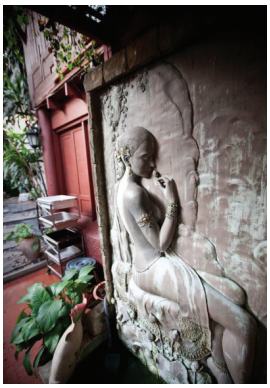



ASEAN REGIONAL ENTREPRENEURSHIP REPORT 2014/15









Driving Asean Entrepreneurship:

Policy Opportunities For Inclusiveness And Sustainable Entrepreneurial Growth

Siri Roland Xavier | Ulrike Guelich | Penny Kew | Catharina Nawangpalupi | Aida Velasco

GEM
UNIRAZAK
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International Development Research Centre
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Canada

ASEAN REGIONAL ENTREPRENEURSHIP REPORT 2014/2015
DRIVING ASEAN ENTREPRENEURSHIP: POLICY OPPORTUNITIES FOR INCLUSIVENESS AND SUSTAINABLE ENTREPRENEURIAL GROWTH

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Sponsors and Institutions

This regional research project was made possible through;

- The International Development Research Centre (IDRC) which funded Vietnam, Indonesia and the Philippines.
- Universiti Tun Abdul Razak (UNIRAZAK), Malaysia the SEA coordinating institution.
- The Global Entrepreneurship Research Association (GERA).
- The GEM research teams of Vietnam, Indonesia, Philippines, Singapore, Thailand and Malaysia.

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The authors thank Datuk Seri Md Zabid of UNIRAZAK, Edgard Rodriguez of IDRC, Michael Herrington of GERA, Yana Litovsky of GEM data team and all participating national team members for their various contributions to this first ASEAN regional entrepreneurship report.

Although GEM data was used in the preparation of this report, their interpretation and use are the sole responsibility of the authors.

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FOREWORD

Entrepreneurial capacity building is pivotal to the development of all types of economies. It lays the foundation for infant economies, resuscitates stagnant economies and installs a leapfrogging drive for emerging economies. As such UNIRAZAK is proud to lead this research initiative in ASEAN along with GEM and IDRC. The need for evidence based recommendations are crucial as they empower policy makers.

This first regional ASEAN entrepreneurship research study against the backdrop of global data and benchmarks will directly raise policy making standards. It will afford a deeper contextual understanding which can impact growth and inclusiveness for women, youth, SMME's and the disadvantaged within ASEAN. These are key focal pain points for ASEAN as it faces the challenges of a new millennia. Thus this report whilst promoting an understanding of ASEAN's entrepreneurial phenomena will also serve to unveil the vast opportunities for higher entrepreneurial growth and sustainability within the region.

Prof. Datuk Seri Dr. Md. Zabid Hj Abdul Rashid, President and Vice Chancellor, Universiti Tun Abdul Razak, Kuala Lumpur, Malaysia.

If you want to understand today's entrepreneurs, look to GEM. Its surveys help governments understand what motivates entrepreneurs, the challenges faced by new small enterprises, and how to help them grow. IDRC is proud to have supported the research at the heart of this first GEM report on the ASEAN region.

It fills an important gap by providing reliable comparative data about innovation, jobs, and growth in a region of tremendous importance to Canada. This timely evidence is needed to create the sound policies that help small businesses thrive and benefit society as a whole.

Jean Lebel, President of International Development Research Centre (IDRC), Ottawa, Canada.

Each year GEM countries around the world publish a report of their own entrepreneurial ecosystem but very rarely is such a report written on a regional basis allowing for the comparison between entrepreneurship and small business development amongst countries within the region. This ASEAN report is a milestone in that it is the first such report which allows cross-country regional analysis and as such will provide important information which could allow policy makers to make more informed decisions.

The report covers valuable information about the perceptions, attitudes, aspirations and intentions of the adult population in each of the countries and then compares these amongst other neighbouring countries. Valuable insight is obtained from this, providing a richer insight into what is happening in the entrepreneurial space.

Mike Herrington, Executive Director, GEM Global

EXECUTIVE SUMMARY

In the wake of the global financial crisis and ensuing developments, the world's economic landscape has undergone significant shifts. One development has been the heightened role of emerging economies in the global context. ASEAN, with a workforce of more than 400 million, a combined GDP of 3,600 billion US$ and an abundance of natural resources, has vast strengths to draw on and is well positioned for playing an increasingly important role on the global economic stage. An Asian Economic Community (AEC) is no longer an abstract but a reality that the regional governments need to embrace before the end of the year 2015. Reaching the full potential of the AEC, however, will require concerted mutual efforts, with governments focusing on reforms that help to create enabling environments that foster innovation, facilitate more productive economies and, critically, open up new and better job opportunities for all segments of the population. Entrepreneurship plays a crucial role in the upcoming ASEAN Economic Community, as a key driver of sustainable economic growth and job creation. While the potential benefits of increased entrepreneurship are widely recognised, better evidence is needed to identify the most effective policies for entrepreneurship promotion in the region.

The Global Entrepreneurship Monitor (GEM) research project provides useful data on both the extent and nature of entrepreneurial activity within participating economies. Each year since its inception in 1999, GEM has collected and analysed data on entrepreneurial attitudes, participation levels of individuals at different stages of the entrepreneurship process, and the characteristics of entrepreneurs as well as their businesses. Since entrepreneurial activity does not exist in a vacuum, GEM also considers broader environmental factors that stimulate and support it. An assessment of these factors is made using GEM's Entrepreneurial Framework Conditions (EFCs).

In order to assist policy makers in ASEAN to make more informed decisions about how to increase entrepreneurship and enhance SME development, both within their own countries and in the region as a whole, it is important that the current entrepreneurial landscape be defined and understood. In 2014, six Southeast Asian countries – Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam – participated in the GEM survey. This ASEAN survey, adding on of Vietnam, Indonesia and the Philippines, has been made possible through a generous grant from the International Development Research Centre (IDRC) – a key part of Canada's aid programme since 1970. The GEM survey data highlights significant national differences in some aspects of entrepreneurial activity in the six countries; however, enough similarities exist to provide a basis on which to build appropriate policies for the regional promotion of entrepreneurship, job creation and inclusive growth.

KEY FINDINGS

Societal attitudes towards entrepreneurship are generally positive in the ASEAN-6 region. On average, two-thirds of people in the region see entrepreneurship as a good career choice, with only Africa and Latin America & Caribbean scoring marginally higher. Malaysia is the exception. In terms of entrepreneurship as a good career choice and status for successful entrepreneurs, it reports the lowest regional levels by a significant margin, and also scores substantially below the GEM average. The ASEAN-6 stands significantly apart, on a regional basis, in terms of high level of media attention, with 81% believing that there is high media visibility for successful entrepreneurs. ASEAN-6 reports average scores in terms of perceived opportunities and capabilities - Africa, Latin America & Caribbean and North America all show significantly higher averages in terms of perceived opportunities, while Africa and Latin America & Caribbean have markedly more confidence in their own ability to start a business. Coupled with the fairly moderate numbers of people in the ASEAN region who see opportunities and believe they have the capabilities to pursue them, the high regional score for fear of failure is of concern. Only the European Union scores (marginally) higher on this indicator.

The regional level of entrepreneurial intention is encouraging, but for the majority of ASEAN-6 countries there is a sharp fall off between intentional and active entrepreneurs. This is most noticeable in the Philippines and Indonesia. Both these countries have highly positive societal attitudes towards entrepreneurship, which translates into a healthy pool of potential and intentional entrepreneurs. The level of early-stage activity, however, is less than half the number with entrepreneurial intentions. In Singapore and Thailand, on the other hand, entrepreneurial intention translates strongly into actual entrepreneurial activity. Malaysia reports the lowest early-stage entrepreneurial activity in the region, by a significant margin - its low score for perceived capabilities may be significant in this respect Although the nascent entrepreneurship rate for the ASEAN-6 region is disappointingly low, this is offset by a new business rate which is the second highest regional average (only Africa reports a higher average) and is almost double the GEM 2014 average. The established business rate is the highest regional average and is also significantly above the GEM average. The high level of sustainability of start-ups relative to other regions in the GEM sample is encouraging. Singapore shows a significantly higher TEA rate than the average for innovation-driven economies. On the other hand, its established business rate is the lowest in the region. Of greater concern is the fact that the TEA rate is almost four times higher than the established business rate, suggesting a poor level of new firm sustainability which is contrary to the regional trend.

In terms of motivation to start a business, the ASEAN-6 region has the second highest regional percentage of people drawn to go into business because of the opportunity to improve their income – an encouraging finding. However, both Vietnam and the Philippines (the factor-driven economies in the ASEAN-6) have relatively high percentages of necessity entrepreneurs.

The ASEAN-6 region has a positive ratio of TEA to business discontinuance. For every person exiting a business in 2014, three were engaged in early-stage entrepreneurial activity. The Philippines is the only country in ASEAN-6 with a high business discontinuance rate – at 12.6, it is three times the regional average. In the Philippines, for every person exiting a business 1.5 people are engaged

in early-stage entrepreneurial activity. Many of the businesses in the region close for financial reasons – either because they are not profitable, or encounter problems in accessing financing to sustain the business.

Compared to other geographical regions, the ASEAN-6 region is the best performer in terms of gender equity with respect to male and female participation in early-stage entrepreneurial activity (TEA), as well as significantly better than the GEM average. With the exception of Singapore, women are as likely or more likely to be involved in early-stage entrepreneurial activity as are men. The leakage (or the decrease of the percentage of entrepreneurs) between phases of the entrepreneurial pipeline is also similar for women and men. However, from an individual country perspective, it is clear that certain factors make it easier for women entrepreneurs to flourish in some ASEAN countries while they struggle in others. Women in the Philippines, Thailand and Indonesia, for example, are as likely to be involved in all phases of entrepreneurial activity as are their male counterparts. In Singapore, on the other hand, female participation in all three stages of entrepreneurial activity is only half that of male participation. In all the ASEAN-6 countries, women entrepreneurs tend to keep their business small and have lower growth aspirations than men do. Significantly fewer women early-stage entrepreneurs expect to have 5 or more employees in the next five years, compared to men (16% for women, compared to 24% for men). Women also have low international orientation, preferring to remain within local markets.

Thailand and the Philippines are notable for the high level of entrepreneurial activity in all age categories, as well as the significant proportion of the adult population in the 55 – 64 age category engaged in TEA (close to three times the GEM average). Over 80% of early-stage entrepreneurs in the region have at least a secondary qualification, while more than half have a post-secondary qualification. The majority of entrepreneurs in the ASEAN-6 region are engaged in the retail trade, hotels and restaurant business. Only Singapore has a significant percentage of entrepreneurs in more sophisticated sectors such as financial intermediation, communications, and professional and government services.

From a regional perspective, the ASEAN-6 shows a higher than average percentage of entrepreneurs with no employees. Almost half the entrepreneurs in the ASEAN-6 expect to generate between 1 – 5 jobs – however, only 4.6% expect to create more than 20 jobs (half the GEM average). The job growth aspirations for the ASEAN-6 region are not encouraging. More than half the early-stage entrepreneurs expect to generate no jobs over the next five years, well above the GEM average. The exception is Singaporean entrepreneurs – more than 40% expect to generate more than six jobs, and almost half of these project 20 jobs or more. Only Singapore shows vigorous high-growth expectations of 16.5% - more than double the GEM average and substantially higher than the average for innovation-driven economies.

The region shows a moderate level of innovation with just over half the entrepreneurs in the region believing that their products/services are new to none of their customers. About 60% of businesses in the region believe that there is high competition for their products/ services. This imposes significant challenges for these entrepreneurs in providing the competitive advantage they need to generate healthy profits and viable businesses over the longer term.

Particular environmental factors (social, political and economic) are influential in creating unique business and entrepreneurial contexts. The National Experts' Survey (NES) provides insights into the ways in which GEM's Environmental Framework Conditions (EFCs) either foster or constrain the entrepreneurial climate, activity and development in the ASEAN-6 region. Physical infrastructure is the EFC which is ranked most positively, overall, in the region. With the exception of Philippines (with a mean score of 3.1), the rest of the countries all rate physical infrastructure as good, while Malaysia and Singapore rate it as very good. R & D transfer is the worst ranked EFC, overall, in the region. With the exception of Singapore (with a score only just above average), the rest of the ASEAN members all rate this EFC as below-average. The key factors constraining entrepreneurship in the region were identified as access to finance, government policies,

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 The Global Entrepreneurship Monitor (GEM) research project

Academics and policy makers agree that entrepreneurs, and the new businesses they establish, play a critical role in the development and well-being of their societies. As such, there is increased appreciation for and acknowledgement of the role played by new and small businesses in an economy. GEM contributes to this recognition with longitudinal studies and comprehensive analyses of entrepreneurial attitudes and activity across the globe. Since its inception in 1997 by scholars at Babson College and London Business School, GEM has developed into one of the world's leading research consortia concerned with improving our understanding of the relationships between entrepreneurship and national development. GEM's key objectives are as follows:

- to track entrepreneurial attitudes, activity and aspirations within countries in order to provide annual national assessments of the entrepreneurial sector;
- to allow for comparison of levels of entrepreneurial activity among different countries, geographic regions and economic development levels;
- to determine the extent to which entrepreneurial activity influences economic growth within individual economies;
- to identify factors which encourage and/or hinder entrepreneurial activity (especially the relationships between national entrepreneurship conditions, social values, personal attributes and entrepreneurial activity); and
- to guide the formulation of effective and targeted policies aimed at enhancing entrepreneurial capacity within individual countries.

In the sixteen years since its inception GEM has measured entrepreneurship in over 100 countries, covering all geographic regions and all economic levels, and has gained widespread recognition as the most informative and authoritative longitudinal study of entrepreneurship in the world.

In 2014, 73 countries participated in the GEM study, comprising approximately 73% of the world's population and 90% of the world's total GDP.

The GEM project has also used the rich seam of data obtained to produce a series of Special Topic reports, including:

- Financing, in 2004 and 2006
- Women and entrepreneurship, in 2005, 2006, 2007, 2009, 2010, 2012
- High expectation entrepreneurship, high-growth entrepreneurship and high impact entrepreneurship, in 2005, 2007, 2011
- Innovation confidence index – EU funded project, in 2007, 2008, 2009
- Social entrepreneurship, in 2009
- Education and training, in 2010
- Youth, in 2013
- Entrepreneurial employee activity, in 2013
- Sub-Saharan Africa, in 2013, 2014 (on youth)
- Entrepreneurship, competitiveness and development, in 2015

1.2 The GEM conceptual model

Prior to the GEM project, most studies of economic growth and competitiveness emphasised the contribution of larger established firms, on the assumption that these firms were the main drivers of prosperity in modern economies. The objective of the GEM research programme was to understand the relative impact of entrepreneurship on national economic development. In the context of understanding the role of entrepreneurship in economic growth, entrepreneurship was defined as: "any attempt at new business or new venture creation, such as self-employment, a new business organisation, or the expansion of an existing business, by an individual, a team of individuals, or an established business" (Reynolds, P. et al, 1999).

The GEM conceptual framework derives from the basic assumption that national economic growth is the result of the personal capabilities of individuals to identify and seize opportunities, and that this process is affected by environmental factors which influence individuals' decisions to pursue entrepreneurial initiatives.

In line with its objectives, then, GEM focuses on the role played by individuals in the entrepreneurial process. Every person engaged in any behaviour related to new business creation, no matter how modest, is regarded as having an impact on the national level of entrepreneurship.

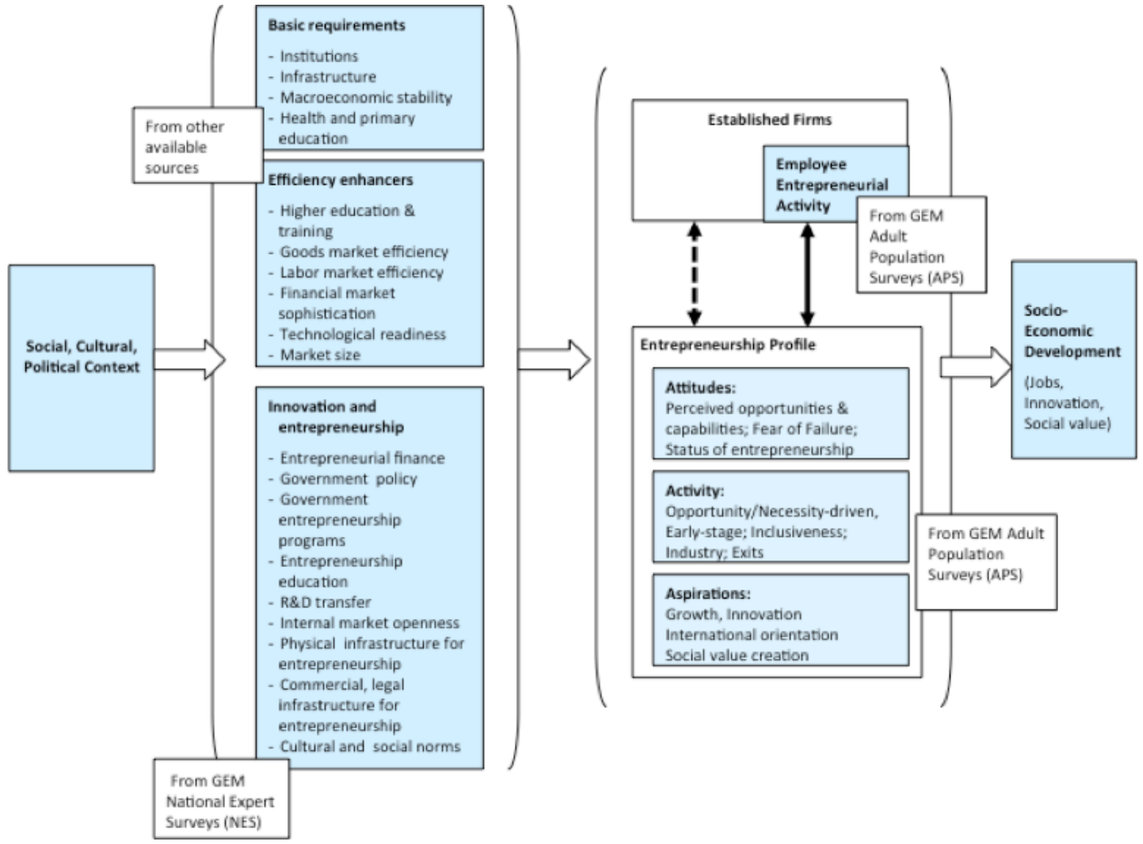
The GEM model (Figure 1.1) maintains that particular environmental factors (social, political and economic) are influential in creating unique business and entrepreneurial contexts. These factors should therefore be taken into account when analysing cross-national differences as well as changes within economies over time. At a national level, there are three levels of factors that have an impact on business activity and, more specifically, on entrepreneurship.

The most fundamental set of conditions are basic requirements. Without a healthy foundation of these conditions it is difficult for the efficiency enhancers, at the next level, to productively influence business activity. In turn, the innovation and entrepreneurship factors will be less effective without a strong base of efficiency enhancers (which, as stated, depend on basic requirements). Economies that are in their earlier stages of development are often more focused on getting basic requirements in place, while more economically advanced societies turn their attention toward innovation and entrepreneurship factors such as the development of a formal venture finance sector and R&D transfer.

International organisations such as the World Bank, the World Economic Forum, Doing Business Report, Heritage Foundation and the United Nations provide indices and data on factors and conditions constituting the basic requirements and efficiency enhancers. To assess the innovation and entrepreneurship factors, GEM developed the National Expert Survey (NES). The key indicators regarding the role played by individuals in the entrepreneurial process (shown in Figure 1.1 under attitudes, activity and aspirations) are assessed through GEM's Adult Population Survey (APS).

Although GEM's core objectives and tenets have remained constant, the GEM conceptual model is a dynamic entity that is progressively developed to incorporate advances in understanding of the entrepreneurship process and to allow for further exploration of patterns revealed in GEM studies. The revised GEM conceptual framework (Figure 1.2) recognises that entrepreneurship is part of a complex feedback system, and makes explicit the relationships between social values, personal attributes and various forms of entrepreneurial activity. It also recognises that entrepreneurship can mediate the effect of the national framework conditions on new job creation and new economic or social value creation. Entrepreneurial activity is thus an output of the interaction of an individual's perception of an opportunity and capacity (motivation and skills) to act upon this AND the distinct conditions of the respective environment in which the individual is located. In addition, while entrepreneurial activity is influenced by the framework conditions in the particular environment in which it takes place, this activity ultimately benefits this environment as well, through social value and economic development. For example, entrepreneurs create jobs for themselves and others, which create income for families. They develop new products that improve people's lives, and advance the knowledge and competitiveness of their societies.

Figure 1.1 The GEM Conceptual Framework, used in GEM surveys up to 2014
Source: GEM Global Report, 2014



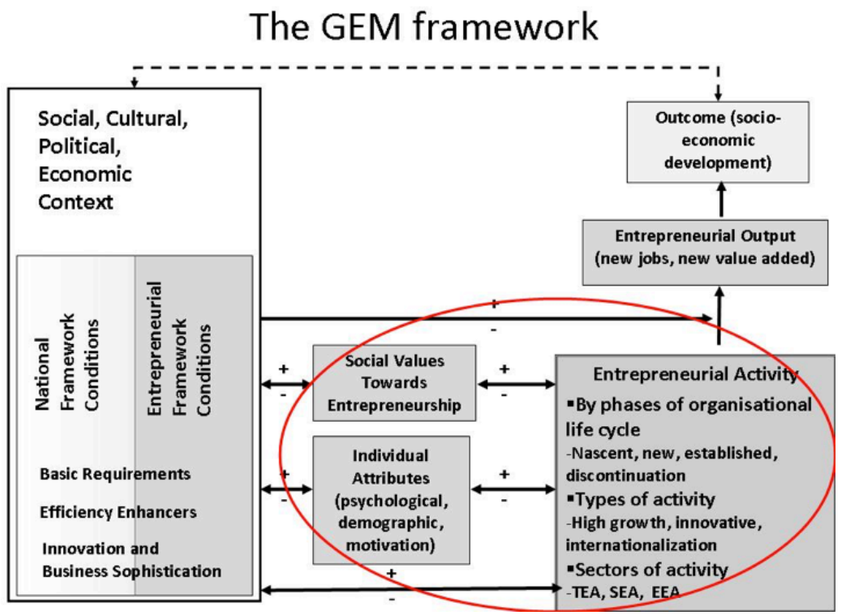


Figure 1.2: The revised GEM Conceptual Framework
Source: GEM Global Report 2014

The components of the revised GEM conceptual framework are:

Social, cultural, political and economic context
As in the previous GEM model, this is defined according to the twelve pillars of competitiveness derived from the Global Competitiveness Index and the nine components of GEM's Entrepreneurial Framework Conditions (see Figure 1.1). These will affect countries differently, depending on the stage of economic development at which the countries are, i.e. although all of the pillars will be important to each economy, the pillars of competitiveness which are of most importance to a factor-driven economy will differ from those that will be most important in an efficiency-driven economy.

Social values towards entrepreneurship
This includes aspects such as the extent to which society values entrepreneurship as a good career choice; whether entrepreneurs have high societal status; and the extent to which media attention to entrepreneurship is contributing to the development of a positive entrepreneurial culture.

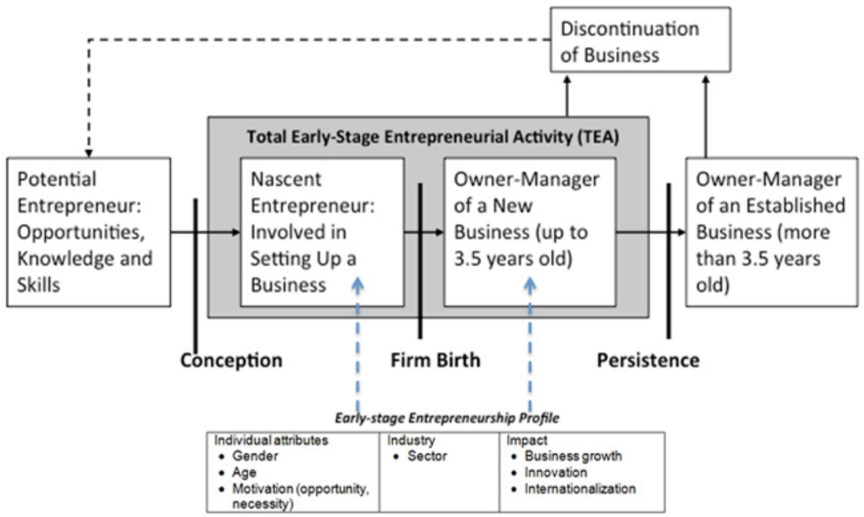
Individual attributes
This includes different demographic factors (such as gender, age, geographic location); psychological factors (including perceived capabilities, perceived opportunities, fear of failure); and motivational aspects (necessity versus opportunity based ventures, improvement-driven ventures).

Entrepreneurial activity
This is defined according to the phases of the life cycle of entrepreneurial ventures (nascent, new business, established business, discontinuation); according to type of activity (high growth, innovation, internationalisation); and sector of activity (Total Early-stage Entrepreneurial Activity – TEA, Social Entrepreneurial Activity - SEA, Employee Entrepreneurial Activity – EEA).

1.3 How GEM measures entrepreneurship

GEM measures individual participation across multiple phases of the entrepreneurial process, providing insights into the level of engagement in each stage. This is important because societies may have varying levels of participation at different points in this process; however, a healthy entrepreneurial society needs people active in all phases. For example, in order to have start-ups in a society, there must be potential entrepreneurs. Later in the process, people that have started businesses must have the ability and the support to enable them to sustain their businesses into maturity. Figure 1.3 presents an overview of the entrepreneurial process and the GEM operational definitions.

Figure 1.3: The entrepreneurial process and GEM operational definitions
Source: GEM Global Report 2014



GEM's multi-phase measures of entrepreneurship are given below:

Potential entrepreneurs – those that see opportunities in their environments, have the capabilities to start businesses and are undeterred by fear of failure.

Intentional entrepreneurs – those who intend to start a business in the future (in the next three years).

Nascent entrepreneurs – those who have taken steps to start a new business, but have not yet paid salaries or wages for more than three months.

New entrepreneurs – those who are running new businesses that have been in operation for between 3 months and 42 months.

Established business owners – those who are running a mature business, in operation for more than 42 months.

Discontinued entrepreneurs – those who, for whatever reason, have exited from running a business in the past year.

GEM's individual-level focus enables a more comprehensive account of business activity than firm-level measures of formally-registered businesses.

In other words, GEM captures both informal and formal activity. This is important because in many societies, the majority of new entrepreneurs operate in the informal sphere.

In addition, GEM's emphasis on individuals provides an insight into who these entrepreneurs are: for example, their demographic profiles, their motivations for starting ventures, and the ambitions they have for their businesses. GEM also assesses broader societal attitudes about entrepreneurship, which can indicate the extent to which people are engaged in or willing to participate in entrepreneurial activity, and the level of societal support for their efforts. The GEM database allows for the exploration of individual or business characteristics, as well as the causes and consequences of new business creation.

A primary measure of entrepreneurship used by GEM is the Total Early-Stage Entrepreneurial Activity (TEA) rate. TEA indicates the prevalence of individuals engaged in nascent entrepreneurship and new firm ownership in the adult (18 - 64 years of age) population. As such, it captures the level of dynamic early-stage entrepreneurial activity in a country.

Every person engaged in any behaviour related to new business creation, no matter how modest, contributes to the national level of entrepreneurship. However, it is important to recognise that entrepreneurs can differ in their profiles and impact. For this reason, GEM provides a range of indicators that describe the unique, multifaceted pattern exhibited in each society. It is therefore important to consider not just the number of entrepreneurs in an economy, but other aspects such as the level of employment they create, their growth ambitions, and the extent to which groups such as youth and women are participating in entrepreneurial activity.

1.4 GEM methodology

In order to provide for reliable comparisons across countries, GEM data is obtained using a research design that is harmonised over all participating countries. The data is gathered on an annual basis from two main sources:

1.4.1 Adult Population Survey (APS)

The key indicators of GEM are measured through an Adult Population Survey (APS). Academic teams in each participating economy administer and oversee this survey, which is conducted using a random representative sample of at least 2 000 adults between the ages of 18 and 64 years. The surveys are conducted at the same time every year (between May and July) using a standardised questionnaire provided by the GEM Global Data Team. The questionnaire is translated into local languages, and back-translated for a validity check.

To ensure that the sample is representative, area stratified probability sampling is used. The sample is stratified by gender, age and population group, then by region and community size. Cities and large towns, small towns and villages, and even rural areas are additionally assessed in some economies. Accredited research companies in each economy conduct the survey.

Upon completion of the survey in each economy, the raw data is sent to the Global Data Team for quality control checks and uniform statistical calculations. The data are then released to the participating economies for analysis and interpretation, and, ultimately, to be utilised in the compilation of annual national reports. Results for the entire dataset are released in a global executive report, which is launched each January at the GEM Annual Meeting.

The APS methodology was developed to measure entrepreneurial activity in a way that allows for meaningful cross-national analyses each year, as well as intra-country comparisons over time. To provide for reliable comparisons across economies, GEM uses a research design that

harmonises the data over all participating economies.

1.4.2 National expert survey (NES)

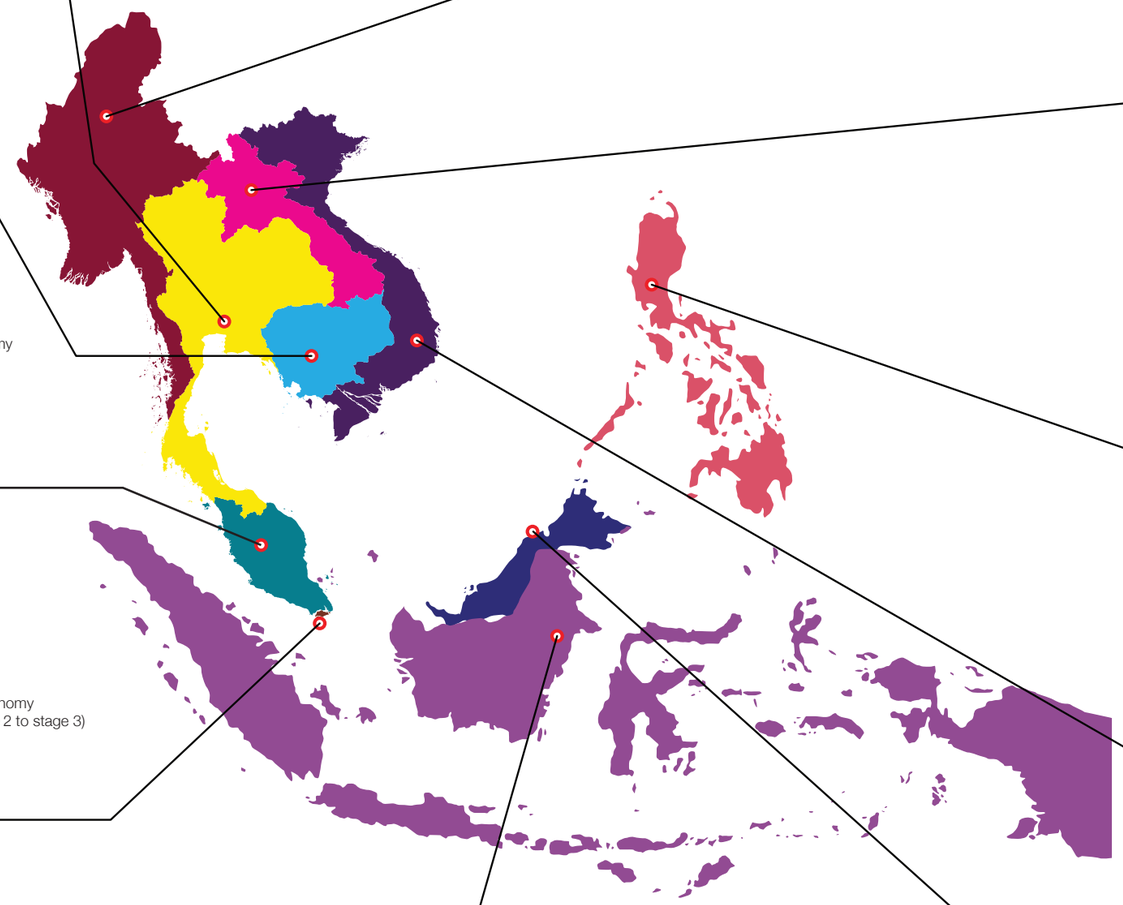
A National Expert Survey (NES) was designed to support GEM's main APS survey. The NES assesses nine Entrepreneurial Framework Conditions (EFCs), which are shown in Figure 1.1 under innovation and entrepreneurship factors. These EFCs are important to GEM because they are conceptualised as having a more specific influence on entrepreneurial behaviour. The NES survey is thus a key component of GEM because it provides insights into the entrepreneurial climate in each economy.

GEM provides a number of criteria which must be met when selecting experts, in order to construct a balanced and representative sample.

- At least four experts from each of the entrepreneurial framework condition categories must be interviewed, making a minimum total of 36 experts per country.
- A minimum of 25% must be entrepreneurs or business people, and 50% must be professionals.
- Additional aspects such as geographical distribution, gender, involvement in the public versus private sector, and level of experience should also be taken into account when balancing the sample.

The information is used to add context to

Asean Countries At A Glance



THAILAND

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	67,741
GDP Per Capita (PPP) est.:	USD14,400
Global Happiness Index:	6.37 (36/156)
Human Development Index:	0.722 (89/186)
Global Competitiveness Index:	5.01 (40/148)
Global Innovation Index:	39.3 (48/143)
Ease of Doing Business Index:	(26/189)
Total early-stage Entrepreneurial Activity Rate (TEA):	23.30
- Necessity-Driven % of TEA Rate:	17.81%
- Opportunity-Driven % of TEA Rate:	80.94%
Classification Phase of Economic Development:	Efficiency-driven Economy

CAMBODIA

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	15,458
GDP Per Capita (PPP) est.:	USD3,300
Global Happiness Index:	4.067 (140/156)
Human Development Index:	0.584 (136/187)
Global Competitiveness Index IneIndexIndex:	4.09 (103/148)
Global Innovation Index:	28.7 (106/143)
Ease of Doing Business Index:	135/189
Total early-stage Entrepreneurial Activity Rate (TEA):	-na-
- Necessity-Driven % of TEA Rate:	-na-
- Opportunity-Driven % of TEA Rate:	-na-
Classification Phase of Economic Development:	Factor-driven economy

*na – not available

MALAYSIA

General Characteristics and Entrepreneurship Indicators

Population (x1000) :	29,628
GDP Per Capita (PPP) est.:	USD24,500
Global Happiness Index:	5.76 (56/156)
Human Development Index:	0.773 (62/187)
Global Competitiveness Index:	5.53 (23/148)
Global Innovation Index:	45.6 (33/143)
Ease of Doing Business Index:	(18/189)
Total early-stage Entrepreneurial Activity Rate (TEA):	5.91
- Necessity-Driven % of TEA Rate:	17.54%
- Opportunity-Driven % of TEA Rate:	82.46%
Phase of Economic Development:	Efficiency-driven Economy (transition from stage 2 to stage 3)

SINGAPORE

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	5,567
GDP Per Capita (PPP) est.:	USD81,300
Global Happiness Index:	6.54(30/156)
Human Development Index:	0.91 (9/187)
Global Competitiveness Index IneIndexIndex:	6.34 (1/148)
Global Innovation Index:	59.2 (7/143)
Ease of Doing Business Index:	(1/189)
Total early-stage Entrepreneurial Activity Rate (TEA):	10.96
- Necessity-Driven % of TEA Rate:	11.40%
- Opportunity-Driven % of TEA Rate:	84.28%
Classification Phase of Economic Development:	Innovation-driven Economy

INDONESIA

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	253,609
GDP Per Capita (PPP) est.:	USD10.200
Global Happiness Index:	5.348 (76/156)
Human Development Index:	0.684 (108/187)
Global Competitiveness Index Index:	4.91 (46/148)
Global Innovation Index:	31.8 (87/143)
Ease of Doing Business Index:	114/189
Total early-stage Entrepreneurial Activity Rate (TEA):	14.20
- Necessity-Driven % of TEA Rate:	20.52%
- Opportunity-Driven % of TEA Rate:	78.57%
Classification Phase of Economic Development:	Efficiency-driven economy

MYANMAR

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	55,746
GDP Per Capita (PPP) est.:	USD4,800
Global Happiness Index:	4.439 (121/156)
Human Development Index:	0.524 (150/187)
Global Competitiveness Index IneIndexIndex:	3.36 (132/148)
Global Innovation Index:	19.6 (140/143)
Ease of Doing Business Index:	177/189
Total early-stage Entrepreneurial Activity Rate (TEA):	-na-
- Necessity-Driven % of TEA Rate:	-na-
- Opportunity-Driven % of TEA Rate	–na-
Classification Phase of Economic Development:	Factor-driven economy

*na – not available

LAOS

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	6,803
GDP Per Capita (PPP) est.:	USD5,000
Global Happiness Index:	4.787 (109/156)
Human Development Index:	0.569 (139.187)
Global Competitiveness Index IneIndexIndex:	4,13 (98/148)
Global Innovation Index:	-na-
Ease of Doing Business Index:	148/189
Total early-stage Entrepreneurial Activity Rate (TEA):	-na-
- Necessity-Driven % of TEA Rate:	-na-
- Opportunity-Driven % of TEA Rate:	-na-
Classification Phase of Economic: :	Development:
Factor-driven economy	

*na – not available

PHILIPPINES

General Characteristics and Entrepreneurship Indicators

Population (x 1,000)	107,668
GDP Per Capita (PPP) est.:	USD7,000
Global Happiness Index:	4.98 (92/156)
Human Development Index:	0.66(117/187)
Global Competitiveness Index:	4.63 (66/148)
Global Innovation Index:	29.9 (100/143)
Ease of Doing Business Index:	(95/189)
Total early-stage Entrepreneurial Activity Rate (TEA):	18.38
- Necessity-Driven % of TEA Rate:	29.36%
- Opportunity-Driven % of TEA Rate:	70.53%
Classification Phase of Economic Development:	Factor-driven Economy (transition from stage 1 to stage 2)

VIETNAM

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	90,000
GDP Per Capita (PPP) est.:	USD5,600
Global Happiness Index:	5.53 (63/156)
Human Development Index:	0.638 (121/187)
Global Competitiveness Index:	4.44 (79/148)
Global Innovation Index:	34.9 (71/143)
Ease of Doing Business Index:	(78/189)
Total early-stage Entrepreneurial Activity Rate (TEA):	15.3
- Necessity-Driven % of TEA Rate:	29.74%
- Opportunity-Driven % of TEA Rate:	70.26%

Phase of Economic Development: Factor-driven Economy

BRUNEI

General Characteristics and Entrepreneurship Indicators

Population (x 1,000):	422
GDP Per Capita (PPP) est.:	$77,700
Global Happiness Index:	-na-
Human Development Index:	0.852 (30/187)
Global Competitiveness Index IneIndexIndex:	-na-
Global Innovation Index:	31.7 (88/143)
Ease of Doing Business Index:	101/189
Total early-stage Entrepreneurial Activity Rate (TEA):	-na-
- Necessity-Driven % of TEA Rate:	-na-
- Opportunity-Driven % of TEA Rate:	-na-
Classification Phase of Economic Development:	-na-

*na – not available

CHAPTER 2: AN ASEAN PERSPECTIVE ON ENTREPRENEURSHIP

2.1 Introduction

The US financial crisis of 2007/2008, considered by many leading economists to be the worst economic crisis since the Great Depression of the 1930s, was followed by a significant global downturn (2008 – 2012). The Global Competitiveness Report 2014 – 2015 notes that although the global economy seems to be finally leaving behind the worst and longest- lasting financial and economic crisis of the last 80 years, this resurgence is moving at a less decisive pace than it has after previous downturns. It remains imperative for policy makers, business and civil society leaders to work together, in order to identify and strengthen the forces that drive future economic growth. In particular, governments are urged to focus on reforms that help to create enabling environments that foster innovation, facilitate more productive economies and, critically, open up new and better job opportunities for all segments of the population.

Entrepreneurship is widely considered to be an important mechanism for economic development through job creation, innovation and its welfare effect, and over the past three decades has become a key focus of academic research. In recent years, and particularly in the wake of the global financial crisis, the realisation that people could no longer depend solely on large organisations or government as job creators led to a burgeoning policy interest in national- and regional-level entrepreneurial activity.

Entrepreneurship is now widely acknowledged as the primary driver of sustainable economic growth.

Entrepreneurs are the ones who create new businesses, drive and shape innovation, speed up structural changes, introduce new competition and contribute to an economy's fiscal health.

2.2 The ASEAN

The Association of Southeast Asian Nations or ASEAN is an organisation formed to strengthen regional co-operation among countries in Southeast Asia. ASEAN was formed on August 8th1967 by five countries, namely Indonesia, Malaysia, Philippines, Singapore and Thailand – its aim was to facilitate better co-operation in economic, social, cultural, technical, educational and other fields as well as to promote regional peace and stability. On January 7th 1984 Brunei Darussalam joined, followed by Vietnam (July 28th, 1995), Lao PDR and Myanmar (July 23rd, 1997) and Cambodia (April 30th, 1999). Today, these countries made up the ten member states of ASEAN. The ten member states of ASEAN comprise close to 9% of the world's population and 3.17% of the world's gross domestic product. The resources and economic activities of ASEAN are seen by neighbouring countries in Asia and in the Pacific Rim as good opportunities for trade, business and economic partnerships. Table 2.1 summarises a number of key economic indicators for the ASEAN countries.

Table 2.1: Selected ASEAN economic indicators (as of December 2014)

Country	Total land area	Total population[1/]	Population density[1/]	Annual population growth[1/]	Gross domestic product at current prices	Gross domestic product per capita at current prices	
	km^2	thousand	persons per km^2	percent	US$ million	US$ [2/]	US$ PPP [3/]
	2013	2013	2013	2013	2013	2013	2013
Brunei Darussalam	5,769	406.2	70	1.6	16,117.5	39,678.7	73,775.0
Cambodia	181,035	14,962.6	83	1.5	15,511.1	1,036.7	3,081.8
Indonesia	1,860,360	248,818.1	134	1.4	860,849.5	3,459.8	9,467.1
Lao PDR	236,800	6,644.0	28	2.0	10,283.2	1,547.7	4,531.6
Malaysia	330,290	29,948.0	91	1.5	312,071.6	10,420.5	23,089.0
Myanmar	676,577	61,568.0	91	1.0	54,661.2	887.8	3,464.4
Philippines	300,000	99,384.5	331	1.8	269,024.0	2,706.9	6,403.8
Singapore	716	5,399.2	7,540	1.6	297,941.3	55,182.5	78,761.9
Thailand	513,120	68,251.0	133	0.5	387,573.8	5,678.7	14,131.6
Vietnam	330,951	89,708.9	271	1.1	171,219.3	1,908.6	5,314.7
ASEAN	**4,435,618**	***625,090.5***	**141**	**1.3**	***2,395,252.5***	***3,831.8***	***9,389.8***

Country	International merchandise trade [5/]					
	Ratio of exports to GDP	Ratio of imports to GDP	Ratio of total trade to GDP	Growth of nominal value of exports	Growth of nominal value of imports	Growth of nominal value of total trade
	percent	percent	percent	percent	percent	percent
	2013	2013	2013	2013	2013	2013
Brunei Darussalam	71.0	22.4	93.4	(13.2)	(1.7)	(10.7)
Cambodia	59.0	59.2	118.1	23.0	(18.3)	(1.8)
Indonesia	21.2	21.7	42.9	(3.9)	(2.6)	(3.3)
Lao PDR	25.2	32.0	57.2	(2.4)	(6.0)	(4.4)
Malaysia	73.2	66.0	139.1	0.3	*4.8*	2.4
Myanmar	20.9	22.0	42.9	22.8	30.7	26.7
Philippines	20.1	24.2	44.3	3.8	(0.4)	1.5
Singapore	137.7	125.2	262.9	0.5	(1.8)	(0.6)
Thailand	59.0	64.4	123.4	(0.3)	0.7	0.2
Vietnam	77.5	77.2	154.6	15.9	16.6	16.2
ASEAN	**53.1**	**51.8**	**104.9**	**1.3**	**1.5**	**1.4**

Country	Growth rate of gross domestic product at constant prices	Inflation rate (year-on-year growth of CPI at *end of period*)	Exchange rate at *average of period* [1/]		Unemployment rate [2/]
	percent	percent	national currency per US$	Currency	percent
	2013	2013	2013		2013
Brunei Darussalam	-1.8	0.2	1.25	Dollar (B $)	1.7
Cambodia	7.0	4.6	3,995	Riel	0.3
Indonesia	5.8	8.4	10,586	Rupiah (Rp)	6.2
Lao PDR	8.2	6.9	8,224	Kip	1.9
Malaysia	4.7	3.2	3.16	Ringgit (RM)	3.1
Myanmar	7.5	-	938	Kyat	4.0
Philippines	7.2	4.1	42.89	Peso (PhP)	6.4
Singapore	3.9	1.5	1.25	Dollar (S $)	2.9
Thailand	2.9	1.7	30.73	Baht	0.7
Vietnam	5.4	6.0	20,934	Dong	3.6
ASEAN	***5.2***	**n.a.**	**n.a.**	**n.a.**	**n.a.**

Sources ASEAN Finance and Macro-economic Surveillance Unit Database, ASEAN Merchandise Trade Statistics Database, ASEAN Foreign Direct Investment Statistics Database (compiled/computed from data submission, publications and/or websites of ASEAN Member States' national statistics offices, central banks and relevant government agencies, and from international sources)

Symbols used

- not available as of publication time

n.a. not applicable/not available/not compiled

Data in italics are the latest updated/revised figures from previous postings

Notes

1/ Refers to/based on mid-year total population based on country projections

2/ Cambodia 2013 country figure is not yet available; this figure taken from IMF WEO October 2014

3/ Computed based on IMF WEO Database October 2014 estimates and the latest actual country data

4/ ASEAN IMTS Database 2013 figures are as of 4 December 2014

5/ Unless otherwise indicated, figures include equity, reinvested earnings and inter-company loans

6/ FDI, 2013 figures are preliminary as of 15 December 2014

The Organisation for Economic Co-operation and Development (OECD), in its Economic Outlook for Southeast Asia, China and India, 2014, predicts favourable growth prospects for the ASEAN region. It predicts that growth momentum will remain robust, averaging 5.6% over the period 2015 – 2019. This growth, it believes, will be anchored by vigorous local demand in the majority of the ASEAN countries, and relative political stability. The recent presidential election in Indonesia, which brought Joko Widodo to power, is regarded as a successful and peaceful change of government. Political unrest in Thailand and territorial disputes over sovereignty of the South China Sea may, however, have adverse effects on tourism and exports in some countries.

Cambodia, Lao PDR and Myanmar are predicted to become new centres of growth, with growth expected to exceed 7%. A positive spin-off of this rapid growth, from a regional perspective, is that it may accelerate regional integration in furtherance of the goal of an ASEAN Economic Community (i.e. achieving a regional common market by 2015).

An encouraging trend is that the development strategies of the Southeast Asian countries display an increased focus on the quality of growth in their respective economies

– growth that is sustainable, people-centred, and inclusive in that it seeks to generate widespread employment and to reduce poverty (see Table 2.2).

Table 2.2: Medium-term development plans in Southeast Asia
Source: OECD Economic Outlook for Southeast Asia, China and India, 2014

Country	Time period	Theme/ vision
Brunei Darussalam	2012-17	Knowledge and innovation to enhance productivity and economic growth
Cambodia	2009-13	Growth, employment, equity and efficiency
Indonesia	2010-14	Realisation of an Indonesia that is prosperous, democratic and just
Lao PDR	2011-15	Socio-economic development, industrialisation and modernisation towards the year 2020
Malaysia	2011-15	Charting development towards a high-income nation
Myanmar	2012-15	Development of industry, balanced development, improvements in education, health and living standards and improved statistical capacities
Philippines	2011-16	Pursuit of inclusive growth
Singapore	2010-2020	Highly skilled people, innovative economy, distinctive global city
Thailand	2012-2016	A happy society with equity, fairness and resilience under the philosophy of a sufficient economy
Vietnam	2011-2020	A modern, industrialised country by 2020

In the wake of the global financial crisis and ensuing developments, the world's economic landscape has undergone significant shifts. One development has been the heightened role of emerging economies in the global context. The Economic Outlook for Southeast Asia, China and India, 2014 argues that ASEAN has vast strengths to draw on and is well positioned for playing an increasingly important role on the global economic stage. Data from the Global Competitiveness Report, 2014 – 2015 support this view. For the fourth consecutive year, Singapore was ranked 2nd out of the 144 countries assessed. The five largest Southeast Asian economies – Malaysia, Thailand, Indonesia, the Philippines and Vietnam – are all in the top half of the rankings and have all improved their rankings. What is particularly encouraging is that these countries have improved their rankings every year since 2009. Malaysia has moved up four places to be ranked 20th – the best ranked of the Emerging and Developing Asian nations. Thailand, despite its political uncertainties, is up six positions (31st), Indonesia is ranked 34th (up four positions), the Philippines has jumped seven places to 52nd place and Vietnam (68th) is up two positions.

Over the past four decades, Emerging Asia has made remarkable progress in raising income levels, reducing poverty and developing manufacturing. Indonesia, Malaysia, the Philippines, Thailand and Vietnam are poised to join Japan, Korea and Singapore in the ranks of the advanced high-income countries within the next few decades, as long as they can sustain their current robust growth rate. However, the challenges of sustaining development become more difficult and complex as development evolves - countries need to shift away from growth that is driven primarily by factor accumulation, and embrace extensive growth based on productivity increases driven by improvements in the quality of human and other capital and by innovation. Government policies aimed at creating an enabling and business-friendly environment will be critical, as SMEs will play a key role in achieving sustainable growth and contributing to further development in the region.

In line with current economic thinking, ASEAN has already recognised the strategic role that small and medium enterprises (SMEs) play in the economic development and growth of economies. Small and medium enterprises are business establishments classified according to their size, as measured by their total assets and/or number of workers they employ. Each country has its own way of classifying SMEs. In ASEAN the most common method of classifying SMEs is according to the number of jobs they generate. Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, and Vietnam classify SMEs according to the number of employees, from 19 in Lao PDR to 300 in Indonesia (UNESCAP, n.d.). Businesses with fewer than 19 workers are classified as microenterprises.

In ASEAN, SMEs account for more than 96% of all enterprises and provide 50%-85% of domestic employment (ASEAN SMEs, http://www.asean.org/communities/ asean-economic-community/ category/small-and-medium-enterprises, retrieved Feb. 15, 2015).

ASEAN SMEs contribute between 30%-53% to GDP and 19%-31% to exports. SMEs that work as sub-contractors to large exporting firms play an important role in intra-regional ASEAN trade. SMEs are also crucial to the success in sustaining innovative growth and development – in part because highly innovative enterprises tend to start out as SMEs. Small and medium enterprises are not only important in income and employment generation, but also contribute to gender and youth empowerment and inclusive growth and development by engaging

women and the youth in business participation and contributing to growth in enterprise development in rural and poor communities.

Given the critical role that SMEs play in the economy, ASEAN has developed the ASEAN Policy Blueprint for SME Development (APBSD) 2004-2014, which outlines the framework for the development of SMEs in the ASEAN region (ASEAN, 2011). Strategic programmes, policy measures and outputs have been developed to support the roadmap as embodied in the Strategic Action Plan for ASEAN SME Development 2010-2015. The roadmap seeks to fast-track the development of ASEAN SMEs; enhance the entrepreneurial capability through access to information, markets, human resource development, financing and technology; and increase the contribution of SMEs to the economic growth of the region.

In order to assist policy makers in ASEAN to make more informed decisions about how to increase entrepreneurship and enhance SMME development, both within their own countries and in the region as a whole, it is important that the current entrepreneurial landscape be defined and understood. The ASEAN survey has been made possible through a generous grant from the International Development Research Centre (IDRC) – a key part of Canada's aid programme since 1970. The project will fill a critical gap in entrepreneurship research capacity and knowledge within Southeast Asia. As of 2013 there were few GEM teams in Southeast Asia apart from Singapore, Thailand and Malaysia. The new GEM teams in this project (namely Indonesia, the Philippines and Vietnam) will complement and extend the GEM network in Southeast Asia and build on the work of other GEM teams within the wider region of Asia.

The project is designed to address the critical gaps in entrepreneurship knowledge in Southeast Asia by building local research capacity. The findings resulting from the GEM research will be disseminated to policy makers, educators, and researchers and provide an empirical basis on which to build appropriate policies for the promotion of entrepreneurship, job creation and inclusive growth. While the potential benefits of increased entrepreneurship are widely recognised, better evidence is needed to identify the most effective policies for entrepreneurship promotion in the region. Research and data on the level and nature of entrepreneurship in the region is limited and researchers currently lack the capacity to close knowledge gaps. Available data (e.g. World Bank, Ease of Doing Business Report and World Economic Forum's Global Competitiveness Report) approximate levels of entrepreneurship and address business environments, but do not allow for analysis of the relationships between a broader set of environmental conditions and the entrepreneurial characteristics, perceptions, and aspirations of entrepreneurs. These relationships are key to the success of entrepreneurship as a tool for growth and job creation.

The specific objectives of the project include:

- Strengthen the capacity of researchers within the Southeast Asian region to undertake rigorous research and data analysis on entrepreneurship, and to facilitate discussion of these research findings among policy makers, the private sector, educators and researchers, particularly regarding the promotion of women entrepreneurship.

- Collect scientifically sound, harmonised and publically available datasets on entrepreneurship and enterprise formation in Southeast Asia, through the application of the Global Entrepreneurship Monitor (GEM) methodology, to provide evidence for policymaking.

- Contribute to a deeper understanding of the nature, characteristics and dynamics of entrepreneurs and enterprise formation within Southeast Asia, including perceptions, aspirations and practices of women and youth with respect to entrepreneurship and what accounts for differences across countries.

Anticipated outcomes and impacts include:

- Improved empirical foundation for discussion, design, and monitoring of entrepreneurship policies that promote high-growth entrepreneurship, particularly those that promote entrepreneurship among women and youth;

- Increased awareness of entrepreneurship, particularly high-growth entrepreneurship as well as issues facing women in entrepreneurship, among national policy makers;

- National teams contribute to entrepreneurship research through continued GEM membership in post-project years, as well as additional academic research on entrepreneurship, stimulated by the project, beyond the core research activities of GEM;

- National and international resources mobilised to support entrepreneurship research in the region; and

- A long-term positive impact on the quantity and quality of entrepreneurship in the region, resulting in job creation and inclusive growth.

Six ASEAN countries – namely Indonesia, Malaysia, Philippines, Thailand, Singapore, and Vietnam - participated in the 2014 GEM survey. The remainder of this chapter will focus on these six countries, providing macro-level insights across the countries, as well as country-level insights into the people who participate in different phases of entrepreneurial activity.

Although ASEAN is geographically compact, the region is diverse in terms of social and economic development. Countries participating in GEM are classified as factor-driven economies, efficiency-driven economies or innovation-driven economies, in line with the categories used by the World Economic Forum in its annual Global Competitiveness Reports. This classification into phases of economic development is based on the level of GDP per capita and the extent to which the countries are factor-driven in terms of the shares of exports of primary goods in total exports (Schwab and Salari-Martin, 2014). GEM research argues that patterns in entrepreneurial activity may also be influenced, in part at least, by phase of economic development.

- **Factor-driven economies:** These are countries in the early stages of economic development, typically with a large agricultural sector. The majority of the population tends to live in rural areas. Industrial activity is often dependent on the extraction of natural resources. Migration from rural to peri-industrial areas may feed necessity-based entrepreneurship, as the surplus workers are forced into self-employment in order to make a living. The Philippines and Vietnam are classified as factor-driven economies.

- **Efficiency-driven economies:** As the industrial sector develops further, higher productivity is pursued through economies of scale and development of financial institutions. Increasing productivity, combined with the opening up of an independent supply of financial capital from the emerging banking sector, expands opportunities for the development of small-scale and medium-sized manufacturing sectors. Indonesia, Malaysia and Thailand are efficiency driven.

- **Innovation-driven economies:** As an economy matures, a gradual shift may occur towards an expanding service sector that caters to the needs of an increasingly affluent population. The industrial sector evolves and experiences improvements in variety and sophistication. This is typically associated with increasing research and development, knowledge intensity and innovation. Singapore is an innovation-driven economy.

2.3 ASEAN and the Asian Economic Community (AEC): Awareness and Engagement

"AEC 2015" is no longer an abstract but a reality that the regional governments need to embrace before the end of the year 2015. Entrepreneurship, as a factor contributing to growth and prosperity in every economy, plays an important role in the upcoming ASEAN Economic Community. But - how ready are the entrepreneurs? Two words come to mind before the ten countries are supposed to join forces as a single economic community: anticipation and insecurity.

The countries represented in this report are highly diverse, both from a cultural and from an economic point of view. Economic growth is also accompanied by significant disparities in income and expenditures as seen in the larger ASEAN economies, where high inequality exists between urban and rural areas within the same country (Asian Development Bank, 2012). In a social context, the main national religions represented in the region are Buddhist (Cambodia, Lao PDR, Myanmar, Singapore, Thailand), Muslim (Brunei, Indonesia, Malaysia), Catholic Christians (Philippines) or none (Vietnam) besides additional minority religions in every country.

In theory, no one doubts the potential of a single market with 600 million people and a workforce of more than 400 million, a combined GDP of 3,600 billion US$ and an abundance of natural resources .

Reaching the full potential of the AEC, however, requires concerted mutual efforts, as well as acknowledgement of entrepreneurship as a key driver of sustainable economic growth and job creation.

ASEAN has its fair share of detractors as well as supporters. Awareness of ASEAN, and this year the Asian Economic Community (AEC), does fall short as indicated by the GEM AEC survey (described below). At the beginning of this research study (June, 2014,) both new and established entrepreneurs were asked three key questions about the AEC. The

countries that participated in the AEC survey were Malaysia, Indonesia, Vietnam and the Philippines. The entrepreneurs were asked to rate the extent to which they agreed with the following statements:

1. *The regionalisation of ASEAN as an economic community has increased competition for my businesses from both existing and new competitors.*
   A total of 36%, comprised equally of both new businesses and established businesses, agreed or strongly agreed that this was the case.

2. *Common regional regulations within ASEAN as an economic community would make it easier for new businesses to start up and existing businesses to operate.*
   34% of new businesses agreed or strongly agreed that the ease of operating their businesses would increase. Established businesses were only slightly more convinced, at 36%.

3. *As a whole my business has benefitted or will benefit from the formation of ASEAN's economic community initiatives.*
   In terms of benefitting from the AEC, only 33% of new businesses were convinced compared to 36% of established businesses.

Approximately 80% of Southeast Asia's population was covered by the AEC survey. The responses to the three key questions thus indicate that there is much that remains to be done to do to raise awareness of the AEC. Currently, only a little more than one third of new and existing businesses believe that the AEC will benefit them.

There are many other issues and challenges ahead for each country to deal with, coupled with the opportunities and the fears regarding the AEC and its "single market and production base" by the end of the year 2015 (ASEAN, 2010). The five core elements –the free flow of goods, services and investment, a freer flow of capital and the free flow of skilled labour, will affect nearly all enterprises in the region. Increased competition may hinder SME development, if their specific needs and concerns, as addressed in this report (for example: access to finance, to information and markets; skills development; education) are not addressed and if public or private initiatives fail to increase entrepreneurial capacities to leverage an ASEAN integration. Stimulating entrepreneurship and supporting it appropriately is a crucial aspect in this process of economic integration. In tandem, an aspirational entrepreneurial mind-set needs to be cultivated wherein opportunities are exploited within this wider market. ASEAN entrepreneurs will then be able contribute significantly to intra-regional economic activities.

It might be of value to evaluate regions which have undergone similar experiences, such as the European Union, and to gain insights from their experiences. An initiative of the European Union in 2006, namely "The Oslo Agenda for Entrepreneurship Education in Europe" as the outcome of the conference on "Entrepreneurship Education in Europe: Fostering Entrepreneurial Mindsets through Education and Learning", gathered experiences and good practices and proposed ways to move forward. These successful insights from Europe could serve as best-practice models and, in part, be transferred to the ASEAN countries (EU, 2006). Recommendations include a catalogue of initiatives, addressing the following topics:

- framework for policy development;
- support to educational establishments;
- support to teachers and educators;
- entrepreneurship activities in schools and higher education;
- building links and opening education to the outside world; and
- communication activities.

2.4 The entrepreneurial pipeline

GEM sees entrepreneurial activity as a continuous process rather than as individual events.

As such, the Adult Population Survey (APS) is designed to allow for the measurement and assessment of individual participation across the range of phases comprising entrepreneurial activity: potential entrepreneurship, entrepreneurial intentions, nascent and new business activity, progression into established business ownership, and the reasons for business discontinuance. This process can be viewed as a pipeline, where people participating in each phase are the source of those potentially advancing to the next phase (Figure 2.1).

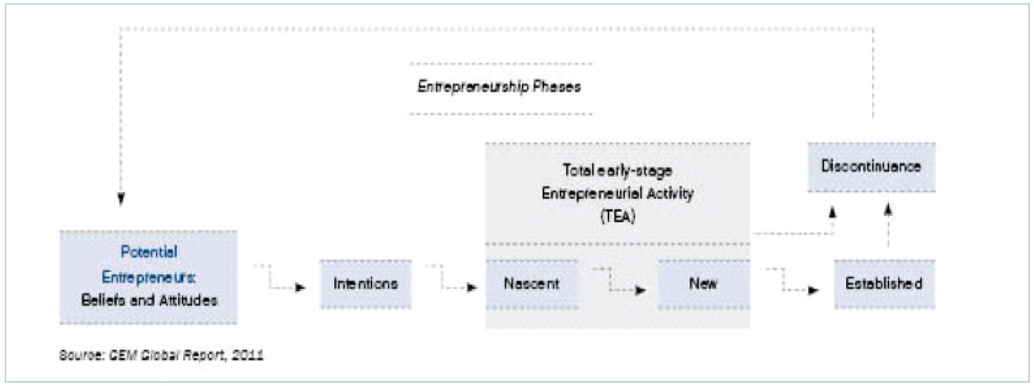


Figure 2.1: The entrepreneurial pipeline

It is important to note that entrepreneurial activity is the third phase of the entrepreneurial pipeline, and thus dependent on a healthy pool of potential and intentional entrepreneurs. If policy makers and service providers are to be successful in their efforts to stimulate and support new generations of entrepreneurs, they therefore require sound information on the earlier phases of the pipeline – namely potential and intentional entrepreneurs.

The GEM model recognises entrepreneurial attitudes, activity and aspiration as dynamic interactive components of national entrepreneurial environments and the adult population survey includes questions relating to all three of these components. Entrepreneurial activity does not take place in a vacuum and although not a direct step in the entrepreneurial process, societal attitudes have a profound influence on a number of activities in the pipeline. Entrepreneurial attitudes and perceptions play an important part in creating an entrepreneurial culture – although this will have an impact on all phases of the entrepreneurial pipeline, the influence on the pool of potential and intentional entrepreneurs is likely to be most significant.

"The entrepreneurship process is a complex endeavour carried out by people living in specific cultural and social conditions. For this reason, the positive or negative perceptions that society has about entrepreneurship can strongly influence the motivations of people to enter entrepreneurship. If the economy in general has a positive attitude towards entrepreneurship, this can generate cultural and social support, financial and business assistance, and networking benefits that will encourage and facilitate potential and existing entrepreneurs." (GEM 2012 Global Report, page 18)

In order to assess societal perceptions regarding entrepreneurship, the following three questions are included in the APS:

- Do people consider starting a new business a good career choice?
- Do people consider successful entrepreneurs to have a high level of status?
- Do successful entrepreneurs garner significant media attention?

Table 2.3 summarises the responses to these questions for the six ASEAN countries. Overall, entrepreneurship is regarded positively in the ASEAN-6 region, with the average scores for all three measures above the GEM average. On average, two-thirds of people in the region see entrepreneurship as a good career choice, with only Africa and Latin America & Caribbean scoring marginally higher. The ASEAN-6 stands significantly apart, on a regional basis, in terms of its high level of media attention, with 81% believing that there is high media visibility for successful entrepreneurs.

At the individual country level, the Philippines shows consistently high levels of societal attitudes across all three measures. Malaysia, on the other hand, reports the lowest regional levels on all three indicators, by a significant margin. In terms of entrepreneurship as a good career choice and status for successful entrepreneurs, it also scores substantially below the GEM average.

Table 2.3: Societal attitudes in ASEAN-6 countries and comparisons with other regional averages, GEM 2014

Country	Entrepreneurship as a good career choice	High status to successful entrepreneurs	Media attention for entrepreneurship
Indonesia	72.9	78.0	84.8
Malaysia	50.4	50.0	69.8
Philippines	81.8	78.1	84.7
Singapore	51.7	62.9	79.1
Thailand	73.6	71.1	80.3
Vietnam	67.2	75.9	86.8
ASEAN average (unweighted)	66.3	69.3	80.9
GEM average (unweighted)	62.46	68.11	63.30
Regional averages			
Africa (unweighted)	71.5	77.6	72.9
Asia & Oceania (unweighted)	63.4	69.8	74.4
Latin America & Caribbean (unweighted)	66.8	64.6	67.3
European Union (unweighted)	56.9	66.6	53.3
Non-European Union (unweighted)	63.3	72.9	51.3
North America (unweighted)	61.0	73.3	71.8

2.4.1 Potential entrepreneurs

GEM considers those who perceive good opportunities for starting a business, as well as believe they have the required skills, the potential entrepreneurs in a society. It is important to note that, at this stage of the entrepreneurial pipeline, they have not yet decided whether they will pursue the opportunity or not.

Opportunities (or the perception of good opportunities) play an important role in determining whether an individual will even consider starting a business. Starting a business is a complex issue. People may decide to start a business because they recognise specific entrepreneurial opportunities. Others may decide to become entrepreneurs and consciously undertake a search for ideas. Entrepreneurs may recognise opportunities well in advance or just before they set up their businesses.

The quantity and quality of the opportunities that people perceive and their belief about their own capabilities may well be influenced by various factors in their environment, such as economic growth, culture and education. While opportunity perceptions demonstrate people's views of the environment around them, beliefs about capabilities are more reflective of self-perceptions.

Over the years, GEM has found that individuals who are confident in their skills or believe they possess the necessary skills to start a business are four to six times more likely to be involved in some form of entrepreneurial activity.

To get an estimate of the size of the pool of potential entrepreneurs, the APS asks two questions:

- In the next six months will there be good opportunities for starting a business in the area where you live?
- Do you have the knowledge, skills and experience required to start a new business?

Another factor taken into account is the fear of failure, assessed as a percentage of the people who perceive opportunities in the area in which they live. Fear of failure can be influenced by intrinsic personality traits, as well as by societal norms and regulations. Much about entrepreneurship can be taught or acquired through practical experience, but propensity for risk cannot. For the risk-averse person, the downside risk of failure often outweighs the most promising opportunities or expectations, even if the potential returns are considerably higher than the next best alternative. In some countries, the legal and social ramifications of business failure may act as a strong deterrent, reducing the pool of potential entrepreneurs.

Table 2.4 shows that, from a regional perspective, ASEAN-6 reports average scores in terms of perceived opportunities and capabilities (despite the generally positive social attitudes towards entrepreneurship shown in Table 2.3). Africa, Latin America & Caribbean and North America all show significantly higher averages in terms of perceived opportunities, while Africa and Latin America & Caribbean have markedly more confidence in their own ability to start a business. Coupled with the fairly moderate numbers of people in the ASEAN-6 region who see opportunities and believe they have the capabilities to pursue them, the high regional score for fear of failure is of concern. Only the European Union scores (marginally) higher on this indicator.

At the individual country level, the ASEAN-6 shows divergent results. Singapore is a definite outlier in terms of perceived opportunities and capabilities – its scores for these indicators are almost three times lower than the combined average for the other five countries. Singapore is the only innovation-driven economy in the ASEAN-6, but this does not explain the magnitude of the discrepancy – the averages for the innovation-driven economies, which participated in GEM 2014 are 38.8 for perceived opportunities and 42 for perceived capabilities, still around double Singapore's scores. Table 2.3 indicates that entrepreneurship is particularly highly regarded in the Philippines, and the trend continues here with the Philippines displaying among the highest levels of both perceived opportunities and perceived capabilities. Malaysia's low level of perceived capabilities, in conjunction with its relatively negative societal attitudes towards entrepreneurship, is a concern – its score for fear of failure, however, is the lowest for the ASEAN-6 region. Vietnam has the highest fear of failure for the region.

Fear of failure tends to be more common in developed economies (such as Singapore), where the greater prevalence of alternative career options can create the impression that people have more to lose by forgoing these other opportunities.

However, Vietnam is a factor-driven economy, where job opportunities are more restricted and society often sees entrepreneurship as a means to improve one's economic and social standing. Vietnam's score of 50.1 is significantly higher than both the GEM average and the average of 31.4 for factor-driven economies that participated in GEM 2014.

Table 2.4: Perceived opportunities, capabilities and fear of failure in ASEAN-6 countries and comparisons with other regional averages, GEM 2014

Country	Perceived opportunities	Perceived capabilities	Fear of failure*
Indonesia	45.5	60.2	38.1
Malaysia	43.4	38.4	26.8
Philippines	45.9	66.1	37.7
Singapore	16.7	21.4	39.4
Thailand	47.3	50.1	42.4
Vietnam	39.4	58.2	50.1
ASEAN average (unweighted)	39.7	49.1	39.1
GEM average (unweighted)	42.67	50.96	34.16
Regional averages			
Africa (unweighted)	62.3	65.2	23.8
Asia & Oceania (unweighted)	36.6	44.6	37.5
Latin America & Caribbean (unweighted)	49.4	64.5	27.7
European Union (unweighted)	34.8	42.3	40.7
Non-European Union (unweighted)	42.6	41.7	32.4
North America (unweighted)	53.2	51.2	33.0

**Fear of failure assessed for those perceiving opportunities*

2.4.2 Intentional entrepreneurs

Potential entrepreneurs see good opportunities for starting a business and believe that they have the necessary skills, knowledge and experience to start a business. However, perceiving a good opportunity and having the skills to pursue it will not necessarily lead to the intent to start a business. Individuals will assess the opportunity costs, and risks and rewards, of starting a business versus other employment preferences and options, if these are available. In addition, the environment in which potential, intentional and active entrepreneurs exist needs to be sufficiently enabling and supportive.

Intentional entrepreneurs, the next stage in the pipeline, express their intention of starting a business. GEM defines entrepreneurial intention as the percentage of the 18 – 64 year old population (individuals already engaged in any stage of entrepreneurial activity excluded) who intend to start a business within the next three years. This stage is important in the entrepreneurial process as a strong association exists between entrepreneurial intention and actual entrepreneurial behaviour.

Table 2.5: Entrepreneurial intentions in ASEAN-6 countries and comparisons with other regional averages, GEM 2014

Country	Entrepreneurial intentions*
Indonesia	27.4
Malaysia	11.6
Philippines	42.8
Singapore	9.4
Thailand	21.8
Vietnam	18.2
ASEAN average (unweighted)	21.9
Regional averages	
Africa (unweighted)	45.1
Asia & Oceania (unweighted)	20.5
Latin America & Caribbean (unweighted)	28.8
European Union (unweighted)	12.1
Non-European Union (unweighted)	9.7
North America (unweighted)	12.0
Average (factor-driven)	40.2
Average (efficiency-driven)	22.8
Average (innovation-driven)	12.3
GEM average (unweighted)	20.9

**Intentions assessed among non-entrepreneur population*

The regional level of entrepreneurial intention is encouraging, with only Africa and Latin America & Caribbean showing higher levels of entrepreneurial intention. In line with their consistently highly positive scores in Tables 2.3 and 2.4, the Philippines and Indonesia top the rankings among the ASEAN-6 countries. In the Philippines, which experiences chronic unemployment and underemployment, a key priority is to improve job creation – the high level of entrepreneurial intention is thus encouraging. Vietnam's level of entrepreneurial intention is very low for a factor-driven economy – the exceptionally high score for fear of failure is probably a significant factor in this respect. Malaysia's level of entrepreneurial intention is only half the average for efficiency-driven economies. The Economic Outlook for Southeast Asia, China and India, 2014 suggests that structural problems affecting the education system remain a stumbling block in Malaysia's efforts to improve productivity – SMEs tend to be especially hard hit by difficulties in finding skilled labour. Malaysia's low score for perceived capabilities (Table 2.4) may be significant in this respect.

2.4.3 Entrepreneurial activity

Even when individuals have favourable perceptions of entrepreneurship and exhibit entrepreneurial intentions, it is by no means certain that this will be translated into actually starting businesses. According to the GEM Global 2008 Report, there are several assessments to be made, which may or may not be conscious. There is the assessment of opportunity costs, which involves comparing the expected returns of entrepreneurship to the expected returns of an alternative occupation, of which the most common is being employed. There is also a risk-reward assessment: even if the expected returns from entrepreneurship are considerably higher than the best alternative, the perceived risks involved may be too high for an individual who is thinking about starting a business. A variety of national characteristics could contribute to this risk-assessment, for example, "red tape" which could present unfavourable administrative burdens or high costs to those thinking about starting a business; access to resources and technical assistance; levels of corruption and crime; the attractiveness of the market; and the competitive environment. It is useful for policy makers to determine the factors that contribute to the fall off between intentional and active entrepreneurs, as this has a strong influence on the next stage of the entrepreneurial pipeline - actually starting a business. Figure 2.2 highlights the relationship between these phases of the entrepreneurial pipeline (namely entrepreneurial intention, early-stage entrepreneurial activity and established business rate) for the six ASEAN countries.

Figure 2.2: Entrepreneurial pipeline for ASEAN-6 countries, GEM 2014

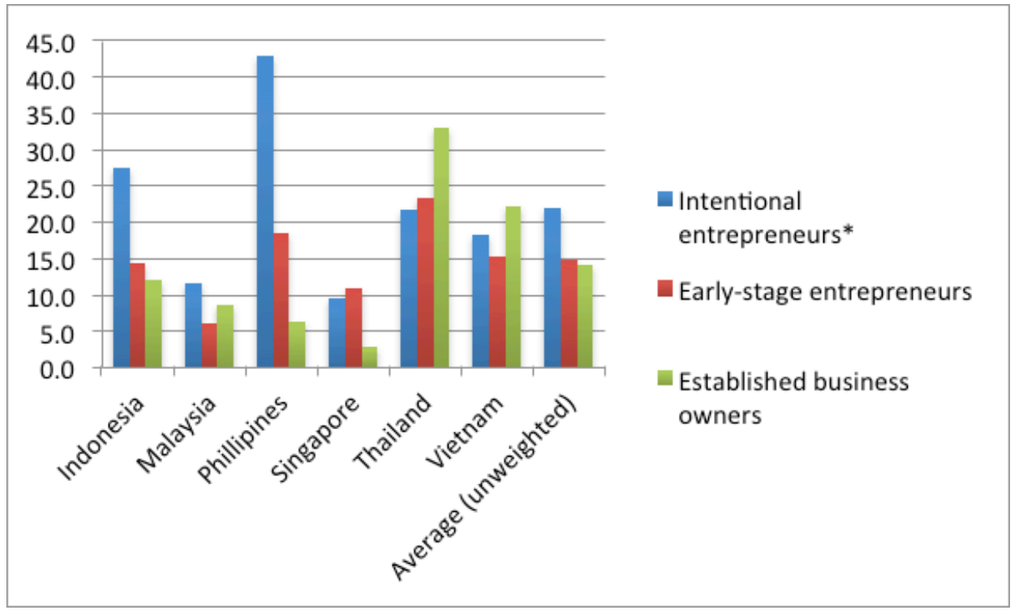


Figure 2.2 shows that for the majority of ASEAN-6 countries, there is a fall off between intentional and active entrepreneurs. This is most noticeable in the Philippines and Indonesia. Both these countries have highly positive societal attitudes towards entrepreneurship, which translates into a healthy pool of potential and intentional entrepreneurs. The level of early-stage activity, however, is less than half the number with entrepreneurial intentions. In Singapore and Thailand, on the other hand, entrepreneurial intention translates strongly into actual entrepreneurial activity. Another positive trend highlighted in Figure 2.2 is that for most of the ASEAN-6 countries, the transition from start-ups to successful established businesses poses minimal challenges.

The central indicator of GEM is the Total Early-stage Entrepreneurial Activity (TEA) rate, which measures the percentage of the adult population (18 to 64 years) that are in the process of starting or who have just started a business. This indicator measures individuals who are participating in either of the two initial processes of the entrepreneurial process:

- Nascent entrepreneurs – those who have not paid salaries or wages for more than three months, and

- New business owners - those who have moved beyond the nascent stage and have paid salaries and wages for more than three months but less than 42 months.

Measuring these two types of entrepreneurs is important as it provides the level of early-stage activity that will hopefully be transformed into established businesses.

GEM has consistently shown that there is a correlation between GDP per capita and TEA rates (GEM Global Report 2012). Generally TEA rates are highest in factor-driven economies, where the GDP per capita is low, and then decrease in efficiency-driven economies as the GDP per capita increases. This could be attributed to the increase of industrialisation. Larger established firms play an increasingly important role in the economy, providing the option of stable employment for a growing number of people as a viable alternative to the risks of self-employment, thus displacing some of the potential entrepreneurial activity. High-income countries are characterised by greater availability of resources and more affluent markets, which may stimulate an increase in opportunity-motivated entrepreneurship. However, the level of TEA could also be influenced by the level of unemployment in a country. One would expect entrepreneurial activity to be higher with higher levels of unemployment, as established companies and the formal economy are unable to meet the demand for jobs.

Table 2.6: Entrepreneurial activity in ASEAN-6 countries and comparisons with other regional averages, GEM 2014

Country	Nascent entrepreneurship rate	New business ownership	Early-stage entrepreneurial activity (TEA)	Established business rate	Discontinuation of businesses
Indonesia	4.4	10.1	14.2	11.9	4.2
Malaysia	1.4	4.6	5.9	8.5	2.0
Philippines	8.2	10.5	18.4	6.2	12.6
Singapore	6.4	4.8	11.0	2.9	2.4
Thailand	7.6	16.7	23.3	33.1	4.2
Vietnam	2.0	13.3	15.3	22.2	3.6
ASEAN average (unweighted)	5.0	10.0	14.7	14.1	4.8
Regional averages					
Africa (unweighted)	14.1	13.0	26.0	13.2	14.0
Asia & Oceania (unweighted)	5.8	7.4	13.0	10.8	3.9
Latin America & Caribbean (unweighted)	11.4	6.7	17.6	8.0	5.4
European Union (unweighted)	4.8	3.2	7.8	6.7	2.6
Non-European Union (unweighted)	3.3	2.8	6.0	5.7	3.0
North America (unweighted)	8.8	4.9	13.4	8.2	4.1
Average (factor-driven)	12.4	11.7	23.3	12.7	11.0
Average (efficiency-driven)	8.2	6.2	14.0	8.5	4.4
Average (innovation-driven)	5.3	3.4	8.5	6.7	2.7
GEM average (unweighted)	7.6	5.8	13.1	8.4	4.7

Table 2.6 captures activity throughout the business cycle for the six ASEAN countries.

Although the nascent entrepreneurship rate for the ASEAN-6 region is disappointingly low, this is offset by a new business rate which is the second highest regional average (only Africa reports a higher average) and is almost double the GEM 2014 average. The established business rate is the highest regional average and is also significantly above the GEM average.

The high level of sustainability of start-ups in ASEAN-6 relative to other regions in the GEM sample is encouraging.

The contribution of nascent entrepreneurial firms to economic development and growth in GDP is negligible, compared to new and established firms. Information on the level of established businesses is important as it provides some indication of the sustainability of entrepreneurship in an economy. These businesses have moved beyond the nascent and new business phases, and are able to contribute to a country's economy through the on-going introduction of new products and processes and a more stable base of employment. ASEAN-6's high new firm

At the individual country level, Malaysia reports the lowest early-stage entrepreneurial activity in the region, by a significant margin. Singapore shows a significantly higher TEA rate than the average for innovation- driven economies. On the other hand, its established business rate is the lowest in the region. Of greater concern is the fact that the TEA rate is almost four times higher than the established business rate, suggesting a poor level of new firm sustainability which is contrary to the regional trend. Despite the political turmoil it experienced during 2014, Thailand is the region's highest performer - both TEA and established business rates are the highest in the region by a substantial margin, as well as three and four times higher, respectively, than the averages for efficiency-driven economies.

Table 2.7: Reasons for starting a business in ASEAN-6 countries and comparisons with other regional averages, GEM 2014

Country	Necessity-driven (% of TEA)	Improvement-driven opportunity (% of TEA)
Indonesia	20.5	37.9
Malaysia	17.5	64.0
Philippines	29.4	33.5
Singapore	11.4	70.8
Thailand	17.8	71.2
Vietnam	29.7	53.3
ASEAN average (unweighted)	21.1	55.1
Regional averages		
Africa (unweighted)	26.3	46.9
Asia & Oceania (unweighted)	23.4	53.5
Latin America & Caribbean (unweighted)	22.7	49.7
European Union (unweighted)	22.8	47.9
Non-European Union (unweighted)	29.7	42.3
North America (unweighted)	14.6	65.1
Average (factor-driven)	28.2	47.0
Average (efficiency-driven)	27.2	45.1
Average (innovation-driven)	18.0	54.9
GEM average (unweighted	23.5	49.4

A primary objective of GEM is to explore differences in national levels and types of entrepreneurship and to link these to job creation and economic growth. The relative prevalence of opportunity-motivated versus necessity-motivated entrepreneurial activity provides useful insights into the quality of early-stage entrepreneurial activity in a given country.

Necessity based early-stage entrepreneurial activity: This is defined as the percentage of those involved in early-stage entrepreneurial activity that claim to be driven by necessity (having no better choice for work) as opposed to opportunity.

Opportunity based early-stage entrepreneurial activity: This is the percentage of those involved in early-stage entrepreneurial activity driven purely or partly by opportunity, as opposed to finding no other option for work. This includes taking advantage of a business opportunity or having a job but seeking a better opportunity.

Improvement-driven opportunity early-stage entrepreneurial activity: This is the percentage of those involved in early-stage entrepreneurial activity who (1) claim to be driven by opportunity as opposed to finding no other option for work; and (2) who indicate that the main driver for being involved in this opportunity is being independent or increasing their income, rather than just maintaining their income.

GEM has shown that businesses started by opportunity-driven entrepreneurs are much more likely to survive and employ people than those started by necessity-driven entrepreneurs.

One would therefore expect economies with higher developmental levels to have a high ratio of opportunity entrepreneurs to necessity entrepreneurs. Table 2.7 summarises the motivations for starting a business for the six ASEAN countries. ASEAN-6 has the second highest regional percentage of people drawn to go into business because of the opportunity to improve their income. Singapore and Thailand have the highest rates of improvement-driven opportunity motivation in the region. This is particularly positive in the case of Thailand, given its robust level of early-stage entrepreneurial activity. Vietnam and the Philippines have the highest percentage of necessity entrepreneurs. Factor-driven economies have lower GDP per capita, indicating that a large percentage of the population is either unemployed or underemployed (i.e. they earn very low wages). Individuals therefore start businesses because they are unable to find employment, or to supplement low wages. A relatively high proportion of entrepreneurial activity, therefore, tends to be motivated by necessity.

Table 2.8: Reasons for business exit in ASEAN-6 countries, GEM 2014

Reason	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Opportunity to sell	2.8	0	0.5	2.8	2.6	0
Business not profitable	19.8	19.6	40.5	28.1	17.4	12.9
Problems getting finance	26.4	21.7	24.5	16.8	14.7	15.7
Another job or business opportunity	14.7	14.4	4.1	9.4	2.9	14.3
Exit was planned in advance	13.2	9.9	0.5	4.3	0.8	7.1
Retirement	2.5	0	0	7.9	5.0	5.7
Personal reasons	19.0	34.4	24.4	30.7	40.9	28.6
Incident	1.0	0	5.6	0	15.7	15.7

Information on the rate of business discontinuance is another indicator of the sustainability of entrepreneurship in an economy. The ASEAN-6 regional average for discontinuance is 4.8 (see Table 2.6), which is similar to the GEM average. The region has a positive ratio of TEA to business discontinuance.

For every person exiting a business in 2014, three were engaged in early-stage entrepreneurial activity.

The Philippines is the only country in ASEAN-6 with a high business discontinuance rate – at 12.6, it is three times the regional average. In the Philippines, for every person exiting a business 1.5 people are engaged in early-stage entrepreneurial activity.

The reasons for business discontinuance are many and varied. Some reasons could be seen as positive, such as the opportunity to sell, pursuing another opportunity or planned retirement. On the other hand, exits may be due to lack of business profitability, problems with accessing finance and running out of working capital. Table 2.8 summarises the reasons for business exit for the six ASEAN countries. Many of the businesses in the region close for financial reasons – either because they are not profitable, or encounter problems in accessing financing to sustain the business. This is a particularly pernicious problem in the Philippines, accounting for 65% of business discontinuance. In Thailand, however, businesses close mainly due to personal reasons.

2.5 Profile of the ASEAN entrepreneurs

GEM's focus on individual-level participation enables this research to reveal a range of demographic and other characteristics about entrepreneurs. The research also makes possible an assessment of the level of inclusiveness in an economy—in other words, the extent to which various groups (for example age, gender or education level) engage in entrepreneurial activity. This information can assist policy makers in targeting effective interventions aimed at increasing participation as well as productivity in the economy.

2.5.1 Age

The influence of age on entrepreneurial activity tends to be very similar throughout GEM. The prevalence of early-stage entrepreneurial activity tends to be relatively low in the 18-24 years cohort, peaks among 25-34 year olds, and then declines as age increases. The higher prevalence of entrepreneurial activity between the ages of 25 and 44 could be attributed to the fact that these individuals have had time to develop their skills and knowledge through education as well as through work experience, building their confidence in their own abilities. A critical factor is that they may have accumulated other resources such as networks, personal savings and access to other financial resources.

Although access to finance is a perennial problem for all small businesses, the youth are particularly vulnerable to this limitation.

Young people often have no credit history or assets to serve as collateral in order to secure loans from financial institutions. In the 25 – 34 age cohort, in addition, they may be a little less established in a career that may offer high salaries and perks (less opportunity costs) or they may have fewer financial obligations such as families to support and loan repayments.

Table 2.9 indicates the participation in early-entrepreneurial activity in the ASEAN-6 region as a whole is similar to the spread in the GEM sample. It is characterised by an almost equal distribution of entrepreneurial involvement across the different age groups. From an individual country perspective, Thailand and the Philippines are notable for the high level of entrepreneurial activity in all age categories, as well as the significant proportion of the adult population in the 55 – 64 age category engaged in TEA (close to three times the GEM average).

Table 2.9: TEA rates by age group in ASEAN-6 countries, GEM 2014 (% of adult population in each age category involved in TEA)

Country	18 - 24 years	25 - 35 years	35 - 44 years	45 - 54 years	55 - 64 years
Indonesia	9.8	16.7	15.8	14.4	10.0
Malaysia	3.9	7.7	5.5	8.3	2.3
Philippines	12	19.4	20.1	19.2	25.1
Singapore	10.3	13.4	14.1	8.4	7.4
Thailand	14.6	28.9	26.3	22.1	19.4
Vietnam	12	22.1	15.0	12.9	8.6
ASEAN average (unweighted)	10.4	18.1	16.1	14.2	12.2
GEM average (unweighted)	11.0	16.6	14.8	12.2	8.4

2.5.2 Gender

Although the ratio of male to female participation in early-stage entrepreneurial activity varies considerably across the total sample of GEM countries, reflecting differences in culture and customs regarding female participation in the economy, a consistent finding is that men are more likely to be involved in entrepreneurial activity. It should be recognised that women enter entrepreneurship for many of the same reasons as males, such as to support themselves and their family, to attain financial independence and to enrich their lives with meaningful careers.

Table 2.10 indicates that the ASEAN-6 region diverges strongly from the GEM norm in terms of the proportion of women involved in early-stage entrepreneurial activity. With the exception of Singapore, women are as likely or more likely to be involved in early-stage entrepreneurial activity as are men.

In the Philippines and Malaysia, women are significantly more likely to be involved in TEA. Singapore is a significant outlier in the region, with women accounting for only a third of early-stage entrepreneurial activity in the country.

Table 2.10: TEA rates by gender in ASEAN-6 countries, GEM 2014 (% of adult population for each gender involved in TEA)

Country	Male TEA rate	Female TEA rate	Ratio male to female
Indonesia	13.2	15.2	0.86
Malaysia	5.1	6.8	0.82
Philippines	15.9	20.8	0.73
Singapore	14.8	7.2	2.01
Thailand	24.5	22.1	1.06
Vietnam	15.1	15.5	0.95
ASEAN average (unweighted)	14.8	14.6	1.0
GEM average (unweighted)	15.7	12.2	1.28

2.5.3 Education level

An educated workforce, appropriately skilled and with the capacity for innovation, is vital to an economy's competitiveness, productivity and growth. A sound education system is therefore one of the key imperatives for a competitive country, as it is reasonable to believe that a good quality education system will have a positive influence on individuals' self-efficacy and self-confidence, thereby increasing the chances of such individuals not only starting a business but also being able to successfully navigate competitive and changing business environments

Table 2.11: TEA rates by education level in ASEAN-6 countries, GEM 2014

Country	Some secondary	Secondary degree	Post-secondary	Graduate
Indonesia	12.7	14.0	17.7	-
Malaysia	2.1	3.3	7.0	9.6
Philippines	12.1	17.4	22.9	26.7
Singapore	6.1	8.5	12.1	16.3
Thailand	21.0	25.6	23.3	34.5
Vietnam	13.9	16.0	16.0	7.1

Table 2.11 shows the distribution of education levels across TEA entrepreneurs in each of the ASEAN countries. Over 80% of early-stage entrepreneurs in the region have at least a secondary qualification, while more than half have a post-secondary qualification. Thailand and the Philippines have a notably high proportion of entrepreneurs with graduate level qualifications. The high education levels among ASEAN-6 entrepreneurs may contribute to the fact that ASEAN-6 has the second highest regional percentage of people drawn to go into business because of the opportunity to improve their income (Table 2.7). Thailand, with the highest percentage of entrepreneurs with post-secondary as well as graduate-level education, also has the highest rate of improvement-driven opportunity motivation in the region.

2.6 Entrepreneurship impact

In studying the impact of entrepreneurs, GEM recognises that while all entrepreneurs are important, they have differing impacts on their societies. Key to economic development and growth are job creation, mix of industries and level of innovation. This section focuses on these factors with respect to the ASEAN-6 region.

2.6.1 Industry sector

Table 2.12 shows the distribution of entrepreneurship across sectors for the six ASEAN countries. The majority of entrepreneurs in the region are engaged in the retail trade, hotels and restaurant business with the Philippines having 83% of business engaged in this sector, the highest in the region. Indonesia registered the highest number engaged in manufacturing while Singapore has the highest number of entrepreneurs in more sophisticated sectors such as financial intermediation, communications, and professional and government services.

Table 2.12: TEA rates by industry sector in ASEAN-6 countries, GEM 2014

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Agriculture, forestry, fishing	2.3%	4.2%	4.7%	0.5%	10.6%	0.3%
Mining, construction	2.3%	4.2%	1.4%	2.9%	1.5%	1.7%
Manufacturing	23.4%	6.8%	3.0%	2.9%	6.0%	1.0%
Utilisation, transport, storage	0.6%	1.7%	1.6%	3.8%	1.7%	0.7%
Wholesale trade	5.3%	5.9%	3.8%	6.3%	6.8%	3.1%
Retail trade, hotels, restaurants	49.0%	61.9%	83.2%	45.7%	58.5%	80.1%
Information & communication	0.1%	2.5%	0.0%	6.3%	2.3%	2.4%
Financial intermediation, real estate activities	1.8%	2.5%	0.3%	6.3%	1.7%	1.7%
Professional services	6.0%	6.8%	0.3%	7.7%	1.0%	0.3%
Administration services	4.1%	1.7%	0.5%	2.4%	0.8%	0.7%
Government, health, education, social services	4.5%	1.7%	1.1%	12.0%	8.9%	6.8%
Personal/consumer service activities	0.4%	0.0%	0.0%	3.4%	0.2%	1.0%

The Economic Outlook for Southeast Asia, China and India, 2014 argues that further economic development in the region is likely to depend increasingly on the services sector. It notes that services are concentrated mainly in lower-productivity segments such as the retail trade (as highlighted in Table 2.12). Barriers to entry into the consumer sector, in terms of both skills and capital required, tend to be lower. As a result, however, this is often an over-traded sector populated by low profit margin businesses and the high level of competition for limited markets can threaten the sustainability of these businesses Another factor to bear in mind is that the consumer services sector tends to be particularly vulnerable in periods of economic slowdown. Further development of the services sector - especially sophisticated, high-productivity modern services such as finance, ICT and business services – is thus important, particularly in enabling the ASEAN region to participate in global value chains. Regulatory barriers that limit entry, stifle competition and inhibit investment have been major obstacles to the development of services sectors in developing Asian countries. Reducing and (where possible) removing regulatory barriers is an essential focus area for policy makers.

2.6.2 Job creation

A key focus in the development strategies of the Southeast Asian countries is to facilitate growth that is sustainable and inclusive in order to generate widespread employment and to reduce poverty. The potential of the SME sector to create job opportunities is thus a crucial factor. Table 2.13 indicates the percentage of early-stage entrepreneurs reporting any current jobs, or expecting to create any jobs within the next 5 years.

From a regional perspective, the ASEAN-6 shows a higher than average percentage of entrepreneurs with no employees. Although Thailand has the highest TEA rate in the region, almost half of these entrepreneurs run a one-person business. The Philippines, with the second highest percentage of entrepreneurs with no employees, has the highest level of necessity-driven entrepreneurship in the region. Given the chronically high level of unemployment in the Philippines, this high level of self-employment can be seen as a positive.

Almost half the entrepreneurs in the ASEAN-6 region expect to generate between 1 – 5 jobs – however, only 4.6% expect to create more than 20 jobs (half the GEM average).

The job creation potential for the region can thus be regarded as moderate. Entrepreneurs in Singapore have the highest job-creation aspirations – more than 40% expect to generate more than six jobs, and almost half of these project 20 jobs are more. With a TEA rate of 11% (higher than the average for innovation-driven countries) this could translate into significant job creation for Singapore.

Table 2.13: Job expectations for early-stage entrepreneurial activity in ASEAN-6 countries, GEM 2014

Country	No jobs	1-5 jobs	6-19 jobs	20+ jobs
Indonesia	0.6	45.9	4.7	1.2
Malaysia	27.0	61.7	11.4	0.0
Philippines	39.2	49.0	5.6	1.8
Singapore	9.7	32.1	23.2	19.4
Thailand	47.2	33.0	7.8	1.1
Vietnam	18.6	63.4	12.4	4.3
Average (unweighted)	23.7	47.5	10.8	4.6
GEM average	15.4	41.0	14.7	9.0
Average (factor-driven)	14.0	50.5	13.3	6.0
Average (efficiency-driven)	12.5	40.3	14.7	8.0
Average (innovation-driven)	19.1	38.4	15.1	11.1

Table 2.14 indicates the growth expectations, over the next five years, among the ASEAN-6 entrepreneurs. Growth expectations represent a future assessment of the expansion prospects for a business, as well as an entrepreneur's ambitions to grow the enterprise.

Table 2.14: Job growth expectations over next five years in ASEAN-6 countries, GEM 2014

Country	No jobs	1-5 jobs	6-19 jobs	20+ jobs
Indonesia	65.6	30.0	3.8	0.6
Malaysia	41.9	55.6	2.5	0.0
Philippines	56.1	37.9	5.1	0.9
Singapore	38.1	26.1	19.3	16.5
Thailand	72.1	21.2	5.7	1.0
Vietnam	50.0	42.5	5.9	1.6
Average (unweighted)	54.0	35.6	7.0	3.4
GEM average	44.4	35.9	12.4	7.2
Average (factor-driven)	39.4	45.5	10.6	4.6
Average (efficiency-driven)	45.5	35.3	12.8	6.4
Average (innovation- driven)	45.1	33.2	12.7	9.0

The job growth aspirations for the ASEAN-6 region are not encouraging. More than half the early-stage entrepreneurs expect to generate no jobs over the next five years, well above the GEM average. The economic impact of Thailand's positive ranking in terms of TEA and established business rate is weakened by over 70% of its entrepreneurs having no employment expectations.

In most economies, only a small percentage of high growth entrepreneurs generate the bulk of new jobs associated with the entry of new firms into the economy. High growth expectation (HEA) entrepreneurs are those who expect that their businesses will employ at least 20 people in five years' time. The ASEAN-6 region has a disappointingly low percentage of HEA entrepreneurs with the majority of the countries reporting around 1% in this category. Only Singapore shows vigorous high-growth expectations of 16.5% - more than double the GEM average and substantially higher than the average for innovation-driven economies. A concern, however, is Singapore's low established business rate, which needs to be addressed if these economic benefits are to be realised.

Interventions that encourage and stimulate businesses in the SME sector to grow are essential if they are to contribute meaningfully to socio-economic development in ASEAN. It is important to identify those entrepreneurs with realistic high-growth aspirations, and institute policies aimed specifically at supporting them in order to optimise their impact on economic growth and job creation.

2.6.3 Innovation

Innovation and entrepreneurship are closely connected concepts. It is argued that entrepreneurs disrupt market equilibrium by introducing new product-market combinations into a market, teaching customers to want new things and driving out less productive firms as their innovations advance the production frontier. Innovation goes beyond just creating novel products and services. To commercialise their innovations, entrepreneurs need to identify new market niches and develop creative ways to offer, deliver and promote their products. All of this requires an awareness of competitive offerings, and the ability to incorporate this knowledge into distinct products and services. Innovation capabilities are thus important to economies' ability to become competitive, particularly in higher-productivity sectors.

GEM assesses innovation in entrepreneurial businesses by looking at two main variables with respect to the entrepreneur's products or services: the degree of newness they represent to customers, and the extent to which competitors are not offering the same products or services.

Table 2.15: New products/ services offered to customers in ASEAN-6 countries, GEM 2014

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
None	52.8	70.0	39.0	51.2	50.4	63.1
Some	21.0	24.9	29.5	31.8	32.3	31.0
All	26.2	5.1	31.5	17.0	17.3	5.9

% within TEA: Product new to none/some/all customers

Table 2.16: Proportion of competitors in ASEAN-6 countries, GEM 2014

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
None	9.6	4.1	7.5	7.8	6.6	4.9
Few	22.9	40.7	32.6	32.1	36.1	29.1
Many	67.5	55.2	59.9	60.1	57.3	66.0

% within TEA: No/ few/ many businesses offer the same product

Table 2.15 shows a moderate level of innovation in the ASEAN-6 region. Just over half the entrepreneurs in the region believe that their products/ services are new to none of their customers. Malaysia is the least innovative in this respect (70%). The Philippines is the most innovative, with 61% of products/ services new to some or all of the customers. The Philippines has been making especially strong efforts to develop its innovation capabilities, offering fiscal and other incentives for research and development, and creating science and technology parks to attract and strengthen linkages among foreign and domestic knowledge-intensive firms.

Table 2.16 shows that about 60% of businesses in the ASEAN-6 region believe that there is high competition for their products/ services. This imposes significant challenges for these entrepreneurs in providing the competitive advantage they need to generate healthy profits and viable businesses over the longer term. As discussed under industry sector, most of the ASEAN economies need to diversify their offerings within the broader services sector, in order to improve their competitiveness and productivity.

2.7 Summary of entrepreneurship by country

Overall, entrepreneurship is regarded positively in the ASEAN-6 region. Two-thirds of people in the region see entrepreneurship as a good career choice and entrepreneurs receive a high level of media attention. Although there is a fairly healthy pool of potential entrepreneurs, the high regional score for fear of failure is of concern. For the majority of ASEAN-6 countries, there is a sharp fall off between intentional and active entrepreneurs. Although the nascent entrepreneurship rate for the region is disappointingly low, this is offset by a new business rate which is the second highest regional average and an established business rate which is the highest regional average. The high level of sustainability of start-ups in the ASEAN-6, relative to other regions in the GEM sample, is encouraging. The ASEAN-6 has the second highest regional percentage of people drawn to go into business because of improvement-driven opportunity, and a positive ratio of TEA to business discontinuance. With the exception of Singapore, women are as likely or more likely to be involved in early-stage entrepreneurial activity as are men. Over 80% of early-stage entrepreneurs in the region have at least a secondary qualification, while more than half have a post-secondary qualification. The majority of entrepreneurs in the region are engaged in the retail trade, hotels and restaurant business. The ASEAN-6 shows a higher than average percentage of entrepreneurs with no employees. Although almost half the entrepreneurs expect to generate between 1 – 5 jobs, only 4.6% expect to create more than 20 jobs (half the GEM average). The job growth aspirations for the ASEAN-6 region are not encouraging - more than half the early-stage entrepreneurs expect to generate no jobs over the next five years. About 60% of businesses in the region believe that there is high competition for their products/ services. This imposes significant challenges for these entrepreneurs in providing the competitive advantage they need to generate healthy profits and viable businesses over the longer term.

Following are some summary insights into entrepreneurship in each of the six countries:

In **Indonesia**, highly positive attitudes towards entrepreneurship translate into a healthy pool of potential and intentional entrepreneurs. The level of early-stage activity, however, is less than half the number with entrepreneurial intentions. Start-ups in Indonesia show good sustainability with fairly high numbers of new firms and established businesses. Entrepreneurs in the country show a surprisingly low rate of improvement-driven opportunity motivation for an efficiency-driven economy (the second lowest in the region). Indonesia is fairly diverse in terms of participation in industry sectors, with a significant percentage of entrepreneurs in manufacturing as well as retail, and some activity in the professional services sector. Almost half the early-stage entrepreneurs employ 1 – 5 people.

Malaysia has the smallest base of potential entrepreneurs in the region. Malaysians generally have a low level of confidence in their own entrepreneurial abilities, and have a negative perception of entrepreneurship as a career choice. Malaysia's level of entrepreneurial intention is half the average for efficiency-driven economies, and the country reports the lowest early-stage entrepreneurial activity in the ASEAN-6 region. Malaysian businesses are comparatively less innovative with 70% believing that their products/ services are new to none of their customers. Malaysian women are significantly more likely to be involved in entrepreneurial activity than their male counterparts. Most entrepreneurs are improvement driven as opposed to necessity driven due in part to the low unemployment rate. Overall most entrepreneurs are employers, with over 60% creating jobs for 1-5 people.

In the **Philippines**, highly positive societal attitudes towards entrepreneurship correspond with high levels of both perceived opportunities and perceived capabilities, which translate into a healthy pool of potential and intentional entrepreneurs. The level of early-stage activity, however, is less than half the number with entrepreneurial intentions. The Philippines has the highest percentage of necessity entrepreneurs in the region – given that it is a factor-driven economy, this is not surprising. The Philippines is the only country in the ASEAN-6 with a high business discontinuance rate – at 12.6, it is three times the regional average. Lack of profitability, or difficulties in accessing financing to sustain the business, are particularly problematic in the Philippines, accounting for 65% of business discontinuance. The Philippines is notable for the high level of entrepreneurial activity in all age categories, as well as the significant proportion of the adult population in the 55 – 64 age category engaged in TEA (close to three times the GEM average). Women are significantly more likely to be involved in TEA, compared to men. A significant majority of businesses are in the retail sector (the highest in the region). Entrepreneurship primarily takes the form of

self-employment, rather than job creation for others. A significant proportion of entrepreneurs have no employees, corresponding with the high rate of necessity-driven entrepreneurship. The Philippines is the most innovative country in the region, with 61% of products/ services new to some or all of the customers.

Singapore has a very small pool of potential entrepreneurs – its scores for perceived opportunities and capabilities are almost three times lower than the combined average for the other five countries, and it has the lowest entrepreneurial intentions in the region. However, a positive trend is that entrepreneurial intention translates strongly into actual entrepreneurial activity. Singapore shows a significantly higher TEA rate than the average for innovation- driven economies, and has one of the highest rates of improvement-driven opportunity motivation in theASEAN-6 region. On the other hand, its established business rate is the lowest in the region. The TEA rate is almost four times higher than the established business rate, suggesting a poor level of new firm sustainability. In terms of gender parity, Singapore is a significant outlier in the region, with women accounting for only a third of early-stage entrepreneurial activity in the country. Singapore has the highest number of entrepreneurs in the region in more sophisticated industry sectors such as financial intermediation, communications, and professional and government services. Entrepreneurs in Singapore are the highest job-creators in the region – more than 40% expect to generate more than six jobs, and almost half of these project 20 jobs or more. Singapore shows vigorous high-growth expectations - 16.5% expect to generate 20+ jobs over the next five years.

In **Thailand**, positive societal attitudes and the highest regional rate of perceived opportunities translate strongly into actual entrepreneurial activity. Despite the political turmoil it experienced during 2014, Thailand is the region's highest performer - both TEA and established business rates are the highest in the region by a substantial margin. Thailand has one of the highest rates of improvement-driven opportunity motivation in the region, and the highest percentage of entrepreneurs with post-secondary as well as graduate-level education. Like the Philippines, Thailand is notable for the high level of entrepreneurial activity in all age categories, as well as the significant proportion of the adult population in the 55 – 64 age category engaged in TEA (close to three times the GEM average). Although Thailand has the highest TEA rate in the region, almost half of these entrepreneurs run a one-person business. The economic impact of Thailand's positive ranking in terms of TEA and established business rate is further weakened by over 70% of its entrepreneurs having no employment expectations.

Vietnam's level of entrepreneurial intention is very low for a factor-driven economy – the exceptionally high score for fear of failure (the highest in the ASEAN-6 region, and significantly higher than both the GEM average and the average for factor-driven economies) is probably a significant factor in this respect. Vietnam has one of the lowest nascent entrepreneurship rates in the region; however, its new firm and established business rates are the second highest in the region, showing good longer term sustainability. Entrepreneurship exhibits little industry diversity, with over 80% operating in the retail, hotel and restaurant sector. Although a third of entrepreneurs are necessity-driven, just over half cite improvement-driven opportunity motivation – encouraging for a factor-driven economy. A significant majority of Vietnamese entrepreneurs are employers - over 60% employ 1-5 people, and 12% employ more

CHAPTER 3: FOCUS AREA – ASEAN WOMEN'S INVOLVEMENT IN ENTREPRENEURSHIP

A key trend in the development strategies of the Southeast Asian countries is a focus on inclusive and sustainable growth – the creation of enabling environments that foster innovation, facilitate more productive economies and, critically, open up new and better job opportunities for all segments of the population. Worldwide, women's role as drivers of economic growth is increasingly recognised. In addition, countries that invest in greater economic equality between men and women see important results beyond economic benefits. Empowering women leads to better-educated and healthier families, stronger societies and decreased national poverty.

Although female entrepreneurship is an increasing trend around the world, the rate of participation in entrepreneurship still varies considerably between countries and geographical regions. According to the OECD (2004), women tend to have lower participation rates in entrepreneurship as they face more social and cultural constraints than men. Women generally start or manage businesses in industries that are "often perceived as being less important to economic development and growth than high-technology and manufacturing" (OECD, 2004, p. 5). Many studies maintain that women face greater difficulties in becoming entrepreneurial. These obstacles include: higher levels of domestic responsibility; lower levels of education (particularly in developing countries); lack of female role models in the business sector; fewer business-orientated networks in their communities; lack of capital and assets; lower status in society and a culturally-induced lack of assertiveness and confidence in their ability to succeed in business. These factors may prevent women from perceiving as well as acting on entrepreneurial opportunities.

The SME sector is often viewed as the core of economic development in the ASEAN region. GEM's measurement of individual participation across multiple phases of the entrepreneurial process makes it possible to get a clearer idea of not only the extent to which women are participating in entrepreneurial activity, but also the nature and impact of this activity. This chapter will provide an overview of gender differences in entrepreneurial attitudes, activity and impact in the six ASEAN countries which participated in the GEM survey in 2013 and 2014, namely Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam (ASEAN-6). Data from these two years is aggregated to provide insights into gender differences in entrepreneurship in the region.

Research suggests that Southeast Asian women are becoming increasingly active as SME owners and entrepreneurs.

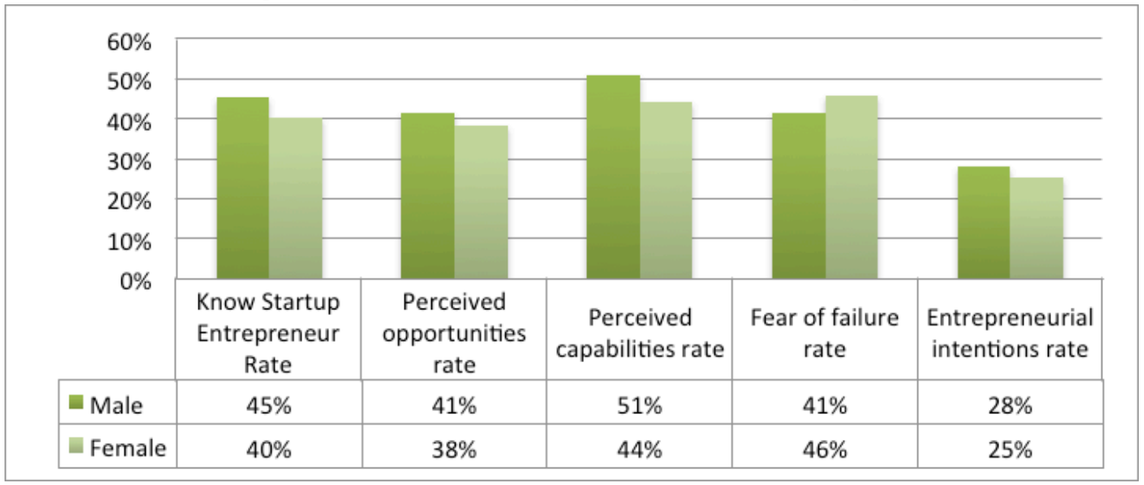
3.1 Entrepreneurial attitudes

Entrepreneurial activity does not take place in a vacuum – the prevalent entrepreneurial attitudes and perceptions play an important part in creating an entrepreneurial culture in an economy. GEM assesses broader social attitudes towards entrepreneurship, which can indicate the extent to which people are willing to participate in entrepreneurial activity, and the level of social support for their efforts. Although attitudes and perceptions will have an impact on all phases of the entrepreneurial pipeline, the influence on the pool of potential and intentional entrepreneurs is likely to be most significant.

GEM research has confirmed the importance of individuals' perceptions of their entrepreneurial ability, their recognition of start-up opportunities, how risk-averse they are, and the extent to which their social networks include entrepreneurs as being instrumental in whether or not they become involved in starting new businesses.

Figure 3.1 shows that in general, men in the ASEAN-6 countries score have more favourable perceptions relative to the entrepreneurial indicators listed above, compared to women in the region. Men know more start-up entrepreneurs; perceive more good opportunities in the area in which they live; have more confidence in their own ability to run a business; and tend to have less fear of failure (i.e. are less risk-averse). In line with these higher levels of positive perceptions, men also report higher rates of entrepreneurial intention.

Figure 3.1: Gender differences in entrepreneurial attitudes, ASEAN-6 region

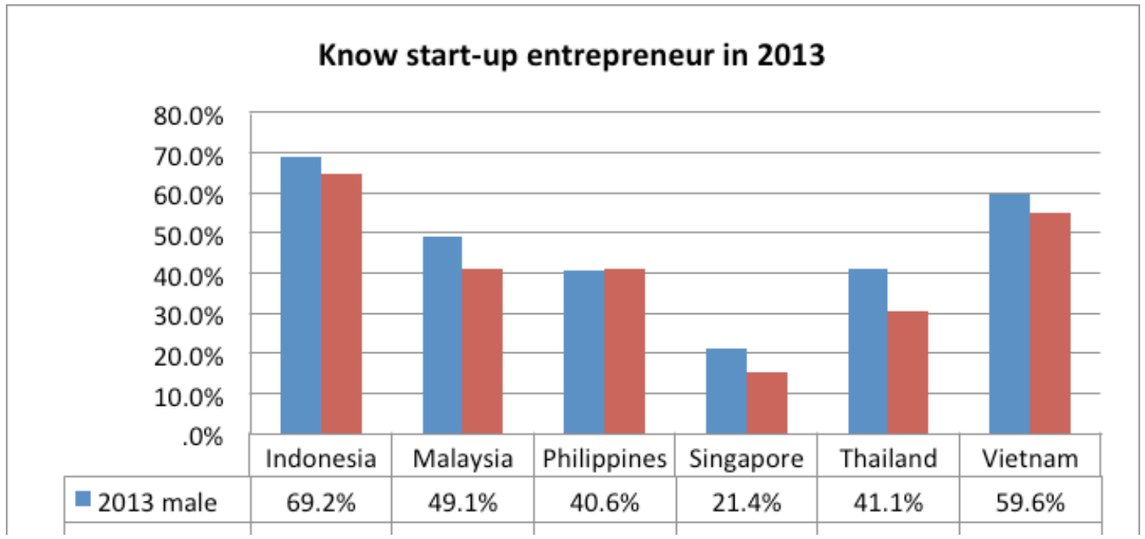


	Know Startup Entrepreneur Rate	Perceived opportunities rate	Perceived capabilities rate	Fear of failure rate	Entrepreneurial intentions rate
Male	45%	41%	51%	41%	28%
Female	40%	38%	44%	46%	25%

On an individual country level, the six ASEAN economies show significant variation in both male and female entrepreneurial attitudes, as discussed below.

3.1.1 Know start-up entrepreneur

The average for the ASEAN-6 region for the variable "know a start-up entrepreneur" is less than 50% (45% for men and 40% for women). Figure 3.2 shows the breakdown for this indicator by individual country, for both 2013 and 2014.



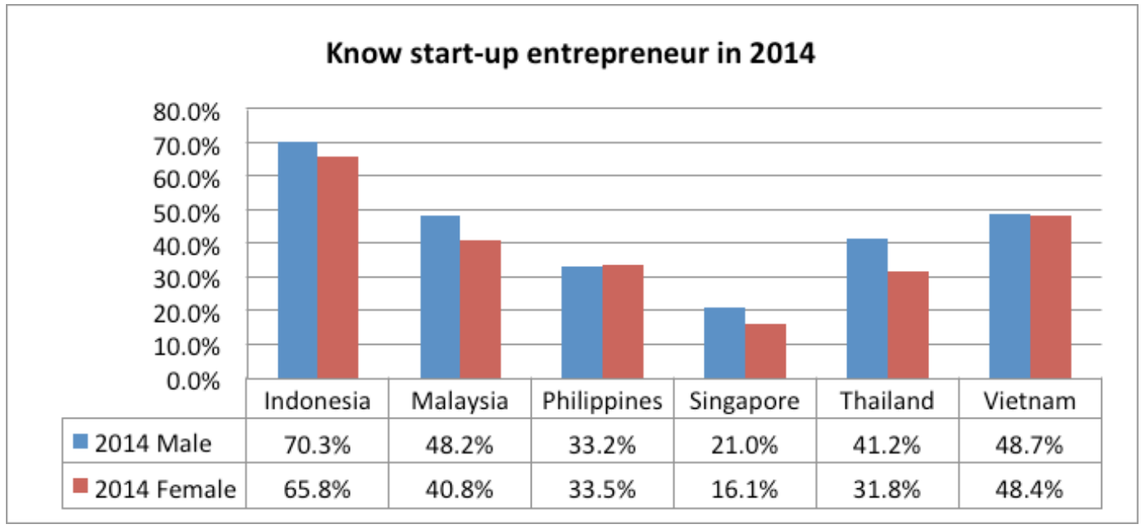


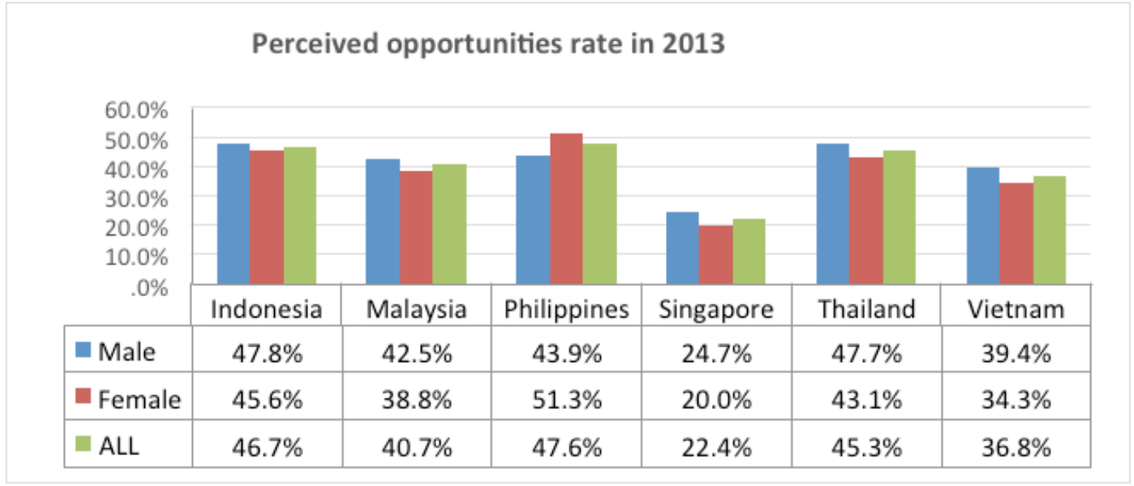
Figure 3.2: Know start-up entrepreneur rate, by gender, for ASEAN-6 countries

Indonesia has the highest score in the region, by a significant margin, for both men and women. Vietnam also scores above the regional average for both genders. Singapore has significantly lower rates of knowing start-up entrepreneurs for both men and women – less than half the regional average in both cases.

In the majority of the ASEAN countries, fewer women know a start-up entrepreneur, compared to men. The most significant discrepancies are found in Thailand (with a difference of about 10% for both 2013 and 2014) and Malaysia. In Vietnam and the Philippines, in 2014, the rates for men and women are essentially the same.

3.1.2 Opportunity perception

GEM research suggests that individuals who see good business opportunities in their area are significantly more likely to become involved in entrepreneurial activity. Figure 3.3 shows the rates of opportunity perception for the ASEAN-6 countries. Although the rate of perceived opportunities is, in general, higher for men than for women, the difference between the genders in the ASEAN-6 region for perceived opportunities is relatively low (around 3%). Again, when the rates for individual countries are considered, a more diverse picture emerges. Philippines has the highest rate in the region for female opportunity perception in both 2013 and 2014, and is also the only country in the region where women report higher rates than men. In 2013, the perceived opportunities for women in the Philippines are much higher than for men, while in 2014 the rate is still higher although not as significant. In 2014, Thai men reported the highest rate for opportunity perception in the region, resulting in a significant gender differential of 9%. Singaporeans, as with the previous indicator (knowing an entrepreneur) have rates of opportunity perception, for both men and women, less than half the regional average.



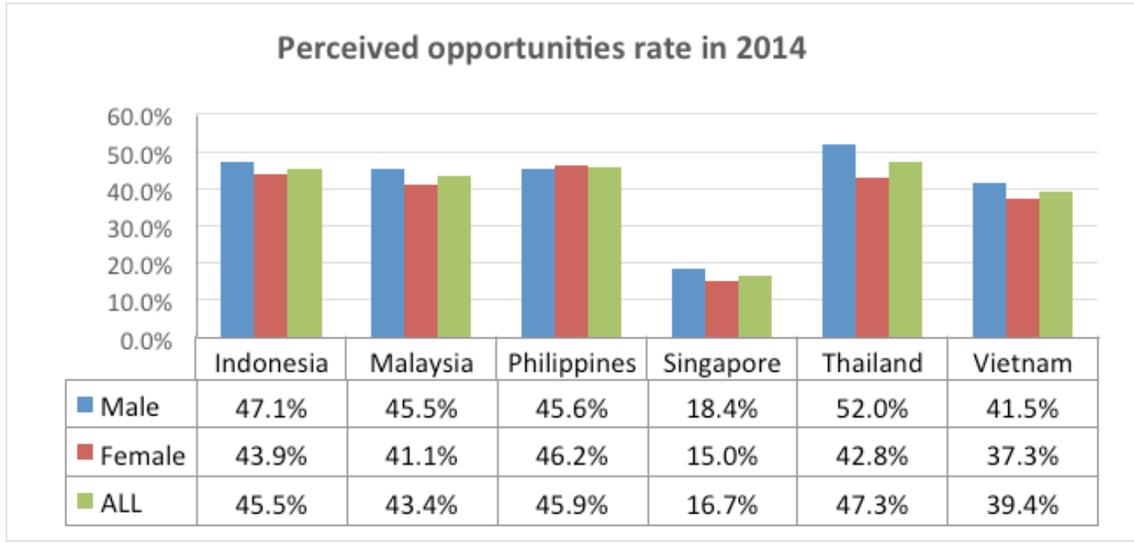
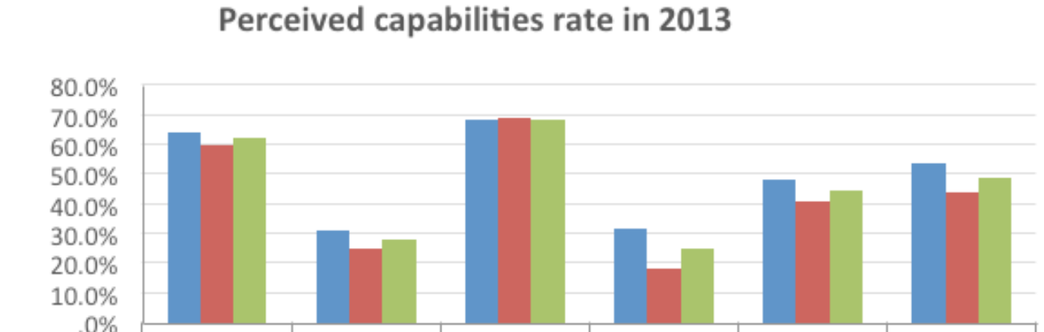


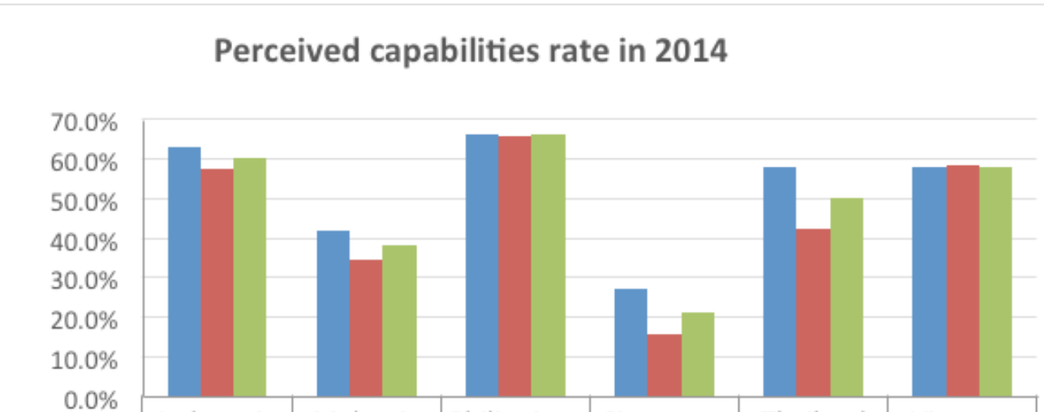
Figure 3.3: Perceived opportunities rate, by gender, for ASEAN-6 countries

3.1.3 Perceived capabilities

While opportunity perceptions demonstrate people's views of the environment around them, beliefs about capabilities are more reflective of self-perceptions. They indicate individuals' confidence that they have the knowledge, skills and experience required to start a new business. Figure 3.1 indicated that in the ASEAN-6 region, half of the men surveyed believed that they were capable of engaging in entrepreneurial activity, compared to 44% of women in the region.



	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Male	64.1%	30.8%	68.2%	31.7%	48.0%	53.5%
Female	60.0%	25.0%	69.0%	17.9%	40.9%	44.0%
ALL	62.0%	28.0%	68.6%	24.8%	44.4%	48.7%



	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Male	63.0%	42.1%	66.5%	27.3%	58.0%	58.0%
Female	57.4%	34.5%	65.8%	15.5%	42.6%	58.4%
ALL	60.2%	38.4%	66.1%	21.3%	50.1%	58.2%

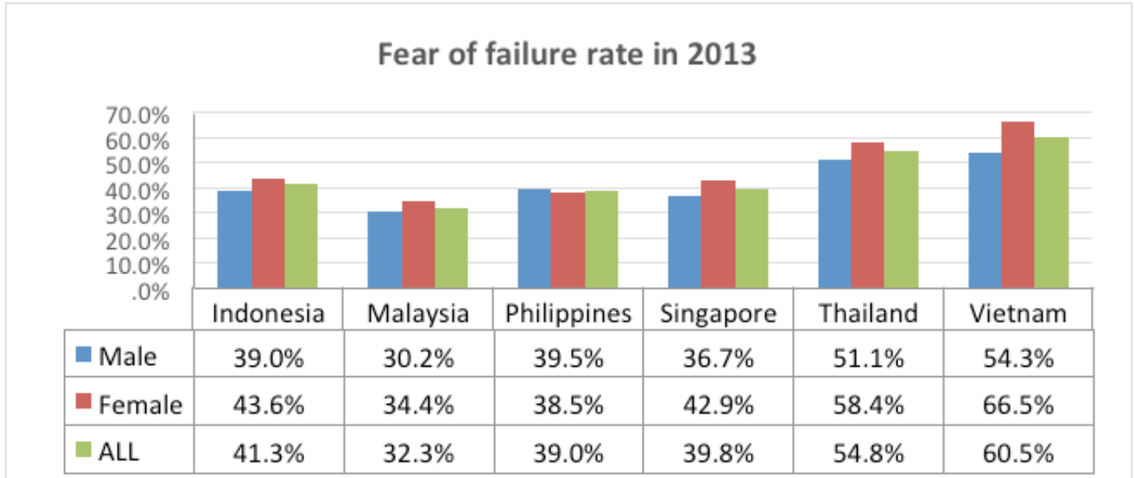
Figure 3.4: Perceived capabilities rate, by gender, for ASEAN-6 countries

The GEM 2010 Women's Report (Kelley et al., 2011) found that women in factor-driven economies are more likely to perceive opportunities in their area and have confidence in their capabilities for entrepreneurship, compared to efficiency-driven and innovation-driven countries. The ASEAN findings (Figure 3.4) indicate a similar trend. Women in the Philippines (a factor-driven economy) have the highest perceived capabilities (as well as perceived opportunities) while women in Malaysia (an efficiency-driven in transition to innovation-driven country) and Singapore (the only innovation-driven economy in the ASEAN region) have the lowest perceived capabilities rates among women.

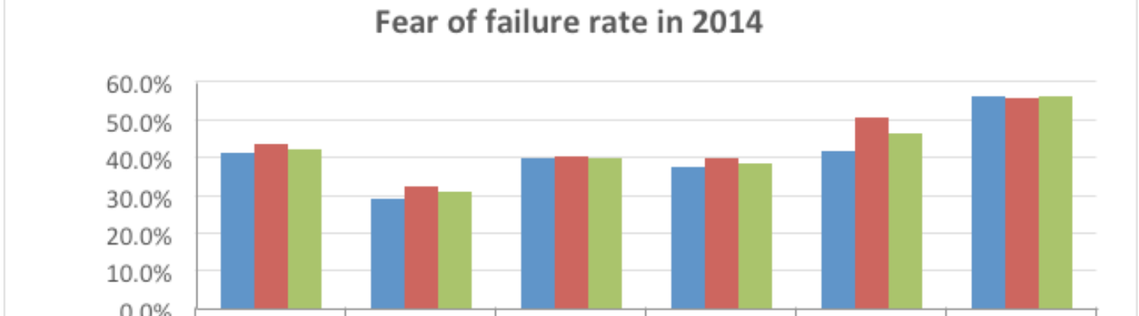
In the Philippines, there no gender difference in rate of perceived capabilities. Interestingly, in Vietnam there is a significant difference in female perceived capabilities compared to the male counterparts in 2013; however, the rate is almost the same in 2014. Similar to the trend of perceived opportunities, the perceived capabilities rate for Thai women in 2014 is much lower than for their male counterparts (13% difference).

3.1.4 Fear of failure

Fear of failure rate measures the percentage of those perceiving entrepreneurial opportunities who indicate that fear of failure would prevent them from setting up a business. If fear of failure is low, it is expected that individuals will be less inhibited by the risks inherent in doing business. On average, women in the ASEAN-6 region report a higher fear of failure (46%) when compared to men in the region (41%).



	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Male	39.0%	30.2%	39.5%	36.7%	51.1%	54.3%
Female	43.6%	34.4%	38.5%	42.9%	58.4%	66.5%
ALL	41.3%	32.3%	39.0%	39.8%	54.8%	60.5%



	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Male	41.1%	29.1%	39.8%	37.4%	41.9%	56.4%
Female	43.4%	32.5%	40.3%	39.8%	50.9%	55.7%
ALL	42.3%	30.8%	40.1%	38.6%	46.5%	56.1%

Figure 3.5: Fear of failure rate, by gender, in ASEAN-6 countries

The same pattern is seen in individual countries with the exception of the Philippines, which again shows no significant difference in male and female perceptions. It is worth noting that the Philippines is the highest ranked ASEAN country in the World Economic Forum's Gender Gap Report, which assesses the relative gaps between men and women across four key indicators (health, education, economic participation and opportunity, and politics). In 2014, the Philippines was ranked 9th out of 142 economies. The next highest ASEAN country – Singapore – was ranked 59th. Of particular interest is that the Philippines has completely closed the gender gap in terms of educational attainment, which may contribute to the higher perceptions of self-efficacy among women in the Philippines surveyed in the GEM study. Figure 3.5 also indicates that both men and women in Vietnam have the highest fear of failure rates in the region. Malaysian women (despite showing the second lowest perceived capabilities and perceived opportunities) show the lowest fear of failure rate (43%).

3.2 Entrepreneurial intentions

GEM defines entrepreneurial intention as the percentage of the adult non-entrepreneur population who intend to start a business within the next three years. This stage is important in the entrepreneurial process, as a strong association exists between entrepreneurial intention and actual entrepreneurial behaviour. On average, the entrepreneurial intention rate for men in ASEAN-6 countries is 27.9% and for women 25.3%.

As predicted, the majority of women in the ASEAN-6 countries have lower intentions than men to start a business in the future (Figure 3.6). This corresponds to the lower rates of opportunity and capability perceptions, as well as the high rate of fear of failure, reported by women in the region. Women in the Philippines, as would be expected, have the highest rate of entrepreneurial intention almost double the regional average. In addition, their rate of entrepreneurial intention is only 1% lower than for men in the Philippines. Women in Malaysia have the lowest entrepreneurial intentions (12%), followed by Singaporean women (15%).

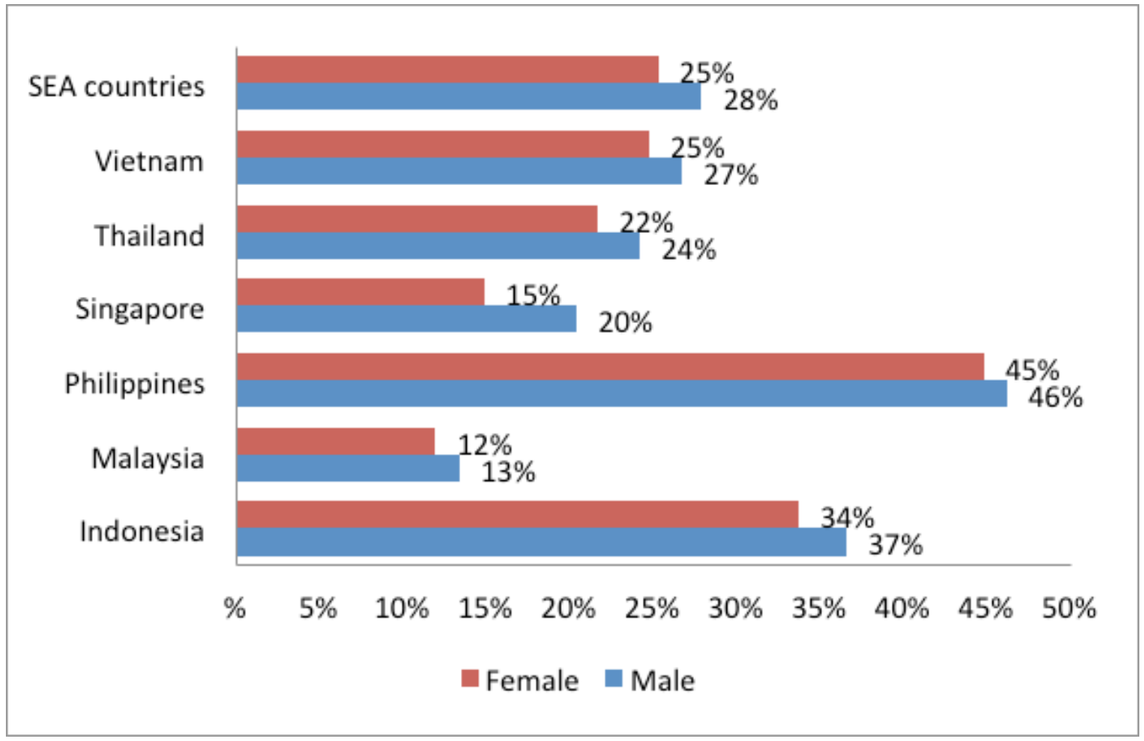


Figure 3.6: Entrepreneurial intentions, by gender, for ASEAN-6 countries

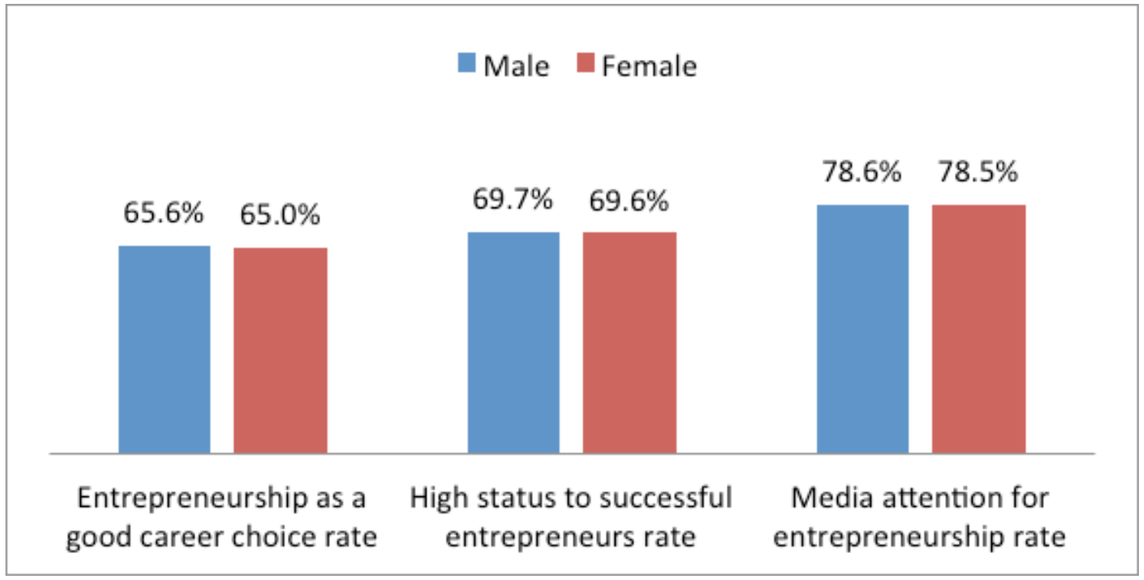


Figure 3.7: Entrepreneurial desirability perception, by gender, ASEAN-6 countries

Entrepreneurial intentions are also measured based on individuals' perceptions about society's attitude towards entrepreneurs. Individuals are asked whether in their country, successful entrepreneurs receive high status. Media attention for entrepreneurship is also measured - individuals who often see stories in the public media about successful new businesses are likely to have more favourable perceptions of entrepreneurship as a viable career option. Personal desirability perceptions are measured as a percentage of the population of 18-64 year olds who consider starting a new business a desirable career choice. Figure 3.7 indicates no gender difference in these three indicators in the ASEAN-6 region.

3.3 Entrepreneurial activity

3.3.1 The entrepreneurial pipeline

GEM sees entrepreneurial activity as a continuous process rather than as individual events. This process can be viewed as a pipeline, where people participating in each phase are the source of those potentially advancing to the next phase (see Figure 2.1). The phases comprising the entrepreneurial pipeline are: entrepreneurial intentions, nascent and new business activity, progression into established business ownership, and business discontinuance. Even when individuals have favourable perceptions of entrepreneurship and exhibit entrepreneurial intentions, it is by no means certain that this will be translated into actually starting businesses. Figure 3.8 highlights the relationship between the phases of the entrepreneurial pipeline for men and women in the ASEAN-6 region.

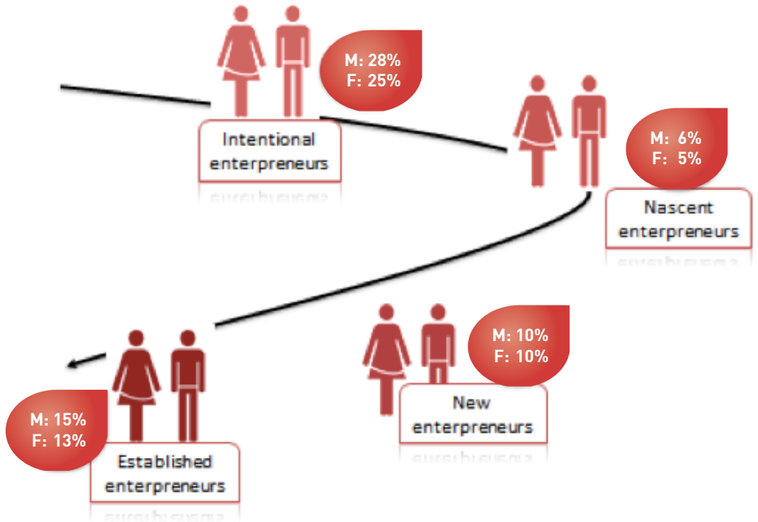


Figure 3.8: Entrepreneurial pipeline, by gender, for ASEAN-6 region

In the ASEAN-6 region, people have fairly positive rates for intention to start up a business in the next three years. However, there is a sharp fall off between intentional and nascent entrepreneurs. Given that the latter is the first stage of actual entrepreneurial activity, this is cause for considerable concern. The rates for women in all stages of entrepreneurship are lower than the male rates, although the rates are not significantly different. Encouragingly, for new entrepreneurs the rate for males and females is equal.

Table 3.1 indicates that when compared to other geographical regions, the ASEAN-6 region is the best performer in terms of gender equity with respect to male and female participation in early-stage entrepreneurial activity (TEA), as well as significantly better than the GEM average.

The leakage (or the decrease of the percentage of entrepreneurs) between phases of the entrepreneurial pipeline is similar for women and men. This implies that the persistence as well as the challenges facing ASEAN women and men with regards to entrepreneurship is also comparable.

Table 3.1: Regional comparison of TEA activity by gender, GEM 2014

Region*	Male TEA (as % of adult population)	Female TEA (as % of adult population)
ASEAN-6	15	15
Africa	28	25
Asia & Oceania	14	11
Latin America & Caribbean	19	16
European Union	10	5
Non-European Union	7	5
North America	16	11
GEM average	16	12

**Regional averages are unweighted*

Table 3.9 summarises the involvement in entrepreneurial activity, by gender, over several phases of the entrepreneurial process for the six ASEAN countries. In Indonesia, male and female participation is essentially the same in all three phases of entrepreneuriall activity, namely nascent entrepreneurship, new firm ownership and established business ownership.

Malaysia has consistently low rates at all stages of entrepreneurship, compared to the other ASEAN countries. Malaysia is an efficiency-driven in transition to innovation-driven country, which suggests that the Malaysian people may prefer non-entrepreneurial jobs. Given that it has the lowest entrepreneurial intentions rate, it is not surprising that Malaysia has the lowest nascent entrepreneurship rate in the region. The rates for Malaysian women in the entrepreneurial pipeline are also consistently lower, compared to their male counterparts. For established entrepreneurs, the percentage of women is significantly lower than for men (5% for women and 10% for men). Singapore follows a similar pattern to Malaysia. Nascent entrepreneurship rates are average, but new and established firm rates are the lowest in the region. A particular concern is that in all three stages of entrepreneurial activity, female participation is only half that of male participation.

In line with its high level of potential and intentional entrepreneurship, the Philippines has the highest nascent entrepreneurship rate in the region for both men and women. However, for new and established entrepreneurs, the rates of entrepreneurial activities are much lower – the established business rate is the second lowest in the region.by a significant margin. An encouraging finding is that female participation in active entrepreneurship either equals (nascent businesses) or exceeds (new and established firm ownerships) that of their male counterparts. The fact that women's start-ups survive the liability of newness and can be sustained into the established business phase is a positive trend.

The percentage of Thai women involved in entrepreneurship is mostly lower than men, except for new entrepreneurs where the female rate is slightly higher than that for males. For all other stages, the female percentage is significantly lower, with a difference of 2 – 7%. However, the overall percentage of people (of both genders) involved in entrepreneurial activities is relatively high in every stage. Thailand has the highest established rate in the region, for both men and women, by a significant margin. There are twice as many female-owned established businesses compared to new firms – a most encouraging trend of business sustainability.

Women in Vietnam show an interesting trend in entrepreneurial activities. Although there is an imbalance in favour of men in terms of rate of perceived opportunities and entrepreneurial intentions, the gap closes rapidly when they actually start a business. Eventually, the rate of established entrepreneurs for Vietnamese women is higher than for men. It seems that Vietnamese women are more persistent in business compared to the men.

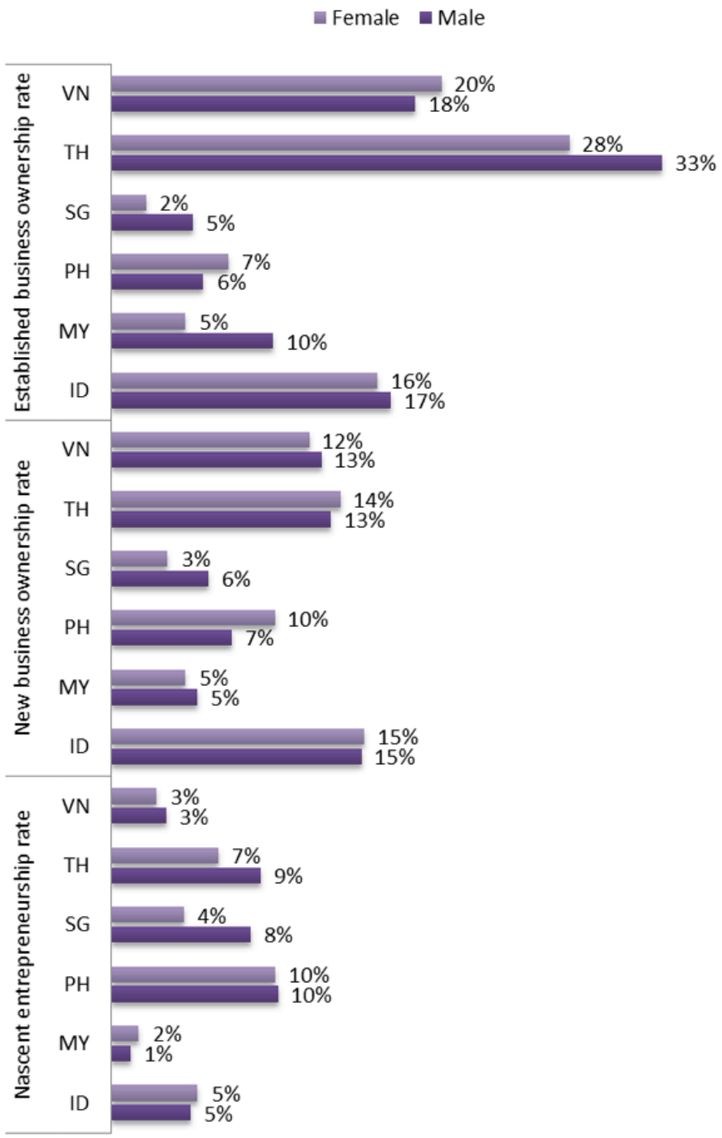


Figure 3.9: Participation in entrepreneurial activity, by gender, for ASEAN-6 countries

3.3.2 Reason for starting a business

GEM asks all entrepreneurs about their motives for starting a business. The entrepreneurs with necessity motives opt for entrepreneurship mostly because they have no other options for work, while entrepreneurs with opportunity motives prefer to pursue an opportunity. In general, we can consider those with necessity motives as being pushed into entrepreneurship, rather than actively taking advantage of a business opportunity or having a job but seeking a better opportunity. Figure 3.10 summarises the motives of the early-stage entrepreneurs in the ASEAN-6 countries.

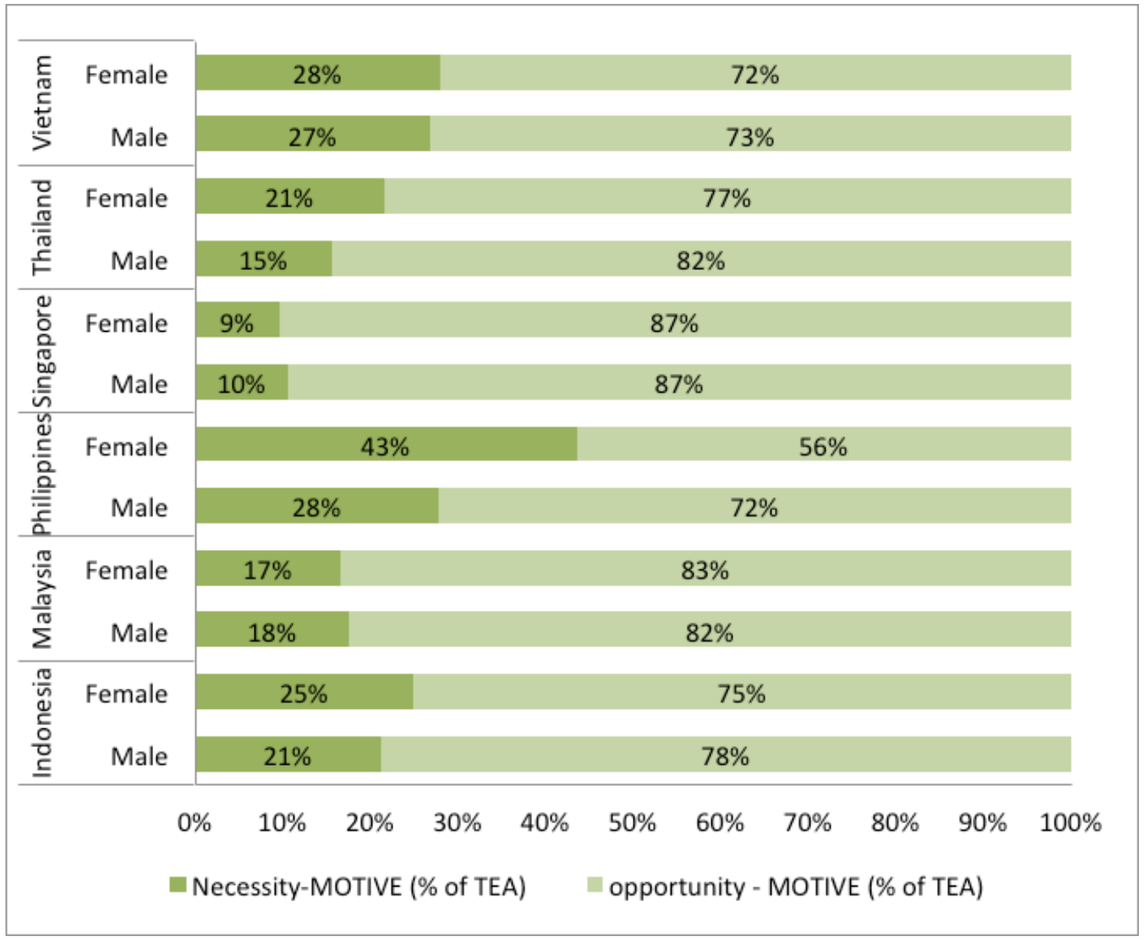


Figure 3.10: Motive for starting business, by gender, for ASEAN-6 countries

The ASEAN-6 region as a whole has relatively high levels of opportunity-motivated entrepreneurial activity. Overall, women are more likely to be pushed into entrepreneurship out of necessity (24%) than are men (20%). At the individual country level, Singapore and Malaysia, with the lowest levels of necessity-motivated entrepreneurship, show no gender disparity in terms of motive for starting a business. The Philippines, with the highest rate of necessity-motivated entrepreneurship for both genders, also shows the highest gender disparity. Early-stage women entrepreneurs in the Philippines are 1.5 times more likely to be motivated by necessity than are men in the region. Philippines is a factor-driven country with the highest unemployment rate in the ASEAN-6 region. High competition for low levels of job opportunities in the formal sector, means that women, especially in poorer communities, will be forced into necessity-entrepreneurship because of lack of other options for sustainable livelihoods.

3.3.3 Business discontinuance

In the ASEAN-6 region, the rate of discontinuing business is relatively low (less than 3%), except in the Philippines (Figure 3.11). While the rate of business discontinuance is almost equal between the genders in the majority of the countries, more women in the Philippines gave up their business (11%) compared to men (7%).

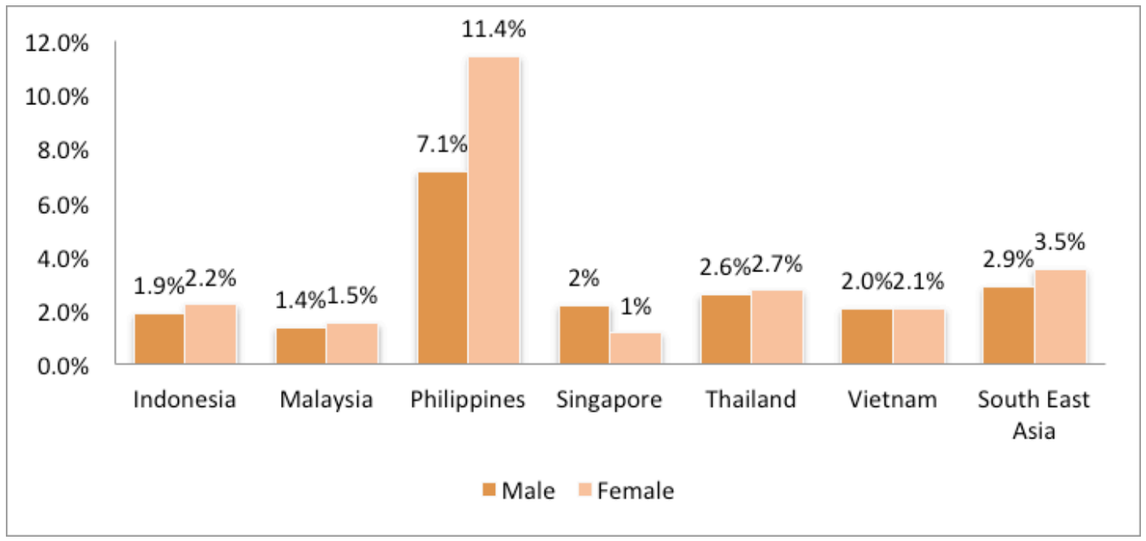


Figure 3.11: Rate of business discontinuance, by gender, for ASEAN-6 countries

Figure 3.12 summarises the reasons given by entrepreneurs for their business closure. The main reasons for business discontinuance are similar for both genders, namely lack of business profitability, difficulty in accessing finance and personal problems. The highest percentage of male-owned business closures are because the business is not profitable, while the highest percentage of closures for female-owned businesses is for personal reasons. As mentioned earlier, women often face greater challenges as entrepreneurs. Gender stereotyping places higher levels of domestic responsibility on women's shoulders (household chores as well as family responsibilities), while lower status in society and cultural expectations that women should not display character traits such as assertiveness could erode their confidence in their ability to succeed in business.

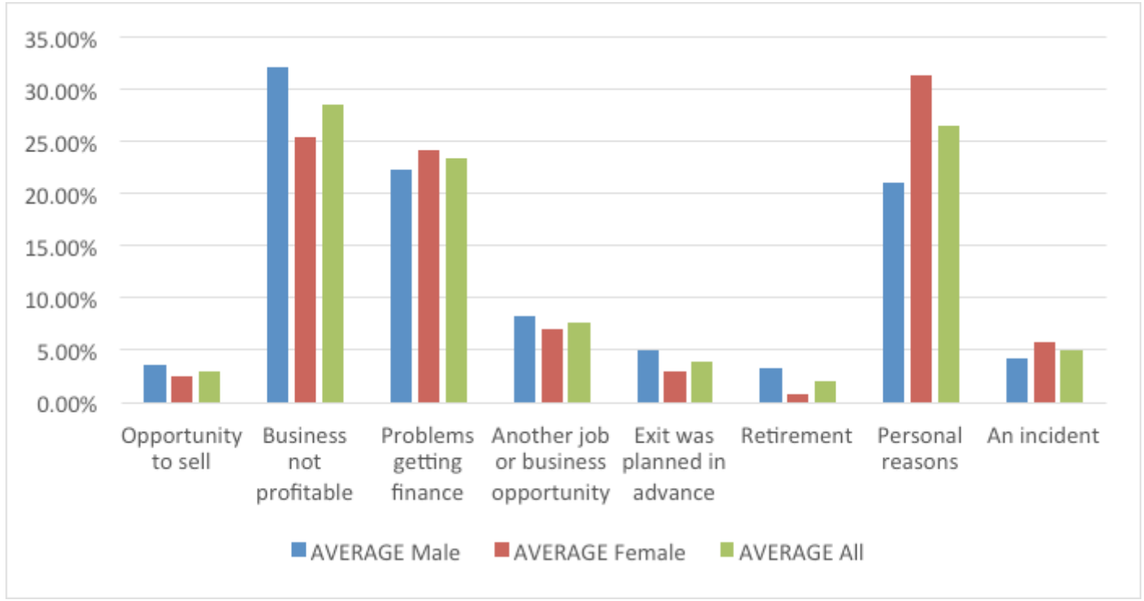


Figure 3.12: Reason for business discontinuance, by gender, for ASEAN-6 region

3.3.4 TEA and education

When some studies suggested that highly educated women tend to choose career options other than self-employment and entrepreneurship, this trend does not particularly apply to women in the ASEAN-6 region. Figure 3.13 below shows the percentage of females in each country's population and in total early-stage entrepreneurship, categorised according to their education level.

For all the ASEAN countries, it can be seen that the proportion of women involved in early-stage entrepreneurship who have completed the first stage of tertiary education is higher than women in the population. The percentage of Malaysian women with tertiary education involved in TEA is significantly higher, compared to the general female population in Malaysia. In Malaysia and Thailand, fewer women who have completed post secondary non-tertiary education become involved in entrepreneurship.

In Vietnam, the percentage of women with a low education level (basic education: first stage and second stage) involved in entrepreneurship is lower than the population. A similar trend applies in the Philippines where the highest percentage of TEA involvement is for women who have completed upper second education.

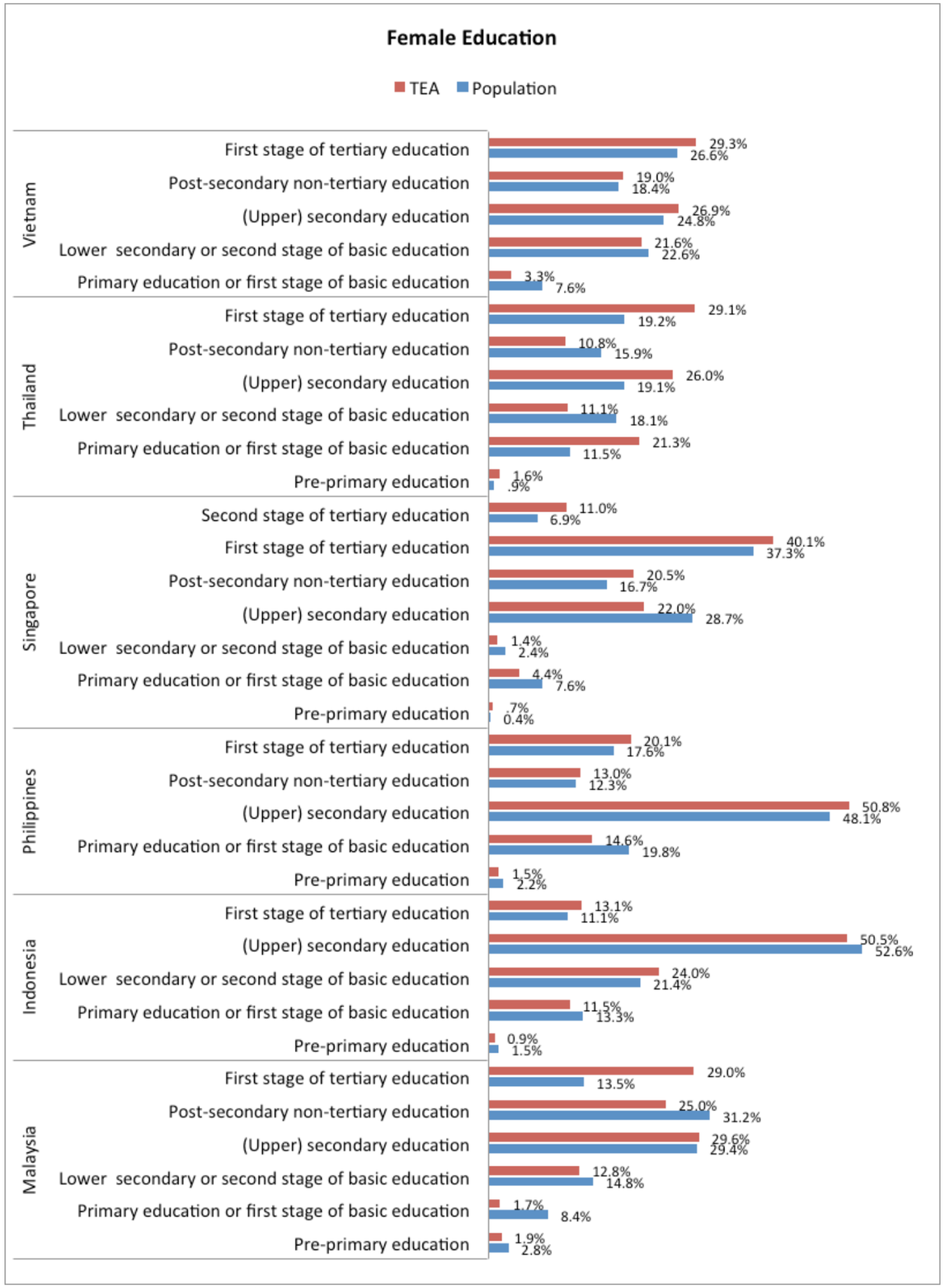


Figure 3.13: Female TEA according to education level, for ASEAN-6 countries

In Singapore, similar to Vietnam and the Philippines, the percentage of women with low education levels (including those who have only completed lower secondary education) involved in entrepreneurship is lower than the population. In Indonesia, the trend is different. Some women with a low education level (second stage basic education/lower secondary education) show higher involvement in entrepreneurship than the general population, but the same holds true for those who have completed first stage tertiary education.

3.4 Entrepreneurial aspirations

3.4.1 Firm growth and job creation

A key focus in the development strategies of the Southeast Asian countries is to facilitate growth that is sustainable and inclusive in order to generate widespread employment and to reduce poverty. As many of the ASEAN countries are considered to be emerging economies, the potential of the SME sector to create job opportunities is thus a crucial factor in economic growth. The GEM survey asks early-stage entrepreneurs how many employees (other than the owners) they currently have and expect to have in the next five years. The difference between current and expected employees indicates growth expectations. Entrepreneurs are classed as having growth aspirations if they expect to employ at least 5 people in the next five years.

Traditionally, women entrepreneurs tend to create smaller businesses than men. This trend indeed occurs in the ASEAN-6 countries as well.

Figure 3.14 shows that in all the ASEAN-6 countries, women tend to have lower growth aspirations than men do. Fewer women early-stage entrepreneurs expect to have 5 or more employees in the next five years, compared to men.

Early-stage entrepreneurs in Singapore have the highest growth aspirations, with 42% of women early-stage entrepreneurs expecting to have at least 5 employees five years from now. Filipino women have the lowest firm growth aspirations, with only 6% expecting to have at least 5 employees in the next five years. In Vietnam, the growth aspiration level is significantly different between men and women. While almost one third of male early-stage entrepreneurs in Vietnam (31%) are confident of having at least 5 employees in the next five years, only 18% of female early-stage entrepreneurs aspire to the same performance.

The largest gap in the ASEAN-6 region, in terms of growth aspirations, occurs between the innovation-driven economy (Singapore) and the rest of the region. Singapore has early-stage entrepreneurs that have the highest expectation (more than double the regional average for both genders) of increasing their firm size. However, there is no difference in growth aspirations between the efficiency-driven and factor-driven countries, as they have similar rates. This suggests that economic development level alone does not explain the difference between genders in firm growth aspirations.

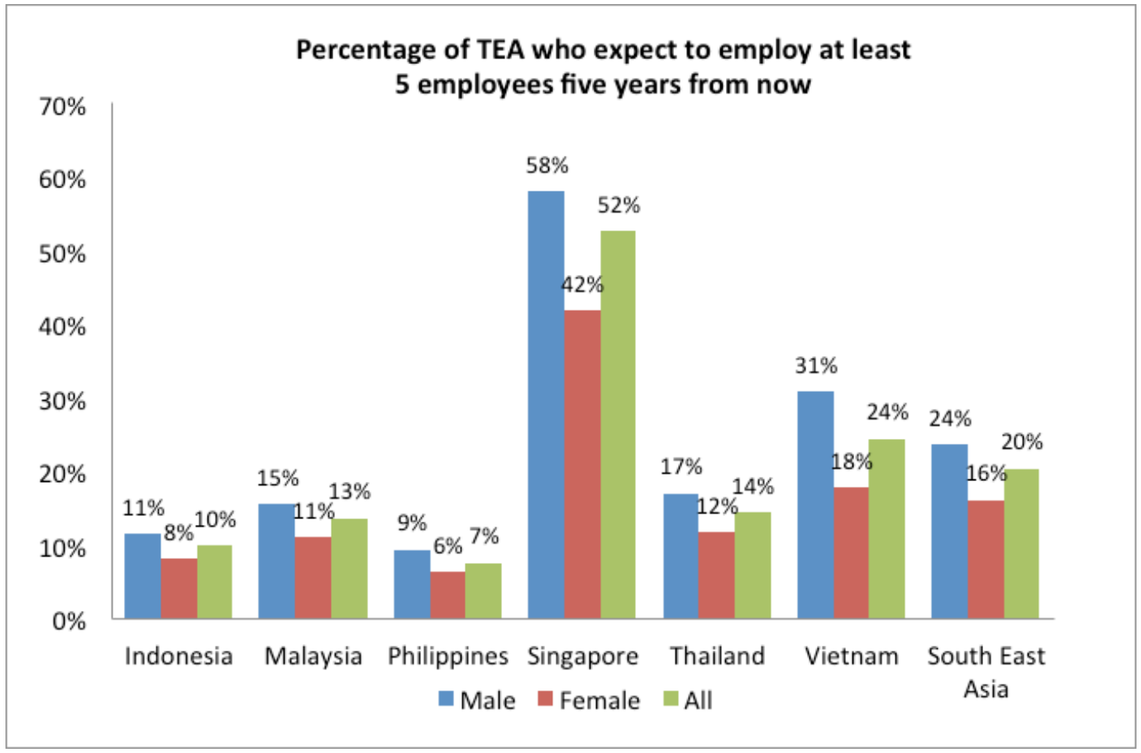


Figure 3.14: Firm growth aspirations, by gender, for ASEAN-6 countries

3.4.2 Internationalisation

Another criterion for entrepreneurial aspiration is internationalisation. For many entrepreneurs, 'going internatio nal' is an approach to obtain larger markets. The GEM study uses two indicators to measure the percentage of entrepreneurs who expect to have more international markets:

- Weak international orientation: those who aim to have more than 1 percent of their customers coming from outside their own country
- Strong international orientation: those who aim to have more than 25 percent of their customers coming from overseas.

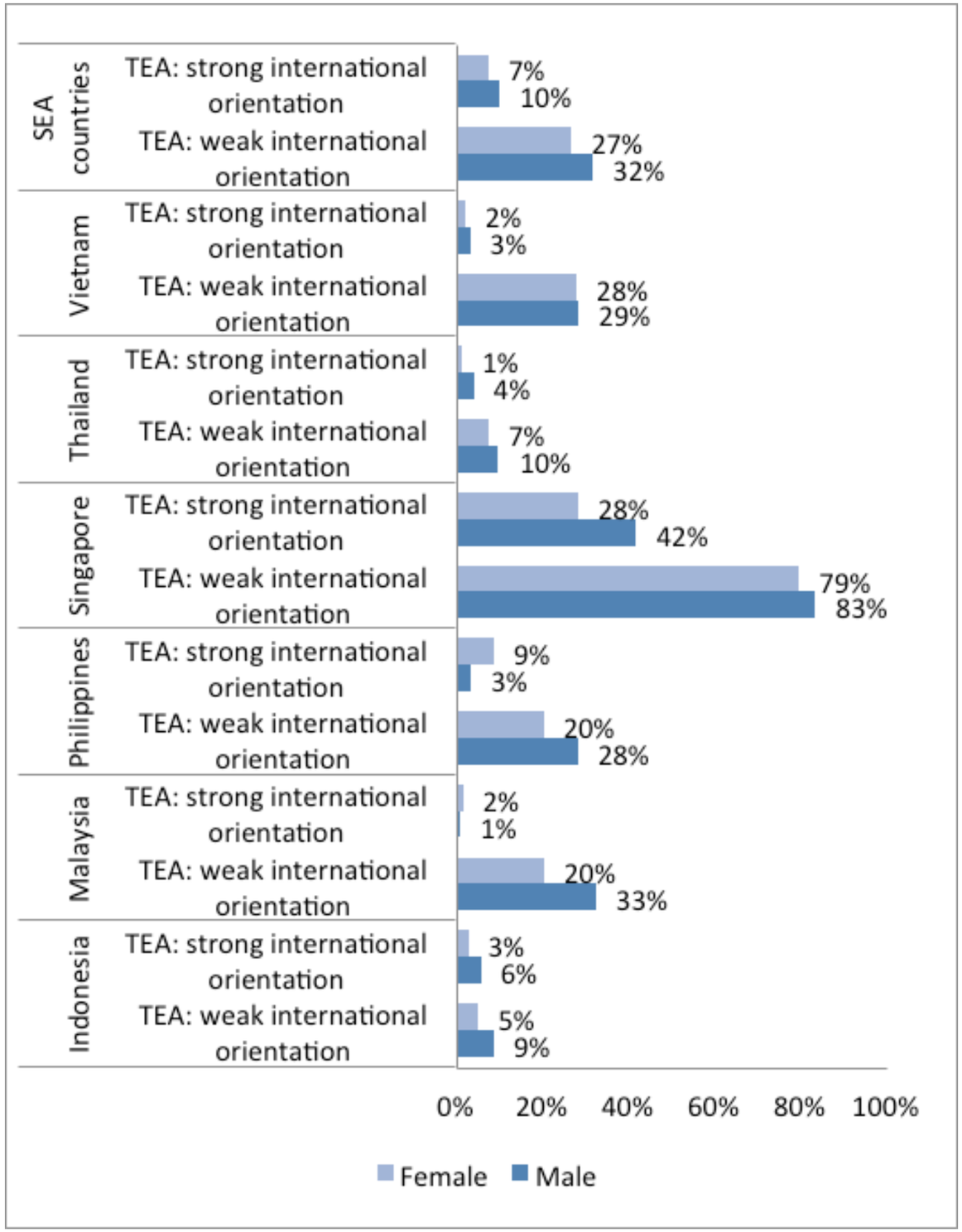


Figure 3.15: TEA international orientation, by gender, for ASEAN-6 countries

Figure 3.15 shows the international orientation for nascent and new businesses, for both genders, for the ASEAN-6 countries. With the exception of Singapore, early-stage ASEAN-6 entrepreneurs have lower levels of internationalization. Indonesia shows a very low international orientation, as it has very low rates for both weak and strong international orientation (less than 10%). The rates are even lower for women, as only 5% of female early-stage entrepreneurs indicate that more than1% of their customers are from overseas while only 3% indicate that more than 25% of their customers are from overseas. The internal market of Indonesia is very large; this could be a reason why Indonesian early-stage entrepreneurs hesitate to target overseas markets with their products. Thai early-stage entrepreneurs also indicate low expectations to sell their products and services overseas.

Malaysia, the Philippines and Vietnam have relatively high rates for the weak international orientation, especially for male early-stage entrepreneurs. However, except for Vietnam, women entrepreneurs tend to have less international orientation than men. Only 20% of Malaysian and Filipina women early-stage entrepreneurs have at least 1% of overseas customers. For Vietnam, the rate is 28% for women and 29% for men. For these three countries, the percentage of entrepreneurs that have at least a 25% overseas market is also low. In the Philippines, more females have overseas markets than their male counterparts when strong international orientation is used (9% for women and only 3% for men).

Singapore has a very high rate for internationalisation, which applies to both men and women entrepreneurs. Although the rate of weak international orientation for women and men is relatively close (79% for women versus 83% for men), the gender discrepancy becomes significant when strong international orientation is considered (28% for women versus 42% for men).

3.5 Conclusions

It is clear that women in the ASEAN-6 region play an important role in the SME sector, contributing actively to entrepreneurship in the region. Data from the GEM survey shows that when compared to other geographical regions, the ASEAN-6 region is the best performer in terms of gender equity with respect to male and female participation in early-stage entrepreneurial activity (TEA), as well as significantly better than the GEM average. The leakage (or the decrease of the percentage of entrepreneurs) between phases of the entrepreneurial pipeline is also similar for women and men. However, from an individual country perspective, it is clear that certain factors make it easier for women entrepreneurs to flourish in some ASEAN countries while they struggle in others. Women in the Philippines, Thailand and Indonesia, for example, are as likely to be involved in all phases of entrepreneurial activity as are their male counterparts. In Singapore, on the other hand, female participation in all three stages of entrepreneurial activity is only half that of male participation.

In all the ASEAN-6 countries, women entrepreneurs tend to keep their business small and have lower growth aspirations than men do. Significantly fewer women early-stage entrepreneurs expect to have 5 or more employees in the next five years, compared to men (16% for women, compared to 24% for men). Women also have low international orientation, preferring to remain within local markets. Entrepreneurship is seen as a potential contributor to job creation and economic growth, and women entrepreneurs need more support to enable them to grow their enterprises effectively.

Women in different ASEAN countries will clearly face different challenges when entering and operating in the SME sector. However, the survey data suggests common areas which could be addressed across the region.

- Access to networks: significantly fewer women in the ASEAN-6 region know an entrepreneur, compared to men in the region. In this way, women are disadvantaged from the start, having fewer role models (which could affect their willingness to engage in entrepreneurial activity) as well as mentorship opportunities and professional connections, which could affect the sustainability of their businesses in the long run.

- Access to finance: this is one of the main reasons for business discontinuance among women in the region. Women often resort to obtaining loans through personal and family connections rather than attempting to approach a commercial bank. They also often lack knowledge of how to develop and present a robust business plan. Their lower confidence in their own abilities, coupled with higher fear of failure rates, may well contribute to the problem. Funding agencies and options geared specifically towards women-owned SMEs are needed in the region to support women entrepreneurs.

CHAPTER 4: A GEM ASSESSMENT OF THE ASEAN NATIONAL ENTREPRENEURIAL ENVIRONMENTS

The GEM model (discussed in Chapter 1) explicitly acknowledges that entrepreneurial activity within a country is influenced by the specifics of the national political, social, cultural and economic environment. Three sets of framework conditions are expected to concern policy makers at different stages of economic development.

The basic requirements, namely a country's macro-economic stability, institutions, infrastructure, health and primary education, are the underlying fundamental conditions required for a well-functioning business environment. These requirements are usually the focus of development efforts in factor-driven countries. As these factors become relatively established, and the economy moves toward the efficiency stage, more funding and development efforts should focus on the efficiency enhancers. These factors include higher education and training, goods and labour market efficiency, financial market sophistication, technological readiness and market size. In more developed economies, factors that are aimed at stimulating and supporting innovation and entrepreneurial activity become increasingly important.
International organisations such as the World Bank, the World Economic Forum, Doing Business Report, Heritage Foundation and the United Nations provide indices and data on factors and conditions constituting the basic requirements and efficiency enhancers. To assess the innovation and entrepreneurship factors, GEM developed the National Expert Survey (NES).

4.1 An overview of the business environment in the ASEAN region

The Global Competitiveness Report 2013-2014 describes the ASEAN's competitiveness landscape as 'a mixed picture with encouraging trends'. It notes that significant development gaps exist within the ASEAN – no other regional integration initiative has deeper disparities among participating members (Schwab et al, 2013). The ten ASEAN member countries represent all stages of economic development: from factor-driven (Cambodia, Lao PDR, Myanmar, Vietnam), through efficiency-driven (Indonesia, Thailand) to innovation-driven (Singapore), plus they cover the two transition phases between factor- and efficiency-driven (Brunei, Philippines) and between efficiency- and innovation-driven (Malaysia).

ASEAN's population numbers 625.9 million people with a combined GDP of 2,406.9 billion US$, which is a 4.4% share of the world's total GDP (PPP). The average GDP per capita is 12,426.5 US$ with a spread from 869 US$ in Myanmar to the 63 times higher GDP per capita in Singapore of 54,776 US$ (Table 4.1).

Table 4.1: Key indicators of the economic profile in ASEAN, 2014*

	Population (millions)	GDP (US$ billions)	GDP per capita (US$)	GDP (PPP) as share (%) of world total
Brunei Darussalam*	0.4	16.6	41,703	0.03
Cambodia	15.4	15.7	1,016	0.05
Indonesia	248.0	870.3	3,510	1.49
Lao PDR	6.8	10.0	1,477	0.02
Malaysia	29.6	312.4	10,548	0.60
Myanmar	64.9	56.4	869	0.13
Philippines	97.5	272.0	2,790	0.53
Singapore	5.4	295.7	54,776	0.40
Thailand	68.2	387.2	5,674	0.77
Vietnam	89.7	170.6	1,902	0.41
ASEAN	625.9	2,406.9	12,426.5	4.4

** Brunei Darussalam data in this table are from 2013*
Source: Global Competitiveness Report 2014-2015 (World Economic Forum, 2014)

Table 4.2: Global Competitiveness Index: rankings out of 144 countries, 2014-2015*

	Brunei Darussalam*	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
I. Basic requirements	**18**	**103**	**46**	**98**	**23**	**132**	**66**	**1**	**40**	**79**
Institutions	25	119	53	63	20	136	67	3	84	92
Infrastructure	58	107	56	94	25	137	91	2	48	81
Macroeconomic environment	1	80	34	124	44	116	26	15	19	75
Health and Primary education	23	91	74	90	33	117	92	3	66	61
II. Efficiency enhancers	**65**	**100**	**46**	**107**	**24**	**134**	**58**	**2**	**39**	**74**
Higher education and training	55	123	61	110	46	135	64	2	59	96
Goods market efficiency	42	90	48	59	7	130	70	1	30	78
Labor market efficiency	10	29	110	34	19	72	91	2	66	49
Financial market development	56	84	42	101	4	139	49	2	34	90
Technological readiness	71	102	77	115	60	144	69	7	65	99
Market size	131	87	15	121	26	70	35	31	22	34
III. Innovation and sophistication factors	**54**	**116**	**30**	**80**	**17**	**139**	**48**	**11**	**54**	**98**
Business sophistication	56	111	34	79	15	140	46	19	41	106
Innovation	59	116	31	84	21	138	52	9	67	87

** Brunei Darussalam data in this table are retrieved from the 2013-2014 Global Competitiveness Report (148 countries), therefore direct comparisons to Brunei Darussalam are inexact.*

Source: Global Competitiveness Report 2014-2015 (World Economic Forum, 2014)

The annual analysis of the global competitiveness landscape by the World Economic Forum, which included data on 144 countries, reveals strong contrasts between the countries in the ASEAN region. The juxtaposition of the main indicators for the ASEAN member countries shows the large differences in the region (Table 4.2).

The Ease of Doing Business Report is another report that provided useful comparative information on how enabling and business-friendly a particular economy's regulatory framework is. Annually, World Bank researchers evaluate economies across 10 areas of business regulations, from starting a business to cleaning up insolvency (World Bank, 2014). A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm. Table 4.3 shows the overall rankings for the ASEAN countries, as well as their ranking in each sub-category assessed. Top 15 rankings in these sub-categories are highlighted in green, while bottom 15 positions (i.e. 175-189) are highlighted in red.

It is clear from Table 4.3 that the country-level indicators vary considerably across the region. Singapore tops the global list (as in 2014) and Malaysia is ranked 18th overall, whereas Cambodia, Laos PDR and Myanmar are ranked among the lowest 30% in the global comparison. A positive trend is that the majority of the ASEAN countries improved their ease of business ranking in 2015, compared to 2014 – Lao PDR, in particular, improved by 7 positions. However, Brunei (-3), Vietnam (-6) and the Philippines (-9) deteriorated in their global rankings.

Table 4.3: Global rankings of ASEAN countries in ease of doing business, 2015 vs. 2014 (out of 189 countries)

Economy	Ease of Doing Business Rank	Change fin Ranking from 2014 to 2015	Starting a Business	Dealing with Construction	Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Minority Investors	Trading Paying Taxes	Across Borders	Enforcing Contracts	Resolving Insolvency
Singapore	1	0	6	2	11	24	17	3	5	1	1	19	
Malaysia	18	+2	13	28	27	75	23	5	32	11	29	36	
Thailand	26	+2	75	6	12	28	89	25	62	36	25	45	
Vietnam	78	-6	125	22	135	33	36	117	173	75	47	104	
Philippines	95	-9	161	124	16	108	104	154	127	65	124	50	
Brunei	101	-3	179	53	42	162	89	110	30	46	139	88	
Indonesia	114	+3	155	153	78	117	71	43	160	62	172	75	
Cambodia	135	+1	184	183	139	100	12	92	90	124	178	84	
Lao PDR	148	+7	154	107	128	77	116	178	129	156	99	189	
Myanmar	177	+1	189	130	121	151	171	178	116	103	185	160	

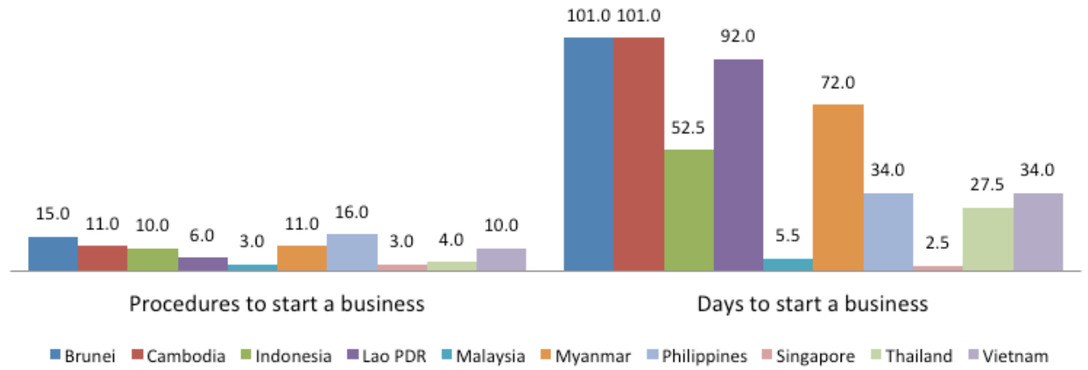
Myanmar ranks last on the global scale, in terms of starting a business. Indicators of this index are the number of procedures, the number of days it takes to start up, the costs that are involved and the capital that has to be paid in. Lao PDR ranks last for resolving insolvency because of a no practice mark in this sub-category, indicating, that in each of the previous five years no cases could be found that involved a judicial organisation or liquidation or foreclosures.

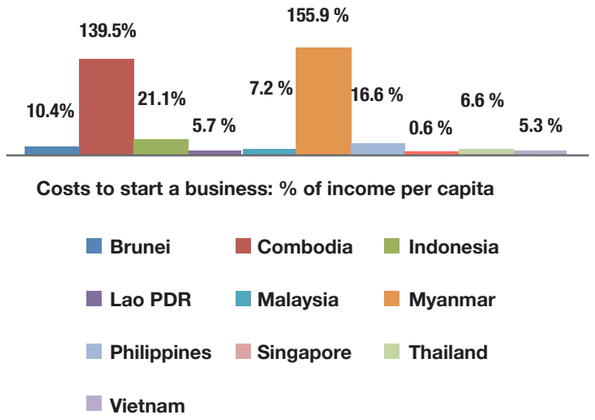
The central indicator of GEM (as noted in Chapter 2) is the Total Early-stage Entrepreneurial Activity (TEA) rate, which measures the percentage of the adult population (18 to 64 years) that are in the process of starting or who have just started a business. Inefficient government bureaucracy, in particular the red tape associated with starting up and managing a business, can be a significant disincentive to potential entrepreneurs. Simple business start-up is thus critical for fostering formal entrepreneurship, and economies with efficient business registration procedures have a higher entry rate as well as greater business density.

The factors assessed in terms of starting a business (namely the number of procedures, the number of days it takes to start up, the costs that are involved and the capital that has to be paid in) can be used to assess whether government policies foster or constrain entrepreneurial potential within a country. Figure 4.1 and Figure 4.2 show the differences in these areas for the ASEAN countries.

With the exception of Singapore and Malaysia, it is clear that starting a business is a complicated, time-consuming and often costly process for most countries in the region, and reform in the regulatory process is needed if an entrepreneurial culture is to flourish.

Figure 4.1: Starting a business in ASEAN countries - procedures and days





Capital to start a business: % of paid-in minimum capital

Brunei	0.0%
Cambodia	26.1%
Indonesia	35.5%
Lao PDR	0.0%
Malaysia	0.0%
Myanmar	6190.1%
Philippines	3.6%
Singapore	0.0%
Thailand	0.0%
Vietnam	0.0%

Figure 4.2: Starting a business in ASEAN - costs and capital
Source: Doing Business Database (World Bank, 2014)

4.2 Assessment of the Entrepreneurial Framework Conditions in six ASEAN countries

Particular environmental factors (social, political and economic) are influential in creating unique business and entrepreneurial contexts. The environmental features that are expected to have a significant impact on the entrepreneurial sector are captured in the nine Entrepreneurial Framework Conditions (EFCs), which are described in Table 4.4. Although the EFCs can be addressed at any stage of development, these conditions function best in economies with an underlying foundation of basic requirements and efficiency enhancers. For example, it is unlikely that government entrepreneurship programmes will be effective if the country provides inadequate health care and primary education to its population.

Table 4.4: The GEM Entrepreneurial Framework Conditions (EFCs).

Framework condition	Description
EFC1:Financial support	The availability of financial resources, equity, and debt, for new and growing firms, including grants and subsidies.
EFC2: Government	The extent to which government policies, such as taxes or regulations) policies are either size- neutral or encourage new and growing firms. There are two sub-divisions – the first covers the extent to which new and growing firms are prioritised in government policy generally; and the second is about the regulation of new and growing firms.
EFC3: Government programmes	The presence and quality of direct programmes to assist new and growing firms, at all levels of government (national, regional, municipal).
EFC4: Education and training	The extent to which each level of the education and training system incorporates training in creating/ managing new, small or growing business entities. There are two sub-divisions – primary and secondary school entrepreneurship education and training; and post-school entrepreneurship education and training.
EFC5: Research and development transfer	The extent to which national research and development will lead to new commercial opportunities, and whether or not these are available for new, small and growing firms.
EFC6: Commercial and professional infrastructure	The presence of commercial, accounting and other legal services and institutions that allow or promote the emergence of small, new and growing business entities.
EFC7: Internal market openness	The extent to which commercial arrangements undergo constant change and redeployment as new and growing firms compete with and replace existing suppliers, subcontractors and consultants. There are two sub-divisions – market dynamics, i.e. the extent to which markets change dramatically from year to year; and market openness, i.e. the extent to which new firms are free to enter existing markets.
EFC8: Access to physical infrastructure	Ease of access to available physical resources – communication, utilities, transportation, land or space – at a price that does not discriminate against new, small or growing firms.
EFC9: Cultural and social norms	The extent to which existing social and cultural norms encourage, or do not discourage, individual actions that might lead to new ways of conducting business or economic activities which might, in turn, lead to greater dispersion in personal wealth and income.

The National Experts' Survey (NES) provides insights into the ways in which these EFCs either foster or constrain the entrepreneurial climate, activity and development in the ASEAN region. Six of the ASEAN countries (Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam) participated in the 2014 GEM survey. The remainder of this chapter will focus predominantly on the data captured by this survey.

In order to assess the national conditions influencing entrepreneurial activity, a minimum of 36 experts from each of the six countries were interviewed, using both a semi-structured and structured questionnaire. The closed questionnaire consisted of several statements relating to aspects of the nine Entrepreneurial Framework Conditions. The responses were measured on a Likert scale from "completely false (1)" to "completely true (5)". The statements were phrased so that a score of 4 or 5 would indicate that the expert regarded the factor as positive for entrepreneurship, while a score of 1 or 2 would indicate that the expert regarded the factor as negative for entrepreneurship. The data obtained from the respondents was analysed in order to determine the mean score for each category of questions. Table 4.5 summarises the experts' perceptions of the entrepreneurial environment for each of the six countries . On the Likert scale of five, a mean score of three is regarded as average. The most positive EFCs are considered to be those with mean scores between 3.5 and 5, whereas those between 1 and 2.5 indicate a negative perception. Table 4.6 highlights the most negative conditions (<2.5) for each country in red and the most positive conditions (>3.5) in green.

Table 4.5: Experts' assessment of GEM Entrepreneurial Framework Conditions – mean score per ASEAN-6 country

EFC	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Finance	3.1	3.4	2.6	3.5	2.7	2.4
Government policies	2.7	3.1	2.3	3.7	2.6	2.7
Government programmes	2.6	3.2	2.4	3.7	2.1	2.4
Education & training	3.0	2.8	3.1	3.2	2.4	2.2
R&D transfer	2.6	2.7	2.1	3.2	2.2	2.3
Commercial & services infrastructure	3.0	3.3	2.9	3.2	3.3	2.9
Market openness	3.1	3.1	2.7	3.1	2.8	2.9
Physical infrastructure	3.5	4.1	3.1	4.4	3.7	3.7
Cultural & social norms	3.3	3.5	3.1	3.2	2.8	3.1

Table 4.6: GEM Entrepreneurial Framework Conditions rated positive >3.5 (+) and negative <2.5 (-), per ASEAN-6 country

	Finance	Government Policies	Governmental Programmes	Education & Training	R&D Transfer	Commercial & services infrastructure	Market Openness	Physical Infrastructure	Cultural and social norms
Indonesia									
Malaysia								+	
Philippines		-	-		-				
Singapore	+	+	+					+	
Thailand			-	-	-			+	
Vietnam	-		-	-	-			+	

Regarding the experts' perceptions, the country level ratings vary significantly – understandable in a region, which incorporates such a diversity of developmental levels. Indonesia's experts did not rate any of the EFCs as either very positive or very negative, giving mainly average scores to all nine conditions. In Singapore a more positive perception towards the entrepreneurial environment exists, whereas strong negative perceptions, especially for government programmes and R&D transfer, are prevalent in the Philippines, Thailand, and Vietnam. Physical infrastructure is the EFC that is ranked most positively, overall, in the region. With the exception of Philippines (with a mean score of 3.1), the rest of the countries all rate physical infrastructure as good, while Malaysia and Singapore rate it as very good. Physical infrastructure is the only EFC to receive mean scores of above 4. R & D transfer is the worst ranked EFC, overall, in the region. With the exception of Singapore (with a score only just above average), the rest of the ASEAN-6 members all have mean scores below 3.0, indicating that this EFC is regarded as below average.

4.3 Key constraints to entrepreneurial activity

In addition to the closed questionnaire, the experts were asked to identify and comment on the three most important factors constraining entrepreneurial activity, the three most important factors fostering it, and to make recommendations aimed at stimulating entrepreneurship in their respective economies. The EFCs which are regarded as the main constraining factors for entrepreneurship in ASEAN-6 are reviewed next.

4.3.1 Financial Support

Securing sufficient funding is an important resource for every business, especially for start-ups and for growing firms. The finding that access to finance is a key problem is a common feature of research on problems facing all entrepreneurs and is apparent in research done in both developed and developing countries. Inadequate funding to start a business has been indicated as a primary barrier to starting a business for many potential entrepreneurs. Many entrepreneurs raise the start-up capital from their own or family savings rather than approaching formal institutions or agencies. Financial institutions generally require collateral and formal business records as criteria for considering a loan. As a result, business owners who lack collateral or who have not kept formal records for their business are less likely to be successful in approaches to financial institutions. Given that start-up funding for small businesses often comes from personal savings or money from families, the youth, women and people in rural areas are likely to be particularly disadvantaged in their attempts to start small businesses.

Access to financing is among the most problematic factors for doing business in all ten member countries of the ASEAN (Schwab et al, 2014). Table 4.3 indicates that access to finance was regarded as one of the two biggest obstacles to successful business development by business executives in the ASEAN region in 2014.

According to the NES survey, financial constraints are prevalent in all six ASEAN countries as one of the top three constraints in 2014, with more than half of the experts (average 54.9%) stating that the lack of or inappropriate financial support is hindering entrepreneurship in their countries.

This factor is particularly critical for Malaysia (at 75.9% significantly above the average), followed by Thailand (68.6%) and Singapore (60.0%).The financial constraints in Vietnam are considerably lower (25%), despite being one of the top two constraints for the country's respondents.

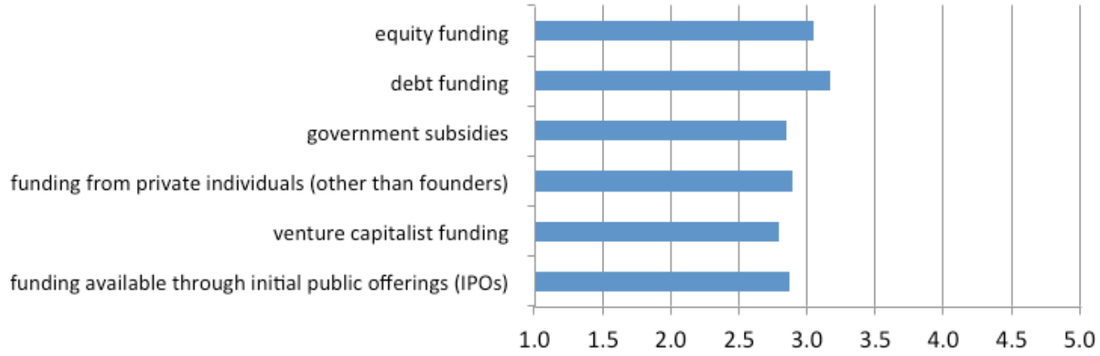
Despite funds and capital being available in Malaysia, access to those resources is considered difficult. In order to be able to get approval for grants and financing through banks, too much collateral is required. Although banks offer funding, their risk-averse approach is not suited to entrepreneurial ventures. Cronyism in the capital market, conservative banking practices and the lack of venture capitalists contribute to the financial constraints experienced by entrepreneurs in Malaysia.

Thailand's banks are not very willing to support entrepreneurs and funding is expensive due to high interest rates, especially for SMEs. Funding is often provided through entrepreneurs' own means and funding by banks seems to be scarce. Investment funding and availability of funds for working capital (which is insufficient in many Thai enterprises) are not available or not accessible.

Indonesian enterprises face similar problems regarding finance: high interest rates and high collateral for loans, combined with the business practice in banks to provide funds mainly for already successful businesses. Financial constraints are prevalent for small businesses, for start-ups who need initial capital, and for growing enterprises, where equity and other types of financing do not suit the entrepreneurial needs.

In Vietnam, theory and practice in mobilising funds for start-ups and for business expansions diverge widely. International funding is not available and banks are increasingly afraid of bad debts which has resulted in the banks tightening their lending conditions and limiting their supply of capital to entrepreneurs.

Figure 4.3: Average expert ratings on financing for new and growing firms across ASEAN-6 countries (five point scale)
Source: 2014 GEM NES Survey



A number of experts regard a lack of seed funding for small start-ups as a constraint on entrepreneurial activity. The Asian Development Bank (ADB, 2014) states, that in 2013 "SME loans made up 25% of total bank lending in Asia and the Pacific on average in 2012, down from 27% in 2011. SME loans grew at 10% year-on-year in 2012, down from 19% in 2011. This indicates banks are raising risk consciousness to SME credit from the perspective of banking stability". In many Asian countries, public credit guarantees are contributing to enhancing SME. However, SMEs still have large unmet demand for financing.

Many measures have already been developed at the national level to improve SME access to finance. Among others, these include public credit guarantee schemes in Indonesia (People's Business Credit) and Thailand (portfolio guarantee scheme), mandatory lending in the Philippines, refinancing schemes in Malaysia and a SME Bank, and the establishment of a centralised credit bureau in Vietnam. Many policies in Asia-Pacific tend to focus on enhancing loans through banking institutions in Asia-Pacific, whereas there is a lack of policies for both non-banking financing options and capital market financing for SMEs.

Economic expansion in Asia and the Pacific and the upcoming ASEAN Economic Community AEC has also created a foundation of growth-oriented SMEs with a need for long-term growth financing. SMEs in Southeast Asia will be exposed to further liberalized trade and investment after the establishment of the Association of Southeast Asian Nations Economic Community AEC in 2015. This new environment will require new financing solutions for SME exporters and importers and for SMEs, who need to raise long-term capital for further growth (ADB, 2014).

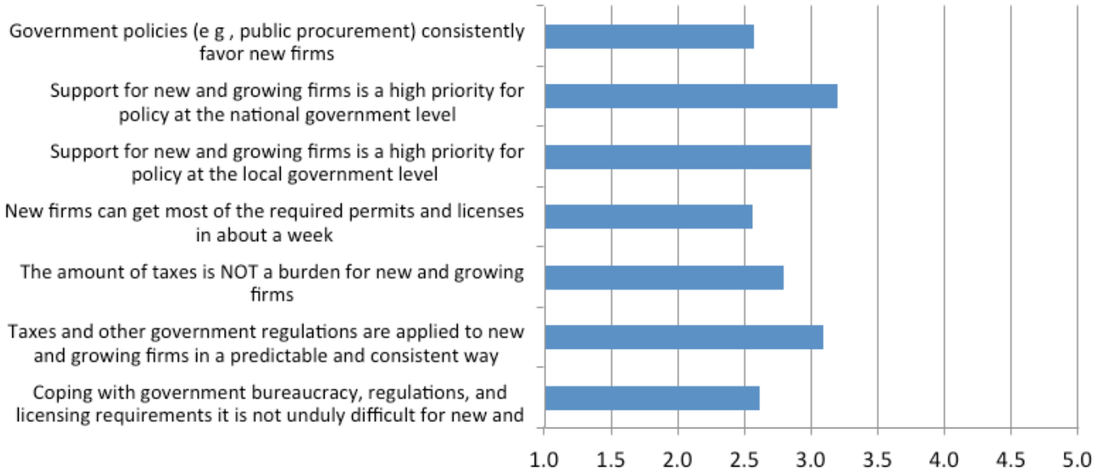
To close the finance gap for SMEs, the ADB developed several funds and finance programs, i.e. a supply chain finance program for SMEs in Asia by partnering with Standard Chartered Bank to share the risk in financing and a fund designed to support the growth of SMEs in Southeast Asia (ADB, 2014).

It is important to note that although access to finance is a necessary factor in growing entrepreneurial activity, it is not a fundamental factor. Providing finance in the absence of adequate infrastructure, market opportunities and business and management skills is unlikely to lead to an increase in the number of successful businesses.

4.3.2 Government policies

The importance of government policies in enhancing entrepreneurial activities is recognised throughout the world. Although it is not governments' responsibility to start new businesses and provide employment, it is their responsibility to provide an environment that is conducive to starting and sustaining a new business, through reforms and regulations that increase the ease of doing business and lessen unnecessary bureaucratic burdens. Figure 4.4 shows that within the six ASEAN countries, the experts believe that government policies are not sufficiently implemented in practice, even if the will to support new and growing firms might be there. On average, half of the national experts regard "government policies" as an important constraining factor for entrepreneurship, led by Vietnam (83.3%), Indonesia (70.6%) and the Philippines (52.9%). Inefficient government bureaucracy is also ranked by the World Economic Forum as one of the most problematic factors for doing business in Cambodia and Myanmar (3rd most problematic), Brunei Darussalam (4th) and Lao PDR (6th).

Figure 4.4: Average expert ratings on government policies for new and growing firms across ASEAN-6 countries (five point scale)
Source: 2014 GEM NES Survey



Singapore is an exception in the region, with experts having generally positive perceptions of government policies and programmes. In Singapore, government policies are considered less constraining than factors such as finance, cultural and social norms, and an open market. In all other ASEAN countries, the experts refer to a high level of bureaucracy and the lack of government goodwill. Prolix procedures, paperwork and too many application procedures influence the cost incurred and prolong the time required for business start-up.

Table 3.1 indicates that when compared to other geographical regions, the ASEAN-6 region is the best performer in terms of gender equity with respect to male and female participation in early-stage entrepreneurial activity (TEA), as well as significantly better than the GEM average.

Vietnamese experts cite the existence of by-laws, especially when it comes to registering a new business, and the lack of consistency between ministries and agencies in implementing business regulations. Dealing with too many authorities and too many procedures are time-consuming for entrepreneurs, and the resulting outcome is unpredictable due to inconsistent and inadequate state regulations. The legal system itself is complicated, with partly overlapping laws and regulations. Institutions lack a long-term orientation and do not focus on beneficial development for enterprises. Since almost all agencies and related authorities do not have sufficient market knowledge, this might lead to benefits for one group while disadvantaging another.

A key constraining factor that hinders entrepreneurship in the ASEAN region is the highly prevalent corruption. In 2014, according to the Global Competitiveness Report 2014-2015, corruption was regarded as the biggest obstacles to successful business development by business executives in Cambodia, Malaysia, the Philippines and Thailand, and as the second biggest problem for Myanmar and Vietnam. This constraint is mentioned under government policy, as reduced incentives for corruption and better enforcement of laws against it are the responsibility of politicians and government officials.

4.3.3 Market Openness

Internal market features such as demand and supply, import and export, monopolies or existing entry barriers are able to limit entrepreneurial activities. Despite the forthcoming ASEAN Economic Community (AEC) (projected to be in place by the end of 2015) the lack of market openness was named as one of the top four constraints in the ASEAN region. This sheds light on how far apart and how little prepared the experts consider their countries to be in the current climate. Only the experts in the Philippines did not consider the existing market openness as a constraint to entrepreneurship.

Figure 4.5 indicates that ease of market entry; costs of market entry and unfair blocking of markets by established businesses are regarded as obstacles to entrepreneurial activity. Intense competition and existing monopolies in the markets are the most pressing constraints.

Figure 4.5: Average expert ratings on market openness for new and growing firms across ASEAN-6 countries (five point scale)
Source: 2014 GEM NES Survey

Pressing issues regarding market openness cited by the experts include:

- Intense as well as international competition versus the perception of own poor competitive capabilities in the market
- Existing monopolies in some industries and multinational corporations rooting down
- Lack of patents and intellectual property protection
- Domestic markets are seen as small-scale markets
- Difficulties in entering and connecting to new markets
- Limited supplier base and high production costs

4.3.4 Research and development transfer

In the closed section of the questionnaire, R & D transfer was the worst ranked EFC, overall, in the region. Innovation capabilities - which are important to economies' ability to become competitive, particularly in higher-productivity sectors – are heavily dependent on research and development. Effective innovation capabilities require a business environment that facilitates entrepreneurship and provides the access to finance necessary for the creation and growth of innovative firms. Such an environment needs to be supported by effective university and research institutions with strong links to industry. It is clear from Figure 4.6 that the experts believe that the new and growing firms are constrained in their access to critical new technologies, and that public institutions such as universities are not playing a constructive enough role in facilitating knowledge transfer and stimulating innovation.

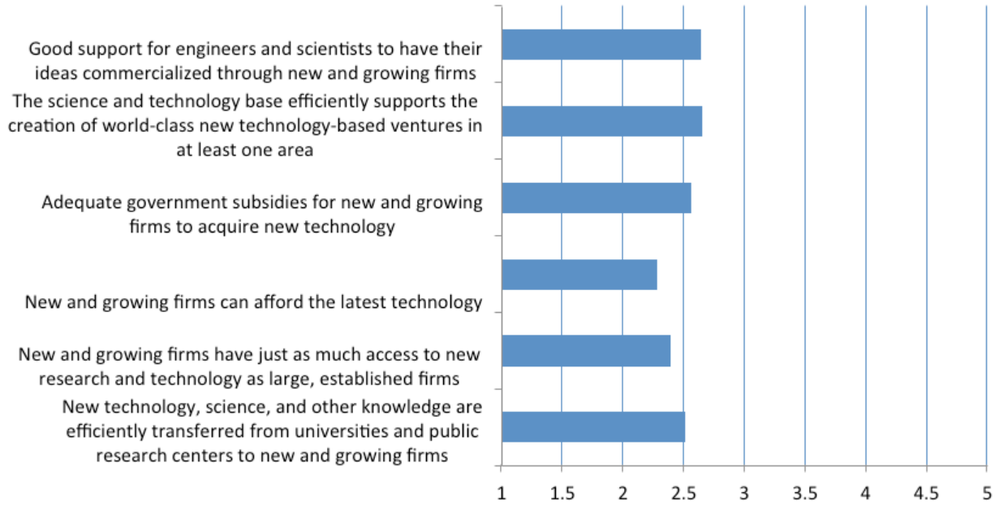


Figure 4.6: Average expert ratings on R&D transfer for new and growing firms across ASEAN-6 countries (five point scale)

Pressing issues regarding R&D transfer cited by the experts include:

Malaysian experts are concerned about access to research and intellectual property rights. They believe that more must be done to ensure that research efforts and outcomes from research institutes and universities are published and made easily available to businesses. Incentives should be provided to encourage sharing and commercialisation of R&D results.

Experts in the Philippines believe there are no support structures to assist new businesses with integrating technology effectively - new businesses owners have to rely on their innate creativity and resourcefulness, and manage on their own. An area of concern is the limited emphasis on technical, scientific and technological innovations for application in Philippine society (entrepreneurship for better goods - exact, measurable, and replicable through production lines) and as well as too little commitment to developing artistic talents and the humanities (subjective, hard to replicate, and oriented towards the services sector). Collaboration between academia – private sector- government is needed on innovation, research and development (for example, set up an innovation fund and start up incubation centres for viable new business ventures). A positive trend noted in the Philippines is the high level of exposure to the Internet realm, translating into easy access and knowledge of current trends, and integration with the international community.

In Vietnam, the experts feel that information technology has been developed rapidly and effectively. New and appropriate technologies for enterprises are researched, updated and disseminated on a regular basis. However, they believe that there is insufficient R&D support to encourage cutting-edge technological innovation.

Start-up owners in Thailand must be encouraged, through appropriate incentives, to focus on technology and R&D in order to create innovation hubs in the country. Thai entrepreneurs need access to more information sources on production and management technologies. Transferred knowledge and best practice models from successful businesses of other countries are needed to stimulate the Thai entrepreneurial sector.

4.4 Key recommendations from the national experts

An important focus of the national experts' survey is not only to identify key weaknesses in the entrepreneurial environment, but also to obtain precise and practical recommendations that can be used to inform policy decisions. National experts from the six ASEAN countries that participated in the 2014 GEM cycle were asked for recommendations to enhance entrepreneurship in their respective countries.

The top three recommendations of the experts differed between countries, due to different starting points and different economic imperatives. However, there were several overlapping areas of recommendation, include adjustments in financial support, in government policies and government programmes.The key recommendations offered by the panels of experts are summarised below.

Financial Support

- In general, the experts felt that easier access to funding sources and to capital, lower restrictions on loan applications and lower costs of the financial sources could improve entrepreneurship conditions in the survey countries.

- Introduce a one-stop shop where entrepreneurs (established and new businesses as well as start-ups) are able to access information on available funding and grants, receive advice and help with business planning, and access training in entrepreneurial skills.

- Encourage and expand private equity solutions for entrepreneurs. In some of the member countries access to private equity is limited, especially for smaller businesses. The provision of the initial finance should be coupled with mandatory mentoring for an extended period, for example the first three years.

- Provide specific monetary policies to strengthen the manufacturing sector.

- Introduce a start-up community which is financially supported by private firms.

- Provide a combination of venture capital and government support as a collaborative system to assist entrepreneurs.

Government policies

- Support from both private and government sectors, even if it is limited, should be readily available and accessible and include a feedback mechanism.

- General improvement of the business environment in the countries is crucial, e.g. regulations, infrastructure support and trade facilitation. The ease of doing business could be improved by introducing one-stop services and reducing the need to go from one agency to another for application, issuance of business permits, tax and other requirements.

- Policies could provide more assistance in organising entrepreneurial communities or groups by establishing shared production facilities and shared marketing activities.

- Implementation of government policies requires good public servants who are also stringently policed in their conduct. Individual responsibility and ethics within the public services should be clear and defined. Within an often bureaucratic government system, all stakeholders should be oriented towards assisting aspiring entrepreneurs by streamlining procedures instead of "milking" these applicants of their time, efforts, resources, and money.

- Training of government agencies in entrepreneurship, business and economics and reforming administrative procedures could help to build the professional capacities of the administrative officers, enabling them to better understand and serve entrepreneurs.

Government programmes

- A national or even a regional ASEAN agenda for entrepreneurship could help to step up progress in promoting entrepreneurship by providing more support through training programs, rebates, funding and grants, projects, tax incentives and other policies aimed at helping entrepreneurs to start up or grow their companies, or assisting others to invest in enterprises.

- Review tax reforms and allocate proper subsidies and incentives (e.g. tax breaks) for legitimate businesses with proven track records that are innovative, sustainable and can contribute to job generation.

- Since corruption is a topic prevalent in all ASEAN countries to different degrees, government programmes need to tackle corruption issues as well as reduces bureaucracy for enterprises.

- Reduced taxes on importing essential materials could make especially MSMEs more competitive. These could include tax breaks to import solar panels, for example, which have the added benefit of reducing electricity costs of enterprises.

- Rules and regulations for businesses should be clear to follow, efficient and realistic to achieve. In addition, when there are support programs for enterprises in place, they should be effectively communicated to the intended beneficiaries.

- Introduce government programmes focused on those start-ups that have the capacity to expand their markets internationally or globally.

- In some countries, failure to pay back loans within a certain time period leaves the entrepreneur on a "blacklist" (in Thailand: of the credit bureau) for the following ten years, during which the entrepreneur is unable to receive further bank or credit loans. This listing is independent of the fact that this event might have been a temporary glitch in the business, and solved shortly afterwards. A solution could be that information on how an entrepreneur performs in re-paying his debts is integrated into this list.

Education & training and capacity for entrepreneurship

Regardless of a country's stage of development, foundations for a sound education and training for entrepreneurship should start early with a basic education that provides the necessary essential entrepreneurial skills. Encouragement of children to venture abroad and become more international, and incorporation of entrepreneurship with an innovation- and creativity-oriented mindset even at the elementary level, needs training of teachers to enable them to provide these skills sets. A 2013 ILO survey of ASEAN enterprises and business organisations on enterprise development confirmed that difficulties in the workforce, faced by young women and young men, reflect a mismatch of capabilities and work tasks as much as general skills gaps (ADB & ILO, 2013). The best fit of skills set for employees was reported for Singapore and the Philippines (both with an 80% fit), while significantly lower rates were found in Cambodia and Myanmar with a fit of below 40% (Bruni et al, 2013). Similar skills gaps can be assumed for the entrepreneur, who often has a self-learning background. Especially for Thailand, improvements in the capacity for entrepreneurship and in access to information necessary to run a business are two main topics experts focus on to foster entrepreneurship.

Recommendations include:

- education for entrepreneurs how to grow a small business to a medium-sized business;

- education for an "entrepreneurship for improved goods" with more emphasis on technical, scientific and technological innovations;

- developing creative talents and talents in the field in humanities which will lead to increasingly harder to replicate products; and

- exposure to other cultures around the world, in order to develop a high degree of tolerance, empathy, and cross-cultural understanding.

In conclusion, an important focus of the national experts' survey, through helping to identify key weaknesses in the entrepreneurial environment, is to provide policy makers and business leaders with information that enables them to put into place precise, practical and targeted recommendations. Entrepreneurial activity is an output of the interaction of an individual's perception of an opportunity and capacity (motivation and skills) to act upon this AND the distinct conditions of the respective environment in which the individual is located. .An economy cannot increase the quantity and quality of potential and intentional entrepreneurs without creating an enabling environment in which entrepreneurship can flourish. Informed policy decisions which help to create a nourishing entrepreneurial environment will be of benefit to entrepreneurs in all phases of their businesses, be it young start-ups, established or repeat entrepreneurs

CHAPTER 5: POLICY RECOMMENDATIONS AND CONCLUSIONS.

In the heat and wet of an Asian tropical environment, where some economies race forward even as others plod along, where uncertainty and change is constant; therein lies the breeding ground for innovation and entrepreneurship.

The demographic dividend that many of the ASEAN economies have enjoyed will diminish due to a low population replacement rate by 2020. However, it remains imperative for policy makers, business and civil society leaders to work together, in order to identify and strengthen the forces that foster innovation and facilitate more productive economies Entrepreneurs invent, improve and innovate. Ultimately, the impact of entrepreneurship on countries is all the greater, for entrepreneurs are job and wealth creators. They have a multiplier effect on those around them and on the economy. High impact entrepreneurs affect those around them by mentoring as well as providing smart capital and partnerships, thus perpetuating the entrepreneurial ecosystems of economies.

Policy makers will realise that entrepreneurship leads to prosperity and peace for all nations. It is the antidote for poverty - an instrument for prosperity.

Policy makers will need to take a holistic and comprehensive approach to ensuring that entrepreneurial policies work. A major step is to facilitate and embed an entrepreneurial ecosystem within the ASEAN context.

5.1 An ASEAN entrepreneurial ecosystem

An entrepreneurial ecosystem is at worst a vague and indeterminate notion and at best a dynamic and stirring concoction of key business drivers comprising bankers, investors, educators, incubators and other relevant clusters. Funding is required but established conservative financial institutions tend only to lend money subject to their comfort levels when taking risks (i.e. often demanding high collaterals). Access to funding is also subject to the private equity and venture capital industry sizes within the respective countries. It is often the case that in developing economies, funders shy away from mezzanine and start-up funding and prefer to focus on bigger and safer projects, e.g. restructurings and mergers.

There is no one formula that can provide the outcomes desired by diverse economies in ASEAN.

This emphasises the importance of GEM's research study, in that it allows for country-specific insights whilst also facilitating regional and even global comparisons. This information makes it possible to identify the 'must-haves' for ASEAN's economies that can contribute to generating an entrepreneurially-enabled economy. The following are key focus areas:

I. Governmental initiatives and projects with clear entrepreneurial criteria (in line with the entrepreneurial framework conditions discussed in Chapter 4). In this regard, the training of government agencies in entrepreneurship, business and economics as well as reforming administrative procedures could help build the professional ability of administrative officers to better understand and serve entrepreneurs.

II. An openness to both new and incremental innovations, even within traditional industries. This will encourage the efficient and productive growth of agricultural, manufacturing and mining activities, an important staple for some ASEAN economies.

III. Talent-driven initiatives that attract and keep the right talents - both for start-ups and innovation integrators e.g. via tax incentives and equity contracts. This is currently a major challenge for ASEAN, as a great deal of talent or human capital is lost to highly developed countries.

IV. Meaningful media communication that permeates all tiers of relevant stakeholders, highlighting local ASEAN entrepreneurship success stories.

V. An entrepreneurship educational imperative (along with higher enrolment rates) that starts from the primary phase and is emphasised throughout the learning continuum, including academic and vocational schools, both rural and urban. Singapore and Malaysia already allocate the highest public expenditure to within the region to education and patent applications (OECD, 2010c) .

VI. An understanding of the imperatives and extended consequences of entrepreneurship for an economy over the mid to long term i.e. an emphasis on R&D, high growth and sustainability for new start-ups.

VII. Good IT infrastructure coupled with inclusiveness for all the players within an economy.

VIII. Working and upskilling spaces that counteract uncertainty and high costs, e.g. accelerators, incubators and coaching agencies.

IX. Individually tailored and holistic development programmes for SME vendors of select industries that are developed and funded by corporate players e.g. CIMB Group's Bumiputera Vendor Development Programme. Programmes that include KPI setting, measurement and interventions for at least 30 months.

X. Engaging localised entrepreneurial capacity building across modalities within individual ASEAN economies e.g. the International Development Research Centre's (IDRC) ongoing regional entrepreneurship research funding that supports projects within ASEAN.

These initiatives for policymakers are by no means comprehensive but they will provide a solid foundation to facilitate and nurture the entrepreneurial enterprises that can provide employment and economic growth for ASEAN nations.

5.3 Directed-urgency for ASEAN policy makers

Ultimately governments need to imbue a sense of directed-urgency into their approach. How? This report provides ample evidence that most governments do make efforts to stimulate entrepreneurship. However, they risk overemphasising start-ups over high growth and sustainable enterprises. This results in steroidal entrepreneurship i.e. a high number of businesses that start up but do not last. Most will disappear within 10 years.

The directed-urgency should be towards high growth and sustainability of entrepreneurial businesses. This will require coaching, research and development initiatives over the mid to long term. The number of start-ups may be lower but these enterprises, though few, are likely to be more sustainable and profitable in the longer term, able to grow and to have a positive effect on the economic and employment outcomes that governments seek. Within ASEAN, entrepreneurial acceleration can only be achieved through each government's directed sense of urgency. The policy-making mechanisms within Singapore and Malaysia are indicative of such imperatives; a similar policy focus is apparent in other Southeast Asian countries as well, albeit in a piecemeal fashion.

5.4 Stage-case for entrepreneurship development in ASEAN

Economies within the ASEAN are diverse in terms of level of economic development, including factor-driven, efficiency-driven and even innovation-driven economies (based on the World Economic Forum's (WEF) Global Competitiveness Report categories). Based on challenges and successes in other economies in each of these categories, some key policy opportunities are briefly outlined.

Factor-driven economies in ASEAN

- Emphasise education and enrolment for education overall, including entrepreneurship education. All stages of the entrepreneurial pipeline are dependent on a good basic education. The effectiveness of entrepreneurial education is enhanced by a good basic education.
- Import technology but also adapt technology to increase local capacities and efficiencies.
- Reduce low value adding activity and invest in learning opportunities by encouraging and engaging entrepreneurial aspirations.
- Embed gender and earnings neutrality in entrepreneurial business endeavours, thus providing equal opportunity for the engagement and support of women entrepreneurs.
- Identify and focus on key entrepreneurial result areas as part of an overarching policy for the mid to long term.

Efficiency-driven economies in ASEAN

- Emphasize STEM learning.
- Work against the middle-income trap.
- Encourage and incentivise innovation especially technology-based innovation.
- Encourage forward and backward integration.
- Link into global economies and be a part of the growing global supply chains e.g. USA, China and India.

- Move into value-addition with an emphasis on higher end services e.g. finance, insurance and integration services.

Innovation-driven economies in ASEAN

- Work towards quality of enterprises as opposed to quantity. Support R & D efforts that offer high end growth opportunities that create global companies.

- Encourage greater collaboration with regional and international R & D initiatives.

- Attract, incentivise and retain talent for key industries that are strategically important for the economy.

This research study has provided us an overall view of ASEAN entrepreneurship. Though it may not be comprehensive, the study of a people's aspirations, attitudes and activity is by no small measure a useful yardstick - a yardstick that will allow policy makers to derive evidence-based information about their citizens' preparedness for an entrepreneurial future. Such information will allow for inclusive and enabling policies that will fuel and support the entrepreneurial trajectory that all of ASEAN can and should strive for. There will be no disadvantaged economy in such endeavours, as the spill-over effect of success from each nation will impact positively all other ASEAN economies too.

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APPENDIX 1

TABLE A.1 PERCEPTIONS OF SOCIAL VALUES REGARDING ENTREPRENEURSHIP IN THE GEM ECONOMIES IN 2014, BY STAGES OF ECONOMIC DEVELOPMENT (% OF POPULATION AGED 18-64)

Stages of economic development and GEM economies		*Entrepreneurship as a good career choice*	*High status to successful entrepreneurs*	*Media attention to entrepreneurship*
Stage 1: factor-driven (includes countries in transition to stage 2)	**Angola**	75.10	81.65	71.69
	Bolivia	70.26	77.00	76.50
	Botswana	69.94	78.11	74.55
	Burkina Faso			
	Cameroon			
	India	57.93	66.16	56.62
	Iran	52.26	75.61	55.09
	Philippines	81.80	78.13	84.70
	Uganda			
	Vietnam	67.15	75.92	86.83
	Average (unweighted)	67.78	76.08	72.28
Stage 2: efficiency-driven (includes countries in transition to stage 3)	**Argentina**	57.82	52.20	63.63
	Barbados	57.61	58.50	46.30
	Belize	57.80	55.46	43.25
	Bosnia and Herzegovina	78.15	69.94	39.85
	Brazil			
	Chile	69.43	64.43	65.21
	China	65.68	72.91	69.28
	Colombia	70.45	67.13	74.42
	Costa Rica	61.33	59.00	79.70
	Croatia	63.27	46.58	40.44
	Ecuador	66.43	67.13	82.89
	El Salvador	82.57	59.49	59.55
	Georgia	65.99	75.92	58.45
	Guatemala	95.33	76.92	60.61
	Hungary	47.39	72.38	33.47
	Indonesia	72.86	77.96	84.79
	Jamaica	83.50	84.05	83.90
	Kazakhstan	78.62	74.35	82.97
	Kosovo	68.28	76.18	57.22
	Lithuania	68.81	58.33	55.14
	Malaysia	50.37	49.95	69.85
	Mexico	53.22	50.76	45.48
	Panama			
	Peru	82.43	81.38	83.62
	Poland	63.28	56.45	54.52
	Romania	73.64	75.22	71.34
	Russia	67.12	65.93	50.43
	South Africa	69.58	72.92	72.57
	Suriname	66.75	67.18	80.66
	Thailand	73.60	71.11	80.31
	Uruguay	62.13	56.72	60.83
	Average (unweighted)	68.05	66.09	63.82
Stage 3: innovation–driven	**Australia**	53.35	67.09	72.56
	Austria			
	Belgium	52.41	51.73	50.82
	Canada	57.25	69.72	67.73
	Denmark			
	Estonia	55.56	64.93	43.34
	Finland	41.24	84.40	66.93
	France	59.05	70.43	38.98
	Germany	51.66	79.10	51.41
	Greece	58.42	66.42	45.80
	Ireland	49.39	76.88	75.68
	Italy	65.05	72.09	48.28
	Japan	30.98	55.81	58.70
	Luxembourg	40.66	68.18	43.54
	Netherlands	79.11	67.77	55.66
	Norway	58.16	83.47	
	Portugal	62.23	62.94	69.75
	Puerto Rico	18.51	51.13	72.70
	Qatar	75.83	87.06	76.75
	Singapore	51.73	62.91	79.10
	Slovakia	45.42	58.05	52.57
	Slovenia	53.39	72.31	57.56
	Spain	53.94	48.99	46.33
	Sweden	51.58	70.90	60.30
	Switzerland	42.30	65.81	50.43
	Taiwan	75.22	62.57	83.50
	Trinidad & Tobago	79.47	69.50	65.60
	United Kingdom	60.30	74.99	58.36
	United States	64.73	76.87	75.83
	Average (unweighted)	55.07	68.22	60.32

TABLE A.2 INDIVIDUAL ATTRIBUTES IN THE GEM ECONOMIES IN 2014, BY STAGES OF ECONOMIC DEVELOPMENT (% OF POPULATION AGED 18-64)

Stages of economic development and economies		*Perceived opportunities*	*Perceived capabilities*	*Fear of failure**	*Entrepreneurial intentions **
Stage 1: factor-driven (includes countries in transition to stage 2)	**Angola**	69.75	61.68	44.81	39.34
	Bolivia	57.67	73.11	38.39	46.94
	Botswana	57.16	67.14	13.70	63.37
	Burkina Faso	63.61	65.89	23.75	42.34
	Cameroon	69.34	73.77	22.80	55.57
	India	38.91	36.70	37.67	7.66
	Iran	27.68	59.45	32.70	25.48
	Philippines	45.89	66.15	37.68	42.84
	Uganda	76.91	84.86	12.55	60.19
	Vietnam	39.36	58.20	50.13	18.20
	Average (unweighted)	54.63	64.70	31.42	40.19
Stage 2: efficiency-driven (includes countries in transition to stage 3)	**Argentina**	31.91	57.78	23.54	27.83
	Barbados	38.16	63.51	23.44	11.48
	Belize	49.55	69.00	32.63	10.09
	Bosnia and Herzegovina	19.59	47.30	26.80	20.43
	Brazil	55.54	49.96	35.56	24.50
	Chile	67.00	64.87	28.39	50.14
	China	31.88	32.97	39.50	19.33
	Colombia	65.74	57.41	30.70	47.01
	Costa Rica	39.00	59.39	36.83	28.95
	Croatia	18.43	45.91	30.30	19.50
	Ecuador	62.02	72.81	30.67	43.10
	El Salvador	44.69	70.81	34.90	23.06
	Georgia	36.58	37.54	34.78	15.58
	Guatemala	45.38	64.17	33.03	35.79
	Hungary	23.40	40.94	41.96	13.89
	Indonesia	45.46	60.20	38.12	27.36
	Jamaica	57.05	81.23	22.04	35.33
	Kazakhstan	26.50	52.54	23.83	15.41
	Kosovo	65.62	65.20	26.73	6.31
	Lithuania	31.66	33.44	44.77	19.65
	Malaysia	43.40	38.40	26.75	11.63
	Mexico	48.87	53.48	29.61	17.40
	Panama	43.26	54.38	14.63	19.67
	Peru	62.31	69.42	29.11	50.60
	Poland	31.35	54.30	51.11	15.56
	Romania	32.41	48.44	41.25	31.70
	Russia	26.50	27.83	39.49	3.53
	South Africa	37.00	37.65	25.37	10.05
	Suriname	41.03	77.36	16.10	4.55
	Thailand	47.35	50.12	42.44	21.75
	Uruguay	45.56	63.12	26.71	24.82
	Average (unweighted)	42.39	54.89	31.65	22.77

TABLE A.2 INDIVIDUAL ATTRIBUTES IN THE GEM ECONOMIES IN 2014, BY STAGES OF ECONOMIC DEVELOPMENT (% OF POPULATION AGED 18-64)

Stages of economic development and economies		*Perceived opportunities*	*Perceived capabilities*	*Fear of failure**	*Entrepreneurial intentions **
Stage 1: factor-driven (includes countries in transition to stage 2)	**Angola**	69.75	61.68	44.81	39.34
	Bolivia	57.67	73.11	38.39	46.94
	Botswana	57.16	67.14	13.70	63.37
	Burkina Faso	63.61	65.89	23.75	42.34
	Cameroon	69.34	73.77	22.80	55.57
	India	38.91	36.70	37.67	7.66
	Iran	27.68	59.45	32.70	25.48
	Philippines	45.89	66.15	37.68	42.84
	Uganda	76.91	84.86	12.55	60.19
	Vietnam	39.36	58.20	50.13	18.20
	Average (unweighted)	54.63	64.70	31.42	40.19
Stage 2: efficiency-driven (includes countries in transition to stage 3)	**Argentina**	31.91	57.78	23.54	27.83
	Barbados	38.16	63.51	23.44	11.48
	Belize	49.55	69.00	32.63	10.09
	Bosnia and Herzegovina	19.59	47.30	26.80	20.43
	Brazil	55.54	49.96	35.56	24.50
	Chile	67.00	64.87	28.39	50.14
	China	31.88	32.97	39.50	19.33
	Colombia	65.74	57.41	30.70	47.01
	Costa Rica	39.00	59.39	36.83	28.95
	Croatia	18.43	45.91	30.30	19.50
	Ecuador	62.02	72.81	30.67	43.10
	El Salvador	44.69	70.81	34.90	23.06
	Georgia	36.58	37.54	34.78	15.58
	Guatemala	45.38	64.17	33.03	35.79
	Hungary	23.40	40.94	41.96	13.89
	Indonesia	45.46	60.20	38.12	27.36
	Jamaica	57.05	81.23	22.04	35.33
	Kazakhstan	26.50	52.54	23.83	15.41
	Kosovo	65.62	65.20	26.73	6.31
	Lithuania	31.66	33.44	44.77	19.65
	Malaysia	43.40	38.40	26.75	11.63
	Mexico	48.87	53.48	29.61	17.40
	Panama	43.26	54.38	14.63	19.67
	Peru	62.31	69.42	29.11	50.60
	Poland	31.35	54.30	51.11	15.56
	Romania	32.41	48.44	41.25	31.70
	Russia	26.50	27.83	39.49	3.53
	South Africa	37.00	37.65	25.37	10.05
	Suriname	41.03	77.36	16.10	4.55
	Thailand	47.35	50.12	42.44	21.75
	Uruguay	45.56	63.12	26.71	24.82
	Average (unweighted)	42.39	54.89	31.65	22.77

Stages of economic development and economies		Perceived opportunities	Perceived capabilities	Fear of failure*	Entrepreneurial intentions **
Stage 3: innovation–driven	Australia	45.72	46.80	39.21	10.02
	Austria	44.40	48.67	34.92	8.15
	Belgium	35.93	30.40	49.35	10.55
	Canada	55.52	48.98	36.52	11.96
	Denmark	59.66	34.88	40.99	6.92
	Estonia	49.44	42.47	41.77	9.85
	Finland	42.38	34.88	36.76	7.94
	France	28.26	35.44	41.18	14.20
	Germany	37.59	36.40	39.95	5.93
	Greece	19.91	45.54	61.58	9.53
	Ireland	33.36	47.24	39.33	7.16
	Italy	26.57	31.31	49.10	11.40
	Japan	7.27	12.23	54.51	2.52
	Luxembourg	42.54	37.56	42.01	11.86
	Netherlands	45.55	44.26	34.79	9.29
	Norway	63.45	30.54	37.56	4.99
	Portugal	22.87	46.59	38.38	15.81
	Puerto Rico	25.08	48.84	24.01	12.45
	Qatar	63.38	60.94	25.54	50.36
	Singapore	16.71	21.35	39.40	9.44
	Slovakia	23.50	54.40	35.96	15.14
	Slovenia	17.25	48.60	29.00	11.36
	Spain	22.61	48.13	38.03	7.09
	Sweden	70.07	36.65	36.53	8.47
	Switzerland	43.67	41.59	28.98	7.07
	Taiwan	33.47	29.00	37.39	25.56
	Trinidad & Tobago	58.62	75.23	16.79	33.91
	United Kingdom	40.99	46.44	36.84	6.88
	United States	50.85	53.34	29.66	12.08
	Average (unweighted)	38.85	42.02	37.79	12.34

* Denominator: age group 18-64 perceiving good opportunities to start a business
** Respondent expects to start a business within three years; denominator: age group 18-64 that is currently not involved in entrepreneurial activity

TABLE A.3 TOTAL EARLY-STAGE ENTREPRENEURIAL ACTIVITY (TEA) IN THE GEM ECONOMIES IN 2014, BY STAGES OF ECONOMIC DEVELOPMENT (% OF POPULATION AGED 18-64)

Stages of economic development and economies		Nascent entrepreneur-ship rate	New business ownership rate	Early-stage entrepreneurial activity (TEA)	Established business ownership rate	Discontinuation of businesses
Stage 1: factor-driven (includes countries in transition to stage 2)	Angola	9.52	12.36	21.50	6.50	15.12
	Bolivia	21.51	7.07	27.40	7.59	6.89
	Botswana	23.13	11.13	32.79	4.95	15.09
	Burkina Faso	12.72	9.75	21.71	17.68	10.80
	Cameroon	26.35	13.70	37.37	11.50	17.70
	India	4.12	2.54	6.60	3.73	1.17
	Iran	7.52	8.68	16.02	10.92	5.73
	Philippines	8.16	10.52	18.38	6.16	12.55
	Uganda	8.92	28.13	35.53	35.94	21.17
	Vietnam	2.00	13.30	15.30	22.15	3.55
	Average (unweighted)	12.40	11.72	23.26	12.71	10.98
Stage 2: efficiency-driven (includes countries in transition to stage 3)	Argentina	9.47	5.21	14.41	9.09	4.92
	Barbados	8.48	4.23	12.71	7.09	3.68
	Belize	4.25	3.02	7.14	3.74	4.69
	Bosnia and Herzegovina	4.48	2.94	7.42	6.67	4.47
	Brazil	3.66	13.79	17.23	17.51	4.14
	Chile	16.61	11.05	26.83	8.79	8.32
	China	5.45	10.17	15.53	11.59	1.45
	Colombia	12.39	6.66	18.55	4.86	5.65
	Costa Rica	7.58	3.74	11.33	2.53	4.86
	Croatia	5.95	2.02	7.97	3.61	3.84
	Ecuador	24.54	9.92	32.61	17.67	8.13
	El Salvador	11.37	8.74	19.48	12.73	10.77
	Georgia	4.10	3.23	7.22	7.28	2.50
	Guatemala	11.98	9.19	20.39	7.36	4.43
	Hungary	5.56	3.87	9.33	7.95	3.10
	Indonesia	4.38	10.12	14.20	11.90	4.18
	Jamaica	7.94	11.90	19.27	14.44	6.27
	Kazakhstan	8.10	6.19	13.72	7.43	2.95
	Kosovo	2.46	1.79	4.03	2.06	6.63
	Lithuania	6.07	5.34	11.32	7.84	2.91
	Malaysia	1.36	4.55	5.91	8.46	2.01
	Mexico	12.66	6.39	18.99	4.48	5.56
	Panama	13.12	4.09	17.06	3.44	4.47
	Peru	23.10	7.32	28.81	9.24	8.03
	Poland	5.77	3.58	9.21	7.30	4.17
	Romania	5.33	6.17	11.35	7.60	3.19
	Russia	2.39	2.35	4.69	3.95	1.18
	South Africa	3.87	3.20	6.97	2.68	3.89
	Suriname	1.93	0.17	2.10	5.17	0.21
	Thailand	7.63	16.73	23.30	33.06	4.16
	Uruguay	10.51	5.75	16.08	6.74	4.39
	Average (unweighted)	8.15	6.24	14.04	8.52	4.49

Stages of economic development and economies		Nascent entrepreneur-ship rate	New business ownership rate	Early-stage entrepreneurial activity (TEA)	Established business ownership rate	Discontinuation of businesses
Stage 3: innovation–driven	Australia	7.65	5.69	13.14	9.80	3.88
	Austria	5.80	3.06	8.71	9.86	2.72
	Belgium	2.93	2.55	5.40	3.54	2.27
	Canada	7.93	5.61	13.04	9.35	4.16
	Denmark	3.07	2.49	5.47	5.09	2.24
	Estonia	6.34	3.54	9.43	5.70	2.02
	Finland	3.45	2.29	5.63	6.60	2.32
	France	3.69	1.71	5.34	2.94	1.75
	Germany	3.05	2.25	5.27	5.15	1.67
	Greece	4.58	3.37	7.85	12.84	2.83
	Ireland	4.36	2.46	6.53	9.91	1.89
	Italy	3.18	1.28	4.42	4.27	2.13
	Japan	2.71	1.26	3.83	7.18	1.08
	Luxembourg	4.94	2.33	7.14	3.70	2.58
	Netherlands	5.15	4.53	9.46	9.59	1.76
	Norway	2.75	2.95	5.65	5.35	1.85
	Portugal	5.83	4.40	9.97	7.58	2.98
	Puerto Rico	8.80	1.29	10.04	1.27	3.61
	Qatar	11.32	5.39	16.38	3.54	4.84
	Singapore	6.36	4.82	10.96	2.88	2.39
	Slovakia	6.70	4.35	10.90	7.80	5.16
	Slovenia	3.78	2.66	6.33	4.76	1.48
	Spain	3.33	2.21	5.47	7.03	1.91
	Sweden	4.86	1.90	6.71	6.46	2.09
	Switzerland	3.38	3.81	7.12	9.10	1.50
	Taiwan	4.41	4.13	8.49	12.19	5.12
	Trinidad & Tobago	7.47	7.44	14.62	8.48	2.79
	United Kingdom	6.28	4.48	10.66	6.50	1.86
	United States	9.67	4.25	13.81	6.95	4.02
	Average (unweighted)	5.30	3.40	8.54	6.74	2.65

TABLE A.4 MOTIVATION FOR EARLY-STAGE ENTREPRENEURIAL ACTIVITY IN THE GEM ECONOMIES IN 2014, BY STAGES OF ECONOMIC DEVELOPMENT (% OF POPULATION AGED 18-64)

Stages of development and economies		Early-stage entrepreneurial activity (TEA)	Necessity-driven (% of TEA)	Opportunity-driven (% of TEA)	Improvement-driven opportunity (% of TEA)	Motivational index
Stage 1: factor-driven (includes countries in transition to stage 2)	Angola	21.50	24.45	72.14	43.41	1.78
	Bolivia	27.40	22.84	76.66	51.70	2.26
	Botswana	32.79	30.25	67.21	54.71	1.81
	Burkina Faso	21.71	22.27	75.25	52.84	2.37
	Cameroon	37.37	33.46	59.23	40.51	1.21
	India	6.60	31.71	59.97	36.54	1.15
	Iran	16.02	38.69	60.56	49.58	1.28
	Philippines	18.38	29.36	70.53	33.49	1.14
	Uganda	35.53	18.88	80.84	54.25	2.87
	Vietnam	15.30	29.74	70.26	53.27	1.79
	Average (unweighted)	23.26	28.16	69.27	47.03	1.67
Stage 2: efficiency-driven (includes countries in transition to stage 3)	Argentina	14.41	28.03	67.77	43.51	1.55
	Barbados	12.71	14.56	73.83	53.13	3.65
	Belize	7.14	13.07	82.94	47.61	3.64
	Bosnia and Herzegovina	7.42	50.83	48.45	25.16	0.49
	Brazil	17.23	28.95	70.60	57.81	2.00
	Chile	26.83	17.63	80.99	62.18	3.53
	China	15.53	33.22	65.72	45.41	1.37
	Colombia	18.55	33.33	66.04	51.55	1.55
	Costa Rica	11.33	19.31	79.40	63.52	3.29
	Croatia	7.97	46.57	51.29	28.67	0.62
	Ecuador	32.61	29.43	70.07	34.95	1.19
	El Salvador	19.48	31.95	67.82	54.48	1.71
	Georgia	7.22	48.59	50.57	30.95	0.64
	Guatemala	20.39	40.62	59.16	38.93	0.96
	Hungary	9.33	33.19	64.72	36.27	1.09
	Indonesia	14.20	20.52	78.57	37.95	1.85
	Jamaica	19.27	32.09	65.57	33.51	1.04
	Kazakhstan	13.72	26.39	69.10	33.68	1.28
	Kosovo	4.03	22.01	59.90	29.13	1.32
	Lithuania	11.32	19.61	79.56	43.78	2.23
	Malaysia	5.91	17.54	82.46	63.99	3.65
	Mexico	18.99	22.46	76.26	50.04	2.23
	Panama	17.06	26.32	73.10	60.23	2.29
	Peru	28.81	16.39	82.53	58.90	3.59
	Poland	9.21	36.75	59.17	47.11	1.28
	Romania	11.35	28.94	70.14	49.75	1.72
	Russia	4.69	39.02	58.70	41.56	1.07
	South Africa	6.97	28.19	71.27	35.49	1.26
	Suriname	2.10	5.42	73.16	39.83	7.34
	Thailand	23.30	17.81	80.94	71.23	4.00
	Uruguay	16.08	15.96	82.36	27.28	1.71
	Average (unweighted)	14.04	27.25	69.75	45.08	1.65

Stages of development and economies		Early-stage entrepreneurial activity (TEA)	Necessity-driven (% of TEA)	Opportunity-driven (% of TEA)	Improvement-driven opportunity (% of TEA)	Motivational index
Stage 3: innovation driven	Australia	13.14	17.60	81.50	63.78	3.62
	Austria	8.71	10.95	81.69	37.37	3.41
	Belgium	5.40	30.67	63.19	43.12	1.41
	Canada	13.04	15.67	76.34	63.34	4.04
	Denmark	5.47	5.43	91.06	60.15	11.09
	Estonia	9.43	15.10	74.48	41.15	2.72
	Finland	5.63	15.62	81.06	63.12	4.04
	France	5.34	16.06	82.00	69.15	4.31
	Germany	5.27	23.18	75.75	53.74	2.32
	Greece	7.85	34.77	61.47	30.53	0.88
	Ireland	6.53	29.65	68.35	48.56	1.64
	Italy	4.42	13.59	78.41	38.58	2.84
	Japan	3.83	18.82	76.15	68.24	3.63
	Luxembourg	7.14	11.81	85.37	59.81	5.06
	Netherlands	9.46	15.67	80.41	62.77	4.01
	Norway	5.65	3.54	86.73	69.03	19.50
	Portugal	9.97	27.37	71.33	49.31	1.80
	Puerto Rico	10.04	20.50	79.05	51.08	2.49
	Qatar	16.38	21.53	77.13	54.37	2.53
	Singapore	10.96	11.40	84.28	70.81	6.21
	Slovakia	10.90	32.57	64.22	51.83	1.59
	Slovenia	6.33	25.46	71.40	44.78	1.76
	Spain	5.47	29.79	66.05	33.48	1.12
	Sweden	6.71	7.91	84.16	56.16	7.10
	Switzerland	7.12	14.35	74.88	58.14	4.05
	Taiwan	8.49	13.26	86.74	66.04	4.98
	Trinidad & Tobago	14.62	12.01	86.45	64.26	5.35
	United Kingdom	10.66	12.90	83.57	52.71	4.09
	United States	13.81	13.50	81.53	66.93	4.96
	Average (unweighted)	8.54	17.96	77.75	54.91	3.06

TABLE A.5 GENDER DISTRIBUTION OF EARLY-STAGE ENTREPRENEURS (TEA) & NECESSITY VS OPPORTUNITY ENTREPRENEURSHIP BY GEOGRAPHIC REGION, 2014

Regions and GEM economies		MALE TEA (% of adult male population)	FEMALE TEA (% of adult female population)	MALE TEA Opportunity (% of TEA males)	FEMALE TEA Opportunity (% of TEA females)	MALE TEA Necessity (% of TEA males)	FEMALE TEA Necessity (% of TEA females)
Africa	Angola	22.79	20.37	73.91	70.39	21.77	27.09
	Botswana	34.79	30.93	72.22	61.96	24.52	36.25
	Burkina Faso	25.39	18.71	84.73	64.72	12.65	32.94
	Cameroon	40.94	34.10	65.53	52.29	27.63	39.89
	South Africa	7.72	6.29	71.38	71.16	28.62	27.70
	Uganda	33.73	37.15	84.55	77.82	15.20	21.89
	Average (unweighted)	27.56	24.59	75.39	66.39	21.73	30.96
Asia & Oceania	Australia	15.97	10.32	81.86	80.93	18.14	16.77
	China	16.83	14.18	69.58	60.95	29.39	37.95
	India	8.52	4.58	56.51	66.70	33.04	29.13
	Indonesia	13.23	15.16	80.56	76.85	18.28	22.45
	Iran	21.45	10.47	59.38	63.04	39.77	36.43
	Japan	6.12	1.50	76.41	75.06	17.34	24.94
	Kazakhstan	14.34	13.17	71.13	67.12	26.06	26.71
	Malaysia	5.10	6.78	86.16	79.47	13.84	20.53
	Philippines	15.85	20.78	83.93	60.78	15.79	39.22
	Qatar	19.29	10.32	75.50	83.43	23.02	15.75
	Singapore	14.83	7.17	85.53	81.76	11.38	11.44
	Taiwan	10.15	6.83	87.84	85.10	12.16	14.90
	Thailand	24.53	22.12	81.53	80.31	17.12	18.56
	Vietnam	15.13	15.47	71.14	69.43	28.86	30.57
	Average (unweighted)	14.38	11.35	76.22	73.64	21.73	24.67
Latin America & Caribbean	Argentina	17.84	11.22	73.88	58.76	22.00	36.93
	Barbados	14.33	11.23	74.40	73.15	12.74	16.69
	Belize	7.81	6.45	83.94	81.70	11.14	15.46
	Bolivia	29.89	24.98	81.05	71.59	18.80	27.51
	Brazil	17.01	17.45	78.88	62.71	21.06	36.47
	Chile	30.10	23.68	88.64	71.65	9.89	27.08
	Colombia	22.78	14.57	70.55	59.42	28.91	39.83
	Costa Rica	11.66	11.02	84.35	74.58	13.04	25.42
	Ecuador	33.04	32.18	73.33	66.78	26.33	32.55
	El Salvador	19.26	19.69	69.39	66.44	30.61	33.13
	Guatemala	24.43	16.85	61.85	55.74	37.75	44.26
	Jamaica	21.26	17.34	70.31	59.94	26.10	39.21
	Mexico	19.74	18.31	78.74	73.80	20.26	24.64
	Panama	17.98	16.14	75.56	70.37	23.89	29.01
	Peru	29.65	28.00	86.07	78.90	12.63	20.24
	Puerto Rico	11.13	9.05	79.64	78.39	19.51	21.61
	Suriname	2.67	1.54	79.77	61.68	3.90	8.06
	Trinidad & Tobago	16.08	13.16	87.08	85.69	10.77	13.52
	Uruguay	19.17	13.23	86.45	76.91	11.29	22.20
	Average (unweighted)	19.25	16.11	78.10	69.90	18.98	27.04

Regions and GEM economies		MALE TEA (% of adult male population)	FEMALE TEA (% of adult female population)	MALE TEA Opportunity (% of TEA males)	FEMALE TEA Opportunity (% of TEA females)	MALE TEA Necessity (% of TEA males)	FEMALE TEA Necessity (% of TEA females)
European Union	Austria	10.38	7.06	82.48	80.54	11.31	10.43
	Belgium	7.65	3.14	66.41	55.29	29.38	33.83
	Croatia	11.28	4.75	52.11	49.38	46.27	47.24
	Denmark	7.12	3.79	91.72	89.81	5.64	5.02
	Estonia	11.21	7.71	75.89	72.50	13.39	17.50
	Finland	6.63	4.63	82.55	78.90	14.54	17.20
	France	6.68	4.03	87.25	73.50	11.42	23.57
	Germany	6.54	3.97	77.58	72.67	20.99	26.88
	Greece	9.89	5.81	67.13	51.82	30.01	42.90
	Hungary	13.48	5.29	67.73	57.25	29.34	42.75
	Ireland	8.87	4.23	73.12	58.47	26.01	37.20
	Italy	5.71	3.15	75.72	83.21	16.38	8.62
	Lithuania	16.19	6.78	82.81	72.31	16.59	26.35
	Luxembourg	8.89	5.32	85.87	84.49	11.97	11.55
	Netherlands	11.62	7.27	79.69	81.58	16.61	14.15
	Poland	12.50	5.95	59.33	58.82	36.09	38.14
	Portugal	11.68	8.36	74.69	66.92	23.95	31.89
	Romania	16.02	6.57	70.40	69.94	28.30	30.06
	Slovakia	14.37	7.41	64.58	63.51	31.94	33.78
	Slovenia	8.29	4.25	76.21	61.48	22.62	31.31
	Spain	6.36	4.57	69.61	61.03	26.13	34.95
	Sweden	9.54	3.79	85.62	80.35	6.61	11.30
	United Kingdom	13.82	7.53	83.24	84.17	14.91	9.27
	Average (unweighted)	10.21	5.45	75.29	69.91	21.32	25.47
Non-European Union	Bosnia and Herzegovina	10.60	4.25	52.45	38.51	47.55	58.98
	Georgia	8.05	6.47	54.39	46.33	45.61	51.90
	Kosovo	4.78	3.30	65.45	51.94	23.00	20.60
	Norway	7.29	4.00	89.04	82.50	0.00	10.00
	Russia	5.77	3.70	60.37	56.34	37.66	40.93
	Switzerland	7.03	7.20	79.85	69.93	10.97	17.72
	Average (unweighted)	7.25	4.82	66.93	57.59	27.46	33.35
North America	Canada	16.23	9.93	80.12	70.35	13.17	19.62
	United States	16.53	11.20	83.85	78.24	11.70	16.04
	Average (unweighted)	16.38	10.56	81.98	74.29	12.44	17.83

TABLE A.6 JOB GROWTH EXPECTATIONS OF EARLY-STAGE ENTREPRENEURS, BY GEOGRAPHIC REGIONS, 2014

Region		0 - 5 jobs (% Job growth as percent of TEA)	6 - 19 jobs (% Job growth as percent of TEA)	20 or more jobs (% Job growth as percent of TEA)
Africa	Angola	19.9745	19.0553	4.6167
	Botswana	51.5733	22.6880	13.2531
	Burkina Faso	78.1843	14.8016	4.8959
	Cameroon	51.6667	13.2051	6.4103
	South Africa	59.5562	15.8585	11.8989
	Uganda	89.4537	8.3985	2.1478
	Total	60.9558	15.2563	6.7452
Asia & Oceania	Australia	62.3103	17.3700	11.6336
	China	57.5163	17.7623	6.5211
	India	50.7525	6.1843	3.6226
	Indonesia	46.5040	4.6515	1.2209
	Iran	61.7290	16.5539	12.5526
	Japan	48.9703	15.4563	17.6446
	Kazakhstan	27.4306	16.3194	14.9306
	Malaysia	88.6119	11.3881	0.0000
	Philippines	88.2003	5.5894	1.7460
	Qatar	49.2733	21.5295	23.0624
	Singapore	41.7300	23.1652	19.3656
	Taiwan	32.5510	26.6817	27.2589
	Thailand	80.1591	7.7485	1.1379
	Vietnam	82.0261	12.4183	4.2484
	Total	58.2713	13.7151	9.4793
Latin America & Caribbean	Argentina	57.5868	16.9587	8.8884
	Barbados	42.0738	9.7559	3.8324
	Belize	48.7125	16.4751	4.6934
	Bolivia	71.0153	14.0964	6.2997
	Brazil	76.4712	8.7371	2.3236
	Chile	44.7210	27.2629	15.9513
	Colombia	33.0785	33.8740	28.1126
	Costa Rica	72.1030	10.7296	7.7253
	Ecuador	75.2508	7.3579	2.6756
	El Salvador	59.3225	5.9044	.7613
	Guatemala	33.2627	5.4477	2.2893
	Jamaica	63.3394	8.8170	2.3490
	Mexico	49.2371	11.8219	1.4823
	Panama	82.4561	4.3860	2.6316
	Peru	70.1012	7.8437	3.4453
	Puerto Rico	76.8487	7.6190	1.7231
	Suriname	69.8612	5.0795	2.4765
	Trinidad & Tobago	53.2118	21.5812	11.3313
	Uruguay	46.7984	20.8839	15.7216
	Total	59.7557	14.3669	7.4869

Region		0 - 5 jobs (% Job growth as percent of TEA)	6 - 19 jobs (% Job growth as percent of TEA)	20 or more jobs (% Job growth as percent of TEA)
European Union	Austria	58.2940	9.4975	5.3409
	Belgium	77.5859	8.0121	8.8663
	Croatia	25.1117	25.7157	14.7890
	Denmark	66.3637	16.2707	5.5667
	Estonia	58.8542	15.6250	6.7708
	Finland	78.3699	4.1054	11.5933
	France	56.5491	16.8722	13.9415
	Germany	62.7588	14.6094	12.8213
	Greece	55.5904	8.7935	3.2269
	Hungary	47.7861	22.0618	19.2562
	Ireland	56.2786	22.1330	12.0431
	Italy	64.7345	8.8834	5.2772
	Lithuania	42.5624	22.0987	12.2205
	Luxembourg	44.8832	24.1776	4.3688
	Netherlands	66.6019	12.7951	6.7042
	Poland	47.8570	14.2982	13.3528
	Portugal	41.6339	14.2402	8.7855
	Romania	31.0804	26.6710	20.4987
	Slovakia	40.3670	16.5138	17.8899
	Slovenia	51.2287	15.5578	13.0175
	Spain	58.9647	14.8983	4.3886
	Sweden	63.3664	9.5433	11.9819
	United Kingdom	54.8526	12.2802	11.7354
	Total	54.2885	15.5197	9.2522
Non-European Union	Bosnia and Herzegovina	53.3516	23.1429	9.7347
	Georgia	43.3364	15.0020	6.6400
	Kosovo	18.2147	17.4221	1.3904
	Norway	75.2212	9.7345	5.3097
	Russia	41.7038	14.1938	9.7918
	Switzerland	67.0138	15.4065	4.8990
	Total	52.6207	16.1384	6.6334
North America	Canada	52.5910	17.3058	14.0210
	United States	48.5136	18.3282	20.9520
	Total	50.1598	17.9154	18.1538

APPENDIX 2

CHARACTERISTICS OF GEM APS SURVEYS, IN 2014

Team	Interview procedureS	ample size
Argentina	Fixed Line Telephone	2500
Australia	Mobile Telephone	2177
Austria	Fixed Line and Mobile Telephone	4586
Barbados	Face-to-face and Fixed Line Telephone	2000
Belgium	Fixed Line and Mobile Telephone	2004
Belize	Face-to-face Interviews	2084
Bosnia-Herzegovina	Fixed Line Telephone	2590
Bolivia	Face-to-face Interviews	2015
Botswana	Face-to-face Interviews	2156
Brazil	Face-to-face Interviews	10000
Burkina Faso	Face-to-face Interviews	2850
Cameroon	Face-to-face Interviews	2087
Canada	Fixed Line and Mobile Telephone	2479
Chile	Face-to-face and Fixed Line and Mobile Telephone	6212
China	Face-to-face Interviews	3647
Colombia	Face-to-face and Fixed Line Telephone	3691
Costa Rica	Face-to-face Interviews	2057
Croatia	Fixed Line Telephone	2000
Denmark	Mobile Telephone	2008
Ecuador	Face-to-face Interviews	2040
El Salvador	Face-to-face Interviews	2014
Estonia	Fixed Line and Mobile Telephone	2357
Finland	Mobile Telephone	2005
France	Fixed Line Telephone	2005
Georgia	Face-to-face Interviews	2016
Germany	Fixed Line and Mobile Telephone	4311
Greece	Fixed Line Telephone	2000
Guatemala	Face-to-face Interviews	2158
Hungary	Mobile Telephone	2003
India	Face-to-face Interviews	3360
Indonesia	Face-to-face Interviews	5520
Iran	Face-to-face Interviews	3352
Ireland	Fixed Line and Mobile Telephone	2000
Italy	Fixed Line Telephone	2000
Jamaica	Face-to-face Interviews	2637
Japan	Fixed Line Telephone	2006

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