#ClosingTheGap Mekong Country Report Myanmar

Entrepreneurial Ecosystem Assessment

Commissioned on behalf of: Dutch Good Growth Fund (DGGF): Investment funds local SMEs #ClosingTheGap Mekong **Country Report** Myanmar Entrepreneurial Ecosystem Assessment

Commissioned on behalf of:

The Dutch Good Growth Fund, part Investment funds for local Small and Medium Enterprises (SMEs), is a "fund of funds" investment initiative from the Dutch Ministry of Foreign Affairs. The initiative aims to improve financing for the "missing middle" – i.e. entrepreneurs who have outgrown micro-finance but do not yet have access to regular financial services. The Seed Capital and Business Development (SC&BD) program was established to increase the impact of the DGGF by providing technical assistance, seed capital and business support services to intermediary investment funds and local SMEs. The program incorporates a knowledge development and sharing component that supports research, tests assumptions and shares insights into financing SMEs in developing countries and emerging markets - fostering industrywide knowledge exchange.

Authored by:

David Totten, Grace Pyone Mya Moe Lwin, Matt van Roosmalen, Emerging Markets Consulting (EMC)

Reviewed by:

Dominic Mellor, Asian Development Bank Timo Hogenhout, Consultant Financial Inclusion / Access to Finance in Southeast Asia Marnix Mulder, Director Market Development, Triple Jump

Coordinated by:

Triple Jump, fund manager of Dutch Good Growth Fund (DGGF) part Investment funds local SMEs: Julia Kho, Knowledge Manager Karina Avakyan, Knowledge Manager

Acknowledgements:

The DGGF hired Emerging Markets Consulting (EMC) to complete the #CTG Mekong studies. The Evidence Network and Mekong Business Initiative provided research insights and Aspen Network of Development Entrepreneurs, Micro Empire and Impact Hub collaborated on the #CTG Myanmar stakeholder workshop.

Design & Visuals:

Julian Deleij, De Beeldmaecker

Disclaimer:

#ClosingTheGap Myanmar has been commissioned on behalf of DGGF as part of the ClosingTheGap series of entrepreneurial ecosystem assessments. The findings and recommendations are at the discretion of the consultants – Emerging Markets Consulting - and do not necessarily reflect the opinion of DGGF and/or its partners



Ministry of Foreign Affairs



Table of Contents

| Abbreviations | | 4 |
|---------------|---------------------------------------|----|
| Exect | utive Summary | 5 |
| 1. | Introduction | 8 |
| 1.1 | Objective | 0 |
| 1.2 | Approach | |
| 2 | Overview of Myanmar | 9 |
| 3 | SME Landscape | 12 |
| 4 | Myanmar's Entrepreneurial Ecosystem | 14 |
| 4.1 | Enabling Environment | 15 |
| 4.2 | Markets | 19 |
| 4.3 | Human Capital | |
| 4.4 | Innovation and Research & Development | |
| 4.5 | Entrepreneurial Culture | 25 |
| 5 | Finance | 26 |
| 5.1 | Credit | 28 |
| 5.2 | Risk Capital | 32 |
| 6 | Business Support Services | 35 |
| 7 | Ecosystem SWOT Analysis | 38 |
| 8 | Way Forward | 39 |
| Anne | ex 1: References | 41 |
| Anne | ex 2: Notes on Methodology | 42 |

Abbreviations

- **CBM** Central Bank of Myanmar
- CDC CDC Group PLC (UK Government-funded development finance institution)
- **CGI** Credit Guarantee Insurance
- **CHDB** Construction and Housing Development Bank Ltd.
- **DGGF** Dutch Good Growth Foundation
- EDNA Entrepreneur Development Network Asia (Myanmar branch)
- **EME** Emerging Markets Entrepreneurs
- **EMIA** Emerging Markets Investment Advisors
- FDI Foreign Direct Investment
- **FRD** Financial Regulatory Department
- **GAD** General Administrative Department
- GEI Global Entrepreneur Index
- **IFC** International Finance Corporation
- MADB Myanmar Agricultural Development Bank
- MATCh Mekong Agritech Challenge, an initiative of Mekong Business Initiative
- MBI Mekong Business Initiative
- MCB Myanmar Credit Bureau
- MCIA Mandalay Region Computer Industry Association
- **MEB** Myanma Economic Bank
- MFI Microfinance Institution
- MIL Myanmar Investments International Limited
- MMRD Myanmar Marketing Research & Development Ltd.
- MOALI Ministry of Agriculture, Livestock and Irrigation
- **MOFP** Ministry of Finance and Planning
- MPT Ministry of Post and Telecommunications
- **MWEA** Myanmar Women Entrepreneurs Association
- MYEA Myanmar Young Entrepreneurs Association
- **OTW** One to Watch, an impact investor
- **PGMF** Pact Global Microfinance Fund
- **SME** Small and Medium Enterprises
- UMFCCI Union of Myanmar Federation of Chambers of Commerce and Industry
- **UNCDF** United Nations Capital Development Fund
- URC The Universities' Research Centre at University of Yangon
- WBES World Bank Economic Survey 2016

Executive Summary

Since 2011, Myanmar has been on a path of transition from military rule and a state-controlled economy, towards democracy and a market-based economy whilst also managing the challenge of wealth creation. These transitions are taking place in a context of religious and ethnic diversity – the Burmese majority accounting for two-thirds of the population.

In the context of our #CTGMekong study, Myanmar stands out in two ways. In its current political and economic incarnation, Myanmar is by far the youngest country. Geographically, though it is only connected to one #CTGMekong country, Lao PDR, it sits between two of the largest and fastest growing economies in the world – China and India.

As a result, much economic commentary focuses on Myanmar's great long-term economic potential. The country benefits from natural endowments of size, location and natural resources, in addition to the benefits of a young workforce and the future demographic dividend.

Analysis of data from the 2016 World Bank Economic Survey (WBES) shows that 38% of registered SMEs are small and low-growth firms, with 5-19 employees and growth rates between 0-10% per annum. Among surveyed firms, about 35% of all small and medium firms are women-owned (>50% women ownership), which is lower than in Cambodia, Lao PDR and Vietnam. Myanmar SMEs are less likely to innovate than their counterparts in other Mekong countries, and this seems particularly true of medium sized firms.

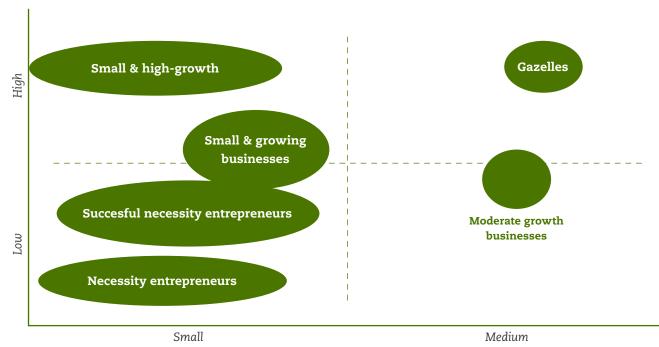


Figure 1: Myanmar SME sub-segments, 2016

Source: EMC analysis based on Enterprise Surveys http://www.enterprisesurveys.org, The World Bank

SMEs Operate in a Challenging Business Environment

Entrepreneurs and growth-oriented SMEs share many common challenges of emerging economies, but they are further disadvantaged by the recent political and economic transformation. Consequently, the policy and regulatory environment, measured by the World Bank Doing Business index, is the worst of all #CTGMekong countries, and has shown little improvement since Myanmar entered the index in 2014 – one year prior to the formation of the first democratically elected government. Business surveys in 2017 and 2018 reflect a similar sentiment amongst domestic and foreign investors. The challenges of a weak enabling environment fall heavily upon rural SMEs. Government reforms, and the private sector response, are most impactful in Yangon and major urban centres, and take time to propagate outwards. This is exacerbated by Myanmar's complex administrative bureaucracy and regional politics.

Myanmar lacks human capital and R&D resources, however it benefits from a large market, and history of 'self-sufficiency' during periods of international isolation, which may have encouraged development of local manufacturing capacity. Unsurprisingly, Myanmar lacks infrastructure, due to many years without investment, though the country's potential to become a major regional logistics hub is a major draw for international investors and governments.

Access to Credit Is the Key Financial Issue

In finance, similar policy and regulatory challenges have inhibited development of the banking and MFI sector. In stark comparison to Cambodia, Myanmar has been wary of liberalisation and foreign ownership, which has limited investment and innovation. Whilst all firms in Myanmar find it difficult to access credit, SMEs find it more difficult, due to higher transaction costs and lower revenue associated with smaller loans. Risk capital fairs far better: the country has attracted a lot of interest due to Myanmar's fundamental advantages. Investment in tech-sector startups is outstanding in comparison to Lao PDR and Cambodia, though ticket sizes are very small, reflecting the risk of investing in relatively inexperienced domestic entrepreneurs. The frontier market private equity sector experienced huge excitement in the years immediately prior to and following the elections, however this receded markedly in 2017, due to concerns over economic reform, though confidence in long term potential remains high.

Business Support Services Favour Tech Startups

In Business Support Services, Myanmar has a flourishing tech startup ecosystem in Yangon, which provides sufficient deal flow and risk diversification for the aforementioned tech investors. However, the size and risk profile of this type of investment lies outside the mandate of the most private equity managers, and those who are searching for investible SMEs with traditional business models have found it difficult to generate a pipeline. There have been few options for 'traditional SMEs', however recent investments in acceleration programmes will improve the situation.

Key issues affecting the Myanmar ecosystem are summarised in this SWOT table.

Figure 2: SWOT analysis of the Myanmar ecosystem

STRENGTHS

- Large internal market, natural resource endowments and strategic location provides growth opportunities
- Support for digital tech entrepreneurs is particularly strong, both acceleration and investment
- Highly attractive to foreign capital investment

OPPORTUNITIES

- Expansion beyond Yangon
- Support for women entrepreneurs
- Support for Gazelles, and exporting firms in particular

WEAKNESSES

- Government has weak track record implementing improvements to the business enabling environment
- Weak financial services sector in general
- The ecosystem is still small, fragmented and centralised in Yangon
- Weak offering for entrepreneurs in non-tech, traditional sectors

THREATS

- Lack of coordination
- amongst ecosystem stakeholdersMacro-economic instability; no improvement
 - of business enabling environment

Recommendations

Ongoing reform is required to improve the regulatory environment, in general and more specifically for SMEs. In the finance sector, the government announced plans in 2018 to improve SMEs' access to credit via better credit information, governance in the financial sector, and a broader range of foreign invested banks.

In addition to these, we identified opportunities to improve support to Gazelles, exporting firms and women entrepreneurs.

Supporting Gazelles' Growth

Gazelles – fast growing medium-sized firms – have the potential to be key drivers of economic development, in particular as Myanmar seeks to integrate into regional value chains and strengthen backward linkages in the country. However, as with other countries within #CTGMekong, there appears to be few options for support, as the firms may be too large for existing 'startup' initiatives.

This may be particularly important for Myanmar – in comparison with Cambodia, a Gazelle in Myanmar is considerably less sophisticated across a range of measures. Gazelles are also less likely to have foreign or female ownership and be female-managed. Workers are less educated, and their employer is less likely to provide them with formal training. Fewer of Myanmar's Gazelles are exporters despite Myanmar's export potential, and they tend to be less innovative and tech savvy, even amid Myanmar's developing tech ecosystem.

Fostering SME Capacity

Myanmar has the potential to become a major exporting hub, thanks to its natural endowments and the investment interest these generate. However, this has yet to materialise, and Myanmar's exports as a proportion of GDP lags behind all countries in our #CTGMekong study, including landlocked Lao PDR.

This is also reflected in the WBES data across almost all sub-segments, which shows that Myanmar SMEs are far less likely to export. This is perhaps unsurprising: Myanmar firms have access to a large domestic market, which Lao PDR and Cambodia lack, and have had a short time to develop internal capacity or external domestic business services to support export capacity.

In order to realise its potential as an exporting nation, support for small and medium businesses would be beneficial to help export orientated entrepreneurs to access overseas opportunities and seed the domestic market for business services.

In summary, SMEs in Myanmar face familiar challenges to other developing economies, compounded by a political and economic environment that is still in transition. This has also impacted the financial sector, and consequently SMEs' access to credit. A flourishing tech ecosystem indicates high potential, yet at this time, there have been few opportunities for SMEs with traditional business models.

Targeting Women Entrepreneurs

Myanmar has a smaller proportion of female SME ownership than the other #CTGMekong countries. This is important and represents an opportunity, insofar as our small business sub-segments (NEs, SNEs, SGBs, SHGs) account for 88% of registered establishments and 61% of employment.

Research from other economies indicates that women entrepreneurs can face specific barriers dealing with bureaucracy – therefore particularly salient in deeply bureaucratic Myanmar. These challenges may arise from lower educational attainment, literacy levels, and underrepresentation of women in senior positions (defined as 'legislators, senior officials and managers') that an entrepreneur may encounter when formalising and developing her business.

However, we didn't encounter examples of acceleration programmes that provide support tailored to the specific challenges faced by women entrepreneurs.

1. Introduction

Since 2011, Myanmar has been transitioning towards a democracy and market-based economy, following 50 years of military rule. Though starting from a weak position, the number of investors and business service providers operating in the country has grown dramatically. As in other emerging countries, the Government, private sector and development partners are looking to domestic and foreign entrepreneurs to drive economic growth, innovation and employment opportunities.

In this context, the Dutch Good Growth Fund (DGGF) undertook a diagnostic study of the Myanmar entrepreneurial ecosystem, with a deeper evaluation of the financial offering for small and medium sized enterprises (SMEs).

1.1 Objective

This study has been conducted on behalf of the DGGF, an initiative of the Dutch Ministry of Foreign Affairs. The DGGF is a "fund of funds" investment initiative of the Dutch Ministry of Foreign Affairs that aims to improve access to finance for the missing middle – that is, entrepreneurs who have outgrown microfinancing but do not yet have access to conventional financial services.

The Seed Capital and Business Development (SCBD) Facility was established to further the impact of the DGGF by providing technical assistance, seed capital and business support services to intermediary funds and local SMEs. In addition, the program incorporates a knowledge sharing component that supports research, tests assumptions and shares insights on financing SMEs in developing countries and emerging markets and fosters industry-wide knowledge exchange. Under the SCBD knowledge development and sharing component, the DGGF #ClosingTheGap series aims to improve the common understanding of key challenges faced by entrepreneurs and especially the "missing middle" in countries covered by the DGGF mandate. The #CTG series is a tool to facilitate and support local and international stakeholders' efforts to set the agenda for SME development. Working together, local stakeholders and their international partners should be better able to identify solutions to the main gaps in entrepreneurial ecosystems that hamper the growth of local enterprises.



The study was commissioned to get a better understanding of the 'missing middle' in the Mekong region of Southeast Asia, of which Myanmar is one of the focus countries. The report describes the main factors that hamper SME growth and suggests possible actions to address them.

1.2 Approach

The DGGF #ClosingTheGap series was designed to improve the common understanding of key challenges faced by the "missing middle" by researching local entrepreneurs' characteristics and needs; testing assumptions related to the current financial and non-financial service offerings; and sharing insights as to their impact on the conduciveness of the ecosystem overall. The methodology was piloted in Kenya in 2015 and scaled to a regional level in francophone West Africa in 2017 using the Aspen Network of Development Entrepreneurs' (ANDE) framework for ecosystem assessment. The framework was modified for #ClosingTheGap Mekong by adding entrepreneurs' capabilities at the centre of it.

¹ Entrepreneurial Ecosystem Diagnostic Toolkit, Aspen Network of Development Entrepreneurs, Dec 2013.

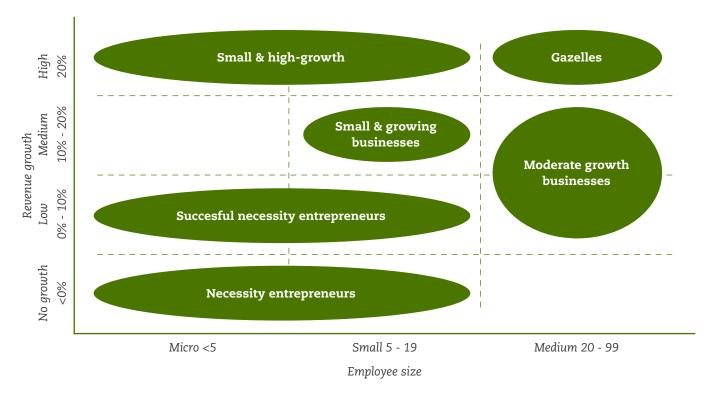
Figure 4: Entrepreneur capabilities

| ENTREPRENEUR CAPABILITIES | DESCRIPTION |
|---|---|
| Strategic planning | Short- and long-term planning o products and services to be offered, local and international expansion plans, generating new business models, business restructuring, and exit strategies |
| Market & environment related | Engagement with potential customers and end users to gain an understanding of unmet market and societal needs. Market intelligence, and management of distribution channels |
| Generating & testing products | Generating new products or services and testing them in the market |
| Acquiring finance | Acquiring/raising finance in order to expand businesses |
| Business operation | Financial management, value chain management, staff management, and other operational management |
| Acquiring & retaining human resource | Acquiring/retaining human resources, in order to expand businesses |
| Networking | Networking/partnering with other individuals and organisations |

The ANDE methodology recommends using World Bank Enterprise Survey (WBES) data to analyse SME characteristics. WBES covers 139 countries, including all countries in the #CTGMekong, and therefore provides a good basis for inter-country comparisons.

Accordingly, authors of this report used Myanmar World Bank Enterprise Survey 2016 (WBES 2016) to estimate the population of SME and segment according to growth and size characteristics, as described in the following figure.

Figure 5: Segmentation framework



² WBES 2016 interviewed 607 establishments from a sample frame of 4,851, between October 2016 and April 2017 (World Bank). The survey uses stratified random sampling to ensure the final total sample is not concentrated in one or two industries/sizes/regions. EMC derived estimates for the total population, based on WBES weightings. For further information, please see http://www.enterprisesurveys.org/ and EMC methodology in Annex.

The Myanmar WBES 2016 only includes registered establishments and whilst the survey includes data relating to gender of majority owner and top management, it excludes data on their ages, so it is not possible to segment for 'young entrepreneurs', aged 18-35.

Therefore, the research also draws on other data, an extensive literature review, as well as key informant interviews with entrepreneurs and service providers in the ecosystem.

In May 2017, a workshop brought together those stakeholders to review, validate and challenge research findings to date and engage in an interactive session towards elaborating solutions that address gaps identified in the ecosystem. Groups were asked to comment on 'entrepreneur personas' that typified businesses and growth challenges faced by firms in each sub-segment, identify gaps and propose solutions.

Conclusions from the workshop are directly captured in the final report.

2. Overview of Myanmar

- Handy Handicrafts makes and sells, both retail and wholesale, souvenir handicrafts that are useful and decorative
- After working in hospitality for a few years, the university graduate saw an opportunity for the growing tourist market in Myanmar
- Annual revenue is around \$20,000 with average 15% growth

AMBITIONS

• Starting off small, the business is only three years old and growth has been disappointing, so the owner wants to hire staff to focus on developing the business both operationally and strategically

CHALLENGES

- Inexperienced in sales and business development, as well as HR management, the owner will need support services
- The market is limited to tourists, and Handy Handicrafts does not entirely understand the different types of visitors and their preferences

Small Growing Business

Since 2011, Myanmar has been on a path of transition from military rule and a state-controlled economy, towards democracy and a market-based economy that aspires to greater wealth creation. These transitions are taking place in a context of religious and ethnic diversity, informed by a complex history that includes British colonial rule and internal competition for resources. Officially, Myanmar is a multi-ethnic country, with 135 discrete ethnicities recognized by the Government. Of these, the Burmese account for 68% the population of Myanmar, and within the remaining 32%, the Shan, Karen, Rakhine, Chinese and Mon are the largest groups.

In 2015, the first democratically-elected government in 53 years assumed power, under former political prisoner and Nobel prize recipient Ang San Suu Kyi. Notably, the military retained control of 25% of parliament and some key ministries as part of the process, and therefore the military continues to wield strong political and economic influence. This compromise, combined with Myanmar's colonial history and ethnic diversity, contributes to a complex political economy and administrative bureaucracy (see Section 4.1 Enabling Environment – Policy). The political centre is in the union capital, Nay Pyi Taw, while the largest commercial centre is Yangon, supplemented by major economic hubs around the country, of which Mandalay is the most significant.

REPUBLIC OF THE UNION OF MYANMAR

AREA 676,578 sq km POPULATION 53.37 million (2017 est.) CAPITAL Naypyidaw OTHER MAIN CITIES Yangon (main business city), Mandalay OFFICIAL LANGUAGE Burmese (several regional languages also recognized) CURRENCY Myanmar Kyat (MMK) GDP PER CAPITA US\$ 1,354 (2017) DOING BUSINESS INDEX 171 (2019)

2....

Sources: World Bank 2017; 2018

The political consensus, which shaped peaceful elections, and the subsequent relaxation of sanctions against the military regime, have helped Myanmar develop trade and attract foreign investment, leading to impressive GDP growth, averaging 7.2% per annum from 2012 to 2017. Despite this growth, Myanmar still has the lowest GDP per capita of the four counties within the #CTGMekong group, though its nominal GDP exceeds Cambodia and Lao PDR by a wide margin, due to its much larger population. Myanmar doesn't share land borders with Vietnam and Cambodia and doesn't trade frequently with them or Lao PDR (Figure 8). By comparison, the populations and wealth of its immediate neighbours – India and China – are significantly higher (Figure 9).

² to the specifics of Myanmar's political system, Aung San Suu Kyi is considered the de facto leader, however, holds the title State Counsellor as well as Minister of Foreign Affairs. The President of Myanmar is U Win Myint.

Figure 8: Key Facts on Economic Performance

| COUNTRY | POPULATION (MILLIONS) | GDP NOMINAL (US\$, BILLIONS) | GDP PER CAPITA (US\$) | GDP GROWTH 2012 – 2017 (AVG. % PA) | CLMV TRADE (% TOTAL TRADE)4 |
|----------|--------------------------|---------------------------------|--------------------------|--|--------------------------------|
| Vietnam | 95 | 241.4 | 2,552 | 6.2% | 1.2% |
| Myanmar | 53 | 67.3 | 1,279 | 7.2% | 1.7% |
| Cambodia | 16 | 24.1 | 1,485 | 7.1% | 7.5% |
| Lao PDR | 7 | 18.2 | 2,690 | 7.4% | 8.2% |
| Total | 170 | 355.3 | | | |

Source: World Bank 2017

Figure 9: Myanmar's neighbouring economies (Population, Nominal GDP), 2017

| COUNTRY | POPULATION (MILLION) | GDP (US\$ BILLION) |
|------------|-------------------------|-----------------------|
| Myanmar | 52.6 | 67.3 |
| India | 1,316.9 | 2,602.3 |
| China | 1,390.1 | 12,014.6 |
| Thailand | 69.1 | 455.4 |
| Bangladesh | 163.2 | 261.5 |
| Lao PDR | 6.7 | 17.0 |

Source: IMF World Economic Outlook Database October 2018

The foreign investment that has underpinned Myanmar's growth is driven by its development potential and strategic advantages: a large and cheap labour force, large domestic market, strategic location and natural resource endowments. Myanmar is the largest country in mainland South East Asia, covering 667,000 square kilometres with a population of 53 million, of which about 66% is working age (15–64 years). Adjacent countries' populations and nominal GDPs total 2.9 billion and U\$15 trillion respectively (Figure 9).

In particular, the strategic location between India, China and Thailand – as well as its 1,930 km coastline along the Bay of Bengal – positions Myanmar to become a major regional logistics hub, subject to major infrastructure investments. This is particularly relevant in the context of China's Belt and Road Initiative.⁵

Myanmar is also rich in natural resources, providing growth opportunities in forestry, extractive industries (natural gas and minerals), agriculture, and fisheries in addition to high tourism potential.

Myanmar enjoys regional and international trade benefits due to its ASEAN membership and as a result of lowermiddle income (World Bank classification) and Least Developed Nation (United Nations OHRLLS classification) statuses, it benefits from development aid (US \$1.6 billion in 2015-16) and preferential market access to the US (since 2016) and EU (since 2013). However, China and Thailand remain its largest trading partners.

⁴ Imports from CLMV + Exports to CLMV) / (Total Imports + Total Exports)

⁵ The Belt and Road Initiative (BRI) is a US\$1.3 trillion Chinese-led infrastructure investment program to enhance China's land and maritime access across Eurasia and East Africa. It places particular emphasis on developing China's westward market access and reducing its reliance on traditional South China Sea maritime routes.

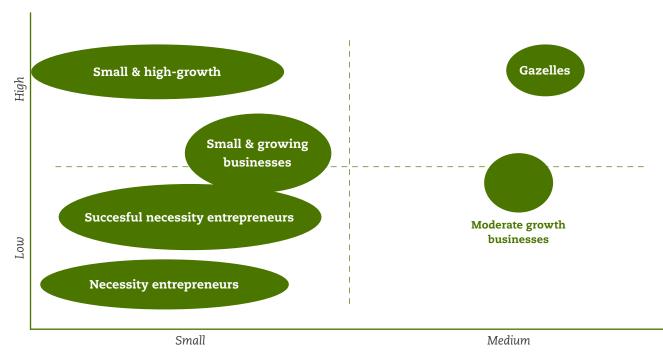
Unsurprisingly given the complexity of its political and economic transition, Myanmar is experiencing significant challenges, as illustrated in this report, and this has negatively impacted domestic and foreign investors' sentiment in the past year. At the same time, international stakeholders and many Governments, have grown increasingly concerned about Myanmar's treatment of the Muslim ethnic minority in Rakhine State, referred to in this report as the 'Rakhine Crisis'.

Both factors have weighed on foreign and domestic investor sentiment, expressed in several surveys throughout 2017 and 2018 and in key informant interviews for this study. Nonetheless, due to Myanmar's highly favourable strategic advantages, existing investors have remained overwhelmingly positive about the economy's long-term outlook.

3. SME Landscape

According to the WBES, of Myanmar's estimated 13,053 formal businesses, 10% are micro (less than 5 employees), 69% small (5 to 19 employees), 16% medium (20 to 99 employees) and 5% large (100+ employees). Myanmar has 4,772 micro, small and medium businesses with revenue growth greater than 10%. These growing enterprises employ 53,100 full-time workers and have 6,518 billion kyat (US \$4.15 billion) turnover. Segmentation of WBES shows that almost half of SMEs in Myanmar are small, low-growth firms.

Figure 7: Sub-segments as proportion of total



Source: EMC analysis based on Enterprise Surveys http://www.enterprisesurveys.org, The World Bank

- Necessity entrepreneurs (NE) are small businesses with an average of 7.8 full-time employees, that experience negative annual turnover (no growth). Three-quarters are services oriented (including retailing), and all target only the domestic market.
- Successful necessity entrepreneurs (SNE) constitute the largest group within the SME sector. They are small businesses in the SME sector that experience low growth (0–10%) in annual turnover. They employ an average of 8.0 full-time employees. They are less likely to operate in the manufacturing sector than NEs and are very unlikely to export.

- Small and growing businesses (SGB) are characterized by moderate annual turnover growth (10-20%) that employ an average of 8.2 full-time employees and are less likely than SNEs to employ more than 10. Compared with NEs and SNEs, they are more likely to be fewer than five years old, use email to communicate with clients, and be in retailing.
- Small and high-growth businesses (SHB) are small businesses with more than 20% growth in annual turnover. They retain an average of 8.2 full-time employees. These businesses are more likely to be older than five years and are more likely to have introduced a new product or service in the last three years (as compared to SGBs). These businesses are also much more likely to be in services. 80% are based in Yangon.
- Moderate-growth businesses (MGB) are medium-size (20 to 100 employees) with 0-20% growth in annual turnover. They employ an average of 32.5 full-time employees, and the majority employ fewer than 50. Compared to the aforementioned sub-segments, MGBs are more much likely to operate in manufacturing, to export (18% are exporters) and to have their own website. One-quarter of them are fewer than five years old.
- Gazelles (GAZ) are high-growth (more than 20% growth of annual turnover), medium-sized businesses. They employ an average of 47.2 full-time employees and are more likely than MGBs to employ more than 50. Gazelles are more likely to be older than other businesses (only 11% are fewer than five years old). They are the most likely to operate in manufacturing and the least likely in the retail sector the opposite of Gazelles in Cambodia (see Figure 24 Gazelles in Myanmar and Cambodia). Myanmar's Gazelles are much more likely than other business types to use email to communicate with clients and they are the most likely to maintain company websites. However, they are less likely than other business types to have introduced new or improved products or services in the last three years. About 15% of Gazelles are exporters and most operate in Yangon.

According to WBES 2016, women-owned firms (>50% women ownership) represent about 35% of all small and medium firms, which is lower than respective rates in Cambodia, Lao PDR and Vietnam. The incidence of womenmanaged small business is higher than women-owned, but the reverse is true for medium size businesses. In particular, 68% of SGBs have a female top manager, which is a very high figure.

Unlike Cambodia, Lao PDR and Vietnam, the Myanmar enterprise survey also includes microbusinesses, which have fewer than five employees (not shown here). Within this group, women are as present in ownership (35%) but less present in top management (36%) positions, as in small businesses. This is very low in comparison with Cambodia, where more than 60% of microbusinesses are female-owned (Cambodia National Institute of Statistics, Cambodia Inter-censal Economic Survey 2014).

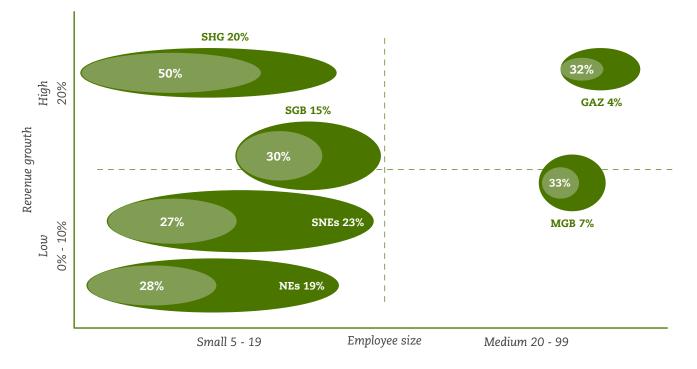
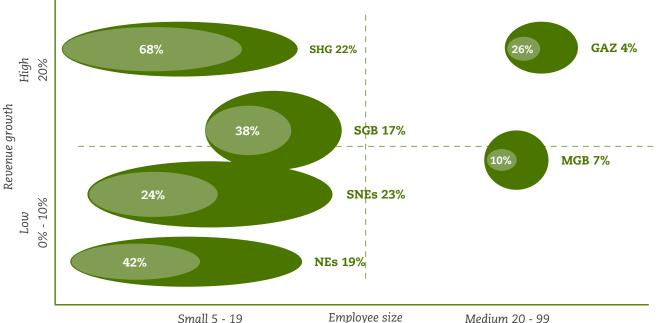


Figure 11: Myanmar SME sub-segments by gender of ownership, 2016

Note percentage of female-owned defined as a business with at least 50% female ownership Source: EMC analysis based on Enterprise Surveys http://www.enterprisesurveys.org/, The World Bank



Small 5 - 19Employee sizeMedium 20 - 99Source: EMC analysis based on Enterprise Surveys http://www.enterprisesurveys.org/, The World Bank

4. Myanmar's Entrepreneurial Ecosystem

Our description of the entrepreneurial ecosystem, follows the ANDE categories, grouped into three sections: Enabling Environment (comprising of infrastructure, policy, markets, human capital, innovation and R&D and culture), Finance (credit and risk capital) and Business Support Services.

Entrepreneurs and startups are not simply victims of a challenging ecosystem, or beneficiaries of benign one, but also influencers for positive change. Throughout the course of this study, we encountered numerous examples of innovation from individuals, SMEs and corporations, seeking opportunities in the 'gaps' in the Myanmar ecosystem. Examples of these are covered in each section of the following report.

The countries in the #CTGMekong group are very different from one another, and consequently, comparison one to another is not always appropriate. In terms of 'entrepreneur ecosystem', Myanmar is far more developed than Lao PDR, far less than Vietnam, and so, for occasional comparison, we focus on Cambodia, notwithstanding the substantial differences in size, natural endowments, political economy and other factors.

An analysis of SMEs' self-reported constraints by sub-segment is in Figure 13, as defined by the WBES survey. An inadequately educated workforce and political instability are the most-cited constraints. Access to finance also ranks highly, particularly among smaller and slower-growing SMEs.

⁵ Proportion of firms with female as top manager are higher for each sub-segment (WBES 2016)

•••••••••

Figure 13: Analysis of SME self-reported constraints by sub-segment (WBES 2016)⁶

| CONSTRAINT | NE | SNE | SGB | SHG | MGB | GAZ |
|---------------------------------|-----|-----|-----|-----|-----|-----|
| Inadequately educated workforce | 12% | 34% | 30% | 2% | 16% | 7% |
| Political instability | 15% | 12% | 22% | 5% | 16% | 23% |
| Access to finance | 32% | 25% | 4% | 16% | 7% | 8% |
| Access to land | 12% | 7% | 17% | 19% | 11% | 11% |
| Electricity | 2% | 7% | 1% | 25% | 24% | 15% |

Source: EMC analysis based on Enterprise Surveys (http://www.enterprisesurveys.org), The World Bank

Many of the above constraints are also prominent in other business surveys. A lack of trained/qualified staff was found to be the top and second top constraint, respectively, in surveys by UMFCCI⁷ /Roland Berger⁸ and EuroCham Myanmar⁹. These studies also found that legal uncertainty, no clear government economic policy and an unpredictable legislative environment are major concerns. The European investors surveyed by EuroCham stated that regulatory issues were the top challenge, while UMFCCI/Roland Berger found selective and unpredictable enforcement of regulations to be the fourth-biggest issue. Financial infrastructure is also a concern for European investors.

4.1 Enabling Environment

The Myanmar 'enabling environment' in which SMEs operate reflects many challenges common among emerging economies. In some cases, these are exacerbated by the challenges of recent political and economic transformation. Consequently, the policy and regulatory environment, as measured by World Bank Doing Index, has shown little improvement so far.

In common with other emerging economies, Myanmar lacks skilled human capital and R&D resources, however it benefits from a large domestic market, as well as its history of 'self-sufficiency' during periods of international isolation. Unsurprisingly, Myanmar lacks modern infrastructure due to many years without investment, though the country's potential to become a major regional logistics hub is a draw for international investors and governments.

Infrastructure

Infrastructure is evaluated through transportation systems, facilities, electricity, telecommunications and other utilities. These elements are progressing in Myanmar, though from a low foundation.

Myanmar's infrastructure is currently weak, however its strategic location provides significant incentives for domestic and foreign investment, which seeks to leverage trade and transit opportunities.

Consistent with the recent EuroCham¹⁰ and UMFCCI/Roland Berger business surveys, infrastructure constraints did not feature highly on WBES sub-segments' constraints: electricity rated only fifth and transportation eighth. However, firms' preoccupation with other issues does not signal satisfaction with infrastructure in general: in the UMFCCI/Roland Berger survey, 96% of respondents cited stable electricity supply and 94% cited transportation infrastructure as critical additions the government could add to the ecosystem ('importance of potential Government measures').

⁶ Businesses were asked which from the list provided was their biggest constraint. We have ranked the constraints here according to the frequency with which they were cited across the subsegments.

⁷ Union of Myanmar Federation of Chambers of Commerce and Industry, the apex private sector representative organization in Myanmar

⁸ Roland Berger Focus: Myanmar Business Survey #2, Roland Berger 2017.

⁹ Business Confidence Survey 2017, Eurocham Myanmar, 2017.

¹⁰ Eurocham survey placed transportation #6 and energy infrastructure #8. (European investors only).

Myanmar's coastal infrastructure comprises five ports along the eastern coastline of Bay of Bengal. This has the potential to become an alternative trade route to Asia and Indochina, and in particular provides Western China and Thailand with more direct access to sea trade. To leverage its potential as a trade hub, Myanmar is currently developing three Special Economic Zones at three of these port locations: Thilawa (Yangon), Dawei (Tanintharyi region) and Kyaukpu (Rakhine State). Planned Chinese and Japanese rail and road projects will traverse Myanmar to link Kyaukpu with Mandalay and Thilawa. Other transborder road systems are planned as part of Greater Mekong Subregion transport integration strategy.

In order for SMEs to benefit from these investments, Myanmar also needs to upgrade its subnational infrastructure. Within Myanmar, roads dominate goods transportation, however only 39% of the total road network and 53% of trunk roads are paved¹¹, which significantly increases internal logistics costs. The current antiquated rail system is a weak alternative in most cases.

Electricity is more commonly cited as a constraint among larger and faster growing businesses (Figure 13), but even small businesses are hampered by a lack of reliable supply. Only 35% of the country has access to electricity, and companies face frequent blackouts (UMFCCI/Roland Berger). This is frequently attributed to low domestic electricity rates, which have inhibited investment in supply. Many overcome this by having their own diesel generator, increasing business costs. More than one-quarter of microbusinesses and half of small businesses said they owned or shared a private generator in the last year (Figure 14).

Figure 14: Myanmar businesses' use of generators (WBES 2016)

| | MICRO | SMALL | MEDIUM | LARGE |
|--|-------|-------|--------|-------|
| Own or share a generator | 28% | 50% | 68% | 86% |
| Used generator for 20% or more of electricity needs in last year | 3% | 19% | 21% | 54% |

Source: EMC analysis based on Enterprise Surveys (http://www.enterprisesurveys.org), The World Bank

In contrast, mobile infrastructure has developed very quickly, mirroring many developing economies. As with Cambodia, overseas private companies have led investment, beginning with Ooredoo (Dubai) and Telenor (Norway). These were subsequently joined by the state-owned operator (Ministry of Posts and Telecommunications, MPT) and most recently a Myanmar-Vietnam JV (Mytel). This has driven mobile penetration from extremely low levels (7.3% in 2012 according to World Bank) to 49.9% mobile connectivity index (GSMA 2017¹²) – approximately on par with Lao PDR (47%) and Cambodia (50.1%). In the 12 months leading to January 2018, the number of internet and social media users grew 29% (4 million new users) and the number of mobile connections rose by 7% (3 million new connections). The recent development of cellular infrastructure coincided with the dominance of smartphones, making Myanmar a 'smartphone first' economy (80% of mobile connections are smartphones, according to Telenor).

Unsurprisingly, the constraints imposed by weak infrastructure has provided opportunities for start-ups and investors.

Two startups are developing solutions to help smaller firms with road-based logistics. Kargo is an 'uber for trucks' marketplace for connecting businesses with independent truck drivers, which in 2018 raised US \$500,000 – comprised of investors and a US \$250,000 matching grant from the GSM Association (GSMA). Previously, Kargo were winners of Seedstars Yangon 2017, a startup business plan competition, and subsequently a finalist in the global Seedstars Summit held in Switzerland. Kone Si is a newer arrival among logistics-focused startups, aiming to save 50% of SME logistics costs using freight pooling. Both firms are graduates of Phandeeyar Accelerator programme, cohorts 1 (2016-17) and 2 (2017-18) respectively.

¹¹ Myanmar transport sector policy note: Trunk roads, Asian Development Bank, 2016.

¹² The GSMA Mobile Connectivity Index take into consideration a country's mobile network coverage and performance, the affordability of devices and services, consumer readiness, and the availability of content and services. https://www.mobileconnectivityindex.com/

[#]ClosingTheGap Mekong – Myanmar – Entrepreneurial Ecosystem Assessment

Solar Home seeks to improve rural households' access to energy, with nearly 20,000 customers for its Pay As You Go solutions. They have received US \$5 million funding to date, including US \$1 million granted this year by the Insitor Impact Asia Fund in order to fund expansions into Cambodia and Indonesia.

Policy

As noted in the Introduction, policy in general, and particularly as it relates to SMEs, has struggled under the combination of historical, societal, political and economic factors as Myanmar's government and economy transitions.

Myanmar's administrative bureaucracy is somewhat complex. At the national level, the Union Government comprises a House of Representatives and a House of Nationalities¹³. Each have its own committees, bylaws and leadership. The Executive is headed by the Chief Minister, who is appointed by the President. There are 21 regional governments (seven states, seven regions, six self-administered zones, and the capital territory Nay Pyi Taw): each with its own parliament, ministries, administrative departments and Executive (regional chief minister). A regional government's authority depends on the sector in question. For example, they have control over agriculture but not healthcare and education. Regional departments are governed by the General Administrative Department (GAD), arguably the most powerful part of Myanmar's bureaucracy. GAD is part of the Ministry of Home Affairs, which reports to the military. This body controls police and fire departments, tax collection, land registration, immigration and much more.

Government policy reform is very important to businesses operating in Myanmar. Of the foreign and domestic firms surveyed by UMFCCI/Roland Berger, more than 90% believe simplification of licensing and regulatory procedures, financial sector reform and regulatory capacity-building are critical measures to reform.

The WBES policy-related constraints shown above, such as tax rates and administration, business licensing, and labour regulations, are less frequently cited by businesses than other constraints. However, government policy can have far wider influence than just these areas. Initial political reforms resulted in the lifting of sanctions, leading to an influx of FDI and export growth. However, the slow pace of reform since then has translated into just modest improvement in Myanmar's Doing Business rankings after its entrance in 2014 (Figure 15).

| COUNTRY/YEAR | 2014 | 2016 | 2018 | 2019 |
|--------------|------|------|------|------|
| Myanmar | 182 | 167 | 171 | 171 |
| Lao PDR | 137 | 127 | 135 | 138 |
| Cambodia | 159 | 134 | 141 | 154 |
| Vietnam | 99 | 90 | 68 | 69 |

Figure 15: CLMV Doing Business ranking (2014-2019)

Source: World Bank, 2018

Many foreign businesses entered Myanmar just as sanctions loosened their grip: some have had their initial optimism about further reforms dented. Insufficient or languid reform has dampened business sentiment, according to a number of recent surveys.

According to Oxford Business Group (domestic and foreign firms, published October 2018), UMFCCI/MMRD¹⁴ (domestic firms, end May 2018), EuroCham (European firms, December 2017), and UMFCCI/Roland Berger (foreign and domestic firms, December 2017), the business environment has deteriorated.

¹³ Known as the Pyithu Hluttaw and the Amyotha Hluttaw, respectively.

¹⁴ UMFCCI = Union of Myanmar Federation of Chambers of Commerce and Industry, the apex business representative organization in Myanmar. MMRD = Myanmar Marketing Research and Development, a domestic market research firm.

EuroCham's survey of European firms operating in Myanmar found that 76% rated the Myanmar business environment as "poor" or "needs improvement", compared to 67% in 2016. Furthermore, 30% agreed that "the business environment has negatively changed during the past 12 months", compared with 18% in 2016.

The UMFCCI/Roland Berger survey similarly registered a decline in short-term entrepreneurial optimism, with only 49% of executives expecting the business landscape to (rapidly) improve within the next 12 months, compared to 73% in 2016. The drop is consistent across local companies (from 76% to 50%) and international firms (from 71% to 49%). The lack of a clear government economic policy has become an increasing concern for local and especially international firms. It is now found to be a significant issue by 86% of the international firms – of which 53% find it a very significant challenge – and the top-ranked challenge overall. Hence, this is likely to be a root cause of FDI's failure to flourish overall.

However, 64% of CEOs surveyed by Oxford Business Group felt positive or very positive about Myanmar business conditions – although this too has fallen, from 70% in January 2018 – and 77% intend to make a significant capital investment in the next 12 months. Respondents to the other surveys are also optimistic about the longer-term potential of Myanmar:

- 93% of domestic companies and 82% of foreign companies are optimistic or very optimistic about Myanmar's "mid to long term economic potential" (UMFCCI/Roland Berger)
- 84% of European companies expect to provide more services during the upcoming three years, and 70% indicated they expect their market share to increase (EuroCham)
- On corruption, there is favourable momentum, with 45% of companies saying obstacles have improved the last 12 months, while just 10% said it had deteriorated (UMFCCI/Roland Berger)

The Myanmar Government recognises the importance of SMEs and their need for support in its Small and Medium Enterprise Development Policy (2015). The policy aims to create innovative and competitive SMEs in all sectors of the economy. Its ambitious aims include supporting SMEs in all areas of business: human resources, innovation, finance, infrastructure, market access, taxation, and business environment. Among the policy's many initiatives, the concrete actions include:

- Establishing an sme agency, responsible for simplified sme registration (including online registration) and one-stop service centres, which would provide smes with information and advice and many other aspects of the policy
- Financial assistance in the form of microfinance, credit guarantee schemes, hirepurchase, two-step loans, and trade credit. Low-interest loans are also mentioned
- Assistance to banks in raising capital
- Relaxing and in some cases abolishing export licensing
- Promoting joint ventures and public-private partnerships for infrastructure development
- Providing training (production technology, quality control, finance, taxation, management, marketing, etc.) And upgrading organisations which provide sme training
- Developing research centres and incubators
- Developing intellectual property certification centres
- Collecting and disseminating information on marketing, trade, local and foreign transport, and product standards throughout the sme agency's branches and information centres
- Allowing collaboration among universities, research institutes and smes
- Creating awards to promote innovation and human resource development
- Funding for universities, training centres, and research departments
- Enabling tvet schools or institutes, with sufficient recognition to their graduates
- Establishing an insurance corporation that would provide necessary insurance services
- Simplifying taxation procedures, and tax relief for certain activities, such as producing a new product or modifications for energy efficiency
- Supporting regional governments in establishing cluster-based industrial zones

Other recent reforms include the new Companies Law, the new Investment Law, the development of Special Economic Zones, the removal of exporting licensing for many products, and the planned establishment of a credit bureau (said to begin operations in 2019). The new Companies Law, in particular, has been praised by some commercial law experts for its improvements in transparency and corporate governance, as well as more efficient corporate compliance processes. As part of this endeavor, a new online company registration system was launched in August 2018. Importantly, the new law allows for Myanmar businesses to be up to 35% foreign-owned and still retain licenses to operate in restricted industries that otherwise are closed or limited to foreign firms. Therefore, businesses in previously restricted industries can now receive foreign capital, increasing FDI opportunities.

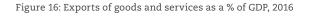
The actual implementation of these and other reforms – rather than just enacting the relevant legislation – will determine how effective they are at improving the local environment. If properly performed, there is potential for Myanmar's Doing Business ranking to rise further.

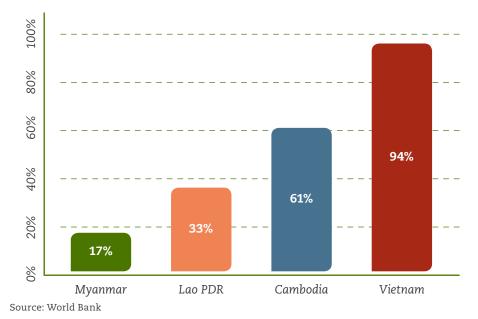
4.2 Markets

As noted in the Introduction, Myanmar's endowments of size and location provide SMEs with large domestic markets and export opportunities. However, export potential is currently hampered by internal constraints, and consequently, the proportion of exporting SMEs is lower than in Cambodia or Vietnam.

Export

After a long history of operating a relatively closed economy under heavy trade sanctions from developed economies, Myanmar's exports are relatively narrow, dominated by natural gas. China and Thailand remain the largest export destinations. But exports are diversifying, both in product range and destination. Since sanctions were lifted, there has been an increase in exports to the EU and US, as well as other Asian countries. Garment exports continue to rise and are now the second-largest export product after natural gas (World Bank).





As part of its membership of ASEAN and associated regional free trade agreements, Myanmar's local products can be exported with zero import tax to the ten-member countries as well as Australia/New Zealand, China, India, Japan, and the Republic of Korea. Myanmar also now has preferential access to major protected markets including the US (since 2016, under the Generalized System of Preferences), and the EU (since 2013, under 'Everything But Arms'). Additionally, Myanmar has bilateral trade agreements with China, Bangladesh, India, Israel, Korea, Lao PDR, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam. It also has economic agreements with China, Cuba, Kuwait and Singapore. Despite the removal of sanctions, fewer SMEs in Myanmar exported than in Cambodia and Vietnam – but more than in Lao PDR – as of 2016. Medium-size enterprises in Myanmar are much more likely to export than small businesses (Figure 17). Myanmar's export potential has been hampered by, among other factors, a restrictive export licensing regime, which was reformed in February 2018, theoretically making exporting of many products easier.

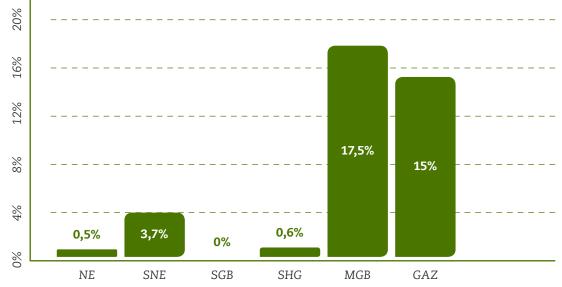


Figure 17: Proportion of Myanmar SMEs that export, by sub-segment

Source: EMC analysis based on Enterprise Surveys http://www.enterprisesurveys.org/, The World Bank

Although SMEs might not export themselves, experience elsewhere has shown they can benefit from participating in international value chains by supplying to larger exporters. Myanmar can increase its share of exports in GDP to the levels of Lao PDR or Cambodia, buoyed by a growing manufacturing industry and improved export logistics, opportunities will emerge for entrepreneurial SMEs.

Domestic

Unlike Cambodia and Lao PDR, Myanmar has a relatively large domestic market. This may be one reason why relatively few Myanmar SMEs export: they have opportunities locally, not to mention that sanctions once blocked some foreign competition in their domestic market.

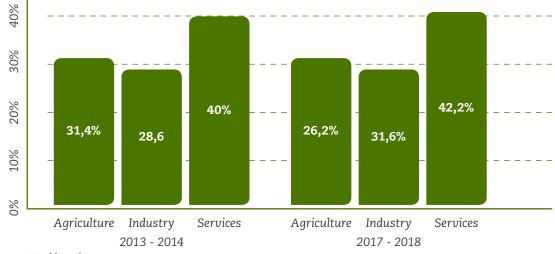
The domestic market is one of Myanmar's key attractions for foreign investors. Of the foreign companies surveyed by UMFCCI/Roland Berger, 85% said that a large domestic market was an important or very important reason for entering Myanmar. Similarly, the EuroCham Business Survey found that the main goal of the majority (53%) of European businesses operating in Myanmar is to produce goods or services for the local market, and that "opportunities in Myanmar's domestic market" is the top reason for entering Myanmar.

As poverty rates fall and incomes rise, there will be more scope to serve this local market. "Private consumption has been buoyed by better access to consumer durables and services, for instance, as behavioral shifts supported more spending toward non-food items like telecommunications services and devices" (World Bank).

The major industries in Myanmar are agriculture, natural gas, construction, tourism, and garments. Services industries are also a major and growing part of the economy.

While agriculture is important for employment and for exports, but it has not been the main driver of growth in the economy. Industry and services have contributed the most to growth, including garments, construction, trade (retailing and wholesaling), tourism, communications and banking.

Figure 18: Contribution to Myanmar GDP production



Source: World Bank

International tourism receipts have grown very fast: from 1.2% of total exports in 2010 to 17.4% in 2016 (World Bank). However, this has recently slowed somewhat due to the Rakhine crisis.

The political uncertainty and conflict have also seen a recent slowing of FDI inflows. This presents problems for SMEs to the extent that FDI – regardless of whether it aims to serve domestic or export markets – purchases goods and services from local SMEs.

Homegrown startups are finding opportunities in the tourism and agriculture sectors. Oway and FlyMya / Go Myanmar – established by digital tech/ICT professionals from the Myanmar diaspora – have scaled rapidly to dominate tourism bookings, alongside more recent startups such as GOP and EZStay. In agriculture, Impact Terra leverages Myanmar's smartphone penetration to provide climate and market data to farmers and organisations, receiving US \$3 million in grants in early 2018. Tun Yat, the third place winner in Mekong Business Initiative's (MBI) Mekong Agritech Challenge (MATch), similarly seeks to improve on-farm productivity via an online platform that connects farmers and machine suppliers.

Other startups are addressing middle class consumption: Flexible Pass is a fitness subscription app and graduate of the inaugural Founders Institute accelerator, which raised US \$100,000 from Nest Tech, Seed Myanmar and Yangon Capital Partners (October 2018).

4.3 Human Capital

Around 66% of Myanmar's population is working age (15-64 years). This large and inexpensive labour force is attractive to investors, but the country still has scope to improve its education system and workforce skills to best leverage this asset. Hence there are challenges to developing an entrepreneurial class and educated SME workforce.

For example, while current enrolment rates in secondary and tertiary education are better than or equal to Cambodia and Lao PDR, they significantly lag Vietnam.

| COUNTRY ENROLLMENT | SECONDARY ENROLMENT RATE | TERTIARY ENROLMENT RATE |
|--------------------|--------------------------|-------------------------|
| Myanmar | 61% | 16% |
| Cambodia | 45% | 16% |
| Lao PDR | 57% | 5% |
| Vietnam | 93% | 31% |

Figure 19: Secondary and tertiary enrolment rates

Source: Global Competitive Index 2016-17; UNESCO

Furthermore, improved enrolment rates will take time to alter the education levels of the existing workforce. WBES data shows that most SME employees in Myanmar have not completed secondary school

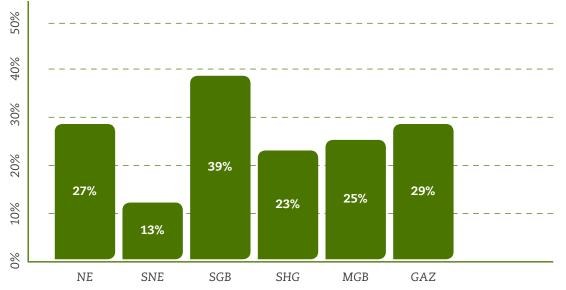


Figure 20: Full-time employees completed secondary school, by sub-segment

Source: EMC analysis based on Enterprise Surveys (http://www.enterprisesurveys.org), The World Bank

Hence, an inadequately educated workforce is one of the most cited constraints among SMEs in Myanmar. Though this is more a problem for SNEs and SGBs than larger and faster-growing SMEs (Figure 13). Similarly, 77% of businesses surveyed by UMFCCI/Roland Berger said the lack of trained staff is a significant or very significant issue, and 88% of businesses said that education reform and training was an important area for potential government action. The lack of skilled labour is the second-most important issue for businesses surveyed by EuroCham.

Gender differences in secondary and tertiary education enrolment in Myanmar have fallen, according to the World Economic Forum (WEF) Global Gender Gap Report 2017. In addition to increasing women's share in technical and professional roles, Myanmar has reached near parity in total labour force participation. However, women remain underrepresented in government, senior official, and manager roles, and inequalities persist in basic literacy.

| COUNTRY SCORE CARD | MYANMAR | LAO PDR | CAMBODIA | VIETNAM |
|--|---------|---------|----------|---------|
| Economic participation and opportunity | 0.754 | 0.769 | 0.698 | 0.738 |
| Labour force participation | 0.946 | 1.000 | 0.878 | 0.920 |
| Wage equality for similar work (survey) | | 0.741 | 0.730 | 0.646 |
| Estimated earned income (PPP, US\$) | 0.688 | 0.846 | 0.730 | 0.821 |
| Legislators, senior officials and managers | 0.396 | 0.465 | 0.447 | 0.348 |
| Professional and technical workers | 1.000 | 0.692 | 0.573 | 1.000 |
| Educational attainment | 0.975 | 0.933 | 0.921 | 0.972 |
| Literacy rate | 0.898 | 0.738 | 0.797 | 0.954 |
| Enrolment in primary education | 0.989 | 0.988 | 1.000 | - |
| Enrolment in secondary education | 1.000 | 0.972 | 0.918 | - |
| Enrolment in tertiary education | 1.000 | 0.956 | 0.821 | 1.000 |

Note A score of 1 reflects perfect parity, the closer to 0 the greater the gender gap. Source: World Economic Forum Global Gender Gap Report 2017.

Domestic tech startups working in education include Digital Royal Net, a school management platform called eSchool, and MMTutors, an online marketplace to match students and tutors. eSchool has yet to crack the state school market, but it has just raised US \$100,000 from Singaporean investors, constituting its second tranche of external funding. MMTutors recently raised funding from Seed Myanmar and others. Digital Royal Net was a previous winner of Seedstars Yangon, and MMTutors a participant in Phandeeyar Accelerator's Cohort 2. A third example is Chate Sat, a market place for freelancers that enables smaller firms to access temporary expertise (see Section 5.2 Risk Capital – Tech Startups).

4.4 Innovation and Research & Development

There is a lack of international public and private research capacity in Myanmar, although there are public institutions that have existed throughout Myanmar's long period of isolation.

Yangon University was established in 1920 and among its disciplines offers industrial chemistry, pure and applied physics at the post-graduate research level. The Universities' Research Centre (URC, est. 1985) is a research laboratory based at the University of Yangon and provides research assistance to other universities as well as to private enterprises and government organisations.

There is a network of 33 Government Technological Universities across Myanmar's regions. Of these, the Yangon Technological University attracts top Myanmar students with a range of research programmes in engineering disciplines.¹⁵

In the important domain of agricultural research, the Department of Agricultural Research within the Ministry of Agriculture, Livestock and Irrigation (MOALI) coordinates research in plant varieties, post-harvest technology and microbiology. Yezin Agricultural University, located in Nay Pyi Taw, has a number of research agreements in place with research organisations from Japan, US, France, Germany and China.

SMEs in Myanmar are generally less innovative than their counterparts in the other countries studied. Although a number are likely to have introduced a new or improved product or service in the last three years, very few spend on R&D (see Figure 22 and Figure 23). Notably, Gazelles in Myanmar are less likely to have introduced a new product or service or to have invested in R&D in the last three years than those in Vietnam and Cambodia.

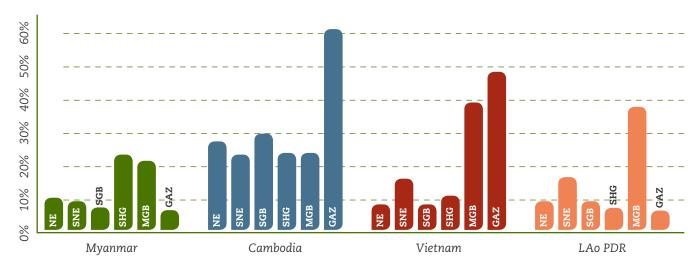
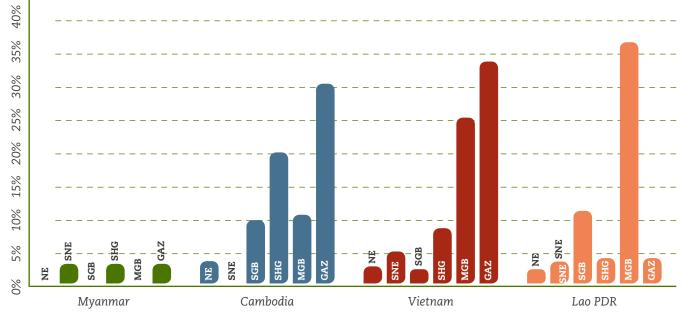


Figure 22: Proportion of SMEs that introduced a new or improved product or service in last 3 years

Source: EMC analysis based on Enterprise Surveys http://www.enterprisesurveys.org/, The World Bank

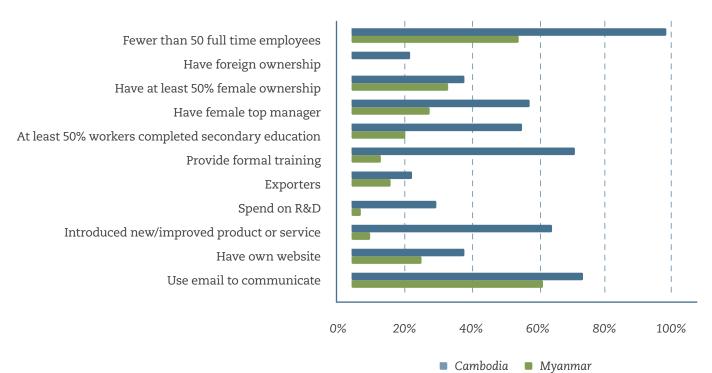


Source: EMC analysis based on Enterprise Surveys http://www.enterprisesurveys.org/, The World Bank

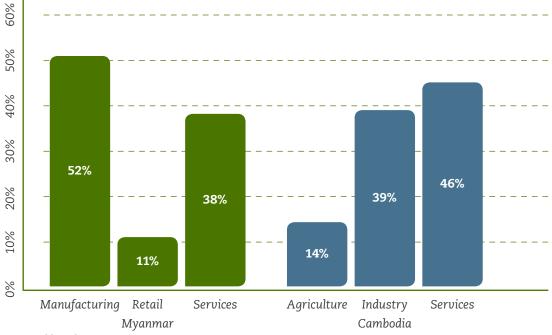
Gazelles in Myanmar and Cambodia

Gazelles in Myanmar differ in many aspects from those in Cambodia. In Myanmar, more Gazelles employ more than 50 workers than in Cambodia. A Gazelle in Myanmar is less likely to have foreign or female ownership, and be femalemanaged. Workers at Myanmar's Gazelles are less educated than those in Cambodia, and their employer is less likely to provide them with formal training. Fewer of Myanmar's Gazelles are exporters, and they tend to be less innovative and tech savvy.

Figure 25: Gazelles in Myanmar and Cambodia (WBES 2016)



These differences likely result – at least in part – from Myanmar's larger domestic market and long period of isolation, which demanded greater self-sufficiency. For example, Gazelles in Myanmar are much more likely to be manufacturers than Gazelles in Cambodia, a much smaller and more open market.



Source: World Bank

4.5 Entrepreneurial Culture

Myanmar has a rich media culture, including domestic publications in Burmese and English that devote considerable coverage to innovation and startup activities. In contrast to Cambodia and Lao PDR, Myanmar also attracts considerable attention from regional specialist media and digital communities, such as DealStreetAsia, Tech in Asia and e27, which cover innovations and investment in the tech startup scene.

Myanmar Young Entrepreneurs Association (MYEA, est. 2008), Myanmar Women's Entrepreneurs Association (MWEA, est. 2009) and the Entrepreneurship Development Network Asia (EDNA Myanmar, est. 2014) have the largest most established networks amongst entrepreneurs across a broad base of traditional sectors and are more embedded in Myanmar's political economy and tertiary education systems. MYEA and MWEA have more experienced memberships, with a significant proportion comprised of second-generation proprietors who established businesses during Myanmar's period of isolation. They take a leading role in advocating for Government policies that encourage the promotion of entrepreneurship, including major national events such as Global Entrepreneurship Week, Myanmar Entrepreneurship Carnival and the Myanmar Entrepreneurship Summit. EDNA targets grassroots entrepreneurs, including micro and small businesses, and works closely with Government to develop its capacity to offer appropriate services.

 16 Myanmar Entrepreneur Development Network Asia, specializing in grassroots entrepreneurship

Aside from current association memberships, young professionals may share connections through alumni networks and membership in Myanmar's young diaspora. The latter group – particularly those returned from Singapore who maintained close relations during Myanmar's isolation – has been influential in Myanmar's digital tech scene, with several well-known 're-pats' among the earliest and most successful innovators. Examples include the founders of Oway (ride hailing, and online travel services), Shweproperty (real estate), JobNet (recruitment), iMyanmar (classifieds) and BODTech (online travel services). Influential domestic universities include Yangon University and Yangon University of Economics, as well as private institutes such as New Westminster Institute, Strategy First and Lithan Academy, which are active sponsors of tech entrepreneurship. Many international scholarship programmes just recommenced at the end of Myanmar's international isolation, and therefore there are fewer generations of graduates – and consequently their alumni networks – embedded in Myanmar's political and business communities as in Cambodia, for example

5. Finance

Myanmar lacks supply of credit, financial services and risk capital across most sub-segments. Due to the size of the market, the country attracted a lot of interest from investors – both domestic and international – however, this has abated in the past two years due to concerns on reform, as described in Section 4.1 Enabling Environment – Policy. The supply of credit is very weak, due to regulatory and structural issues in the financial sector.

On the demand side, SMEs lack assets to secure finance and have low levels of financial literacy and business planning, which make them risky propositions for FIs that seek loan repayment and investors that seek significant capital appreciation. The tech startup sub-segment fares better due to its vibrant support ecosystem described in the preceding section.

Consequently, there are still many gaps in the provision of credit to SMEs, as illustrated in Figure 27. Cashflow-based lending is still rare, due to lack of SMEs and financial institution capacity and insufficient credit information. Most credit is secured against land and real estate, and therefore financing movable and intangible assets is difficult. There is additionally an absence of early stage risk capital to HGBs.

Figure 27: Gaps in provision of finance to SME

| SUB-SEGMENT | KEY CHARACTERISTICS | FINANCIAL CHALLENGES | FINANCIAL NEEDS |
|---|---|---|--|
| Small Growing Businesses • 5-19 employees • 10-20% revenue growth • \$5,000-\$10,000 annual turnover | Business often unregistered Many similar businesses in traditional sectors Business owner fulfils most managerial tasks Often employ friends and family members Weak financial and business planning | Credit secured against personal assets is unregistered Highly unpredictable short term cashflows - revenues concentrated High risk of business failure - competition, changes in the market, small size Lack of personal assets (in particular among women) Lack of access to finance (in particular among married women) | Short term working capital loans and overdraft facilities Credit enhancement Financial and business planning services |
| Small High Growth Businesses • 5-19 employees • >=20% revenue growth • \$10,000-\$50,000 annual turnover | Small size, strong growth prospects Business often unregistered Business owner fulfils most managerial tasks Often successful business models adapted from abroad Often young, well-educated founders | Credit secured against personal assets is unregistered Highly unpredictable short term cashflows - revenues concentrated Cashflow requirements increasing rapidly in medium and long term High risk of business failure - competition, changes in the market, small size Challenges assessing credit worthiness | Moveable financing to increase credit lines Receivables financing to support revenue growth – trade finance, supply chain finance, revolving credit facilities, factoring Long term business loans to finance strategic investment Credit enhancement Risk capital Financial and business planning services |
| Medium Growth Businesses • 20-99 employees • 1-20% revenue growth • \$50,000-\$500,000 annual turnover (wide range) | Steady growth, but vulnerable to economic cycles Often family businesses, relatively old Traditional sectors such as hospitality, retail, and agriculture Weak financial and business planning | Business lacks sufficient collateral to secure credit lines Unstable short term cashflows Cashflow demand increasing slowly in medium and long term Challenges assessing credit worthiness | Short term business loans and overdrafts to stabilize cashflows Moveable, intangibles financing, cashflow based lending to increase credit lines Long term business loans to finance investment Credit enhancement |
| Gazelles • 20-99 employees • >= 20% revenue growth | High growth rates Respected businesses in the community Well-connected and often wealthy entrepreneurs Limited liability firms | Business lacks sufficient collateral to secure credit lines Unstable short term cashflows Cashflow demand increasing rapidly in medium and long term Challenges assessing credit worthiness | Moveable financing to increase credit lines Receivables financing to support revenue growth – trade finance, supply chain finance, revolving credit facilities, factoring Long term business loans to finance investment Credit enhancement Risk capital Financial and business planning services |
| Tech Start-ups • \$5,000-\$10,000 turnovers | High growth rates Predominately digital services / mobile High failure rates - 'winner takes all' Business models highly replicable Often young, well-educated founders Phnom Penh focused Very small sub-segment | No viable collateral for business loans Young owners do not have personal assets to secure loans Small sector – angels and VCs lack diversification options | Risk-friendly seed capital (tech orientated angels and VCs) Financial and business planning services |

5.1 Credit

Myanmar FIs and SMEs face many challenges typical of developing economies: lack of financial service sophistication, short loan tenors, onerous collateral requirements, and barriers to access. In Myanmar's particular case, interviews and reports consider these developmental challenges exacerbated by a regulatory regime that has limited investment and innovation in the sector. As a consequence, the United Nations Capital Development Fund (UNCDF) estimates that total demand for financing in Myanmar is almost US \$1 billion, almost four-times the available supply¹⁷, and SMEs in particular experience significant issues around access to credit.

In contrast with Cambodia but similar to Lao PDR and Vietnam, MFIs and banks play very distinct roles in the Myanmar financial system. There are 173 microfinance institutions (MFI) in the country – of which, those operated by development organisations are the largest, including Pact Global Microfinance Fund (PGMF), VisionFund and Proximity. The largest domestic private sector operators include Myanmar Finance International Ltd (MFIL), while ACLEDA and Sathapana, are both subsidiaries of Cambodian MFIs with a significant market share. Much smaller domestic firms and co-ops make up the main bulk of licensed service providers. The banking sector comprises 28 banks, of which half (14) are State-Owned Banks (4) or quasi government organisations (10). Private banks are dominated by the top three – KBZ, CB and AYA – accounting for 58% of total private bank assets, 64% of loans and 66% of deposits (March 2017)¹⁸.

The MFI sector has a total loan portfolio of around US \$500 million – in contrast, Cambodia, a highly developed MFI market with one third the population, has a loan portfolio that is around 20 times larger.¹⁹ The banking sector is significantly larger than the MFI sector in terms of loan portfolio, however by regional comparisons it remains small: domestic credit to the private sector in Myanmar is 23.5% of its GDP, far below other emerging economies like Cambodia (86%), Lao PDR (47.5%) and Vietnam (130.7%).²⁰

Both sectors are growing quickly. From 2016-2018, the number of MFI clients nearly doubled to three million, while the number of organisations fell by around 30% to 173 (March 2018) as smaller operators struggle to compete in the growing market due to lack of scale and high costs. Similarly, the banking sector is growing quickly: the total assets held by the three largest banks increased by 34% throughout the 2016-2017 fiscal year, with combined loan portfolios growing by more than 30% and deposits rising almost 40%. However there have been concerns regarding banks' lending practices and portfolio quality, prompting the Central Bank of Myanmar (CBM) to issue new 'prudential regulations' to modernise practices (7/2017 Directive²¹).

SME Lending

Analysis of WBES data illustrates that registered SMEs seem particularly uninterested in credit from FIs across all sub-segments. In general, SMEs are unlikely to have a bank loan or line of credit, and unlikely to have applied for loan last fiscal year. Women-managed SMEs are even less likely to have a loan than SMEs in general.

The biggest reason cited for not applying for a loan is 'no need' (cited on average 62%), followed at some distance by process ('procedure too complex', 18%) and product reasons ('rate, collateral, size of loan and maturity', 6%). This attitude is consistent with EMC research of the Mandalay market, showing many small businesses still prefer informal lenders due to greater flexibility in tenors and redemption, less documentary requirements and greater convenience.

Small businesses can obtain unsecured loans from MFIs relatively easily; however, they face a significant gap between the maximum loan available from MFIs and the typical minimum loans available from banks. Regulation limits MFIs' maximum loan size to US \$5,000, while banks' typical loan sizes have been around US \$50,000. Banks have been unwilling to make small loans as the maximum interest rate is capped at 13% and therefore they are not keen to embrace the relatively high risk and high cost of SME lending.

¹⁷ https://www.aseanbriefing.com/news/2018/03/21/banking-sector-reforms-myanmar.html

¹⁸ Myanmar Financial Services Report 2018, FMR Research and Advisory, 2018.

¹⁹ National Bank of Cambodia 2017.

²⁰ International Monetary Fund (IMF) accessed at https://data.worldbank.org/

²¹ Accessed at https://www.cbm.gov.mm/sites/default/files/regulate_launder/overdraft_directive_eng_sd_version-24-11-2017-5.pdf

Figure 28: Comparison of typical loan terms

| | MFI | BANKS |
|-----------------|---|-------------------------------|
| Loan Rate | Maximum 30% (regulated) | Maximum 13% (regulated) |
| Loan Term | 6-12 months | 12 months (typical) |
| Loan Size | Maximum US \$5,000 (regulated) | Minimum US \$50,000 (typical) |
| Loan Collateral | MFIs prohibited from taking physical collateral | Land, real estate |

Perhaps due to this credit gap, analysis of WBES data indicates that smaller businesses (SGBs, SHBs) are much less likely than medium businesses (MGBs, Gazelles) to have a loan or line of credit, to have applied for loan in last fiscal year, or to have a checking or savings account. However, of those SGBs and SHGs that did apply, they are as likely to be approved – in full or in part – as medium sized businesses (on average 84% for all four sub-segments).

Smaller businesses may be less familiar with financial and business planning and owner managers may be time poor; consequently, they are particularly intolerant of bureaucratic costs of accessing bank credit. In Myanmar, this can be particularly burdensome: in order to formally apply for a loan, SMEs require recommendations from the SME Development Department, Ministry of Industry and the Republic of Union of Myanmar Chamber of Commerce and Industries (UMFCCI).²²

The high risk of doing business in Myanmar has also encouraged banks to lend on short tenors of one year, which limits credit as a useful source of investment capital; repayment of principle and interest on loan within one year is likely unaffordable for larger loans in capital equipment. According to WBES analysis, these are much more likely than any other sub-segment to cite product reasons for not applying for a loan last fiscal year: in particular, interest rate (19%) and loan size & maturity (10%).

To mitigate the credit risk, bank loans in Myanmar secure almost all loans against collateral. Land and real estate remain the overwhelmingly most common form of security, even though there is no legal or regulatory requirement that stipulates this.²³ Myanmar lacks strata titling, so is difficult to obtain credit against condominium real estate – the common form of housing in Yangon. In lieu of collateral, SMEs may enhance their credit worthiness by purchasing credit guarantee insurance (CGI), although CGI is only available from one state-owned provider, Myanma Insurance.

Larger businesses with strong growth potential – Gazelles or trading businesses in general – also need access to more sophisticated and flexible credit lines that are responsive to rising or falling business volumes, such as trade finance, revolving credit lines, factoring and supply chain finance. However, receivables-based financing is currently not available in Myanmar, and there is no secured transaction framework.

It is very difficult for banks to assess SME credit risk, as few SMEs produce standard financial accounts and there are few other data sources with sufficient information: Myanmar does not yet have a credit bureau²⁴ and many SMEs are not registered for tax or underreport tax, and hence, their profitability. In the event of default, enforcing commercial contracts is expensive and unpredictable. This is reflected in Myanmar's very weak global ranking in 'enforcing contracts', at 188 of 190 economies.

In addition to the above gaps in financial services, the financial sector faces a variety of particular regulatory constraints, which limit expansion and innovation in the sector and because the SME segment is typically viewed as more costly and risky to serve, they are particularly disadvantaged.

 $^{^{22}\} https://www.mmtimes.com/news/myanmar-takes-small-steps-towards-providing-greater-liquidity-smes.html$

²³ In fact, since 2011 the list of collateral was gradually expanded to include land, buildings, gold and jewellery, bank deposits, shares and in some cases agricultural produce are all permitted forms of collateral.

²⁴ It has been announced it will launch in 2019.

Support for SME Credit

Myanma Economic Bank (MEB) is the largest of four state-owned banks and has a mandate to provided subsidised loans to state-owned enterprises, other state-owned banks – mainly Myanmar Agricultural Development Bank (MADB) and also Construction and Housing Development Bank Ltd (CHDB) – and to SMEs. MADB accounts for majority of MEB disbursed loans and uses these to provide subsidised loans to farmers with a one-year term and credit for purchasing agricultural machinery and equipment. Myanmar Investment and Commercial Bank (MICB) provides commercial and investment banking services in kyat and dollars to the private sector, including loans to domestic MFIs. Government-owned Myanma Insurance is the only entity allowed to provide CGI. State-owned banks are not subject to the new 'prudential regulations' and are not regulated by the CBM. Currently, the World Bank is advising on reform.

Figure 29: Regulation of the financial sector

REGULATION OF FINANCIAL SERVICES IN MYANMAR

LOAN INTEREST RATES

Both banks and MFI are constrained by regulation on the interest they can charge for loans, which encourages them to ration credit to riskier clients like SMEs.

LENDING CAP

MFIs can only lend a maximum of US \$5,000 and therefore are not a sufficient source of finance for most SMEs.

FOREIGN INVESTMENT IN BANKING SECTOR

Only 13 foreign lenders are authorised to operate in Myanmar. They are restricted to one branch each and prohibited from engaging in retail banking and direct lending in the local currency. Therefore they primarily serve foreign-invested companies.

LIQUIDITY AND CAPITAL

MFIs may only take voluntary deposits from existing loan customers, rather than the general public. Domestic MFIs are only able to borrow from domestic banks, though domestic banks have been reluctant to lend to MFIs at 13%. Foreign-owned MFIs can borrow overseas, but this entails currency risk, as well as paying two sets of interest – on the initial overseas foreign currency loan and the subsequent domestic kyat loan that is backed by the proceeds of the foreign currency loan.

Banks face restrictions attracting foreign capital under law, due their weak financial situation and governance. The inability to strengthen their capital base, and the necessary enforcement of prudential regulations, unavoidably limits the amount of credit that banks can extend.

Development aid and DFI sponsor programmes encourage FIs to direct credit to SMEs on concessionary terms. MEB and the Japanese International Cooperation Agency (JICA) fund SME loans via six retail banks , at 8.5% on tenors of one to three years. Similarly, KfW has collaborated with Ministry of Finance and Planning (MOFP) and CB Bank to help SMEs refinance existing loans. CB Bank also offers a 13% 'collateral-free' SME loan product, charging a 1-3% premium for CGI from Myanma Insurance.

Early Signs of Change

Recently, the Government of Myanmar addressed some concerns over reform, which should improve supply of credit and innovation in the financial sector.

In addition to setting prudential regulations, the 7/2017 Directive encourages a shift from collateral-based lending towards cashflow-based lending, with loan durations up to three years and flexible repayment terms. However, the 13% interest rate cap still requires banks to extend unsecured loans at the same rate as those secured with the legal title to land. To benefit from this, SMEs must adopt formal accounting systems and be able to demonstrate a history of stable profits – this is potentially a challenge for many Myanmar SMEs, according to comparison of Cambodian and Myanmar Gazelles (see Figure 24 Gazelles in Myanmar and Cambodia). **PROBLEM** Lack of access to working capital, limits growth for fast growing, trading SMEs.

WHY IT HAPPENS The firms' working capital needs far exceed their land, real estate and other fixed assets required to secure credit.

SOLUTION Receivables finance enables trading firms to liquidate invoices, to improve cashflow. Warehouse receipts financing (collateral finance) enables agriculture firms secure credit lines against their stock of commodities.

²⁵ SMIDB, MAB, AYA, CB, MCB & KBZ. JICA is planning another disbursement in 2018 with a fresh group of banks #ClosingTheGap Mekong – Myanmar – Entrepreneurial Ecosystem Assessment As of March 2018, the Financial Regulatory Department (FRD) of the Ministry of Finance and Planning is in the process of creating a dedicated Credit Guarantee Corporation Law, which would help create a legal framework for providing credit insurance to SMEs. An expansion of CGI will significantly benefit many SMEs, however the additional cost of the guarantee, will raise total cost of credit, and therefore only be affordable to SMEs with high growth expectations – Gazelles, SHBs and some SGBs.

In May 2018, CBM approved Myanmar Credit Bureau Limited (MCB) to operate a credit bureau, with an anticipated launch in 2019.²⁶ MCB is a joint venture between Myanmar Banks Association and Singapore-based Asian Credit Bureau Holdings. SMEs that rely on credit secured against the credit-worthiness of their owner – or another individual guarantor – will benefit disproportionately: this includes SGBs and many micro firms. Once the MCB successfully implements loan registry and credit assessment for registered firms, then this will be a substantial benefit to Gazelles, MGBs, SHBs and SGBs.

Since December 2017, the CBM has gradually relaxed restrictions on foreign bank operations in order to boost domestic firms' access to credit. This includes export financing and most recently loans to local corporates. It is hoped that the entry of domestic banks will improve governance standards and innovation in the sector, as well increase supply of capital to domestic industry.

The above reform is encouraging some of the more sophisticated banks to develop SME lending infrastructure and adapt products and services.

The 'credit gap' that exists between MFIs and banks is significant for smaller businesses. Banks are introducing SME loans, with tenors from two to five years for investment, and minimum loan principal of US \$10,000, subject to assessment of the applicant's business case. One bank in particular is offering loans for as little as US \$3,000.²⁷ According to interviews, the MFI industry is hopeful that US \$5,000 cap will be increased. Meanwhile, a local MFI based in Mandalay is offering US \$ 10,000 loans to existing clients who have successfully repaid an earlier loan.

Increasing loan tenors up to five years will help SMEs invest in capital equipment, which will benefit SMEs with clearer growth prospects and greater incentives to invest for the longer term – in particular, SHBs and Gazelles.

To address Myanmar's reluctance to embrace credit, several lenders – including CB Bank and KBZ – have established SME service centres. In 2018, KBZ established a One-Stop SME Banking Centre (OSBC) to provide a range of services that meet their needs, including improving financial literacy.

Development partners and local banks continue to expand cooperation in order to improve banks' capacity to offer more specialised services. Yoma Bank received support from GIZ for a pilot program building a credit-risk appraisal with SME lending in mind. In early 2018, the bank announced new lending programs for SME value chain financing. KBZ has a similar SME pilot program with GIZ. Yoma Bank and ADB have recently announced a US \$10 million trade finance guarantee targeting SMEs.²⁸

Other investors and non-bank FIs are also seeking out opportunities for service innovation. Anthem Asia, a Myanmar focused fund manager is cooperating with Filipino startup Acudeen Technologies to introduce receivables finance, so that SMEs can liquidate receivables ahead of their maturity date. SLCM, an Indian agriculture and warehousing firm, has partnerships with four Myanmar banks to provide collateral financing for agricultural commodities.

²⁶ https://www.mmbiztoday.com/articles/myanmar-has-its-first-credit-bureau

²⁷ http://www.abank.com.mm/products/loans-2/

²⁸ https://www.finchannel.com/business/71038-adb-partners-with-yoma-bank-to-support-smes-in-myanmar

5.2 Risk Capital

The size of the Myanmar market and its long-term growth prospects has attracted significantly more foreign investors to fund Myanmar SMEs than Cambodia or Lao PDR, although all three countries face similar developmental challenges.

This is reflected in the number of institutional investors active in the market and the volume of deals they have completed. It is also reflected in the amount and range of risk capital available to startup and growing SMEs – and consequently, the Global Entrepreneur Index (GEI) rates. 'Availability of Risk Capital' is 30% higher than Cambodia and Lao PDR.²⁹

| MANAGER | DEALS | TICKETS | MANDATE | ACTIVE SINCE |
|---------------------------|-----------------|----------------------|------------------|--------------|
| BOD Tech (Myanmar) | 9 ³⁰ | Unknown | Digital / VC | 2014 |
| iMyanmar (Myanmar) | 9 ³¹ | < 0,5M | Digital / VC | 2015 |
| Seed Myanmar (VIMIC) | 4 ³² | 1M – 5M (VIMIC) | Digital / VC | 2016 |
| MIL (Foreign) | 2 | < 1M ³³ | All / PE | 2013 |
| Anthem Asia (Foreign) | 8 | < 0,1M ³⁴ | All / PE | 2012 |
| Delta (Myanmar / Foreign) | 5 | 6 – 9M ³⁵ | All / PE | 2013 |
| Daiwa (Foreign) | 2 | Unknown | All / PE | 2017 |
| EMIA (Foreign) | 1 | 2 – 7M | All / PE | 2017 |
| Insitor | 2 | 0,25 – 3M | Impact investing | 2013 |

Figure 30: Institutional investors active in Myanmar (Q2 2018) figures in USD

Source: EMC research and key informant interviews. Excludes investments made by accelerators in their graduated firms

Driven by greater overseas experience in business, Myanmar nationals are also more involved and formalised than their domestic counterparts in Cambodia and Lao PDR. Singapore features particularly prominently as an incubation tank for Myanmar's entrepreneurs and investors.

Tech Startups

Investment in tech sector startups is outstanding compared to that of Lao PDR and Cambodia, though ticket sizes have been very small, reflecting the risk of investing in relatively inexperienced domestic tech entrepreneurs. This positive situation is likely attributed to availability of platforms that can deliver a pipeline of investment opportunities, as well as the potential for digital tech-driven business models to find growth opportunities in generally inefficient industrial sectors – online market places for equipment and services account for one of the largest tech startup segments.

According to research by Emerging Markets Entrepreneurs (EME) in early 2018³⁶, there have been 184 Myanmar startups and 58 investments – including discrete funding rounds and accelerator investments – since 2013.

Bootstrapping is common in the tech sector, with digital consultancy being a popular model to generate cashflow while developing and scaling their businesses. **PROBLEM** It is difficult to find seed finance for accelerator graduates.

WHY IT HAPPENS Few investors, little experience with startup and tech investing, and unfamiliarity with valuation.

SOLUTION Phandeeyar offers seed financing on commercial terms to accelerator graduates. This helps crowd in external investors and motivate accelerator participants.

²⁹ GEI Risk Capital parameter: "Is capital available from both individual and institutional investors? http://thegedi.org/.

 $^{^{\}scriptscriptstyle 30}$ Includes the firm's and founder's investments.

³¹Includes the firm's and founder's investments.

³² Seed Myanmar (VIMIC) is Myanmar focussed fund, established by Vulpes Fund Managers. Includes both entities investments.

³³ MIL excludes Apollo Towers, a telecom tower infrastructure business (US\$ 20M).

³⁴ Anthem Asia excludes SME Venture Fund.

³⁵ Delta Capital Partners' first fund.

³⁶ Hype and Hope: A Report on Myanmar Startups, Emerging Markets Entrepreneurs, 2018.

^{•••••••}

Phandeeyar Innovation Lab invests in graduates of its tech acceleration programme, and if included in the list, the incubator becomes the largest 'institutional' seed investor, with 11 investments in each startup of US \$25,000 for a 12% convertible note.

Aside from 'accelerator-investors', the largest currently active investors by number of deals are all tech investors: BOD Tech, iMyanmar³⁷ and Seed Myanmar³⁸. These firms also illustrate Myanmar's connections to Singapore – the founders of BOD Tech and iMyanmar are Myanmar nationals, educated in Singapore educated with previous proprietorship in Singapore before returning to Myanmar. Vulpes, the parent of Seed Myanmar, is a Singapore-based fund manager.

The tech sector also has a 'long tail' of individual angels and VC firms, including overseas, that have contributed one to three individual deals. These include a large proportion of overseas firms, including outside Southeast Asia, who have tested the waters with one or two small investments, and cumulatively these account for a large proportion of investments in start-ups. Examples include Bilbros (Sweden), New Vostok (Sweden), Frontier Digital Ventures (Malaysia), 500 Startups (US), Globalway (Japan) and Nest Tech (Vietnam).

The range of early stage investors continue to increase and formalise: following initial investments, Vulpes raised a dedicated Myanmar focused VC fund – Seed Myanmar (previously VIMIC) – during 2017. Emerging Markets Entrepreneurs (EME), launched in early 2018, will target tickets of up to US \$300,000 and provide onshore support to domestic tech entrepreneurs that have outgrown seed investment³⁹ Phandeeyar expects to close a US \$10 million VC fund in late 2018 (Phandeeyar Tech Ventures) that will similarly invest up to US \$300,000 per firm. iMyanmar founder Nay Min Thu is in the process of raising a US \$5 million VC fund.

As illustrated with examples throughout this report, some tech startups have received two or three rounds of funding. This is a good sign: VC tech sector investments usually have shorter funding cycles than private equity, typified by the '18/20 rule' – the firm sells 20% equity to fund the next 18 months of expansion.

This evolution is probably assisted by emergence of scaled-up fundraising pioneers, which have attracted significantly larger investments, including firms such as Shweproperty, Nexlabs, Bagan Innovation Technology and Oway.

In general, it seems that early stage tech investing is moving on the right trajectory: tech startups successfully attracted seed funding and have therefore increasing access to larger quanta of capital from a growing domestic venture capital scene, as well as other international markets like Singapore.

SMEs in Traditional Sectors

By comparison, SMEs with traditional business models have a more limited range of funding options and account for fewer deals.

Seed capital is relatively widely available in small amounts via friends, family and grants. Startup entrepreneurs may borrow a small amount from MFIs, as physical collateral is not required; however, these loan tenors are very short.

Anthem Asia is an investment manager established in Myanmar since 2012 and as of the end of 2017 had made eight SGB and SHB investments from US \$100,000 upwards.

³⁷ iMyanmar founder is raising US\$ 5 M fund (Feb, 2017).

³⁸ VIMIC - Vulpes Innovative Myanmar Investment Company – rebranded as 'Seed Myanmar' in 2018.

³⁹DGGF was an anchor investor in EME. Other investors include the parent company of EMC and regional investors.

Myanmar Investment Limited (MIL, est. 2013) and Emerging Markets Investment Advisors (EMIA, est. 2017) will invest in tranches as low as US \$1-2 million in SGBs and Gazelles with strong growth prospects. MIL is an exclusively Myanmar focussed investment manager and has two portfolio companies – both startups in retail (health & beauty) and microfinance.⁴⁰ EMIA is a Mekong focused frontier market private equity firm with a single Myanmar portfolio company; however, unusually for its portfolio, this is a tech sector investment: the booking and ride hailing business, Oway. Most importantly, all three investments by both companies are in startups, albeit with experienced entrepreneurs at the helm and high growth expectations.

According to interviews, this reflects a general challenge finding investable opportunities amongst existing firms, in particular amongst 'Gazelles', where they typically might expect to deploy several millions in an attractive target. These early stage investors in traditional sectors also noted that they don't get pipeline from existing tech-focused accelerator programmes.

MIL and EMIA have not exited any investments, however this is probably not surprising given the youth and current challenges of the Myanmar market and the long-term growth potential from holding attractive portfolio firms. As a benchmark, EMIA, founded in Cambodia in 2009, had yet to exit a Cambodian portfolio firm as of December 2017. However, in general there is a lack of exits for growth stage investors, due to weaker overseas sentiment, and absence of domestic exits via stock market listing – the senior board on the Myanmar Stock Exchange has only seven firms and low market capitalisation, valuation ratios and trading volume. Larger domestic investors – already acclimatised to country risk factors – represent a possible route. For example, Delta Capital Partners (est. 2013) is a Joint Venture with a major Myanmar holding company and is currently on its second fund.

The above situation is in stark contrast to earlier optimism, as the availability of risk capital in traditional sectors has been constrained due to the slow pace of reform, further hindered by political controversy due to the situation in Rakhine State. Among the long list of firms attempting to capitalise investment funds in 2015⁴¹, the majority took much longer, only partially achieved their aim, or withdrew. Reflecting these difficulties, MIL announced in early 2018 that it would pause expansion and focus on developing its existing investment portfolio.⁴²

Signs of Change

According to interviews with domestic investors, valuing tech startups had been a significant problem. Myanmar entrepreneurs report that "Myanmar investors want to own 100% of your business for mere six fig investment". On the other hand, Myanmar tech investors report that many young entrepreneurs have unrealistic expectations of their digital startups' value. However, as more institutional investors enter the tech-investing market, this problem appears to diminish. **PROBLEM** Lack of investment capital for SMEs.

WHY IT HAPPENS High costs to develop pipeline and execute investments.

SOLUTION IFC, DGGF and CDC Group PLC are funding the Myanmar SME Venture Fund, operated by Myanmar-based fund manager Anthem Asia, to invest in non-tech SMEs. Ticket sizes start at US \$250,000.

Additionally, the availability of risk capital to existing small businesses in traditional sectors is increasing.

There have been several attempts to mobilise angel networks, including Business Angel Network, Myanmar Angel Network, MYEA Angel Network, Yangon Angel Network and others.

The creation of Anthem Asia SME Venture Fund (see box) and entry of One To Watch (OTW) will improve risk capital to growth-oriented SMEs below US \$1 million.

⁴⁰DGGF was an anchor investor in EME. Other investors include the parent company of EMC and regional investors.

⁴¹ https://frontiermyanmar.net/en/business/private-equity-take-your-time

⁴² Strategic and Business Update April 2018, Myanmar Investments International Limited (MIL).

One To Watch is an impact investment manager that also invests in SMEs. In contrast to Anthem Asia, and in common with Phandeeyar, OTW established an accelerator programme, Rockstart, to develop a pipeline of investment opportunities. Pitching for its first cohort of graduates began in July 2018.

Anthem Asia is closing an SME fund, with funding announcements from DGGF, International Finance Corporation (IFC) and CDC Group PLC (CDC)⁴³, totalling US \$34.5 million. Ticket sizes will start at US \$250,000, providing a valuable source of risk capital for growing SMEs in the 'missing middle'.

6. Business Support Services

The ecosystem has five acceleration programmes. The longest running of these focuses on tech and innovation, however they've been joined in the past year by programmes that address existing SGBs and SHBs in traditional sectors, resulting in a diverse set of programmes (See Figure 32 Recent accelerator programmes (Q2 2018)). While there is outreach nationally, service provision is focused in Yangon, and the ecosystem is quite fragmented and grassroots-driven.

Although the most active hubs are relatively new, they are built on strong foundations. Phandeeyar evolved from a previous project, Code4Change, and Impact Hub evolved from the 2016 merger of two pre-existing organisations. Micro Empire's founder has eight years' Myanmar experience in related activities, and Lithan Academy is the Myanmar subsidiary of regional technology-oriented business training provider. OTW/Rockstart builds on four years' experience in acceleration and seven years investing in Nepal.

Local organisations feature prominently: Phandeeyar Innovation Hub and Micro Empire were founded in Myanmar, and Impact Hub co-founder, Office cubed, is a Myanmar-owned service offices company. UMG Global is a Myanmar corporation focused in industrial machinery.

International networks are significantly involved in the development of the current hub infrastructure. Lithan Academy is a subsidiary of a Singaporean regional professional training firm. Rockstart Impact is the Myanmar subsidiary of Dutch impact investor, One To Watch. Impact Hub is part of a global network of social impact hubs. Additionally, Yangon has attracted the interest of many global ecosystem builders that leverage the existing 'hub infrastructure' to deliver locally in Myanmar. Amongst these is Seedstars – who have run three annual business plan competitions for early stage startups. The US accelerator, Founders Institute, partners with Phandeeyar to deliver its acceleration programme in Myanmar.

Of these organisations, Phandeeyar is the oldest and largest, with the broadest range of services and collaborative relationships spanning ideation ('Startup Challenge') through to acceleration (Accelerator, Founders Institute), and with the launch of Phandeeyar Tech Ventures, VC investment (see Section 5.2 Risk Capital).

This ecosystem expanded and diversified in 2017. Phandeeyar approximately doubled its staffing and facilities in 2017-2018, following a US \$2 million investment from Omidyar Network⁴⁴, while Micro Empire and Rockstart established operations to focus on growth oriented SMEs in traditional sectors.

⁴³ CDC and IFC are the development finance institutions of the UK Government and World Bank Group respectively.
⁴⁴ https://www.omidyar.com/investees/phandeeyar

Figure 31: Organisations offering startup and acceleration services 2017-2018

| ORGANIZATION | ORIGIN | MANDATE | ESTABLISHED |
|---------------------------|--|---|-------------|
| Phandeeyar Innovation Lab | Start-up, founded in Myanmar | Digital tech, social impact | 2014 |
| UMG Global | Myanma corporation focused on industrial machinery | Corporate innovation, 'Idea Lab' coworking space | 2015 |
| Micro Empire | Start-up, founded in Myanmar | All sectors | 2016 |
| Impact Hub | Global network social impact hubs | Social impact | 2016 |
| Lithan Academy | Regional professional training firm | Digital tech | 2016 |
| Rockstart Social Impact | Existing operations in Nepal | All sectors, BOP impact. | 2017 |

Ecosystem Services

There is a great deal of activity to promote entrepreneurship, including national events such as Global Entrepreneurship Week, Myanmar Entrepreneurship Carnival 2018 and Myanmar Entrepreneurship Summit. Myanmar's first major startup competition was launched in 2015 by Phandeeyar, and is currently recruiting for its third event. Seedstars Yangon, an annual pitch event for startups, was launched in 2016. Interviewees and workshop participants, however, emphasised that awareness is mostly centralised in Yangon and less developed elsewhere in the country.

Most acceleration programmes have been tech focused, however there is a more diverse selection, including existing SMEs in traditional sectors and entrepreneurs with professional work experience.

| PROGRAMME | TARGET GROUP | IMPLEMENTER | LAUNCHED | COHORTS (PARTICIPANTS) | DURATION |
|--------------------------|-------------------------------------|----------------------------------|----------|------------------------|-------------------------|
| Accelerator | Digital tech | Phandeeyar | 2016 | 2 (11) | 6 months |
| Founders Institute | Digital tech | Phandeeyar | 2017 | 1 (6) | 14 weeks (part time) |
| TechUp | Digital tech | Lithan Academy | 2017 | 1 (2 ventures) | 6 months (fulltime) |
| Rockstart Accelerator | All sectors | Rockstart Social Impact (OTW) | 2018 | 1 (9) | 100 days (part time) |
| M-Biz | Small manufacturing companies | Micro Empire | 2016 | 4 (32) | 3 months (part time) |

Figure 32: Recent accelerator programmes (Q2 2018)

The most 'intense' and well-resourced acceleration programme is Phandeeyar's Accelerate, currently recruiting its third cohort (July 2018), which requires the seven to 10 tech startups to attend full-time, on-site training and programming at Phandeeyar's dedicated 6,000 sq.foot accelerator facility for the six-month duration of the accelerator. Similarly, Lithan Academy's TechUP is also a full-time six-month programme, during which participants also receive a US \$300 per month stipend.

By contrast, Founders Institute acceleration programme – also implemented in Myanmar by Phandeeyar – and Rockstart Accelerator are both part time, last three to four months and are oriented towards entrepreneurs who are employed or running their own business.

Applications to the acceleration programmes are highly competitive: depending on whether they cater to startups or existing SMEs, programmes require minimum viable products backed by research and testing, or minimum two years' operations experience. In both cases, candidates must demonstrate a business model and desire to scale.

Attrition during acceleration is low – the exception being the Founders Institute programme, which has purposefully high attrition levels of around 40-50%.

Most accelerator programmes integrate an investment capability for successful graduates, which is attractive to participants and helps generate other sources of finance. Phandeeyar Innovation Hub invests in graduates of Phandeeyar Accelerator, and similarly, Red Dot Ventures invests in graduates of Lithan's Tech Up. OTW does not invest capital in Rockstart graduates but facilitates access to a network of international and local impact investors as well as bank credit. Similarly, Micro Empire facilitates participants in its accelerator programme to pitch for US \$5,000-10,000 investments.

Facilitating investment or credit is also part of the accelerators' financial sustainability strategy.

Figure 33: Accelerators' income

| PROGRAMME | FEE | EQUITY PARTICIPATION |
|------------------------|------------------|---|
| Phandeeyar Accelerator | No ⁴⁵ | 12 % equity, US \$25,000 (convertible) |
| Tech Up | No | 10% equity, US \$25,000 |
| Rockstart | No | Success fee of 10% of investment (capped) |
| Founders Institute | Yes | 4% equity |
| M-Biz | Yes | No |

Phandeeyar Innovation Labs has successfully crowded in external investors to finance graduates from its acceleration programme. Chate Sat is a good example: conceived at a 'hackathon', the freelancer marketplace startup graduated from Accelerate 2016 Cohort 1 (2016) with US \$25,000 seed funding and subsequently received two rounds of VC finance, in 2017 (Seed Myanmar, Theta Capital and others) and in 2018 (Singaporean based investors). Similarly, graduates of Rockstart Cohort 1 also achieved fundraising success: by end of 2018, four of the nine accelerator graduates have raised or received funding commitments from both domestic and international investors.

There has been some attrition and evolution in the ecosystem for a variety of reasons: several service providers cited in previous studies⁴⁶ having closed or changed business model. These include Project Hub (expatriate founders departed), Kanaung Hub (shifted to co-location) and Hamsahub (shifted to consulting). IdeaBox, a corporate initiative by cellular service provider Ooredo, was cancelled due to a change in corporate strategy. Suletech launched in 2015 as a co-locating space with Ooredo and Code4Change as tenants but closed within one year.

Gaps

Currently none of these acceleration programmes operate outside Yangon. Whilst regional participants are encouraged, the requirement to attend part or full-time limits their participation. Phandeeyar is currently (as of July 2018) collaborating with Mandalay Computer Industry Association (MCIA) to build a pitch bootcamp in Mandalay, with the winner guaranteed a spot pitching to the Accelerator admissions committee.

SGBs, HGBs and Gazelles in traditional sectors have far less acceleration options than the tech sector startups, and consequently with investors outside the tech sector that are not seeing investment opportunities, according to interviewees.

⁴⁵ TechUP paid participants a US\$ 300 stipend.

 $^{^{\}rm 46}$ Mapping Yangon's Emerging Startup Ecosystem, 2015; USAID White Paper Myanmar, 2016

The hubs and acceleration programmes are not yet financially self-sustainable and require financial support from development aid or boot strapping: small grants, scholarship for key staff, consulting activities, facilities provision and reciprocal 'in kind' arrangements with their service providers.

The Government has not been actively involved in service provision.

Early Signs of Change

The Government is becoming involved as a service provider: Yangon Regional Government allocated a 12,000 sq.ft. premises to provide incubation, coworking, and community and event space in support of students, youths, startups and SMEs. In addition, Seedstars and Thura Swiss, a Myanmar consulting firm, were awarded a three-year contract to renovate and operate under a profit-sharing arrangement with the centre (May 2018).

MYEA is providing a broader range of services, beyond advocacy and networking.

Acceleration options for SGBs and SHBs in traditional sectors are increasing, with the launch of Rockstart and Micro Empire.

7. Ecosystem SWOT Analysis

The core strength of the Myanmar ecosystem is its large internal market. This attracts opportunity-seeking investors and provides demand for domestic entrepreneurs. As investments in policy and infrastructure materialise, Myanmar will become a major regional logistics hub, extending export opportunities for domestic SMEs. In the shorter term, however, Myanmar has struggled to enact the necessary enabling reforms, as it manages the complex transition from autocracy to democracy and from managed to market-based economy. During 2018, renewed efforts by Myanmar's government indicate desires to ease the bureaucratic hurdles that inhibit entrepreneurial risk-taking and increase support for financial services.

Figure 34: SWOT analysis of the Myanmar ecosystem

STRENGTHS

- Large internal market, natural resource endowments and strategic location provides growth opportunities
- Support for digital tech entrepreneurs is particularly strong, both acceleration and investment
- Highly attractive to foreign capital investment

OPPORTUNITIES

- Expansion beyond Yangon
- Support for women entrepreneurs
- Support for Gazelles, and exporting firms in particular

WEAKNESSES

- Government has weak track record implementing improvements to the business enabling environment
- Weak financial services sector in general
- The ecosystem is still small, fragmented and centralised in Yangon
- Weak offering for entrepreneurs in non-tech, traditional sectors

THREATS

- Lack of coordination amongst ecosystem stakeholders
- Macro-economic instability; no improvement of business enabling environment

8. Way Forward

The Myanmar entrepreneur ecosystem is young and dynamic, offering a variety of financial and non-financial services. Many of the acceleration programmes are new, Yangon focused and – with the exception of Phandeeyar – lack scale. There is a substantial emphasis on tech entrepreneurship, which may not be as exposed to the challenges of creating and moving tangible goods, labour-intensive industries and service businesses. However, as illustrated in sections on infrastructure, education and elsewhere, many tech entrepreneurs are finding opportunities in this adverse situation.

Whilst all firms in Myanmar find it difficult to access credit, SMEs find it especially so, due to higher transaction costs and lower revenue associated with smaller loans. Improved government policies, such as the 2018 mandate allowing foreign banks to provide services to local firms, may improve the sector. Risk capital, however, fairs far better than Cambodia or Lao PDR: the country has attracted more interest from fund managers and individual investors, while investment in tech sector startups is outstanding. There remains plenty of space for the ecosystem to grow – both nationally and among domestic SMEs with more traditional business models.

Ongoing Improvements to the Business Enabling Environment

The policy and regulatory environment is improving only gradually, as reflected in the static World Bank Doing Business ranking and several recent business sentiment surveys. The challenges of a weak enabling environment fall heavily upon rural SME. Government reforms, and the private sector response, are most impactful in Yangon and major urban centres, and take time to propagate outwards. This is exacerbated by Myanmar's complex administrative bureaucracy (see Policy) and regional politics.

During 2018, there are signs that the Government has renewed commitment to positive change, via the enactment of policies to facilitate foreign investment and easing of regulatory burdens, which are particularly debilitating for smaller, owner-managed firms. In the finance sector in particular, announcements to improve credit information, governance in the financial sector, and to broaden the scope of foreign invested banks should improve SME access to credit once these measures have been implemented.

In addition to the above, there are three recommendations worth highlighting to help scale growth orientated SMEs.

Expand support for Fast Growing Medium Sized Firms

Gazelles, or fast growing medium sized firms, have the potential to be key drivers of economic development, in particular as Myanmar seeks to integrate into regional value chains and strengthen backward linkages in the country. However, as with other countries within #CTGMekong, there appears to be few options for support: the firms may be too large for existing 'startup' initiatives.

This may be particularly critical in Myanmar because as the comparison of Cambodian and Myanmar Gazelles indicates, there is considerable scope for improvement; compared to Cambodia, a Gazelle in Myanmar is less likely to have foreign or female ownership and be female-managed. Workers are less educated, and their employers are less likely to provide them with formal training. Few Myanmar's Gazelles are exporters despite Myanmar's export potential, and they tend to be less innovative and tech savvy, despite Myanmar's developing tech ecosystem. Anecdotally, this is supported by interviews with investors, who have struggled to find investable opportunities amongst this group.

Moreover, Myanmar Gazelles account for a significantly smaller share of employment than Cambodia and Vietnam, with only Lao PDR fairing worse (see Regional Report).

As a result, there appears to be significant scope to improve support to Gazelles to address expansion related challenges – in particular, adoption of technology, human resource development and export market access.

Develop Myanmar's Export Potential

Myanmar has the potential to become a major exporting hub, thanks to its natural endowments and the investment interest these generate. However, this has yet to materialise, and Myanmar's exports as a proportion of GDP lags behind all countries in our #CTGMekong study, including land-locked Lao PDR.

This is also reflected in the WBES data across almost all sub-segments, which shows that Myanmar SMEs are far less likely to export. This is perhaps unsurprising: Myanmar firms have access to a large domestic market, which Lao PDR and Cambodia lack, and have had a short time to develop internal capacity or external domestic business services that support export capacity.

In order to realise its potential as an exporting nation, support for small and medium businesses would be beneficial in order to help export oriented entrepreneurs access overseas opportunities, and seed domestic market for business services.

Encourage Women-focused Entrepreneur Programmes

Myanmar has a smaller proportion of female SME ownership than the other #CTGMekong countries. This is important and represents an opportunity, in so far as our small business sub-segments (NEs, SNEs, SGBs and SHGs) account for 88% of registered establishments and 61% of employment.

Research elsewhere indicates that women entrepreneurs face specific barriers when dealing with bureaucracy – therefore particularly salient in bureaucratic Myanmar. These challenges may arise from lower educational attainment, literacy levels, and underrepresentation of women in senior positions ('Legislators, senior officials and managers') that an entrepreneur may contend with when formalising and developing her business.

Whilst Myanmar has a women-focused entrepreneur association and a tech startup sector seeking to encourage young female entrepreneurs, there is an absence of specifically women-focused acceleration programmes, and existing small business – in traditional sectors in particular – that seek to address entrepreneurship in a context tailored to specific challenges faced by women and existing small businesses.

In summary, SMEs in Myanmar face familiar challenges to other developing economies, compounded by a political and economic environment that is still in transition. This has also impacted the financial sector, and consequently SMEs' access to credit. A flourishing tech ecosystem speaks to its high potential, however as of yet, there have been few opportunities for SMEs with traditional business models.

Annex 1: References

Asian Development Bank (ADB) Myanmar transport sector policy note: Trunk roads. Mandaluyong City, Philippines: Asian Development Bank, 2016. Accessed at https://www.adb.org/sites/default/files/publication/189078/mya-trunk-roads.pdf

Aspen Network of Development Entrepreneurs (ANDE), 2013 Entrepreneurial Ecosystem Diagnostic Toolkit. Accessed at https://www.aspeninstitute.org/content/uploads/files/content/docs/pubs/FINAL%20Ecosystem%20Toolkit%20Draft_print%20version.pdf

Central Bank of Myanmar, 2017 Directive No. (7/2017). Accessed at https://www.cbm.gov.mm/sites/default/files/regulate_launder/overdraft_directive_eng_sd_version-24-11-2017-5.pdf

Emerging Markets Entrepreneurs, 2018 Hype and Hope: A Report on Myanmar Startups. (unpublished) Eurocham Myanmar, 2017 Business Confidence Survey 2017. Accessed at https://www.eurocham-myanmar.org/elements/download_pdf/f0df8-eurocham_-business-confidence-survey.pdf/61

The Global Entrepreneurship and Development Institute (GEDI) 2017, The Global Entrepreneurship Index 2018. Accessed at https://thegedi.org/wp-content/uploads/dlm_uploads/2017/11/GEI-2018-1.pdf

FMR Research and Advisory, 2018 Myanmar Financial Services Report 2018. Accessed at https://finance.frontiermyanmar.com/node/499

Government of Myanmar, 2015 Small and Medium Enterprise Development Policy (2015). Accessed at http://www.industry.gov.mm/en/download/file/fid/338

GSMA, Connectivity Index. Data retrieved from https://www.mobileconnectivityindex.com/

Myanmar Investments International Limited (MIL) Strategic and Business Update April 2018. Accessed at http://myanmarinvestments.com/wp-content/uploads/2018/04/2018.04.30-MIL-RNS-Strategic-and-Business-update.pdf

Roland Berger, 2017 Roland Berger Focus: Myanmar Business Survey #2. Accessed at https://www.rolandberger.com/en/Publications/Myanmar-Business-Survey-2.html

USAID, 2015 Mapping Yangon's Emerging Startup Ecosystem, 2015; USAID White Paper Myanmar.

We Are Social Singapore (Presentation), January 2018. Accessed at https://aseanup.com/southeast-asia-digital-social-mobile/

World Bank 2016, Enterprise Surveys. Data accessed at: http://www.enterprisesurveys.org/data/ exploreeconomies/2016/

World Bank 2019, Doing Business 2019: Training for Reform. Accessed at http://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf

World Bank, World Bank Open Data. Data retrieved from https://data.worldbank.org/

World Economic Forum (WEF) 2017, *The Global Competitiveness Report 2017- 18*, Geneva. Accessed at https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018

World Economic Forum (WEF) 2017, The Global Gender Gap Report: 2017, Geneva. Accessed at https://www.weforum.org/reports/the-global-gender-gap-report-2017

Annex 2: Notes on Methodology

The aim of the project is to understand SMEs, the entrepreneurial ecosystem in which they operate, and financing and support offerings, needs and gaps. SMEs are often addressed as a homogenous group. But in reality, they vary widely. It is important to understand the differences among SMEs. Hence our approach includes sub-segmenting SMEs for each country. This allows us to deepen the analysis, identify key challenges for each sub-segment, and to better tailor and target solutions.

The studies were implemented in three phases:



The desk study included a review of existing literature and analysis of data. As requested by DGGF, a major focus was utilising the World Bank's Enterprise Survey (WBES) data for each country. Other data sources that helped describe the entrepreneurial ecosystem were also used. The WBES and these other sources are discussed in more detail below.

World Bank Enterprise Survey sample

DGGF recommended that the World Bank Enterprise Survey (WBES) would form an integral part of the #CTG analysis. WBES data covers 148 countries (139 of which use the same methodology), including all countries in the #CTG Mekong, and therefore provides good basis for inter-country comparisons.

Generally, the WBES surveys registered businesses with five or more employees. An exception is Myanmar, where smaller businesses ("micro") were also included.⁴⁷

The following data summarises the full WBES sample for each #CTG Mekong country.

| PROGRAMME | CAMBODIA | LAO PDR | MYANMAR | VIETNAM |
|----------------------|----------|---------|---------|---------|
| Sample size | 373 | 368 | 607 | 996 |
| % of sample that is: | | | | |
| Micro | 0% | 0% | 6% | 6% |
| Small | 52% | 59% | 54% | 30% |
| Medium | 31% | 28% | 27% | 40% |
| Large | 17% | 13% | 14% | 30% |
| Manufacturing | 35% | 30% | 60% | 69% |
| Retail | 32% | 29% | 15% | 6% |
| Services, non-retail | 33% | 41% | 25% | 25% |
| Woman ownership | 41% | 36% | 29% | 44% |
| Woman-managed | 53% | 38% | 29% | 22% |
| Registered | 98% | 99% | 100% | 100% |
| Exporter | 9% | 9% | 9% | 21% |
| - small | 6% | 1% | 1% | 7% |
| - medium | 8% | 16% | 9% | 13% |
| - large | 19% | 28% | 40% | 41% |
| Foreign-owned | 10% | 13% | 5% | 9% |
| - small | 3% | 6% | 1% | 2% |
| - medium | 5% | 19% | 1% | 4% |
| - large | 39% | 30% | 27% | 23% |
| State ownership | 0% | 2% | 0% | 4% |

Source: World Bank Enterprise Surveys.

Although the number of micro businesses surveyed in Myanmar was quite small (see table).

The methodology for the WBES can be found here: http://www.enterprisesurveys.org/methodology

WBES coverage

In the WBES the population is the non-agricultural economy. It comprises manufacturing, construction, wholesale, retail, hotels, IT, transport, storage, and communications. It excludes:

- Financial intermediation
- Real estate
- All public administration
- Mining and quarrying
- Utilities
- Professional services (legal, accounting, consulting, advertising, etc.)
- Education (including private)
- Health and social work (including private)
- Hairdressing and other beauty treatment

Businesses with 100% state ownership are also excluded. In each country, businesses in the cities/regions of major economic activity are interviewed.

Stratified sampling and weights

The WBES uses stratified random sampling³¹ when building up its survey sample. This helps ensure the final total sample is not concentrated in one or two industries, for example. Or if only a few large businesses were interviewed (reflecting their share of the total number of businesses), those chosen might not be representative of large businesses. Stratified sampling avoids this. Three strata are used in the WBES: industry, establishment size, and location. For the #CTG Mekong countries, the industry strata are: manufacturing, retail, and services. The establishment size strata are: small (5 to 19 employees), medium (20 to 99 employees), and large (100 or more employees). The location stratification varies by country, but is typically the four or five regions where most businesses operate. So, for example, large businesses make up 17% of the Cambodia WBES sample, even though they account for a much smaller percentage of total businesses in Cambodia.

Since the sampling design was stratified and employed differential sampling, individual observations must therefore be properly weighted when making inferences about the population. Under stratified random sampling, unweighted estimates are biased (unless sample sizes are proportional to the size of each stratum). Any estimate or indicator that aims at describing some feature of the population should consider that individual observations may not represent equal shares of the population. The WBES dataset provides three weights (strict, median, weak) for each observation³². All data in the reports derived by EMC are estimates for the total population using WBES median weights³³.

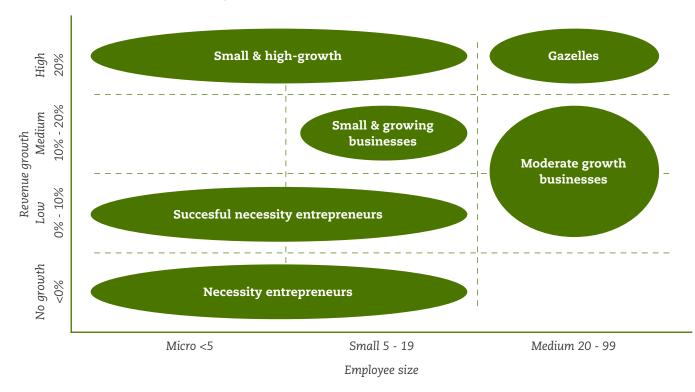
⁴⁸ A stratified random sample is one obtained by separating the population elements into non-overlapping groups, called strata, and then selecting a simple random sample from each stratum.

⁴⁹ WBES Implementation Reports include more information on sampling and weighting.

⁵⁰ Data published on the Enterprise Surveys website is also based on median weights.

SME segmentation

For segmenting the SMEs using WBES data, we followed the approach of #CTG Kenya, using the same nomenclature for the business categories, see the below illustration:



WBES Issues

- Unregistered businesses and micro businesses are excluded. These make up a significant proportion of the private sector in the #CTG Mekong countries.
- Sample size is not large, especially once segmented. Therefore, we need to be mindful of this when discussing sub-segments.
- Revenue growth data was not provided by many businesses, further reducing the sample for segmentation.
- Segmenting by revenue growth excludes young businesses; WBES provides revenue for latest year and 3 years ago, so businesses younger than 3 years are excluded by our segmentation. However, there were very few start-ups and early-stage businesses in the WBES samples for the #CTG Mekong countries.
- Entrepreneur age is not included in WBES, and therefore it is not possible to segment firms by age of their owner or top manager.
- WBES counts establishments, not enterprises. One enterprise (firm) can have multiple establishments (for example, a head office plus a depot). Although for the #CTG Mekong countries the majority of the WBES samples were single-establishment enterprises; Cambodia 93%, Lao PDR 91%, Myanmar 74%, Vietnam 92%.
- As with all business surveys, there can be data quality issues. For example, the reliability of small businesses accurately recalling/reporting sale revenue from 3 years ago. In undertaking the WBES, businesses were recontacted to clarify answers where necessary.

Entrepreneurial ecosystem analysis

The framework for analysing the entrepreneurial ecosystem was the ANDE³⁴ Entrepreneurial Ecosystem Diagnostic Toolkit. The first study for the DGGF #ClosingTheGap series piloted in Kenya applied a version of this Toolkit. The framework was modified slightly for #ClosingTheGap Mekong by adding entrepreneurs' capabilities at the centre of it.

⁵¹ Published by the Aspen Network of Development Entrepreneurs (ANDE), December 2013.

Data for ANDE themes

The WBES provides data for most of the ANDE themes and was used in the reports where possible. The WBES is particularly useful for Finance, Human Capital, Policy, Infrastructure and R&D/Innovation. Other sources also provide data closely related to the ANDE themes, including the Global Entrepreneurship Monitor, the Global Entrepreneurship Index and the Global Competitiveness Index. These were used selectively through the reports. However, some of these sources don't cover all #CTG Mekong countries.

Hence, in addition to WBES, other secondary data sources were reviewed, and these include:

- Infrastructure: Logistics Performance Index; GSMA Mobile Connectivity Index; countryspecific data
- Human Capital: Global Competitiveness Index; UNESCO; World Bank Human Capital Project; WEF Global Gender Gap indicators
- Entrepreneurial Culture: Global Entrepreneurship Monitor; Hofstede Uncertainty Avoidance Index; country-specific data
- Markets: Global Competitiveness Index; World Bank trade data; country-specific data
- Policy: World Bank Doing Business; Global Competitiveness Index; country-specific data
- R&D and innovation: Global Innovation Index; country-specific data
- Finance: country-specific data, local sources
- Support: local sources

The insights from analyzing the above data were then supplemented with key informant interviews in Phase two of the research.

Workshops

#CTG Workshops brought together entrepreneurs and service providers to review, validate and challenge research findings to date and engage in an interactive session towards elaborating solutions to address gaps identified in the ecosystem.

Market

Finance

Innovation

R&D

Human

capital

Culture

Infrastructure

Business

support

Entrepreneurs

Capabilities

Policv

The #CTG Cambodia workshop comprised of 34 representatives from financial institutions, business associations, development organisations, the government, business support service providers, educators, corporates and entrepreneurs. Following a presentation of draft findings and Q&A session, participants were divided in to groups representing a cross section of stakeholders to discuss specific constraints and solutions in the thematic areas of debt finance, equity finance, business support services and human capital. Cambodian Women's Entrepreneur Association provided the opening address and supported group-based work.

The group-based work was refined in subsequent #CTG Mekong workshops. In Lao PDR, Myanmar and Vietnam groups were asked to comment on 'entrepreneur personas' that typified businesses and growth challenges faced by firms in each sub-segment, identify gaps and propose solutions. Personas were selected for the main subsegments of interest and were designed to reflect research and key informant interviews. 'Entrepreneur personas' were developed following the #CTG Cambodia workshop.

| | BACKGROUND | AMBITIONS | CHALLENGES |
|--------------------------------|---|---|--|
| GAZELLE | Socialshakers is one of the leading businesses providing social media marketing and web development in Yangon. It was built from the ground up by a small group of friends from university, with financial backing from family. Currently Socialshakers employs over 30 staff, with turnover over \$1 million, and growing over 20% pa (exact figures confidential). | To be the innovative leader in social media and web in Myanmar, riding the digital wave that is taking the country by storm. Socialshakers is actively looking for significant strategic investment, as the owners want to grow and then cash out. | Difficulties finding talented staff, who demand high salaries. The owners are unsure how to value their business, and how to find and evaluate the right investors |
| HIGH GROWTH BUSINESS | Design4U was established in 2014 by an architecture graduate who studied a master's degree abroad and worked there for a time. The small business grew fast at 30% pa during a construction boom and attracted \$100,000 investment from a venture capitalist. | Establish itself as the leading brand of innovation in interior design, combining international standards with elements of Myanmar traditional cultural heritage | As more international agencies enter the market, competition increases and Design4U will need to up its marketing skills. The firm faces significant challenges finding and keeping skilled human resources. |
| MODERATE GROWTH BUSINESS | Pesto Control is a medium sized firm distributing all kinds of pesticides to retailers as well as directly to large farmers. It was founded over two decades ago by a former farmer using savings and support from family, who took a stake in the business. The founder still manages the firm, with around 70 employees and over \$750,000 in annual revenues, growing steadily at 12% pa. | To expand into different geographical markets and reach more clients, to achieve faster growth. Diversify product offerings, perhaps provide insect control services. | The planned expansion will require significant growth capital, either debt or equity. The founder's experience is primarily on the product side, and he may need a partnership or investor with supply chain experience. |
| SMALL GROWING BUSINESS | Handy Handicrafts makes and sells, both retail and wholesale, souvenir handicrafts that are useful as well as decorative. After working in hospitality for a few years, the university graduate saw an opportunity for the growing tourist market in Myanmar. Annual revenue is around \$20,000, with average 15% growth. | Starting off small, the business is only 3 years old and growth has been disappointing, so the owner wants to hire staff to focus on developing the business both operationally and strategically. | Inexperienced in sales and business development, as well as HR management, the owner will need support services. The market is limited to tourists, and Handy Handicrafts does not entirely understand the different types of visitors and their preferences. |
| SME GROWTH FUND | Entry Growth Fund is a new Development Finance Institution, having just been established with funding from the government of Zokavia. The fund's management has been given US\$50mn to spend on a program to strengthen the entrepreneurial ecosystem in Myanmar. They are currently conducting research to inform the design of this program and have hired you as consultants. | To bridge the funding gap faced by many entrepreneurs moving into the growth stage of their business. Provide support that complements well with existing service providers already in the ecosystem. | Entry Growth Fund's management isn't entirely sure what support entrepreneurs in Myanmar need the most, or how it could be delivered most effectively; but they want to get their program started as quickly as possible. |