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Future of Exchanges

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FOREWORD

As the center of the global economy shifts to Asia, the importance of Asian exchanges in the global equity market is rising. According to the World Federation of Exchanges, the total market capitalization of companies listed on Asia-Pacific exchanges (including Japan, China and India) comprised 35.8 percent of the global total in December 2017, up from 29.3 percent in December 2007.

Turning our attention to the Western developed countries, the 21st century financial system enables companies and investors to select and utilize the most favorable market anywhere and therefore global competition among stock exchanges has become fierce. Exchanges are also required to make huge investments in technology in order to respond to participants' requirements for such things as automation, high frequency trading and complicated equity trading. In many cases, the world's largest stock exchanges took transformative actions to demutualize or to merge with commodity/derivative exchanges, and some have even undertaken cross-border M&As.

Policymakers in ASEAN countries are trying to implement various strategies and measures regarding exchanges in order to gain market competitiveness. However, the stock exchanges in ASEAN remain relatively small in terms of number of listed companies or trading volume and they are not yet recognized as international financial centers. In reality, many emerging companies in the region may want to list on the New York Stock Exchange or London Stock Exchange as the venue for their initial public offerings (IPO).

This issue focuses on the "Future of Exchanges." The articles remind us that all countries are making efforts to strengthen the capacity and quality of their exchanges, backed by the favorable market conditions of recent years. More specifically, we see exchanges around the world employing strategies for diversifying listed products to include derivatives, bonds, exchange traded funds (ETFs) and real estate investment funds (REITs). Also, they are undertaking bold measures to improve the quality of listed companies, such as by tightening listing standards and disclosure requirements, aiming to highlight the strengths of each market or to introduce best practices to the domestic market. Listing more blue-chip companies or inviting eye-catching IPOs seems important, but always there is no shortcut to success without developing the investor base.

Another global trend engaging exchanges is integration or alliance, even though it seems contradictory to the trend of fragmentation or competition. Considering the rapid expansion of passive or index investing, global investors may be more attracted to invest in asset classes such as ASEAN or Asian growth, rather than to stock-pick their investments. In Japan, for example, the release of the Nikkei Asia 300 index in 2016 was followed by the launch of many open-end investment trust funds (mutual funds) based on that index. Maybe now is the time for ASEAN market professionals to consider new alliance strategies to take the place of the ASEAN trading link which was shut down quietly in October 2017.

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Global Trends in Exchanges and Implications for Exchanges in ASEAN Countries

Introduction

The power structure of the world's exchanges has been changed dramatically by international restructurings that have taken place since around the turn of this century. More recent exchange restructurings, such as the 2012 acquisition of the London Metal Exchange by Hong Kong Exchanges and Clearing and the 2013 purchase of NYSE Euronext by Intercontinental Exchange, indicate that restructuring is being motivated not simply by a desire to expand scale but also by a need to diversify business portfolios. This need reflects slow growth of trading volumes on cash equity exchanges and increasing competition among the world's exchanges. As a result, cash equity transactions now account for a smaller share of exchange revenues while more profitable derivative trading is accounting for a higher share of those revenues. In addition, clearance and other post-trade operations are becoming more important for exchanges. Regulatory reforms of the over-the-counter (OTC) derivatives market following the financial crisis triggered by the collapse of Lehman Brothers in 2008 have included mandatory clearing of standardized OTC derivative contracts by a central counterparty.

That said, cash equities remain an important source of revenues for exchanges. A look at the current scale of the world's cash equity markets reveals an ongoing shift in power from markets in the West to those in the East. According to the World Federation of Exchanges (WFE), the Asia Pacific region accounted for only 21 percent of global market capitalization at end-2003, compared with 51 percent for the US and 28 percent for EMEA. However, the Asia Pacific region's share has risen to 36 percent at end-2017. This trend is expected to continue, supported by the sustained strong economic growth of countries in that region. Exchanges in China have been the major contributor to the Asia Pacific exchanges' growing share of global market capitalization. Meanwhile, exchanges in ASEAN countries account for only three percent of global market capitalization despite their steady expansion.

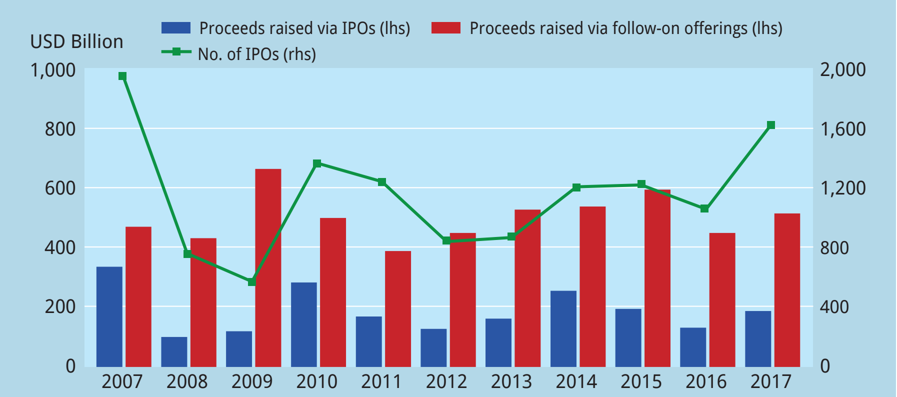
In addition to being small in scale, exchanges in ASEAN countries tend to lack depth and are behind the curve in financial infrastructure development. However, viewed from a more optimistic, forward-looking perspective, these shortcomings indicate huge growth potential. The advances being made by the world's leading exchanges include many initiatives that will be useful examples for the future development of exchanges in ASEAN countries. Considering the current state of capital markets in ASEAN countries, this article focuses on the cash markets and in particular on three trends that have implications for exchanges in the region: (1) strengthening of initiatives promoting so-called ESG investment focused on environmental, social and governance factors, (2) promotion of the ETF market, and (3) development of blockchain-based financial market infrastructure.

Strengthening Initiatives Promoting ESG Investment

Exchanges have been strengthening their promotion of ESG investments in recent years. We see two main factors supporting this trend.

The first is the growing tendency among the world's pension funds, investment trusts, insurance companies and other institutional investors to base investment decisions not only on financial data but also on ESG factors. The United Nations introduced its Principles for Responsible Investment in 2006, and we have seen a heightened awareness of ESG investment starting from around 2010. According to the Global Sustainable Investment Alliance (GSIA), an international organization that gathers data on ESG investment around the globe, total assets of socially responsible

Figure 1: Global IPOs and Follow-on Offerings



Source: EY, Thomson Reuters

investment (SRI) increased from USD 18.3 trillion in 2014 to USD 22.9 trillion in 2016.*[1] A geographical breakdown shows Europe leading the way in SRI, with assets totaling USD 12.0 trillion (52.6 percent of the total), followed by the US at USD 8.7 trillion (38.1 percent). SRI assets are still rather small in the Asia Pacific region.

With institutional investors in the US and Europe showing greater interest in ESG investment, exchanges in those parts of the world have introduced ESG indices. In addition to exchange-developed indices, ESG indices have been developed by such major index providers as FTSE-Russell, MSCI, Standard & Poor's and Thomson Reuters. According to the WFE and the United Nations Conference on Trade and Development (UNCTAD), as of September 2017 there were more than 100 ESG indices in use on 38 exchanges around the world. In this environment, the number of institutional investors using ESG indices is growing. For example, Japan's Government Pension Investment Fund (GPIF), the world's largest pension fund, announced in July 2017 that it had begun passive investment in Japanese equities that tracked three selected ESG indices.

The second factor encouraging exchanges to strengthen initiatives promoting ESG investment has been a relatively low level of corporate fundraising through initial public offerings (IPOs) and follow-on offerings. The number of IPOs and the proceeds raised both fell drastically during the global financial crisis that followed the collapse of Lehman Brothers in 2008, and while they have since been in a recovery trend, neither has returned to the levels seen in 2007 (Figure 1). Proceeds raised through follow-on offerings peaked in 2009 and has since followed an up-and-down pattern that lacks any signs of turning into a strong upward trend.

In this environment, efforts to improve ESG disclosure and performance have become increasingly important for exchanges as a means of enhancing the value of their most important product – listed companies – and attracting investors. According to a joint survey by the WFE and UNCTAD, 32 exchanges were providing guidance on ESG reporting to their listed companies as of September 2017, and that number is expected to increase.*[2]

Needing to expand their offerings of listed products, the exchanges are also actively promoting the listing of so-called green bonds, the proceeds of which must be used to finance businesses or projects that are environmentally friendly. Green bonds have attracted greater attention around the world against the backdrop of stronger efforts to respond to climate change since the 1992 adoption of the United Nations Framework Convention on Climate Change, an international treaty targeted at reducing greenhouse gas emissions.*[3] According to the Climate Bonds Initiative, a nonprofit international organization that is establishing industry standards, green bond issuance has increased rapidly in recent years and outstanding issues as of end-2016 reached more than USD 874 billion. Of this total, unlabeled bonds that earmark proceeds for climate or environmental projects but have not been labeled as green by the issuer amounted to more than USD 694 billion, while the outstanding balance of labeled bonds that the issuer declared would be used for green projects was USD 180 billion. Forty-four percent of the unlabeled bonds and 72 percent of the labeled bonds were listed on exchanges.*[4] The world's first green bond was officially issued by the European Investment Bank and listed on the Luxembourg Stock Exchange in 2007. Today, a number of exchanges, including the Luxembourg, London, Oslo and Stockholm exchanges, have established dedicated green bond markets.

Another ESG initiative supported by participating exchanges is the Sustainable Stock Exchange (SSE) Initiative. The SSE Initiative was launched in 2009 by the United Nations with the aim of strengthening collaboration between exchanges and investors, corporations, and regulatory authorities. As of end-2017, 68 exchanges were participating in the Initiative, which holds its SSE Global Dialogues every two years to promote common best practices for ESG initiatives. SSE Initiative partner exchanges also conduct joint research aimed at contributing to the development of sustainable and transparent capital markets worldwide. In the years ahead, we think exchanges can be expected to strengthen their ESG-related efforts.

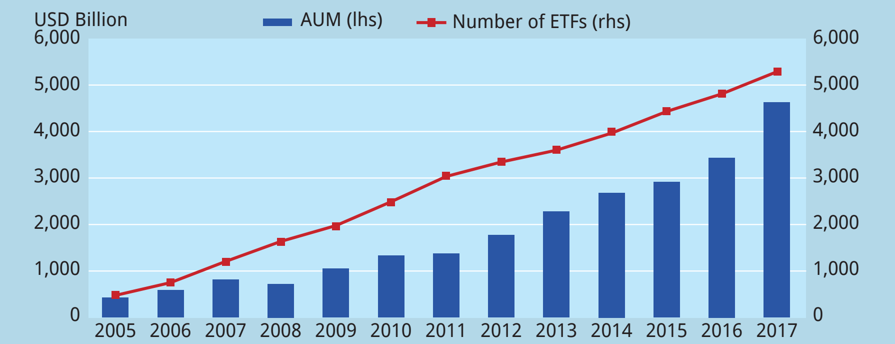
Promoting the Development of the ETF Market

Investors have shown an increasing interest in low-cost, highly liquid and highly transparent exchange traded funds (ETFs) since the global financial crisis. Securities firms, which previously had not promoted these funds very aggressively, have come to regard them as a more strategic product offering. Investors' increasing needs for more diversified and sophisticated portfolio allocation have spurred the development of a wide variety of ETF types and driven the growth of a global ETF market.*[5] The wide variety of ETFs available today include leveraged ETFs constructed to generate a multiple return on the tracked index, actively managed ETFs that undergo portfolio adjustments targeted at outperforming the tracked index, target-date ETFs that undergo automatic portfolio revisions at a specified future date, and smart-beta ETFs that add value, scale and other factors into their index-based portfolio construction. Institutional investors that aim to generate excess returns while relying on index-based investments are expanding investment in smart-beta ETFs in particular.

According to ETFGI, an independent research firm covering the ETF market, total assets under management (AUM) of ETFs have expanded from USD 417 billion at end-2005 to USD 4.7 trillion at end-2017 (Figure 2). The US accounts for 71 percent of this global ETF market, followed by Europe at 16 percent. Expansion of the ETF market is an important source of revenues for exchanges as it leads to an increase in listing fees, trading commissions, and fees charged for the provision of index and market data. Major exchanges are therefore aggressively promoting the development of the ETF market. For example, the Japan Exchange Group (JPX) has positioned ETFs as an important financial product for expanding the base of individual investors and has undertaken various initiatives to foster the growth of the ETF market, including (1) expanding its ETF offerings, (2) developing new indices, such as a smart-beta index, and (3) examining and introducing measures to increase its liquidity.

The increased focus on ESG investment which was noted earlier has led to the introduction of ETFs linked to ESG indices. Going forward, exchanges' need to expand listed product offerings and investors' need for more diversified and sophisticated investment instruments are likely to propel the global growth of ESG-linked ETFs.

Figure 2: Number of ETFs Listed on Global Markets and Total AUM



Source: ETFGI

Development of Blockchain-based Financial Market Infrastructure

While Bitcoin and other cryptocurrencies have been taking the world by storm in recent years, their underlying blockchain technology is finding applications beyond the realm of cryptocurrencies.*6 According to a Goldman Sachs report, the application of blockchain technology to post-trade settlement and clearing processes in the world's cash equities markets could generate annual savings of more than USD 6 billion.*7

That prospect has an increasing number of exchanges looking into the potential application of financial market infrastructure that makes use of blockchain technology (Table 1). For example, in December 2015 Nasdaq announced that its Nasdaq Linq blockchain technology enabled an issuer to successfully complete and record a private securities transaction, and it is now testing a fund trading platform based on that technology. In February 2016, JPX began experimenting with blockchain technology with the aim of achieving more efficient post-trade settlement and clearing processes. Elsewhere, the Australian Securities Exchange in January 2016 began cooperating with a startup on R&D of blockchain technology that it now plans to use in a new clearing and settlement system scheduled for introduction by March 2018.

Of course, in practice, blockchain technology will need to be accompanied by measures to prevent potential risks. For one, exchanges will need to be prepared to respond to system risks. In addition to responding promptly to network breakdowns caused by system failures, the exchanges will need to secure their systems against cyberattacks and to establish IT governance frameworks. Another important response will be compliance with regulatory frameworks. The exchanges will need to ensure that systems based on blockchain technology are in compliance with each country's existing regulations, including laws protecting confidential information, intellectual property and investor privacy. However, the huge potential benefits of blockchains seem to outweigh these risks and challeng-

Table 1: Major Exchanges' Blockchain Initiatives for Financial Market Infrastructure

Exchange	Initiatives
Nasdaq	– Announced that an issuer was able to use its Nasdaq Linq blockchain technology to successfully complete and record a private securities transaction (December 2015). – Announced a new integrated payment solution by connecting the Linq Platform to the CitiConnect® for Blockchain connectivity platform (May 2017). – Initiated a joint project with Nordic financial services group SEB to test a new fund trading platform based on blockchain technology (September 2017).
Japan Exchange Group	– Announced an agreement to test the potential of blockchain technology in cooperation with IBM Japan (February 2016). – Published a working paper on the potential application of blockchain technology to financial market infrastructure (August 2016). – Published a working paper on the trend for exploring use of blockchain technology in the financial market (September 2017).
London Stock Exchange Group	– Group member Borsa Italiana teamed up with IBM to build a blockchain solution digitizing the issuance of securities for small and medium-sized enterprises in Europe (September 2017).
Deutsche Börse Group	– Presented a functional prototype for the blockchain technology-based settlement of securities in cooperation with the Deutsche Bundesbank (November 2016). – Developed a concept for riskless transfer of commercial bank money for post-trade processing via an infrastructure based on blockchain technology (January 2017).
Korea Exchange	– Opened Korea Startup Market (KSM) with blockchain technology for document and identity authentication in partnership with a blockchain startup Blocko (November 2016).
Australian Securities Exchange	– Announced tie-up with US-based Digital Asset Holdings (DAH) to develop solutions for the Australian equity market utilizing blockchain technology (January 2016). – Announced a plan to replace its decades-old settlement and clearing system, using blockchain technology developed by DAH (December 2017).

Source: Exchanges' press releases

es. We therefore expect exchanges to step up their promotion of the use of blockchain technology to improve the financial market infrastructure.

Implications for Exchanges in ASEAN Countries

This section considers the state of ASEAN exchanges' efforts in the three trend areas discussed above and presents some implications based on the initiatives being taken by the world's leading exchanges.

Starting with ESG-related efforts, the ASEAN exchanges recognize the importance of ESG investment although it is not yet mainstream. The region's exchanges have been promoting stronger ESG-related disclosure from listed companies, and several have been rising in global rankings for ESG disclosure. The progress made by the Stock Exchange of Thailand (SET) is particularly notable (Table 2). In addition, some of the ASEAN exchanges are participating in the SSE Initiative.

Regional financial regulatory authorities are also promoting ESG investment. The ASEAN Capital Market Forum (ACMF), an organization comprising the financial regulators from all ASEAN countries, introduced the ASEAN Corporate Governance Scorecard in 2012, with the cooperation of the Asian Development Bank (ADB). The scorecard assigns scores to listed companies in five areas: shareholder rights, equitable treatment of shareholders, role of stakeholders, disclosure and transparency, and responsibilities of the board of directors. The six main ASEAN countries have seen their scores improve since the scorecard was introduced. The ACMF also announced the ASEAN Green Bond Standard in November 2017. The standard conforms to the Green Bond Principles introduced by the International Capital Market Association in January 2014. At the national level, the Monetary Authority of Singapore (MAS) in June 2017 introduced a grant scheme aimed at promoting the issuance of green bonds, and in July 2017 Malaysia saw the issuance of the world's first green Sukuk (Islamic bond) under the Sustainable & Responsible Investment Sukuk Framework established jointly by the Securities Commission (SC) Malaysia, Bank Negara Malaysia and the World Bank. With financial regulatory authorities supporting the issuance of ESG-related financial products as shown above, ASEAN exchanges can be expected to play a greater role in promoting ESG investment by domestic and overseas investors, including efforts to develop and provide ESG indices.

Turning to the second global trend, the ASEAN countries have been behind the curve in the promotion of ETF markets, which are still rather new and of small scale in ASEAN countries. Singapore with the largest ETF market in the region has grown its market by listing foreign domiciled ETFs, but its AUM was still only USD 3.3 billion at end-2017. The ETF market in ASEAN countries has failed to expand for three main reasons; (1) Financial institutions have little incentive to sell ETFs because of low sales commission rates, (2) Efforts to educate local investors about ETFs have been insufficient and, as a result, local investors are largely unaware of ETFs, (3) Low commission rates for asset managers provide them with little incentive for launching new ETFs.

In this environment, talk about developing the ETF market has picked up steam in Malaysia recently. An ETF task force chaired by SC and comprising Bursa Malaysia and other market participants issued a set of key recommendations to enhance the ecosystem and drive further growth of the ETF industry. They recommended that the issuance process be simplified, distribution channels expanded, new types of ETFs introduced, and incentive schemes for market makers added. In the US and Japan for instance, the push to establish ETF markets with rich content was led by securities firms and institutional investors. Individual investors jumped on the bandwagon later, helping to drive market expansion. Considering this experience, active participation of securities firms and institutional investors will be crucial to the early stages of the development of the ETF market in ASEAN countries. Over the longer term, however, expanding the individual investor base will play an important role in ETF market development. Toward that end, exchanges will be expected to take the lead in educating investors about ETFs.

Lastly, the application of blockchain technology has already proven to be useful in financial transactions such as interbank transfers, trade finance, and verification of customer identity when opening bank accounts. However, there are as yet only a few examples of blockchain technology being used for capital market transactions. One such example is a MAS-supported project at the Singapore Exchange focused on using blockchain technology to realize a more efficient transaction and settlement cycle for fixed income securities. In addition, the SET is preparing to launch LIVE, a blockchain-based fund-raising platform for startups. The new platform is expected to begin operating in the first half of 2018.

Improving the efficiency of financial market infrastructure is important for all market participants regardless of the degree of development and scale of the individual capital market. The concrete benefits and risks of using blockchain technology are not entirely clear at this point in time, but from a longer-term perspective exploring the possibilities of blockchain technology while observing the more advanced initiatives of the world's major exchanges should have great significance for exchanges in ASEAN countries.

Table 2: ASEAN Exchanges' Global Ranking on ESG Disclosure

Exchange	2013	2014	2015	2016	2017
The Stock Exchange of Thailand	40	27	17	13	10
Bursa Malaysia	24	23	19	17	15
Singapore Exchange	18	22	15	18	16
Indonesia Stock Exchange	37	38	31	34	25
The Philippine Stock Exchange	39	33	28	32	29
Hochiminh Stock Exchange	N/A	N/A	N/A	N/A	53

Note: A total of 55 exchanges were included in the 2017 rankings.
Source: Corporate Knights

Local and Regional Perspective

As discussed above, the further development of exchanges in ASEAN countries can draw many lessons from the initiatives being undertaken in the world's leading exchanges. At the same time, however, it will be important for each country's exchange to maintain a local and regional perspective.

One area where this perspective will be important is the effort to increase IPOs. Increasing the number of listed companies is one of the most important issues facing ASEAN exchanges, and they accordingly are pursuing a variety of initiatives to promote IPOs. However, IPOs on ASEAN exchanges are not only fewer in number than in the mature equity markets of advanced countries but are also smaller in scale, with few large IPOs. Meanwhile, some countries in the region still have many state-owned enterprises (SOEs) with a majority or all of their shares owned by the government. These SOEs include some large unlisted companies. The listing of such companies on the exchange could not only enhance their management efficiency and transparency but could also contribute to expanding the investor base, a major aim for the capital markets of ASEAN countries. In addition to promoting large-scale IPOs that result in the privatization of SOEs, exchanges in the region have an important role to play in supporting improvements in corporate governance and disclosure.

A local and regional perspective is also important to the promotion of fundraising by small and medium-sized enterprises (SMEs) from the capital markets. Financial services for SMEs in the ASEAN region are insufficient, and various measures to improve this situation are under consideration. Exchanges are expected to contribute to these efforts by improving access to the capital markets. Exchanges could reap huge benefits from their efforts to support fundraising by SMEs if they result in an increase in IPOs. In July 2017, Bursa Malaysia launched the Leading Entrepreneur Accelerator Platform (LEAP) Market to expand fundraising options for SMEs in Malaysia. As previously noted, the SET is preparing to launch its LIVE platform, and other bourses in the region are considering introducing new financing platforms for startups.

While these developments are most welcome, attention must also be paid to the need to ensure investor protection and enhance corporate governance at SMEs. ASEAN countries have many family-owned enterprises that are inclined to avoid calls for more proactive disclosure. In addition, some startups may prefer not to raise funds through IPOs. In this environment, interest in methods that enable quick and efficient financing directly from investors is on the rise. One such method is equity crowdfunding (ECF). ECF in the region is still small in scale based on a study that estimates total funds raised in the region via ECF at about USD 56 million in 2016.*8 However, the regulatory framework for ECF in the region is a rather recent development of the past two to three years. If more companies begin operating the ECF platform and financing volume increases as a result, it can become a competitive challenge to the exchanges' dedicated platforms for SMEs.

A third area where a local and regional perspective will be important is the strengthening of collaborations among exchanges. One of the initiatives under the ACMF is the ASEAN Trading Link launched in 2012 by ASEAN Exchanges, a collaboration of seven exchanges in six ASEAN countries. However, this link has unfortunately not produced the expected result of facilitating cross-border trading across the connected exchanges. At present, it would be difficult to describe the collaborative effort by the exchanges as sufficient for promoting cross-border investments in the region. Furthermore, to attract investors from outside the region, the exchanges need to raise the value of the "ASEAN" asset class and strengthen collaborative efforts. For example, the exchanges could engage in joint development of new products in the high-growth ESG domain and undertake joint FinTech projects.

Lastly, the longer-term development of ASEAN capital markets will require greater efforts to increase the numbers of listed companies and investors, and the role played by the exchanges in achieving these goals will only grow larger. Going forward, how each country's exchange fulfills this role while maintaining a balance between global and local/regional perspectives will merit close monitoring.

Notes

*1 Global Sustainable Investment Alliance. (2017) "2016 Global Sustainable Investment Review."

*2 World Federation of Exchanges and United Nations Conference on Trade and Development. (2017) "The Role of Stock Exchanges in Fostering Economic Growth and Sustainable Development."

*3 The Paris Agreement that was adopted in December 2015 and put into effect in November 2016 aims to hold the increase in the global average temperature to well below 2 degrees above pre-industrial levels.

*4 Climate Bonds Initiative. (2017) "The Role of Exchanges in Accelerating the Growth of the Green Bond Market."

*5 Another factor contributing the expansion of the ETF market has been the proliferation of robo-advisors, a service that uses algorithms to propose portfolios that meet the needs of investors and often focus on the ETF asset class.

*6 Blockchain technology is a foundational technology that mutually authenticates the transfer of rights among participants in a peer-to-peer network and uses encryption to enable the sharing of ledgers in a form that cannot be altered.

*7 The Goldman Sachs Group. (2016) "Profiles in Innovation – Blockchain Putting Theory into Practice."

*8 Cambridge Centre for Alternative Finance at University of Cambridge, Australian Centre for Financial Studies at Monash University, and Tsinghua University. (2017) "Cultivating Growth: The 2nd Asia Pacific Region Alternative Finance Industry Report."

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Indonesia Stock Exchange

Indonesia Stock Exchange: "Sailing North"

Indonesia has the potential to be the biggest market in the region. In 2017, Indonesia has a total population of nearly 262 million people, the largest in Southeast Asia and the fourth in the world. It is also the largest economy in Southeast Asia in terms of GDP, which reached USD 1,000 billion.

With the privatization of Jakarta Stock Exchange in 1992, and the consolidation of Jakarta Stock Exchange and Surabaya Stock Exchange to become Indonesia Stock Exchange (IDX) in 2007, the Indonesian market is set to achieve a more brilliant performance (Figure 1).

In 2016, IDX launched their company's four-year strategic planning term to 2020, called "Sailing North". The company's main goal is to become a fair, orderly, and efficient capital market with the biggest trading value in ASEAN. There are four strategic goals in this master plan: increasing the number of active investors, increasing the number of listed companies,

Figure 1: Jakarta Composite Index and IDX Transformations

Source: IDX

strengthening exchange members, and strengthening the resilience of capital market industry.

To execute the master plan, IDX and other Self-Regulatory Organizations (SRO) that consist of Indonesia Clearing and Guarantee Corporation (KPEI) and Indonesia Central Securities Depository (KSEI) work together to develop the Indonesian capital market industry. KPEI provides proper and efficient clearing and settlement guarantee services as well as other services under the terms stipulated by the Financial Services Authority of Indonesia (OJK). On the other side, KSEI functions as Depository and Settlement Institution (LPP) in the Capital Market by providing a fair, orderly, and efficient securities central depository and securities settlement services. IDX, KPEI, and KSEI are part of SRO in Indonesian Capital Markets. SRO has the authority to make technical regulations for their members.

Increasing the Number of Active Investor

Based on a survey conducted by the OJK in 2013 to 8,000 respondents in 20 provinces, Indonesia's financial services literacy index (how well people understand about financial services) was only 21.84 percent, while the inclusion index (level of utilization of financial services) reached 59.74 percent. Furthermore, literacy and usage rates in the area of capital markets, which stood at 3.79 and 0.11 percent respectively, are the lowest compared to the other financial services industries. This means that among all of Indonesians, fewer than 10 million people understand about capital markets and could be seen either as a drawback or, instead, as a huge potential market.

An increase in the number of active investors in IDX will directly boost the value of stock trading. Hence, IDX promotes investor development activities through collaboration with the SRO, IDX members, listed companies and other supporting institutions.

The main challenge for Indonesia is how to attract investors is the vast area of the country. A flight between Aceh – the western-most province in Indonesia, and Papua – the eastern-most province, takes approximately seven hours, almost equal to the flight duration from Jakarta to Tokyo. Indonesia consists of more than 16,000 small islands, grouped into seven major islands which are Sumatra, Java, Kalimantan, Bali & Nusa Tenggara, Sulawesi, Maluku and Papua. To reach all potential investors across Indonesia, IDX must choose the most effective method for market development.

On 12 November 2015, IDX initiated the "Yuk Nabung Saham (stock saving)" campaign. This campaign aims to change mindsets and saving habits into an investing society. Public perception has been wrong about stock investments. Most people will say that they are expensive, unaffordable for certain communities, risky, and speculative. These perceptions have caused people to hesitate investing in stock and other capital market instruments.

In this campaign, IDX partners with many other private institutions and organizations to promote stock investment. Among others, IDX collaborates with listed companies to organize a capital market educational program for their employees so they gain insight into how to invest in the capital market and may then open a securities account for their investments.

Exchange members also help to increase public awareness through massive campaigns, either "*above the line,*" such as through television commercials, radio, cinema, billboards, commuter line, newspaper, and electronic media, or "*below the line,*" through seminars, workshops, investor forums, and regularly scheduled capital market school.

Equal distribution of accurate information to the entire public is an important factor to attract regional investors. Therefore, expanding IDX's network throughout Indonesia is a must. IDX aims to bring the capital market closer to regional communities, and one way of doing that is by establishing representative offices in every province of Indonesia.

For the last two years, IDX has been intensively opening additional representative offices throughout the country. Currently, IDX has 28 representative offices with a target of 34. These representative offices serve as educational centers that promote capital market investments to public.

IDX also provides a place for securities companies to expand their business to other regions. Through cooperation with the securities companies and universities throughout Indonesia, IDX opens investment galleries on many campuses where not only students and academics but also the people in the surrounding areas can learn about capital markets, open a securities account to become an investor, and start investing or trading. In the last two years, the number of investment galleries has doubled to more than 300 all over Indonesia.

Another strategy to expand IDX's network is providing accurate capital markets information to all stakeholders through social media and establishing a capital market TV station called IDX Channel. This station broadcasts news related to the economy, business, and capital market, especially news related to the activities of listed companies such as annual shareholder meetings and public exposure for all investors throughout Indonesia.

The use of technology has been very helpful in increasing the number of investors. By the conversion of physical paper shares into electronic holdings in 2000, the change from floor trading to remote trading in 2002, and the application of internet and mobile trading, the capital market industry has become more efficient and attracted more people participants.

The minimum size of initial deposits, which used to be around USD 1,000, has now gradually been reduced to under USD 100 – even just USD 10 for academics – hence enabling anybody to become a stock investor. To engage individual retail investors, the IDX reduced the number of shares in a trading lot from 500 shares to 100 shares in 2014. Therefore, it is not surprising that the number of retail investors continue to grow and that they are coming from different backgrounds, ranging from students, factory workers, even farmers from rural areas. After the Yuk Nabung Saham campaign was released, IDX started a program called Desa Nabung Saham (stock saving village) that educates villagers about investment options, warns them about false investment schemes, and promotes capital market investment.

The number of capital market investors has increased to more than 40 percent over the last two years. Based on the data at the end of October 2017, there are more than 600,000 stock investors in Indonesia. In addition, there are more than 500,000 mutual fund investors. Therefore, together there are more than a million investors in Indonesia, based on their unique Single Investor Identity. This number is of course still very small compared to Indonesia's population of 262 million people. However, this suggests that there is a huge potential to increase of the number of Indonesian investors in the future.

Investors nowadays are becoming more aware of the benefit of investing on regular basis and over a long term period, as voiced through Yuk Nabung Saham campaign. The number of active investors per month (who trade at least once) reached 100,000 investors in 2017, an increase of 25 percent compared to 2016. Additionally, these new investors have contributed 50 percent to the growth of daily average trading value this year and 20 percent of that comes from new retail investors.

Increasing the Number of Listed Companies

As one of the most attractive sources of funding for companies, the capital market is still less appealing to business players. At 563, the total number of listed companies in Indonesia is relatively small compared to that in some neighboring countries. However, with the growing economy and improving investor confidence, more and more domestic firms are interested in raising funds from the capital market. In the last five years, the number of listed companies has increased 15.7 percent, a significant growth compared to other ASEAN countries (Figure 2).

As with the number of investors, there is also great potential for listing domestic companies as public companies. In this strategic objective, IDX seeks to expand its role as a source of financing outside the banking industry by expanding public capital access for companies across Indonesia, start-up companies, small and medium-sized enterprises (SMEs) and innovative industries. To achieve this, there are four tactical plans: "To Ease", "To Educate", "To Persuade" and "To Enforce".

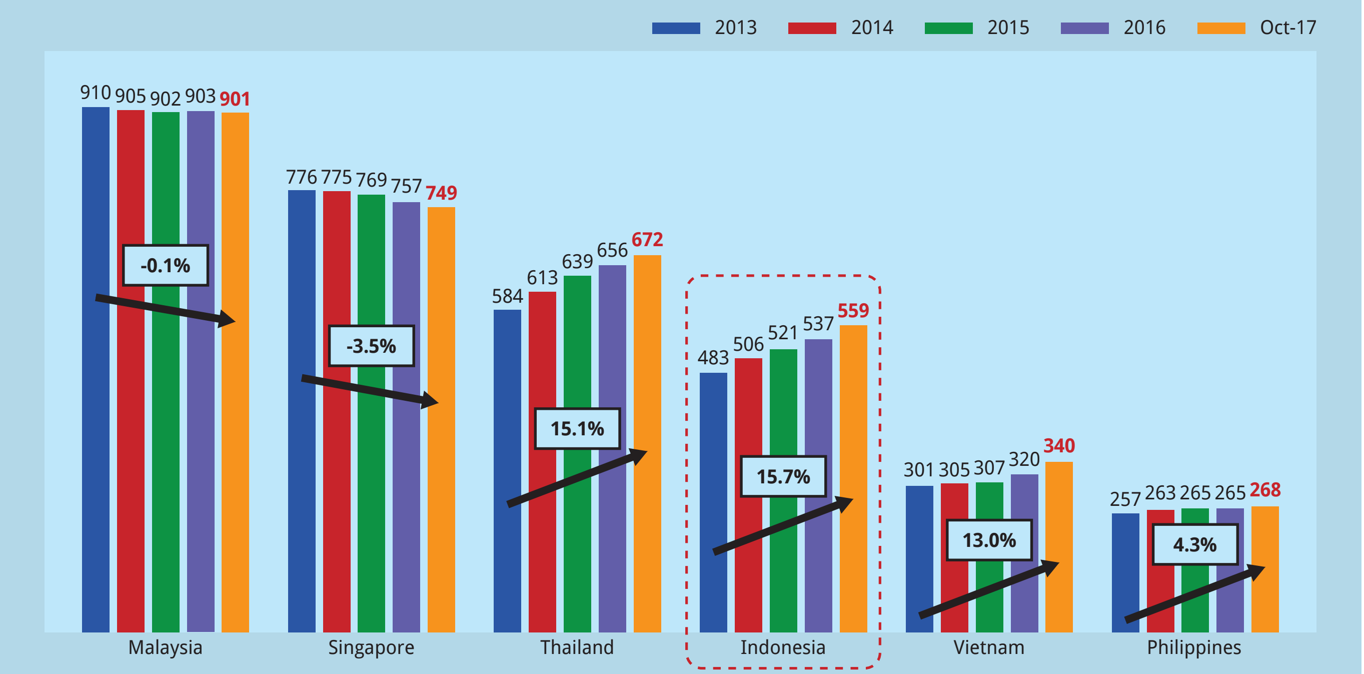
"To Ease" focuses on improving companies' ease of access to funding from the capital markets. Since 2016, IDX has established six Go Public Information Centers (PIGP) in five major cities in Indonesia (Jakarta, Bandung, Semarang, Surabaya, and Medan). Through the establishment of PIGP, local companies that are interested to know more about the benefits and process of going public can obtain information directly in their cities without having to go to the IDX's head office in Jakarta.

"To Educate" focuses on increasing the awareness and giving socialization to prospective listed companies as well as providing them with ongoing education. The tagline of this program is "No day without meeting the issuer". Public seminars and "go public" workshops are held regularly, in collaboration with the Chamber of Commerce and Industry, the Association of Young Entrepreneurs, bankis, accounting firms, and existing associations.

"To Persuade" is an effort to provide an efficient, easy and attractive fund-raising mechanism. Targeted companies are state-owned enterprises (SOEs) and their subsidiaries as well as start-up companies, SMEs, and innovative industries. IDX and underwriters have given intensive go public socialization through 1-on-1 meetings with SOEs and their subsidiaries. As a result, the SOE Ministry has committed to list 14 SOE subsidiaries on IDX within the next two years. In addition, the Government of Indonesia has begun to utilize the capital market to finance Jokowi-JK's infrastructure projects, starting with the issuance of two EBAs by PT Jasa Marga (Persero) and PT PLN (Persero). IDX also launched IDX Incubator in March 2017 to facilitate the development of start-up companies in Indonesia, including pitching to venture capitalists.

In July 2017, the OJK issued rules to encourage SMEs to list on the stock exchange. The capital and financial report criteria were simplified, especially for the small enterprise category. IDX also further encourages SMEs to join the capital market by providing a development board that al-

Figure 2: Number of Listed Companies in ASEAN Countries



Note: (1) Data is as of October 2017
(2) Vietnam includes the companies listed on the Hochiminh Stock Exchange only.
Source: World Federation of Exchanges

lows small companies with minimum Net Tangible Assets of IDR 5 billion to go public. Even when their financial statements show a loss, such firms can still be listed as long as they can provide positive projections and future prospects.

"To Enforce" is to use the law to encourage companies to list in Indonesia. Two types of companies are targeted: foreign companies with 50 percent of their assets and revenues derived from Indonesia and companies that owe a minimum of IDR 1 trillion (USD 74 million) in bank debt. The Indonesian people should be able to enjoy the growth of foreign companies through the issuance of their shares in IDX. In addition, since companies that owe a lot to banks are indebted to the public and society, it is fitting that these public companies should be monitored by the public. The best form of supervision is through the capital market. There are approximately 124 companies with a minimum debt of IDR 1 trillion to Indonesian banks.

Strengthening of Exchange Members

Exchange members (AB) have an enormous role to play in increasing the number of active investors; they are even the spearhead of investor development. To support this role, IDX embarks on a so-called AB strengthening strategy consisting of capital enhancement and business expansion of exchange members. The increase in AB capital is achieved through relaxation of margin rules by capital classification as well as the development of market-maker functions. In February 2017, IDX expanded its margin shares*1 from the previously restriction of only LQ45 shares to 180-200 shares. An AB that can provide margin facilities to its customers is limited to those with capital of more than IDR 250 billion (USD 19 billion).

AB expands business through addition of products, improvement of infrastructure and increasing the number of Broker-Dealer Representatives (WPPE). In April 2017, IDX launched a bond trading platform on the stock exchange. Furthermore, in May 2017, IDX launched a derivative product, called Indonesia Government Bond Futures, based on the underlying 5- and 10-year Government Securities. Looking ahead, IDX will continue to develop derivative products for institutional investors, especially for hedging. The improvement of infrastructure for AB will include the development of General Clearing Member, the acceleration of transaction settlement from T-3 to T-2, and development of information technology for AB through the establishment of IDX's subsidiary in the field of information technology.

The total number of WPPE working in AB is currently only 3,000 people and has been stagnant over the last five years. This stagnation leads to the limited number of daily active investors due to the limited capacity of WPPE in serving its customers. IDX's tactical step to improve WPPE is by expanding the region and number of subsidized WPPE training and exams for public throughout Indonesia.

Strengthening the Resilience of Indonesia's Capital Market Industry

All development strategies must be accompanied by strengthening the resilience of the capital market to gain the confidence of market participants, especially investors and listed companies. Strengthening resilience can be achieved by giving good quality and consistent services to stakeholders, providing competitive capital market products, providing exchange-related facilities and services, managing support infrastructure for exchange activities, giving effective support and operational development, and finally, preparing good and competent human resources.

IDX continuously improves market surveillance and the consistency of law enforcement as a form of giving good quality and consistent services to stakeholders. In addition, IDX is currently in talks with Dubai Financial Market, Borsa Istanbul and Bursa Malaysia to develop a Sharia Capital Market through the establishment of Sharia Securities Exchange in Indonesia.

IDX provides exchange-related facilities and services by providing conducive exchange regulations, optimization of exchange-related information, improvement of IDX website, improvement of investor protection mechanisms, improvement of corporate governance and risk management, and development of services and capital market product distribution. The existence of supporting infrastructure such as technology and a qualified data center is crucial to support exchange activities and trading system renewal.

The last tactical step for realizing effective operational development and competent human resources is by developing securities financing and strengthening the functions of IDX's subsidiaries. Other steps include organizing a Capital Market Professional Development Program and improving the quality and quantity of certified capital market professionals.

Sharia Capital Market

As many as 87 percent of Indonesians are Muslim, and among them 64 percent, or about to 145.4 million people, are of working age. Indonesia's population of working age Muslim people is larger than that in the world's main sukuk-issuing countries such as Turkey, the UK and Saudi Arabia. Hence, the largest potential sharia market in the world is in Indonesia.

For the last five years, the Sharia capital market in Indonesia has grown by 3,000 percent in terms of investors and by more than 50 percent in terms of sharia securities. To continue to improve and to work on the potential of the Shariah capital market in Indonesia, IDX is currently developing a Sharia Stock Exchange with the vision to become the center of excellence, the center of development and Islamic capital market hub in Indonesia and in the global Sharia capital market industry.

Unlike the capital market in general, the Sharia capital market bases its trading mechanism on Islamic law and regulation. The Sharia capital market has lower market risk than the general capital markets. Sharia securities must have real assets as their underlying assets. Sharia effect cannot be used as leverage and transactions must be on a cash basis. To conduct a capital market on Sharia principles, Indonesia has established related capital market infrastructure including fatwa, regulation, account opening processes, and book transfer of Sharia securities accounts.

A Sharia online trading system has been developed by 12 exchange members in Indonesia. The online sharia trading system aims to help increase the number of Sharia investors and the value of Islamic securities transactions, as well as to facilitate investors in conducting Islamic stock transactions that comply with the principles of sharia and to increase the liquidity of sharia shares on IDX. Indonesia's capital market offers many kinds of sharia-compliant investment instruments, e.g., 343 sharia stocks, 160 sharia mutual funds, a sharia ETF, 68 corporate sukuk, and 29 government sukuk. Sharia stock trading contributes about 57 percent of the total value of trading on IDX. Sharia stocks dominate the number of stocks traded on IDX. Sixty-two percent of the shares listed on IDX are Sharia shares.

For these developments of sharia capital market in Indonesia, IDX was recognized by Global Islamic Finance Awards as Best Supporting Institution for Islamic Finance for the years 2016 and 2017.

Closing

As a major tropical tourism destination, Indonesia continuously records high economic growth. The confidence of domestic and foreign investors in Indonesia's Capital Market can be seen in the Investment grade rating it received from three global rating agencies (S&P Global Rating, Moody's, and Fitch) and the significant annual growth of JCI. In addition, IDX has demonstrated strong growth compared to other major stock exchanges. The exchange increased more than 200 percent over the last ten years and its 15.32 percent increase in 2016 was the second highest rate of growth in the Asia Pacific region. With all of these factors, combined with the "resurgence" of domestic investors, Indonesia has huge potential to become one of the top five economic powers in the world by 2030.

Notes

*1 LQ 45 is a stock index comprising 45 stocks that meet some criteria such as market capitalization and transaction value.

NICKY HOGAN

Director of Business Development, Indonesia Stock Exchange

Nicky Hogan serves as Director of Business Development of Indonesia Stock Exchange since 2015, in charge of the Regional Development, Investor Development, Prospective Issuers development and Research Divisions. He has been working in the capital market industry since 1998, serving in various positions in the operations and marketing area for several prominent securities companies in Indonesia. He is a regular contributor of capital markets articles in a number of press media and the author of Yuk Nabung Saham, a book about stock investment published in 2017.

Nicky Hogan obtained his bachelor degree in Economics from Tarumanagara University, Jakarta, Indonesia, and actively involved in national and international capital market activities.

Bursa Malaysia: Pioneering and Inclusive

Malaysia, strategically located in Southeast Asia and one of the regions' most vibrant economies, is seen as a gateway to ASEAN. The country's economic progress is the fruit of decades of growth-focused policies, political stability and a melting pot of cultural and economic diversity. Few countries have access to the natural advantages Malaysia enjoys, with strength in diversity coming from multiple sources of growth, blooming from the fields of agriculture, commodities, manufacturing, construction, services and finance.

Nestled on Exchange Square in the heart of Kuala Lumpur's financial district, sits Bursa Malaysia, the country's only fully integrated exchange offering a comprehensive range of products and services. Established in 1973, Bursa Malaysia plays a prominent role and functions as a vehicle for unlocking the growth potential of the Malaysian economy.

Solid economic fundamentals, progressive transformation plans and a robust capital market framework have provided a conducive backdrop for the exchange to sow the seeds of growth through continuous product innovations and diversity in investment offerings. The companies on Bursa Malaysia have successfully financed national economic development by providing market-based solutions with over MYR 1 trillion being raised through corporate bonds and IPOs since 2000.

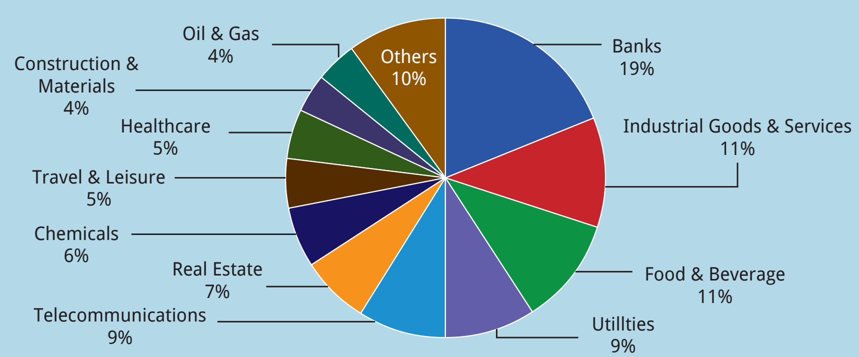
Having grown from strength to strength over the decades, the exchange increasingly provides a plethora of investment choices, making it an inclusive marketplace, while being pioneering in many ways. This resonates with the exchange's clarion call that there is "Something for everyone on Bursa Malaysia."

Attractive Securities Market Offerings

At Bursa Malaysia, we are proud to be an exchange that serves companies of all sizes. Home to more than 900 companies across 60 economic activities, Bursa Malaysia is the largest bourse in ASEAN in terms of number of companies (Figure 1).

Comprising the Main Market for large-cap established companies, the ACE Market for emerging companies of all sizes, and the Leading Entrepreneur Accelerator Platform (LEAP) Market, designed for small and medium-sized enterprises (SMEs), including start-ups, Bursa Malaysia offers a strong platform for capital-raising and investment, providing greater exposure and diversification. These combined factors strongly establish Bursa Malaysia as one of the preferred exchanges in the region among domestic and international investors.

Figure 1: Sector Diversity of Public Listed Companies (PLCs)



Note: As of 15 Dec 2017
Source: Bloomberg

Gateway to ASEAN

Bursa Malaysia offers a diverse range of high quality companies with strong financial performance. As a listing destination, the exchange is committed to ensuring high quality securities are traded, and upholding Bursa Malaysia's reputation as a well-established destination for investors looking for growth opportunities. In 2017, the companies listed on Bursa Malaysia delivered solid dividend yields of 3.9 percent, among the highest in ASEAN.

A number of leading companies in diverse industries with operations across the globe have chosen to raise funds on Bursa Malaysia, reflecting their confidence in the exchange as a destination for listing in ASEAN. Constituents of the benchmark FTSE Bursa Malaysia KLCI (FBMKLCI), comprising the thirty largest companies by market capitalisation on the exchange, include Astro, Axiata, Genting, IHH Healthcare, PETRONAS Chemicals Group, and YTL Corporation, which rise from different sectors. Bursa Malaysia has also attracted the listing of companies that are world class in their respective industries such as Top Glove (the world's biggest glove manufacturer), Hartalega (the world's largest manufacturer of nitrile gloves), Sime Darby Plantation (the world's largest oil palm planter by land area as well as the world's largest producer of segregated certified sustainable and traceable palm oil products and derivatives), and Karex (the world's largest condom maker).

The beauty of investing in blue chip companies listed on the exchange is that many are, in fact, regional companies. The companies on FBMKLCI generate roughly 37 percent of their revenue from overseas operation. Widely known companies on Bursa Malaysia such as AirAsia, CIMB Group, and Maybank very clearly have footprint and operations in most ASEAN nations. Being at the epicenter of ASEAN location-wise, Malaysian companies are poised and primed to harness and ride on the strong wave of growth in the region. Investors who want instantaneous ASEAN exposure of investments can also invest in cross-market offerings like the CIMB FTSE ASEAN 40 Malaysia listed on Bursa Malaysia, which tracks the largest 40 companies by full market value that are listed in five ASEAN nations.

Gems not just in blue chips

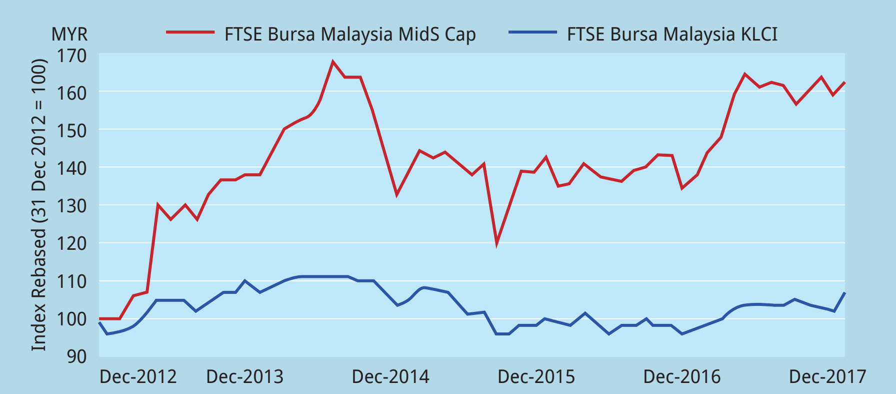
Investors eyeing growth, however, should not confine themselves only to the large stocks. The exchange also offers treasures in the mid- and small cap segment (Figure 2). Demonstrating our belief in this potentially high growth market segment, the exchange introduced the Mid and Small Cap Research Scheme (Bursa MidS) in 2017, to elevate the profile of mid- and small cap companies that have been generally under researched, to further spur the vibrancy of the segment by way of increasing interest in their trading. In its first phase, 100 listed securities were identified to receive analyst coverage from 20 research houses, with the number of listed companies under the research scheme to grow further. To help market participants track performance of this segment, the exchange also introduced two indices – the FTSE Bursa Malaysia MidS Cap Index and FTSE Bursa Malaysia MidS Cap Shariah Index, which have demonstrated growth.

Besides industry giants and established companies, Bursa Malaysia also offers investment opportunities in up-and-coming, high growth companies at the smaller end of the scale. Acknowledging the growing importance of SMEs in the new economy, the exchange launched the ground-breaking LEAP Market in July 2017 as a platform to nurture high growth, innovative companies and support the development of the SME segment. This listing platform, the first of its kind in ASEAN, was designed to provide SMEs an alternative and efficient fund-raising platform through the capital market by bringing together all the relevant players onto one platform and to create a conducive environment to raise funds in an efficient, fast and transparent marketplace.

For SMEs, the LEAP market can serve to enhance their visibility and profile by being listed entities. The LEAP market can also function as an incubator, potentially facilitating the companies' listings on the ACE or Main Markets in the future. For sophisticated investors (high net-worth entities or individuals), the LEAP market provides a platform to participate in high growth companies which can potentially be the next 'Big' thing while offering the comfort of investing in a transparent and orderly market, regulated on a "light touch" basis, but balanced by prudential standards.

Although all SMEs in various sectors can qualify for the LEAP market, coincidentally, the first two listings in its initial four months were technology companies, signifying a strong interest amongst and for innovative SMEs in this new market. The early issuers on the LEAP market have demonstrated that Bursa Malaysia can attract high growth potential and innovative technology companies to list, including those with headquarters outside of Malaysia.

Figure 2: FTSE Bursa Malaysia MidS Cap Index Performance



Source: FTSE Russell

Sustainability and Corporate Governance

Bursa Malaysia is a strong advocate of sustainability and has for more than a decade put in place building blocks to create a more sustainable marketplace. The exchange has taken deliberate steps to develop a sustainability-themed index and through the Bursa Malaysia Sustainability Framework, we aim for listed issuers to not only practise corporate sustainability disclosures but also realise the positive impact sustainability practices can have on their businesses. In fact, Malaysia was the first emerging market to launch the globally benchmarked FTSE4Good Bursa Malaysia Index in December 2014, designed to measure the performance of companies demonstrating good environmental, social and governance (ESG) practices. There has been strong growth in the number of FTSE4Good Bursa Malaysia Index constituents (from 24 in December 2014 to 44 as at December 2017).

The exchange continually conducts engagement programmes with PLCs and their boards, as part of efforts to proactively foster a marketplace of sustainable and high performing companies with strong corporate governance. We envision that sustainability will be part and parcel of business strategy for our quality companies.

The quality of listed companies and investor confidence built through strong corporate governance have been key drivers of the health and vitality of the marketplace. Sustainability is an important long term strategic agenda as it will ensure competitiveness of our companies.

Recognised as The Leading Exchange in Islamic Capital Market

Introducing platforms and services that are global 'firsts' or novel in the Islamic capital market sphere is something that is synonymous with, and not new to Bursa Malaysia. On the Islamic capital market front, Bursa Malaysia has continuously delivered a comprehensive suite of products and innovative services. First, in 2009, Bursa Suq Al-Sila', a commodity Murabahah trading platform created to facilitate commodity-based Islamic financing and investment transactions, was introduced. Then, in September 2016, the world's first end-to-end Shariah investing platform, Bursa Malaysia-*i*, was launched. It enables a truly holistic and complete approach in Shariah investment, and is poised to attract a growing Shariah liquidity pool – both foreign and domestic issuers. These platforms have been internationally lauded as innovations in facilitating Shariah-compliant commodity trading and securities investing, respectively. The foresight in providing innovative market-based financing solutions has enabled Bursa Malaysia to consecutively earn global recognitions as the best and most innovative exchange in the area of Shariah investment.

As another case in point of our pioneering track record, more recently, in December 2017, Bursa Malaysia launched the Islamic Securities Selling and Buying Negotiated Transaction (ISSBNT) framework - the world's first Shariah-compliant alternative to Securities Borrowing and Lending. The size of Islamic fund management assets is massive, both globally and in Malaysia. ISSBNT was developed to enable hedging and risk management activities by institutional capital market participants who manage sizeable Islamic funds. This innovative provision is yet another step in Bursa Malaysia's intention to be an indisputable global leader as a fully integrated Islamic investing marketplace offering a complete set of Islamic financial market instruments and trading alternatives.

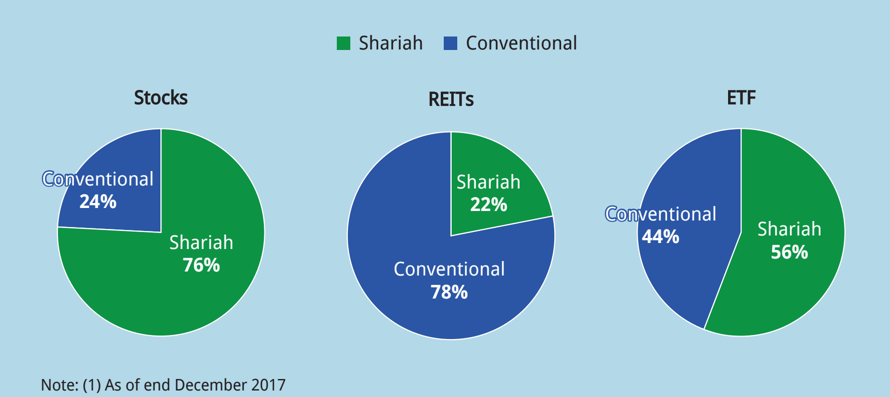
As an integrated exchange, Bursa Malaysia offers a good breadth of quality securities (Figure 3). Seventy-six percent of the 903 companies listed on the exchange are Shariah compliant. The exchange offers investors a wide choice of Shariah investment products such as *i*-ETFs, *i*-REITs and Exchange Traded Bonds and Sukuk. As at end 2017, 56 percent of the exchange traded funds (ETFs) listed on Bursa Malaysia are Shariah-compliant and 22 percent (4 out of 18) of real estate investment trusts (REITs) offerings are Shariah-compliant.

The breadth of Islamic offerings can attract and cater to the growing global appetite for Shariah-compliant offerings, with the size of the industry exceeding USD 2 trillion and burgeoning at a rapid pace. Together with Bursa Malaysia's unique positioning and key differentiator as the leading center of the Islamic capital market, interest from international investors in Shariah–compliant offerings is expected to be a magnetic source of catalytic growth for the exchange. Furthermore, Shariah investments and ethical investments, although not equivalent, share some similar tenets. Thus, potential investors that will be drawn to Bursa Malaysia's commanding Islamic Capital Market offerings may include not just faith-based Muslim investors, but also socially responsible investors.

Expanding Derivatives: Suite and Access

Bursa Malaysia has been the world's biggest palm oil futures trading hub since 1980. Specifically, the Crude Palm Oil Futures (FCPO) contract has long been recognised and referenced as the global price benchmark for the crude palm oil market. With a suite of palm oil derivatives products – from USD Crude Palm Oil Futures; USD Refined, Bleached and Deodorised Palm Olein Futures; Crude Palm Kernel Oil Futures; and Options on Crude Palm Oil Futures – Bursa Malaysia is firmly positioned as the global marketplace for palm oil derivatives. Besides the aforementioned suite of palm oil derivatives, today, the exchange also offers a range of other derivatives asset classes such as equity derivatives and

Figure 3: Bursa Malaysia Provides Ample Conventional and Islamic Products



Note: (1) As of end December 2017
(2) Excluding LEAP Market
Source: Bursa Malaysia

financial derivatives.

Bursa Malaysia's partnership with Chicago Mercantile Exchange (CME) Group (the world's leading and most diverse derivatives marketplace) since 2009 accelerated the internationalisation of Bursa Malaysia Derivatives (BMD). CME's Globex electronic trading platform provides global accessibility and visibility enabling customers from around the world to easily access BMD products for trading and hedging opportunities. BMD has also been granted registration as a Foreign Board of Trade by the US Commodity Futures Trading Commission, meaning identified members and other participants located in the US can directly access the Malaysian market to hedge and arbitrage.

Widespread international market promotion and market access will continue to be a core focus underpinning BMD's growth strategy, to ensure market vibrancy and liquidity. As an example, BMD and Dalian Commodity Exchange have co-organised the annual China International Oils & Oilseeds Conference for more than a decade, providing an international platform for information exchange, to push forward the development of the oils and oilseed futures market in the world. Going forward, the two exchanges will look to further deepen mutually beneficial collaboration in derivatives.

Bursa Malaysia will also continue to host the annual Palm and Lauric Oils: Price Outlook Exhibition & Conference, which provides an avenue for international participants (about 2,000 industry drivers from more than 50 countries) to engage in robust discussions on industry direction and outlook for the market.

Propelling toward Our Aspirations

With the solid foundations we've put in place, we are making progress on our chartered Business Plan to ensure Bursa Malaysia remains a dynamic exchange – specifically to achieve our 2020 aspiration of becoming a key regional player with global reach. Our strategies will be undergirded by our growth mindset towards innovation and anchored by the data-driven culture that is being ingrained into our operations – with technology investments into enterprise data warehouse to provide rich insights for strategic planning, and more targeted products for our market participants.

Exciting products on the horizon

In view of our long-term aspirations, Bursa Malaysia will continue to pioneer in the region, orchestrating innovative ways with targeted partners to deliver offerings to the capital market, to fulfill the diverse needs of investors and issuers. We will be looking to develop the breadth of products in all markets.

A primary focus will be to formulate the next step change in growth of the ETF market. In 2017, the Securities Commission of Malaysia led a task force to spur innovation and drive ETF market growth. With liberalisations and incentives recently put in place and with concerted effort, ETF offerings on Bursa Malaysia are expected to expand to other types of ETFs. Recently, in December 2017, a Shariah-compliant ETF backed by physical gold was listed on Bursa Malaysia. The gold ETF marked Bursa Malaysia's first commodity ETF, broadening the asset classes of ETFs that were already offered in the form of bond or equity ETFs. Investors, both institutional and retail, can likely look forward to exciting entry points beyond the current plain vanilla ETFs – to include Leveraged and Inverse ETFs – that enable fresh investment strategies.

We also anticipate further expansion of REITs. In October 2017, Bursa Malaysia launched our eleventh in-house calculated index, the Bursa Malaysia REIT Index, which tracks all REITs listed on Bursa Malaysia. With the launch, Malaysia joins developed markets like the US, Hong Kong, Japan, Australia and Singapore in having a dedicated REIT Index. The REIT Index will spur the local REIT market and also serve as an attractive underlying for potential ETFs.

Bursa Malaysia also looks forward to working with other member ASEAN exchanges to create ASEAN-centric products and promote ASEAN as an attractive asset class to global investors. For instance, in 2016, Bursa spearheaded the launch of the FTSE4Good ASEAN 5 Index, to showcase quality companies in the region that meet international standards of ESG practices. We have confidence in the attractive proposition of the ASEAN asset class for international investors, and would welcome collaborations to make these offerings available.

We also believe that growth of a derivatives market is increasingly critical to the sustainability of the capital market. Bursa Malaysia will thus also broaden our derivatives product offerings to ensure relevance and attractiveness to market participants, based on continual assessment of market needs. We will introduce more commodity-based derivatives products, solidifying our leadership position in this space in ASEAN. In addition, subject to procuring the necessary regulatory approvals, we hope to launch for the first time in Malaysia, two currency futures – introduction of USD and Chinese Offshore Yuan (CNH) against Ringgit futures. These would be progressive steps towards a more liberalised and conducive financial marketplace, and provide retail and institutional participants a new avenue of managing currency exposure.

Leveraging technology

Investment opportunities via products pique investor interest. However, investor confidence from transparent information, coupled with market vibrancy and a smooth experience are keys to sustaining trading interest. At Bursa Malaysia, we see the potential and promise of technology to transform customer experience – to more efficiently and aptly cater to the needs of diverse investors. It is imperative to capturing investors in future. Changing consumer preference for digital, mobile and customer-friendly solutions has seen Bursa Malaysia and capital market participants work towards delivering upgraded platforms for enhanced experiences.

In 2014, Bursa Malaysia invested in building BursaMKTPLC, our online platform that aims to improve financial literacy and empower investors to participate in the capital market by democratising information access and providing investors with trading ideas. The sleek and mobile-friendly website and app contain information about prices and products on Bursa Malaysia, making information easily accessible. It serves to equip potential investors with knowledge on capital markets and provides even experienced traders with tools to make more informed investment decisions. Investors can access research reports on not just large companies, but also mid- and small cap companies. Bursa Malaysia will continue to attract and reach out to digital natives, and focus on making the entire investor journey easy and inviting.

The belief in the power of technology is not held by Bursa Malaysia alone; it is also recognised and supported by our regulator and embraced by market intermediaries. For example, in 2017, Rakuten Trade, Malaysia's first completely online equities broker entered the market. It is a joint venture between Malaysia's Kenanga Investment Bank and Japan's Rakuten Securities. Rakuten Trade enables customers to open an equity trading account completely online for seamless, end-to-end trading on Bursa Malaysia. Within seven months of launch, the platform recorded more than 5,000 investor accounts, many of which are new investors. Developments such as these will surely lend vitality and help create a sustainable marketplace.

Fintech is evolving the capital market landscape and provides new opportunities to meet customer demands and stakeholder needs. Exchanges need to embrace and become well-versed with the opportunities and disruptions in this space, which not only changes the front-end interface with our customers and investors, but also could change the backbone of how exchanges operate in the long run. Bursa will seek out fintech engagement opportunities in the global capital market landscape to strengthen our value proposition and help the exchange grow, capture new opportunities, and remain relevant in the fast-changing landscape.

While we look to opportunities presented by new technologies, we are cognisant of cyber security risk that is a growing concern among financial market institutions in the short to medium term. Bursa Malaysia stays abreast of developments in this space to adequately mitigate or address the threats. Bursa Malaysia will also invest in increasingly sophisticated technology to perform our risk management and regulatory functions more efficiently.

Developing the ecosystem

Our aspiration of being a developed market come year 2020 means having key characteristics such as ample liquidity in the market and an efficient center of price discovery. We have worked and will continue to work towards addressing structural issues to increase the number and diversity of participants, and creating more provisions that enable further flexibilities in trading, on par as other developed markets.

In year 2017 alone, we opened several new avenues with several liberalisations. Among the initiatives is a revision in the tick rule to provide market participants with greater price flexibility in performing regulated short selling. We also decoupled the participantship structure in the derivatives market, to welcome stand alone, foreign clearing members. The exchange also introduced new trading features (expansion of order types and validity) giving investors greater flexibility in managing their orders, for refined trading and risk management strategies. We will benchmark against developed market peers to do even more.

Spreading our reach

The exchange is reaching out to a larger pool of investors to be part of our economic growth story. We launched several fresh campaigns to energise and reach new local, retail investors as part of our investor education initiative. In November 2017, we launched a three-month nationwide 'What's Your Goal' campaign in collaboration with brokerage firms, to nurture the desire for retail investors to participate in the stock market offering over 80 investor seminars and workshops across the country. Additionally, we held the inaugural Shariah Investing Fair, attracting 10,000 prospective retail investors, to educate them on the value proposition and attractiveness of Shariah-compliant capital market products and services. The fair saw the launch of the Shariah Trader Challenge, a virtual stock trading competition focused on trading of Shariah-compliant stocks. This challenge was created to raise the awareness of Shariah-compliant investment instruments among retail investors and also to help promote responsible investment.

Building connectivity

A thriving and active base of diverse global investors is also necessary to achieve our aspirations. We already have steady foreign participation across our securities and derivatives market. However, we have set our sights on expanding global reach and foreign participation by further leveraging platforms such as Bursa Malaysia-*i*, Bursa Suq Al-Sila', and CME's Globex.

The exchange will also continue to make progress towards being the center or artery of investments in the region. Cognisant of the need to build bridges in an increasingly globalised world, Bursa Malaysia will tap new and existing relationships to build regional connectivity. We will continue to seek strategic partnerships with other exchanges and market players to facilitate cross-border investments. Our efforts include enhancing cross-border access of products or offering exposure to different markets for instance via separate, ongoing collaborations with the Indonesia Stock Exchange and the Shanghai Stock Exchange. Each of these key markets has products of interest to local investors. Indonesia and China also have both existing and latent demand for investment portfolio enhancement via Bursa Malaysia offerings.

Moving forward

The global exchange business will continue to be competitive, partly driven by technology that provides instant access to multiple markets across different time zones, and infrastructure that will be impacted by changes brought about by technological advances.

The global marketplace is set to become more exciting and dynamic. In a nutshell, Bursa Malaysia will remain focused on various initiatives aimed at widening our products and services offerings; increasing liquidity and velocity in the market; and creating a conducive capital market ecosystem for all market participants, to provide more opportunities for fund-raising, trading and wealth creation. We strive to attain more momentous milestones, to ensure wider relevance and sustainability of our business for long-term value creation for our stakeholders.

BURSA MALAYSIA

Bursa Malaysia is an approved exchange holding company under Section 15 of the Capital Markets and Services Act 2007. A public company limited by shares under the Companies Act 2016, Bursa Malaysia operates a fully-integrated exchange, offering equities, derivatives, offshore, bonds as well as Islamic products, and provides a diverse range of investment choices globally.

THE PHILIPPINE STOCK EXCHANGE

The Philippine Stock Exchange: Rising to New Heights

Review of 2017

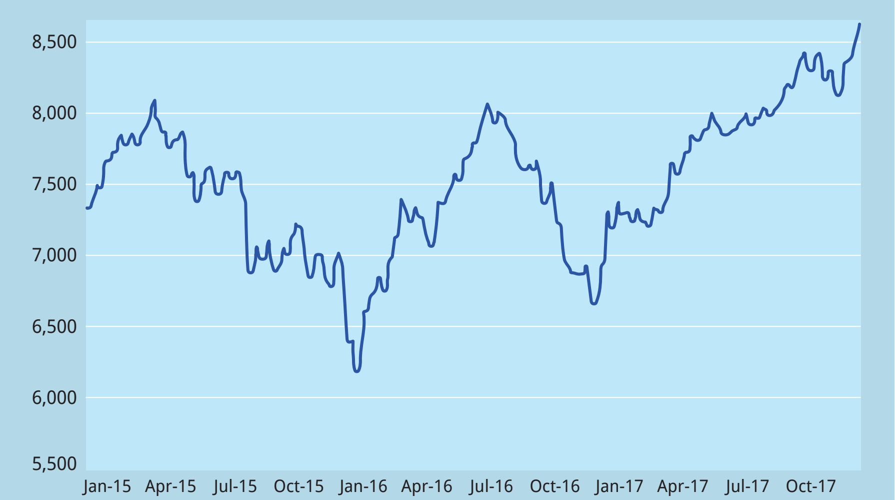
The Philippine economy, with a growth of 6.9 percent in the third quarter of 2017, outpaced and outshone most of its neighbors. The latest GDP figure also marks the 74th consecutive quarter of growth since 1997, with the last 22 quarters recording GDP growth above five percent.

The Philippine stock market experienced a market rally in 2017, an improvement from the two previous years when the country's benchmark index, the PSEi, experienced shortfalls towards the turn of the year. The PSEi finished 2017 at a record high of 8,558.42, up by 25.1 percent or 1,717.78 points from the 6,840.64 level registered at the end of 2016 (Figure 1). During 2017, the PSEi registered a total of 14 record highs since its April 2015 record of 8,127.48. The first record high posted during the year was on 14 September 2017 when the PSEi closed at 8,144.91.

The bullish sentiment continues to emanate from a positive view of the Philippine economy, which remains rock-solid in terms of its fundamentals. Investor excitement is seen to be sustained further by the significant upside offered by the local market given the current administration's upcoming initiatives, including its ambitious infrastructure program and potentially game-changing tax reform plan. The ascent of the benchmark index likewise continues to track the gains in Wall Street and other Asian markets.

Other market indicators, which have been just as relevant in demonstrating how the local market fared in 2017, continued to trend positively. By the end of 2017, total market capitalization was up by 21.8 percent to PHP 17.58 trillion from PHP 14.44 trillion at the end of 2016 (Table 1). Domestic market capitalization, which excludes three foreign firms from the calculation, was likewise up by 22.1 percent to PHP 14.49 trillion from PHP 11.87 trillion during the same time the prior year.*[1] Trading activity remained robust at PHP 8.06 billion value turnover on a daily basis, 3.2 percent higher than the PHP 7.81 billion average a year ago. Trading by foreign investors was also positive as it yielded a net buying amount of PHP 56.21 billion, up from the PHP 2.80 billion net foreign buying figure in the same period the previous year.

Figure 1: PSEi Performance (Jan 2015 to Dec 2017)



Source: The Philippine Stock Exchange

Table 1: Stock Market Indicators (2017 vs 2016)

PHP Billion

	end-2017	end-2016	% Change
Total Market Capitalization	17,583.12	14,438.77	21.8
Domestic Market Capitalization	14,490.83	11,873.22	22.1
Net Foreign Buying / (Selling)	56.20	2.80	1,907.1
Total Value of Share Trading	1,958.36	1,929.50	1.5
Daily Average of Share Trading Value	8.06	7.81	3.2
Capital Raised	164.76	176.80	(6.8)
No. of Listed Companies	267	265	0.8

Source: The Philippine Stock Exchange

A Look Ahead to 2018

For 2018, domestic consumption is expected to continue to drive the economy on the back of higher consumer income and purchasing power arising from the steady inflows of remittances, benign inflation environment, improving jobs climate, and relief provided by downward adjustments in personal income tax due to the passage of the Tax Reform for Acceleration and Inclusion bill. The Philippine economy is also seen to receive an additional boost from the administration's efforts to ramp up infrastructure spending to at least seven percent of GDP. A resurgent manufacturing sector and a flourishing tourism industry are both similarly anticipated to continue supporting economic growth.

Risks to the forecast include uncertainties in global markets and divergent global monetary policies, which may yet again cause jitters in the financial markets. Furthermore, potential economic slowdowns in some of the country's major trading partners including China and Japan may adversely affect the Philippines' already sluggish exports.

Despite these external factors and the political noise both locally and abroad, the country's prospects remain positive due to stable macroeconomic fundamentals and a sound financial system steered by prudent fiscal management of the Bangko Sentral ng Pilipinas, which is essentially the core of its ability to cushion external volatility.

The Philippine Stock Exchange Growth Initiatives

The Philippine Stock Exchange (PSE) acknowledges how quickly the financial industry landscape has changed in the last decade and how it continues to evolve, which is why the exchange adopted a strategic roadmap that is responsive to opportunities as well as risks that may come about in the medium to long term. As the PSE continues to build capacity to achieve its strategic goals, the market is projected to ultimately benefit from having a stronger and more efficient stock exchange.

The PSE continues to advance in terms of development of new products and services, while adding a stronger focus on measures to widen the investor base and capacity-building activities geared towards a holistic transformation of the enterprise. These three themes comprise the PSE's strategic plan which aims to ensure that the growth experienced by the Philippine stock market in the past several years remains sustainable and can be built upon for the years to come.

Development of products and services

To continue the PSE's improved performance and to be at par with its ASEAN counterparts, the PSE envisions building a one-stop shop by offering a complete suite of products and services for market participants. This would also make the PSE more efficient and attractive to investors. The next few years are expected to become transformational for the PSE, as a number of key initiatives are seen to significantly drive the growth of the Philippine capital markets.

- **Acquisition of PDS Group.** The PDS acquisition is also seen to have a major impact on the PSE in 2018. With the consolidation of the equities and fixed income markets into one exchange, the Philippine capital market will become more competitive vis-à-vis other markets in the region in attracting investment flows. Additionally, the synergies to be realized in the integration of the two exchanges are expected to create efficiencies that will allow for the introduction of more products and enhanced risk management processes. These efficiencies are seen to redound to benefits for investors and market participants, including lower costs, ease of access, and greater business opportunities, among others. Consolidation efforts will cover a wide range of business areas, including market operations, post-trade, surveillance, corporate governance, product development, finance, and human resources.

- **Short Selling**. The launch of short selling is expected to complement the Exchange's securities borrowing and lending program. The Short Selling Guidelines, which is currently slated for review by the Securities and Exchange Commission (SEC), sets out, among others, the eligible securities for short selling, the threshold for short interest ratio, duties and responsibilities of trading participants who engage in short selling, and Securities Borrowing and Lending procedures for short selling. The implementation of short selling is projected to unlock greater liquidity in the market by allowing investors to take short positions and by encouraging more securities borrowing and lending transactions. The PSE plans to implement short selling in the first quarter of 2018.

- **Central Securities-based Lending**. To support the launch of short selling, the exchange plans to activate a central securities lending facility that can be tapped by investors who intend to either lend or borrow shares. Aside from providing an efficient hub to connect borrowers and lenders, the centralized lending facility will also offer collateral management services for its users.

- **Name on Central Depository**. Name on Central Depository (NOCD) is a depository facility of segregating client holdings lodged with the Philippine Depository and Trust Corporation (PDTC) into individual sub-accounts reflecting the names of the clients in the PDTC system. This improves transparency by encouraging shareholders to have direct access to information on their stock holdings. The PSE and PDTC will actively implement and promote the NOCD service for investors. The campaign for increased lodgment of investor accounts in the depository will not only increase transparency but also lead to greater efficiencies in managing shareholder information.

- **Structured Warrants**. A structured warrant is a securitized derivative product which obtains its value from an underlying asset. It gives holders the right, not the obligation, to buy or sell the underlying asset at a predetermined price and time. Unlike a company warrant, a structured warrant is issued by a third-party, usually a financial institution. The SEC is currently finalizing its draft rules governing the registration and trading of structured warrants, while the PSE is working on its own regulations on the listing and trading of the said product.

- **New Indices**. At present, the PSE has eight indices. The PSE aims to enhance and add more to this roster, with the goal of attracting investment funds to create products benchmarked on the new indices. The exchange plans to create broad-based indices and thematic or style-based indices such as a high dividend yield index and Shariah index to further aid investors in their investment strategies. Related to this initiative is another project to revamp the current sector classification system that will be more responsive to the increasingly diversified businesses of listed companies and align sector assignments with global standards.

Expanding the investor base

Increased participation in the stock market is viewed as a significant component to sustaining the exchange's growth. While the PSE has managed to grow its investor base over the past decade, there continues to be a huge potential to create a more inclusive market given the vast Filipino population and burgeoning foreign appetite for local equities.

- **SME Access to Capital Markets**. The PSE hopes to tap more small and medium-sized enterprises (SME) to list. Several SME-related initiatives are undertaken by the exchange as part of its strategic agenda to foster new listings. The overall SME strategy includes identifying target and potential companies for listing, and allowing these firms to undergo a development and mentorship program that will prepare and equip them to become sustainable listed companies.

- **Enhanced Local Small Investor Program**. The PSE will also continue to leverage on the internet as a means of raising stock market awareness and making wealth creation more inclusive. One initiative seen to take advantage of the online space is the Local Small Investor (LSI) Program of the PSE, which promotes market inclusivity by encouraging the participation of local small retail investors in initial public offerings. The exchange is currently working on the automation of the LSI subscription process that will make it easier for investors across the country to participate.

- **Financial Literacy**. Financial literacy has long been one of the challenges of the PSE and may ultimately be the reason behind low investor participation in the local market. Investor education is a continuing process which is why the exchange continues to undertake initiatives to address the low market participation rate in the country. Banking on the internet and the social media trend, the exchange will continue to use these as mediums to enhance financial literacy among Filipinos.

- **Stock Market Webinars**. The Stock Market Webinar is an online campaign using an accessible, convenient, and web-based learning facility. The webinar is a one hour and thirty minute-presentation covering topics on basic stock market concepts, investment procedures, trading schedule, understanding stock market quotations, and online trading. Webinars on ETFs, technical and fundamental analysis are also conducted. A live question and answer portion is likewise facilitated during the webinars. The PSE conducted 13 webinars in 2017 with an average of 483 participants per session.

- **PSE Cebu Market Education Campaign**. To sustain the interest of potential investors in Cebu City and Visayas, the PSE organizes monthly seminars and pursues company visits. The basic stock market seminar is recommended for interested market participants with minimal investment experience. PSE invites Cebu-based trading participants to conduct a presentation that will complement the PSE's presentation.

- **Stock Market Roadshows**. Part of the Exchange's financial literacy program is conducting free stock market seminars all over the country, particularly in areas far from the capital. The event features discussions from stock market practitioners on investing basics, products and services, investor rights protection, and online trading, among others. Another feature of the roadshow is the Broker Expo, wherein partner stockbrokerage firms of the PSE will have representatives on site to process account opening for new investors and answer questions on stock investing.

Capacity building

As an enterprise that relies heavily on technology and human resources to ensure the stability of operations and efficiency of services, the PSE is committed to continue investing in best-in-class technology infrastructure and developing staff knowledge to service the growing needs of the market.

- **PSE Bell Awards for Corporate Governance**. The PSE values the importance of good corporate governance (CG) in the long-term success of the company, and aims to not just be internationally recognized as a role model for CG but also foster the same aspiration for listed companies and brokers. To encourage them to "walk the talk", the PSE Bell Awards for Corporate Governance, an annual awarding event, was launched five years ago to honor select listed companies and trading participants that establish outstanding records in

CG. For 2017, the exchange enhanced the Bell Awards criteria and mechanics to focus on giving more weight in terms of audit compliance and CSR programs, going several steps beyond a company's usual compliance with prescribed CG guidelines.

- **Infrastructure Upgrades**. Building a strong technology infrastructure is vital to the exchange as technology forms a critical component in the company's operations and overall growth. As the market grows, the PSE has lined up initiatives to further enhance operational efficiency by automating processes, and to continue investing in tools and applications to strengthen business continuity and cybersecurity.

- **Transfer to New PSE Headquarters.** The exchange is also set to open the doors to its new home in Bonifacio Global City by early 2018, completing the physical merger of its Tektite and Ayala offices. The move to the new PSE headquarters provides the company with bigger spaces to conduct its operations and events, and situates the exchange in a newer business district that is home to many financial and technology companies, both established and emerging.

Collaboration with Other Exchanges

In the past few years, strategic partnerships among stock exchanges have taken on greater importance than mergers and consolidation activities. Collaborative engagements have proven to be less complex and controversial, allowing exchange operators to focus more on adding value to their respective businesses.

The PSE is part of the ASEAN Exchanges collaboration, which meets regularly throughout the year to pursue various initiatives in promoting ASEAN as a single asset class. The PSE likewise regularly engages its counterparts in consultations across multiple areas of the business, including product development and regulation, to learn from the expertise and experiences of other stock exchanges. The PSE's membership and participation in the World Federation of Exchanges also gives it access to a wide network of exchange operators, technology providers, international regulators, and financial experts that can be tapped to assist in the pursuit of PSE's strategic projects.

The main trading engine that is being used by the PSE is the NASDAQ-developed PSE*trade* XTS. NASDAQ is a leading global provider of exchange systems with presence in over 100 markets globally. The Exchange's partnership with NASDAQ has been quite productive and satisfying, considering how it was able to switch over to the X-Stream trading system in less than a year and the said system's continued reliability since its launch in 2015. The Exchange also looks forward to utilizing modules available in the NASDAQ system upon launch of the new products currently in the pipeline. Meanwhile, the surveillance and disclosures systems used by the PSE are provided by the Korea Exchange.

On 7 December 2017, delegates from the Shenzhen Stock Exchange visited the PSE to promote cooperation between the capital markets of the Philippines and China. The visit provided both bourses an opportunity to discuss recent updates and developments in their respective markets and explore potential partnerships and areas for cooperation that will help strengthen ties between the two exchanges. The latest visit follows the Memorandum of Understanding signed by the two exchanges in 2009 initiating cooperation and information sharing in various areas including product development; rules and regulations; cross-border listing and trading; and market data management.

Rising to Greater Heights

Picking up from a series of record-highs in the past year, the Philippine equities market is expected to continue its positive momentum in the next few years, with the benchmark PSEi seen to reach new record levels in 2018. The Philippines is again expected to be one of the top performing economies in Asia, supported by optimistic GDP growth estimates, flexible monetary policies, an accelerated infrastructure spending plan, and rising foreign direct investments, among other factors. These factors, as well as the initiatives being implemented by the PSE, offer compelling reasons for investors to get excited about the prospects of the Philippine stock market in the coming months.

Notes

*1 These companies are Del Monte Pacific, Manulife Financial Corporation and Sun Life Financial.

THE PHILIPPINE STOCK EXCHANGE

The Philippine Stock Exchange (PSE) is a self-regulatory organization that provides and ensures a fair, efficient, transparent and orderly market for the buying and selling of securities. The exchange also offers a convenient and efficient venue in raising capital to support the growth of businesses.

Considered one of the oldest bourses in Asia, the PSE traces its roots back to the country's two former bourses – the Manila Stock Exchange (formed in 1927) and the Makati Stock Exchange (formed in 1963). The Manila and Makati bourses were unified on 23 December 1992 to form the PSE.

The advent of the Securities Regulation Code (Republic Act No. 8799) in 2000 introduced other structural changes. In August 2001, the PSE was demutualized and transformed into a stock, shareholder-based organization from a non-stock, member-governed entity. In December 2003, the PSE's shares were listed on the exchange by way of introduction, paving the way for the PSE to become a publicly-held company.

GEOFF HOWIE

Singapore Exchange

Aligning Opportunity & Capital Growth

Singapore Exchange (SGX) is one of the world's most international exchanges, with nearly 40 percent of its listed companies and 90 percent of its listed bonds originating from overseas. More than half the revenue associated with the constituents of Straits Times Index (STI) is reported to come from outside of Singapore, mostly across the Asia Pacific region.

Many of the listed companies that have originated from overseas have direct exposure to large regional macro-economic themes and initiatives - such as those companies that associate their businesses with China's Belt and Road Initiative (BRI). The rising importance of BRI to SGX-listed companies is discussed in the first section.

The BRI can also impact those Singapore-focused companies with humble beginnings that now maintain larger market capitalisations and a strong regional presence. Providing an efficient platform for less established, yet potentially high-growth companies to access capital and achieve expansion remains a key objective of SGX. Such companies can align with a sponsor,*[1] list on Catalist and tap investors for funding when required, as discussed in the second section.

International investors have played a key role in the capital formation of these listed companies. Recent EPFR estimates, distributed by Informa Financial Intelligence, show proportionate to primary-listed market capitalisation, US and European investors allocate significantly more funds to Singapore than to Hong Kong.

Singapore also serves as Asia's top financial centre and the world's third most important financial hub. This has led to the country's development as Asia's wealth management centre, with assets under management (AUM) of over SGD 2.7 trillion.*[2] With 80 percent of this AUM derived outside of Singapore, Singapore hosts a diverse range of international investors.

Of the SGD 2.7 trillion in AUM, 20 percent is invested in fixed income strategies such as Asian or emerging market debt.*[3] The importance of providing alternative trading platforms, such as SGX Bond Pro, to meet the increasing funding needs of companies and the diverse range of international investors is discussed in the third section.

Growing Participation in the Project of the Century

SGX lists over 110 Chinese companies and 250 bond issuances from China, and it is also the only exchange outside China to offer futures for exposure to China's 50 largest companies through the SGX FTSE China A50 Index Futures.

In 2013, the People's Bank of China appointed the ICBC Singapore branch as the Renminbi clearing bank in Singapore, making the city-state a regional gateway for Renminbi payments. Furthermore, 2013 also saw the unveiling of Chinese president Xi Jinping's "Project of the Century" – the BRI.

At a recent BRI forum, Singapore's Minister for Home Affairs and Law highlighted the region's important heritage of trade. Mr. Shanmugam maintained that the history of trade shows that the "global economic centre of gravity for much of human history was in China and India – and the Silk Route was the spine of world trade".

The BRI is a mega-economic initiative with the potential of trade-related solutions to address underinvestment and infrastructure deficiencies. While strengthening trade and the region's financial flows, the BRI aims to improve regional integration of some 50 countries. These countries span the African, Asian and European continents.

Baker McKenzie estimate that Chinese companies and their partners could together pour some USD 350 billion in projects over the next five years across the countries covered by the investment initiative. By the same token, DBS Bank estimates that China is looking to increase its trade flows to USD 2 trillion from BRI aligned countries by 2020.*[4]

BRI's potential impact on listed businesses will depend on the nature, location and reach of each business. Some businesses, like China Jinjiang Environment could be directly involved in the infrastructure development, while others like China Aviation Oil (CAO) and EC World REIT (ECW) may seek to organically grow networks or make acquisitions in line with BRI. These are just three examples of the ways BRI can impact the strategic direction of listed businesses, and they are not a comprehensive list. For instance, shipbuilder and STI constituent Yangzijiang Shipbuilding Holdings has noted in its September financials that as the BRI gains momentum, it will further stimulate international trade and is a factor that supports long-term demand for shipbuilding. There will also be other businesses that are in a position to provide ancillary products or services to those businesses directly involved, such as Singapore's OCBC Bank.

Singapore – financing BRI investments

Singapore can also play a key role in helping the regional BRI-related investments reach full potential. At a recent forum, Singapore's Secretary-General of the National Trades Union Congress Mr. Chan Chun Sing stated that while the initiative was inspired by the ancient overland and maritime trade routes, it goes beyond the two dimensions of conventional land and sea connectivity. Mr. Chan reflectively identified a five-dimensional connectivity - land, sea, air, data and finance.

On the last connection, OCBC Bank's CEO Samuel Tsien has noted that the bank will actively support Chinese corporates' cross-border financing opportunities arising from BRI. OCBC Bank is Singapore's longest established bank and now the second largest financial services group in Southeast Asia by assets. In supporting these investment flows from China into the region, Mr. Tsien has noted that OCBC Bank will be playing to its strengths in structuring financing beyond straight lending, including certification, insurance, and hedging.*5

On the insurance front, a Singapore-based infrastructure consortium for BRI projects has been formed with China Re Singapore as the administrator. Singapore's Minister for Trade and Industry (Trade) has noted this insurance consortium is envisaged to provide top-up capacity and specialised insurance coverage for BRI projects in Asia Pacific (ex-China) and brings together Singapore-based insurers, reinsurers, and brokers who will contribute insurance capacity and provide risk management services for BRI projects.*6

As Chinese companies continue to internationalise, they can benefit from Singapore's position as one of the world's largest offshore Yuan centres and the third-largest foreign exchange hub in the world. SGX is also one of the leading clearing houses globally that accepts offshore RMB for margin collateral, clearing and settlement. As an offshore Yuan centre, RMB futures trade more in Singapore than in Hong Kong. These factors are particularly important as Chinese enterprises align and leverage on the BRI.

Ravi Menon, Managing Director of Monetary of Authority of Singapore (MAS) also recently affirmed that as an international financial centre in the heart of Asia, Singapore can play a useful role in financing and advancing BRI projects, particularly in Southeast Asia. Mr. Menon noted that China-based banks in Singapore have committed more than RMB 500 billion (USD 73.4 billion) in financing Singaporean companies involved in BRI projects, including the issuance of project bonds.*7

Infrastructure expansion China Jinjiang Environment

China Jinjiang Environment is the first private Waste-to-Energy (WTE) operator in China and positions itself as the leading WTE operator in China with the largest waste treatment capacity in operation. The company raised almost USD 150 million when it listed on SGX in August 2016. As stated in the prospectus, the capital formation was mostly used to fund acquisitions, project investments, upgrading facilities, repayment of debt, working capital and general corporate purposes. The company has also commenced secondary fund-raising activities through the offering of US dollar-denominated senior notes.

Preceding its USD 200 million issuance of three-year notes for overseas expansion, China Jinjiang Environment stated that with the implementation of BRI, "opportunities abound" for the Group's international market. The bond issuance was four times oversubscribed with fund management firms accounting for almost 80 percent of the subscription. The Group detailed in its FY16 Annual Report that it was able to share its green ecological concept and expertise with the coastal regions of China, and the potential market of Southeast Asia, with its similar waste composition to China. Leveraging on the BRI initiative, the Group expects to increase its bidding for projects and mergers and acquisitions both within China and in the international market.

New markets - CAO

Singapore's largest capitalised stock of the Energy Sector is jet fuel supplier and trader, CAO. CAO supplies jet fuel to the key international airports in China, including Beijing Capital International Airport, Shanghai Pudong International Airport and Guangzhou Baiyun International Airport. CAO also markets and supplies aviation fuel to airline companies at international airports outside China, including locations in Europe, North America, Asia-Pacific and the Middle East.

In its FY16 Annual Report, CAO management highlighted that as BRI initiatives across the three continents come into play, new economies will emerge through the development of infrastructure projects. CAO said it is poised to capture the resulting opportunities and maintain a leading position in the Asia-Pacific region through these new markets. CAO intends to leverage on its global supply and trading network, and multiply its supply locations and volumes globally and gain traction with international airlines supported by the imminent growth of these emerging aviation markets.

Expanding business footprints – ECW

ECW invests in a diversified portfolio of income-producing real estate used primarily for e-commerce, supply-chain management and logistics purposes. ECW is managed by EC World Asset Management Pte., an indirect wholly-owned subsidiary of the sponsor – Forchn Holdings Group. The sponsor was established in 1992 and is headquartered in Shanghai. It is a diversified enterprise focusing on the logistics, industrial, hospitality, commercial real estate and finance sectors.

Forchn Holdings Group, Forchn International, and ECW Chairman and non-executive director, Mr. Zhang Guobiao, maintain a commitment and belief in Singapore's continued relevance and synergies with China. Hence, Forchn had decided to list its Hangzhou e-commerce and logistics warehouse assets in ECW on SGX in 2016. Mr. Zhang noted that Forchn had consolidated its overseas headquarters in Singapore, Forchn International, putting together a strong Singapore management team with the objective of expanding its business footprint into the Southeast Asian region along the BRI.*8 As reiterated in a recent financial statement, ECW is actively pursuing and evaluating certain high quality and accretive acquisition opportunities in China and in the Southeast Asia region.

Mr. Zhang had also observed that the affirmation of support for the BRI, expressed by China Premier Li Keqiang and Singapore Deputy Prime Minister Tharman Shanmugaratnam at Dalian in June 2017 means that Singapore's role and impact on the initiative will bring about new business opportunities not only for Singapore, but also for the ASEAN community.

BRI's ASEAN impacts

Outside of China, RHB Securities has suggested that ASEAN will likely become the bridgehead for BRI, due to its geographical proximity and relatively low risk profile.*[9]

BRI's potentially biggest ASEAN-impacts are twofold:

1. Leveraging on BRI's vision, ASEAN countries are expected to see more joint infrastructure developments across the region. Aside from the aforementioned potential for joint utilities, other examples include the Sino-Laos and Sino-Thai railway projects. These projects also complement the ASEAN Economic Community (AEC) Blueprint 2025 vision of integrating ASEAN into the global economy, while maintaining its central role in East Asian regional cooperation.*[10] In July 2017, DBS Group Research emphasised that Chinese contractors were establishing a strong presence in Malaysia - with the signing of 14 agreements worth USD 33 billion in November 2016, followed by the Malaysian government's awarding of two important railway projects to Chinese companies – the Gemas-JB double-tracking project (to a consortium of CRCC, Company A, and CCCC) and the East Coast Rail Link EPC contract, worth USD 15 billion in total.*[11]

2. Increased trade and regional connectivity. According to the Chinese Ministry of Commerce, trade between China and countries along BRI has increased in 2017. China expects annual trade with these countries to be worth over USD 2.5 trillion by 2025 and beyond.*[12] ASEAN, given its strategic location along BRI, will be positioned to benefit from this increase in trade activity.

An enabling environment for infrastructure

Infrastructure requirements are not limited to countries aligned with the BRI. The World Economic Forum has stated that in order to support a future global population of nine billion people, an estimated USD 5 trillion a year (or USD 100 trillion from 2010 to 2030) needs to be invested in global infrastructure.*[13] The World Economic Forum added that this 'business-as-usual' investment will also not lead to a stable future unless it achieves environmental and sustainability goals.

The President of the Asian Development Bank (ADB) Takehiko Nakao has reasoned that for infrastructure investment to attract private-sector financing, the region needs an enabling environment – well-developed local financial markets that can provide adequate long-term local currency financing and tap into the region's high savings rate.*[14]

Supporting SME Growth

ADB President Nakao has also noted a regional need of an enabling environment for the private sector. He has stated that the region needs conducive regulatory systems and support for start-ups and a broad-based financial system embracing small and medium-sized enterprises (SMEs), which are often a key source of innovation and job creation.*[15]

Small businesses also require growth. According to Machado (2016) growth is the result of a good administration of resources and capacities which the companies use to promote growth.*[16] Machado adds that "the establishment of growth depends on the identification of the origin of resources, capacities and learning on accumulation methods and the generation of sustainable profits, coupled to the examination of how and when the resources of industry and financing are accessed, and how the external investors may be informed on the subject".

In recent years, SGX has engaged more industry resources to facilitate growth of its listed and potential-to-be-listed businesses, in addition to finding innovative methods to engage investors. This creates value over and above the simple exchange model of providing a platform that facilitates business financing through the transfer of equity to external investors.

Catalysing the growth of companies

The SGX second board, Catalist, was launched in November 2007 with a vision to provide potentially high-growth companies more efficient access to capital. The sponsor-supervised regime with no prescribed quantitative criteria has enabled companies at varying stages of growth and sizes to tap the capital markets so as to propel themselves to the next growth stage. Growth can be driven organically or via acquisitions, and as McKelvie and Wiklund (2010) note, acquisitions require access to well-functioning capital markets where firms and entrepreneurs can raise the necessary money.*[17]

Prior to Catalist, SGX did not offer a clear platform that catered specifically to the funding needs of high-growth SMEs, some of which may be pre-profit, but with promising business models that require quicker time-to-market and access to capital. It was with this end in mind and following the positive market feedback received, that Catalist was eventually established, as a solution to facilitate access to capital for fast-growing companies, as well as to create an ecosystem of investors and stakeholders to accelerate their growth.

Since then, Catalist has come a long way in providing emerging companies at varying stages of growth with a way to access the capital markets for their financing needs. Beyond catalysing the growth of these companies – and hence its name – Catalist also presented investors with diverse investment opportunities.

Industry resources & collaborations

In support of the start-up to SME phase, SGX has also engaged and established collaborations with a number of government agencies. Industry resources accessed include:

- Exploit Technologies (ETPL). ETPL is the commercialisation arm of Singapore's Agency for Science, Technology and Research (A*STAR). The collaboration identifies and helps start-ups and SMEs, in particular those in the technology sector, tap into innovative technologies and capital more efficiently. The partnership also seeks to help start-ups and SMEs better translate their inventions and intellectual capital into marketable products, processes and services and also helps these companies to tap on A*Star R&D capabilities as relevant. To enable better appreciation of the capital markets, there will also be information sharing and engagement between financial and technology communities.

- Infocomm Media Development Authority (IMDA). IMDA develops and regulates the converging Infocomm and media sectors in a holistic way, creating a dynamic and exciting sector filled with opportunities for growth, through an emphasis on talent, research, innovation and enterprise. SGX is working with IMDA to help high growth IMDA-accredited Infocomm and Media (ICM) companies leverage capital markets for expansion. Under this pathway, companies can benefit by taping on the committed market professionals who will help prepare them towards being IPO-ready. There will be efforts to foster closer ties and information-sharing between the financial and technology communities as well as to help investors become more aware of tech opportunities and therefore help encourage greater investor participation; and

- Spring Singapore. Through this collaboration, SGX works with Spring Singapore to encourage SMEs to work on the five financial management areas that are critical for sustained business growth, particularly in the area of fund-raising. These five areas include corporate restructuring, as well as the development of frameworks and processes for risk management, corporate governance, internal control framework, financial reporting and investor relations.

Growing fund-raising

Secondary fund-raisings have tended to outweigh primary listings on Catalist in recent years. From 2013 to present, Catalist companies have raised USD 2 billion through placements, rights issues and debt.

The Catalist board has provided for the listing of many industry 'firsts' (Table1). Catalist now lists close to 200 stocks with representation, and its combined market capitalization of USD 9 billion is twice its value in 2010. The 200 companies represent a broad range of sectors as well as disruptive and innovative business models, offering investors a proxy to pockets of growth in the global new economy.

Index Provider FTSE Russell capture the majority of these businesses in the FTSE ST Catalist Index, with the companies averaging a market value of USD 41 million, compared to constituents of the STI benchmark maintaining an average market value of USD 14 billion. Since 2008, there have been 21 transfers from the Catalist to Mainboard. While there is no quantitative requirement to list on Catalist, the 16 sponsors typically prescribe in-house criteria, this differs from a listing on the Mainboard which requires companies to meet specific minimum quantitative requirements.

Table 1: Listing of Industry 'Firsts' on Catalist

Company	Description of Business
Kimly	The first coffee shop operator to list in Singapore
Union Gas Holdings	Singapore's leading provider of bottled LPG cylinders
UnUsUaL	Producer and promoter of large scale events and concerts
HC Surgical Specialists	Endoscopic procedures provider
Y Ventures Group	A data analytics-driven e-commerce retailer & distributor
Aoxin Q&M	A China dental play

Source: SGX

Strong investor engagement

Exchanges can also play a primary role in investor engagement through facilitating events that can provide investors with access to a listed company's management, structure and up-to-date financials. Members of an Exchange will also play a key role in facilitating these events, in addition to providing research and views on potential future performance of the stock.

At the recent 10 year anniversary of the Catalist Board – two new industry-led initiatives were launched, aimed at deepening industry ties and raising awareness for Catalist. The formation of an industry-led Association of Catalist Companies was announced, while local stock market portal and large event organiser, ShareInvestor, launched its Investor-One portal, a one-stop information portal on Catalist companies.

Enabling Flow in Asia Bond Trading

SGX is a multi-asset exchange operating not just equity and derivatives, but fixed income markets at the highest regulatory standards. In 2016, Asia's debt issuance at USD 1.3 trillion made up about one-fifth of global debt issuance, but at a 20 percent year-on-year growth rate, grew twice as quickly.*[18] As acknowledged by the MAS Deputy Managing Director, Singapore offers an excellent ecosystem for Asian companies to raise international capital and Asian corporates, including Chinese and Indian companies, looking to regionalise and globalise are increasingly looking to international bond markets to raise capital and to diversify funding sources.

The first bond listed on SGX in 2007. Today SGX provides trading, clearing, settlement and depository services for a variety of fixed income products. As a leading market infrastructure provider and to complement its bond listing franchise, SGX anticipated the need to build an institutional secondary trading platform for Asian bonds, SGX Bond Pro, which was launched in February 2016. SGX Bond Pro provided its institutional participants such as global banks, asset managers, insurance companies and hedge funds a unique platform to access Asian fixed income instruments along with a variety of trading methods to cater to varied trading styles across sovereign, investment grade and high yield bonds.

Much like BRI, participants on SGX Bond Pro have spanned countries (and continents) such as Singapore, Hong Kong, Indonesia, Malaysia, Philippines, UK and Switzerland. As Bond Pro gains traction, the need to broaden global investor access to Asian bond markets is just as important as broadening Asian investor access to global bonds. The platform has therefore since expanded from offering Asian issuer credit to GCC, Turkey and Latam hard currency credit on the back of Asian participant demand for diversification.

Local currency markets account for approximately 85 percent+ of total Asian bond issuance; in October 2017, SGX Bond Pro began offering SGD denominated corporate bonds for trading on the platform with successful matches to date by regional fund managers. As SGX builds its capabilities in operating local currency secondary markets, it will look to expand Bond Pro's product suite to other Asian local currency markets.

Bond Pro also provides bond issuers listing on SGX a unique proposition through enhanced transparency in secondary market activity for the issuer's bonds – for example, issuers can see evaluated prices and indications of institutional level activity within Bond Pro.

Conclusion

SGX is a multi-asset exchange operating not just equity and derivatives, but fixed-income markets at the highest regulatory standards. Its investor participants are highly diversified. SGX offers unique capital solutions for large international companies seeking to align with mega-economic initiatives such as the BRI, in addition to the comparatively less established companies seeking to catalise growth with effective fund-raising.

Notes

*1 A sponsor's roles are to advise and guide issuers in relation to their continuing listing obligationsons an ongoing basis under the Catalist Rules.

*2 Monetary Authority of Singapore. (2016) *Singapore Asset Management Survey: Singapore – Global City, World of Opportunities.*

*3 Monetary Authority of Singapore. (2017) "'Singapore - the gateway to Asia's Bond Market' - Opening Address by Ms. Jacqueline Loh, Deputy Managing Director, Monetary Authority of Singapore, at the Global Borrowers & Investors Forum - Asia on 21 September 2017."

*4 DBS Group Research. (2017) "One Belt, One Road: Moving Faster than Expected," *DBS Asian Insights*, Sector Briefing 49, September 2017.

*5 "Asian markets key focus for OCBC in 2017: CEO," *The Business Times*, 19 December 2016.

*6 Monetary Authority of Singapore. (2017) "'Metamorphosis: Singapore as a Global Capital for Asian Risk Transfer' - Official Keynote Address by Mr. Lim Hng Kiang, Minister for Trade and Industry (Trade), Deputy Chairman, Monetary Authority of Singapore, at the 14th Singapore International Reinsurance Conference on 1 November 2017."

*7 Monetary Authority of Singapore. (2017) "'Stepping Up the Chongqing-Singapore Connection' - Keynote Address by Mr. Ravi Menon, Managing Director, Monetary Authority of Singapore, at Singapore-China (Chongqing) Financial Conference on 4 September 2017."

*8 "From Silk Road trade to Belt and Road e-commerce," *The Business Times*, 12 July 2017.

*9 RHB Regional Thematic Research. (2017) "One Belt One Road," 21 June 2017.

*10 Zhao Hong. (2016) "Can China's OBOR Initiative Synergize with AEC Blueprint 2025?," *ISEAS Yusof Ishak Intsitute Perspective*, 16 November 2016.

*11 DBS Group Research. (2017) "Asian Insights SparX: One Belt One Road Infrastructure Sector," 24 July 2017.

*12 "Navigating the new Silk Road," *The Straits Times*, 16 October 2017.

*13 World Economic Forum. (2013) "The Green Investment Report: The ways and means to unlock private finance for green growth," A Report of the Green Growth Action Alliance.

*14 Nakao, Takehiko. (2014) "Bridging Asia's Infrastructure Gap," Investment in Infrastructure, G20 - The Australian Summit: Brisbane, November 2014.

*15 Asian Development Bank. (2013) "Toward a More Innovative, Inclusive, and Integrated Asia and Pacific - Takehiko Nakao," 4 May 2013.

*16 Machado, Hilka Pelizza Vier. (2016) "Growth of small businesses: a literature review and perspectives of studies," Gest. Prod. 23(2) São Carlos, April/June 2016.

*17 McKelvie, Alexander and Johan Wiklund. (2010) "Advancing Firm Growth Research: A Focus on Growth Mode Instead of Growth Rate," *Entrepreneurship Theory and Practice*, 34(1), pp.261-288.

*18 Monetary Authority of Singapore. (2017) "'Singapore - the gateway,' Loh, 21 September 2017."

GEOFF HOWIE

Market Strategist, Singapore Exchange

Geoff Howie is the Singapore Exchange's Market Strategist, with 20 years' of experience in financial markets and economics. He is the author of the SGX My Gateway Report which highlights important market developments and has served investors with regular educational extracts since 2012. The report has the largest subscriber base within the Singapore financial markets. Mr. Howie also contributes a weekly column in the Business Times, Inside Insights.

Howie previously held lead Broking and Market Strategist roles across the Asia Pacific offices of a large international futures broker. He complemented his broking profile with the provision of frequent market reports, seminars and commentary to local and international media. He has also served as the Treasury Adviser to the Leader of the Queensland Liberal Party in Queensland Parliament.

He has received a Bachelors and Master's degree in Economics at the University of Queensland, with his thesis achieving the highest grade for first-mover policy research on the opening of Shanghai's economy in the early 1990s. Mr. Howie's other notable achievements include receiving two Hong Kong Securities Institute Outstanding Achievers awards for 2005.

Howie also serves as the Treasurer of the Australian Alumni Singapore (AAS) and is on the Editorial Board of HealthInvestor Asia.

KESARA MANCHUSREE

The Stock Exchange of Thailand

The Future of The Stock Exchange of Thailand

SET: To Make the Capital Market "Work" for Everyone

The Stock Exchange of Thailand (SET) has put in place a comprehensive capital market platform for all stakeholders and demonstrated strong performance compared with regional peers. Over the past four decades, SET has contributed significantly to capital formation supporting Thailand's economic growth, while reaching out to all parts of the Thai society in line with its vision **"To Make the Capital Market 'Work' for Everyone."**

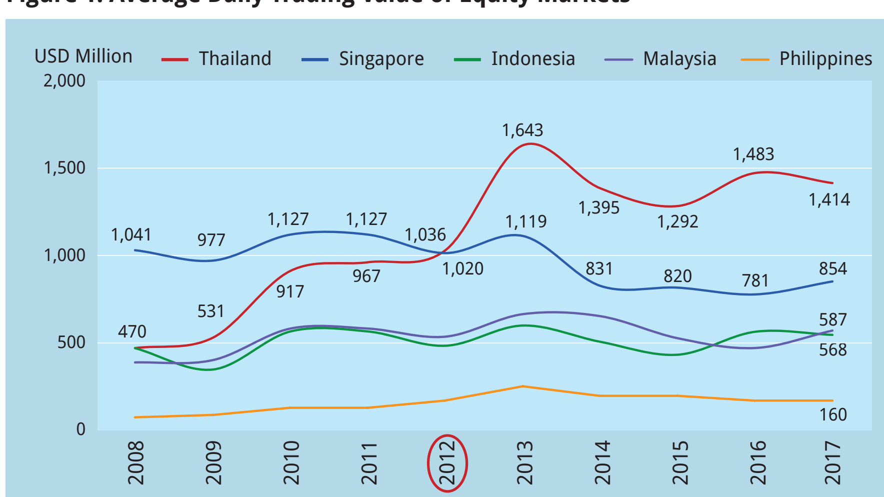
SET continued to be **the most liquid market in ASEAN with an average daily trading value of USD 1.41 billion in 2017, maintaining the top ranking for six consecutive years (2012-2017)** (Figure 1) and now ranked 22nd globally in terms of market capitalization. Owing to close collaboration with listed companies, brokers, and fund firms in the capital market, SET continually attracts new investment through the main board, SET, and the alternative board, Market for Alternative Investment (mai), particularly for innovative business with high potential growth. Overall, SET's goal is to support the development of a sustainable startup ecosystem in Thailand.

Accordingly, SET has cultivated sustainable culture and corporate governance (CG) which can be applied in all facets of operations in the Thai capital market in embracing the combination of environmental, social, and governance (ESG) aspects. Especially noteworthy were the **17 Thai listed companies in 2017 that became constituents of the Dow Jones Sustainability Indices (DJSI), the highest number in ASEAN.** Meanwhile, SET has also promoted financial literacy and investment knowledge among investors and the general public, while developing the capital market for the benefit of the economy, society, and the whole country in the long run.

Thanks to high liquidity, strong listed companies' earnings, a large volume of initial public offerings (IPOs), and a variety of products and services, SET today has become a key preferred one-stop marketplace that suits investor demands and the rapidly changing financial landscape.

Going forward, to strengthen the exchange and society, SET has set out the strategic direction **"Towards Sustainable Growth with Innovation"** by developing the financial platform, creating innovative product development, ensuring inclusive growth, and fostering knowledge management.

Figure 1: Average Daily Trading Value of Equity Markets



Source: World Federation of Exchanges, SET

Strengthen Core Exchange Business with Quality

The achievements have reflected the strength of the Thai capital market over the past years. SET has become **ASEAN's top IPO fundraising venue during the past five years** with the number of IPOs hitting 193, raising a total of USD 19.9 billion (Table 1). In 2017, a total 42 new securities were listed with market capitalization at IPO of USD 13.05 billion. Market capitalization has grown significantly to USD 549 billion (as of end-2017), a 16 percent increase from the end of 2016, and equivalent to 118 percent of GDP.

Listed companies have averaged 10 percent annual growth in earnings during the past five years, double the 5 percent average annual growth in GDP. Their numbers have been on the rise and several have ventured overseas, building presence on the regional and global stages. Another positive factor that has become a competitive edge is the varied sizes of Thai listed companies, from small to large companies, grouped under main sectors as well as newly-created sectors initiated to match today's lifestyles like hospitality, logistics, resources, agro & food industry and technology.

Thai listed companies' outstanding performance has been internationally recognized in terms of size and liquidity attractiveness for foreign investors. **In 2017, as many as 33 Thai listed companies were included in the MSCI Standard Index, marking the highest net addition in ASEAN region for five consecutive years** (Figure 2).

In addition to developing and strengthening listed companies to reach their highest potential, SET also plays an important role in providing knowledge for small and medium-sized enterprises (SMEs), including businesses with readiness for listing. IPO domestic roadshows, which presented listing regulations and opportunities, were held nationwide for potential SMEs and family businesses to help prepare them for listing. Moreover, SET has developed knowledge and enhanced creativity in new business ideas for entrepreneurs, so as to move towards an innovation-driven economy, under the government's Thailand 4.0 policy.

SET also aims to incubate high-potential startups to enhance their business capabilities, and will facilitate matching scheme between the startups and investors to promote business linkages and funding opportunities. Moreover, **SET will launch a new over-the-counter trading platform, called "LIVE," to help startups access capital and to provide accredited investors with alternative investment opportunities.**

In addition, a wide range of products, such as REITs, derivative warrants, and infrastructure funds, are provided in order to create value and offer plenty of opportunities for investment. In the future, foreign companies, including those in Cambodia, Laos, Myanmar, and Vietnam, or CLMV, are expected to list their securities on the capital market.

Enhance quality of listed companies

Presently, SET's ultimate goal is to elevate the **quality of listed companies** to achieve international recognition. The exchange was ASEAN's first exchange and the 13th in the world to join the United Nations Sustainable Stock Exchanges (SSE) Initiative, becoming publicly committed to working with stakeholders to promote long-term sustainability.

Underpinning this is His Majesty the Late King Bhumibol Adulyadej's Sufficiency Economy Philosophy which consists of three key components: moderation, reasonableness, and self-immunity, based on

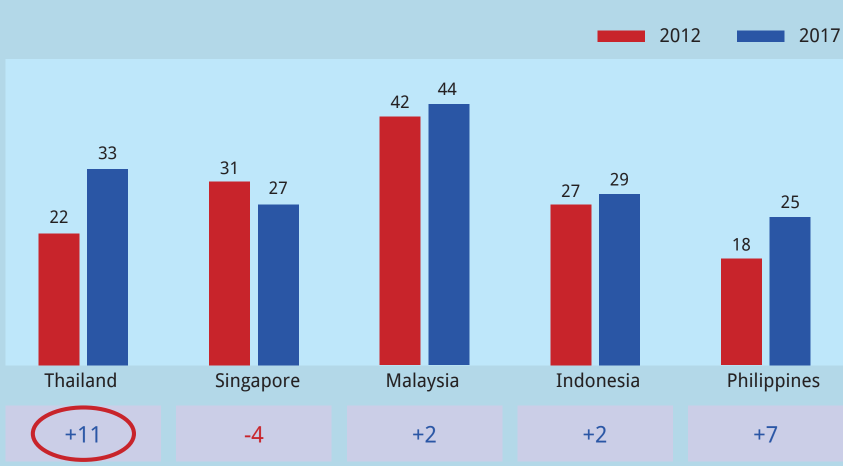
Table 1: Size of IPO Issued in ASEAN Exchanges

USD Million

	2013	2014	2015	2016	2017	2013 – 2017
Thailand	6,552	4,024	4,350	1,503	3,428	19,857
Singapore	5,201	2,577	374	1,664	3,294	13,110
Malaysia	2,835	1,251	1,312	299	1,718	7,415
Indonesia	1,669	768	878	1,043	714	5,072
Philippines	1,369	316	116	1,017	455	3,273

Note: As of December 2017
Source: Bloomberg

Figure 2: Number of Listed Companies in MSCI Standard Index



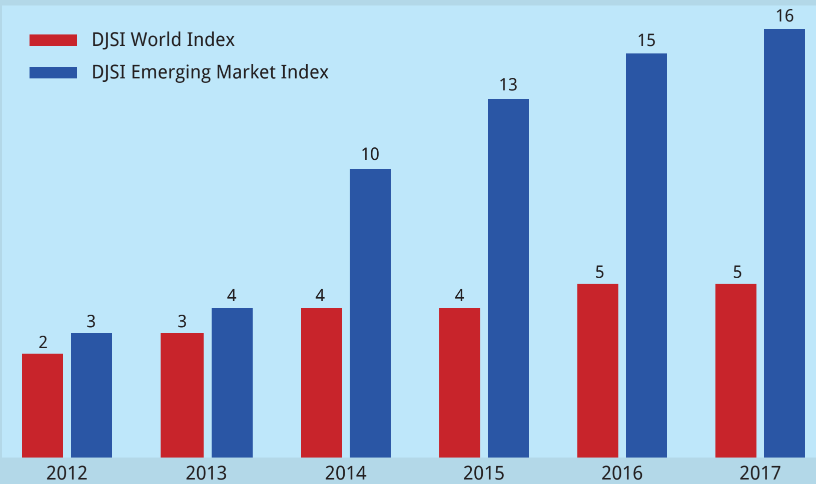
Source: MSCI

Figure 3: Number of Listed Companies in DJSI

2017 DJSI member

DJSI World: KBANK, PTT, PTTEP, PTTGC, SCC

DJSI EM: AOT, BANPU, CPALL*, CPF, CPN, HMPRO*, IRPC, IVL*, KBANK, MINT, PTT, PTTEP, PTTGC, TOP, TRUE, TU
*new members in 2017



Note: 2017 DJSI member's full name is as follows: Kasikornbank (KBANK), PTT (PTT), PTT Exploration and Production (PTTEP), PTT Global Chemical (PTTGC), Siam Cement (SCC), Airports of Thailand (AOT), Banpu (BANPU), CP All (CPALL), Charoen Pokphand Foods (CPF), Central Pattana (CPN), Home Product Center (HMPRO), IRPC (IRPC), Indorama Ventures (IVL), Minor International (MINT), Thai Oil (TOP), True Corporation (TRUE), Thai Union Group (TU).
Source: DJSI

knowledge and ethics. SET has followed the path of this philosophy, while encouraging all Thai companies to conduct business with a keen sense of responsibility and ethics, always bearing in mind the best interests of their stakeholders, as well as adhering to sustainability principles to ensure the ESG balance in all dimensions of operation, and the balance in the use of material resources. In fact, SET embarked on the sustainability journey over 20 years ago after the 1997 financial crisis. Efforts prioritized to promote CG have improved corporate polices which are keys to promoting stakeholders' trust and disclosure, while further promoting sustainability as the key mechanism that adds long-term value for the capital market as a whole.

In addition to the 17 listed Thai companies recognized internationally by inclusion in the DJSI, 35 Thai listed firms have been included in the FTSE4Good ASEAN 5 Index, the highest number of companies among the ASEAN 5 (Figure 3). According to a 2017 report by Corporate Knights,*[1] the **Thai stock market scored among the world's top 10 stock exchanges in terms of the sustainability disclosure reports of listed companies. This was a substantial jump from the exchange's 40th place ranking in 2013.** The report noted the strong all-around performance of large listed Thai companies in terms of their disclosure rates, disclosure growth, and timeliness (Figure 4).

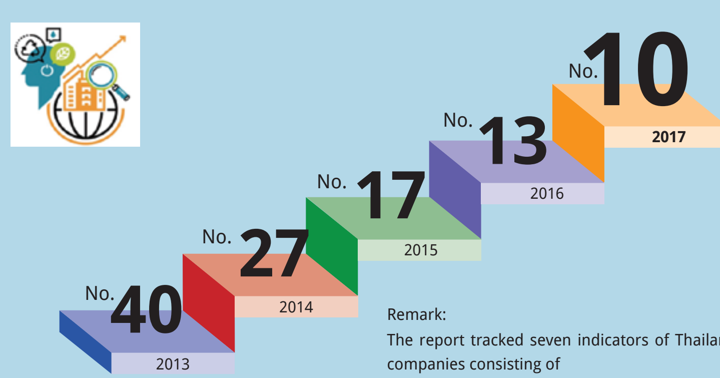
This progress and recognition echoes SET's moves in strengthening listed companies' financial growth with a focus on ESG issues and impact. SET has been encouraging listed firms to recognize the importance of CG and to instill a CG culture. SET has been providing consultation in addition to introducing responsibility and Sustainability Reporting Guidelines. Since 2015, the exchange launched the Thailand Sustainability Investment list which now covers 65 sustainability-oriented companies.

At the regional level, almost half of the top 50 companies in ASEAN were Thai companies which presently were awarded ASEAN CG scorecard, a program assessing the corporate governance performance of listed companies that was initiated by the ASEAN Capital Markets Forum (ACMF) and is supported by the Asian Development Bank (ADB) (Figure 5).

Strengthening investor base with quality

Liquidity and various products have resulted in the diversity of investors in SET. The ratio of local retail investors and institutional investors is well balanced in terms of trading value and holdings (Figure 6). With the **retail investor** base growing to 1.43 million accounts, the exchange has implemented projects to develop financial knowledge and skills to ensure that these investors understand alternative investment products and risks. SET, together with capital market partners, **has encouraged retail investors, especially the younger generation and new investors, to invest in securities and mutual funds regularly on a long-term basis using the Dollar-Cost Averaging (DCA) technique**

Figure 4: SET Ranks World's Top10 Stock Exchanges on Sustainability Disclosure Reporting in 2017



Remark:
The report tracked seven indicators of Thailand's 92 large listed companies consisting of
❶ rate of employee turnover ❷ energy use ❸ carbon emission (GHG)
❹ rate of employee injury ❺ personnel costs
❻ waste generation ❼ water use

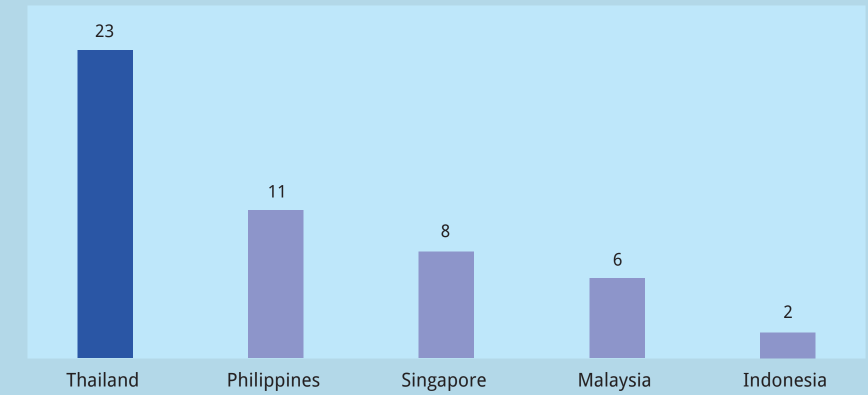
Source: Corporate Knights

through cutting-edge investment tools. SET has continued to expand the investor base via various activities and to enhance the quality of investors by developing learning channels for investors and the general public. Today, SET offers a variety of digital platforms allowing investors to plan their investments to best suit their lifestyle and risk appetite for long-term savings and goals.

Institutional investors are vital in fostering equilibrium in the Thai capital market. At the end of the first half of 2017, the number of mutual fund accounts stood at 5.39 million, up by 1.5-fold from 3.55 million in 2012 (Figure 7). To continue this growth, SET has cooperated with asset management companies and relevant agencies to promote the asset management industry and expand investment via mutual funds, including continuous development of all services concerned. **FundConnext was launched as a platform for trading mutual funds, to enhance the efficiency of distribution channels and increase access of retail investors**.

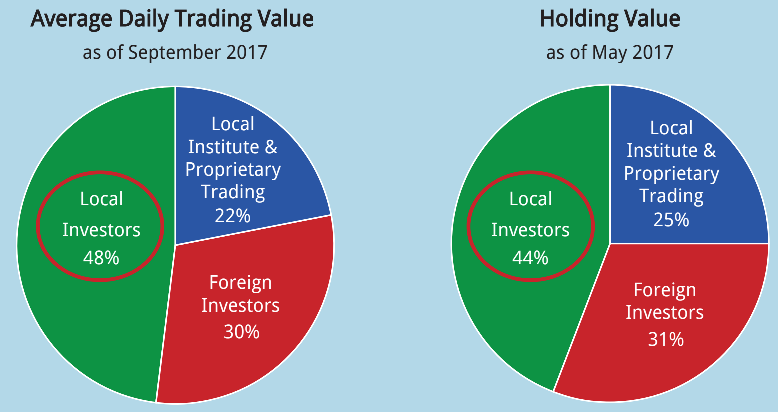
While Thailand is becoming an aging society, SET has also launched several initiatives to improve financial literacy about old age, such as a financial planning project which helps people prepare for their retirement. SET has also encouraged employers to offer provident funds with an employee-choice asset allocation scheme, enabling employees to better select an investment plan that matches their long-term investment targets and risk profiles. In addition, **the value of foreign holdings has recently hit a historical record, at USD 143 billion in August 2017, representing 31 percent of total market value**.

Figure 5: Number of Top 50 Companies in ASEAN Awarded 2015 ASEAN GC Scorecard



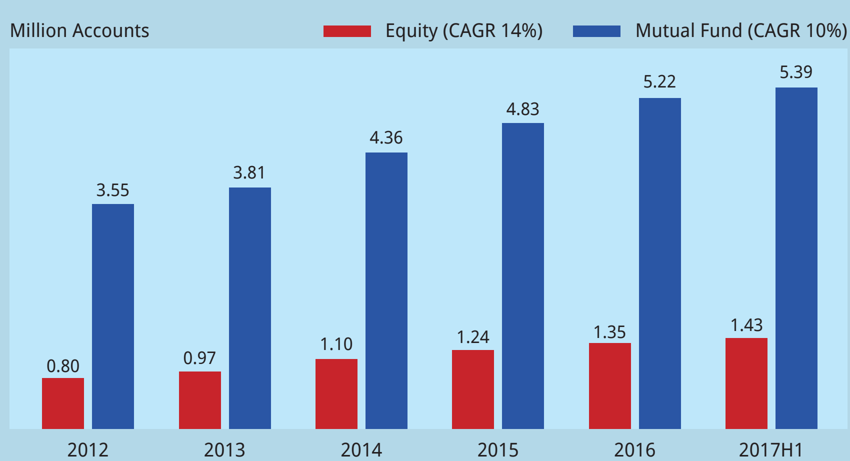
Source: ACMF, ADB

Figure 6: Average Daily Trading and Holding Value by Investor Type



Source: SET

Figure 7: Number of Equity and Mutual Fund Accounts



Source: SET, Association of Investment Management Companies

Towards Growth with Innovation

The work on transforming SET into a "**Digital Exchange**" has been ongoing. SET employs the best technology all across its operation and service areas, turning office-wide operations to "online-based service." The exchange emphasizes the adoption of technology for improvement of SET services and preparing the capital market for disruptive technology. This includes developing IT infrastructure to be an open architecture, embracing innovative ideas, and introducing blockchain as part of SET's "LIVE" platform.

Notably, **SET will be a pioneer in Asia in introducing T+2 for shortening the clearing and settlement cycle to two days from three days, starting from March 2, 2018**. SET's risk management measures have also met the regulatory standards of the Principle of Financial Market Infrastructure and European Markets Infrastructure Regulation.

Strengthen international recognition and regional collaboration

On top of products and services, SET is synergizing its strengths to boost its regional and international presence. SET will further expand and create business linkages with other capital markets in the region. SET plans to introduce an index for CLMV to be derived from a number of Thai listed companies generating revenue from or investing in CLMV countries. **SET is committed to cooperating with other exchanges in the region to create cross-border products and a regional trading system**. A financial literacy project has already been created for exchanges in CLMV. Furthermore, programs to strengthen the members of the World Federation of Exchanges are in process following its annual meeting in Bangkok in September 2017.

Conclusion

SET continues to work on enhancing both quantity and quality of the capital market from all aspects as well as building a stronger foundation. **The Thai exchange aims to maintain its leadership position as the highest liquidity market and preferred fund-raising venue in the region**. SET is striving to support listed companies' progress for international recognition. At the same time, it has launched a funding platform to support startups, which are expected to become a vital force for Thailand's economy in the future. SET also offers well-diversified instruments to investors via a variety of products and services while educating investors nationwide, expanding foreign investment, developing technology to meet international standards.

SET focuses not only on market value but also on quality, innovation, and sustainability. The exchange aims to promote a culture of sustainable investment among retail investors, developing savings channels and promoting investment knowledge so investors can generate returns from the capital market sustainably.

All in all, SET stands ready to support all sectors and stakeholders to access and benefit from the capital market effectively. Managing these transitions and the interconnected risks they entail will require long-term thinking, investment, and cooperation, to meet SET's vision of **"To Make the Capital Market 'Work' for Everyone."**

Notes

*1 Corporate Knights, "Measuring Sustainability Disclosure," September 2017.

KESARA MANCHUSREE

President, The Stock Exchange of Thailand

Kesara Manchusree, SET President since June 2014, is committed to fulfill the SET vision "To Make the Capital Market 'Work' for Everyone". She aims at pioneering new products and services to advance the Thai capital market and its ecosystem forward, with the ultimate goal of developing the exchange on all fronts for the benefit of all stakeholders.

Her stewardship has led SET to become the most appealing fund-raising platform for IPOs, with newly-developed products and services, the creation of a social impact platform and a startups platform, as well as being the most liquid exchange in ASEAN. Specifically, her focus on sustainability has steered SET to strengthen awareness among listed companies on ESG. Being a pioneer has been Kesara's natural strength during her 30-year-long career in the capital market. Kesara is a well-rounded and well-versed executive in the capital market. She was instrumental in establishing Thailand Futures Exchange (TFEX), which today ranks No.2 in ASEAN, after successfully overseeing the bond market at Thai Bond Dealing Center.

Kesara is the first SET President to be elected to the Board of Directors of the World Federation of Exchanges (WFE) in 2016. She won the Outstanding Women Award 2016 from the National Council of Women of Thailand, and an Outstanding Women Leaders for Green Growth Awards 2016 from the Federation of Business and Professional Women in recognition of her leadership and achievements in developing SET at the regional and international levels.

HUONG THI THANH NGUYEN

State Securities Commission of Vietnam

THUY THI THANH NGUYEN

State Securities Commission of Vietnam

Vietnam Securities Market Aims High in 2018

Review of 2017

Vietnam's securities market completed a successful 2017, reaching its peak of the last 10 years and gaining the highest growth among the securities markets in the Asian region.

Among the macro-level factors supporting such an impressive growth were the stable domestic GDP growth rate expected at 6.7 percent; low interest rates and an inflation rate at less than four percent; the stable exchange rate; increasing foreign direct investment (FDI) flows as well as the gradually improving business environment. It was well noted that due to the government's strong commitments in 2017 on solutions to investment barriers, initiatives for private businesses, and an action plan to accelerate initial public offerings (IPOs) as well as the capital exit of large state-owned enterprises (SoEs), Vietnam's securities market has attracted huge capital flows, especially of foreign capital, since early in the year, which created a strong foundation for an impressive development year in 2017.

Some remarkable figures for illustration can be named as follows:

Stock market

- Indices: As of 29 December 2017, VN Index reached 984.24 points, an increase of 48 percent compared to the year-end 2016 – the highest level within the last 10 years. The HNX index closed at 116.86 points, an increase of 46 percent compared to the same period of 2016 – in year end 2016 HNX stood at 80.12 (Figure 1).

- Market capitalization: The market cap reached nearly VND 3.36 quadrillion, an increase of 73 percent compared to year-end 2016 and equivalent to 74.6 percent of GDP (surpassing the target for 2020 of 70 percent of GDP set by the government in the Strategic Development Plan 2016-2020 for Vietnam's Securities Market).

- Trading volume: The total average trading volume of stocks per section reached VND 4.98 trillion, an increase of 63 percent compared to the average volume for 2016.

- Listing and registration activities: Presently, there are 731 listed stocks and listed investment funds on the two stock exchanges : Hochiminh Stock Exchange (HOSE) in Hochiminh City and Hanoi Stock Exchange (HNX) in Hanoi.*[1] Also 679 stocks are registered on the Unlisted Public Companies Market (UPCoM) exchange, with the total listing and registration value of VND 959 trillion, an increase of 30 percent compared to 2016. The business results of the listed companies (as of the first nine months of 2017) improved considerably in comparison with 2016. (Turnover and net profit increased by 18 percent and 23 percent respectively).

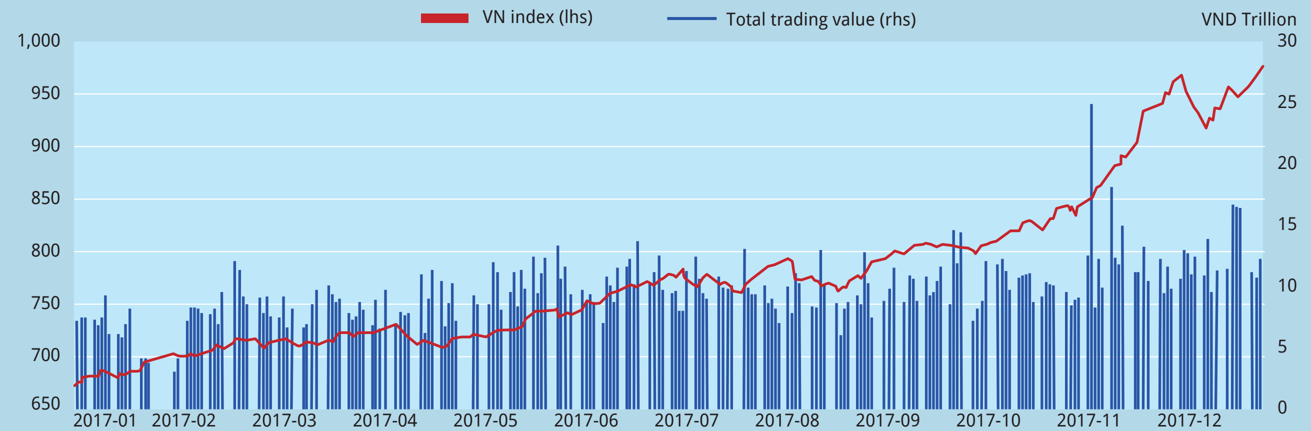
- Investment activities: Vietnam's securities market witnessed an impressive return of foreign investors, with their investment portfolios up sharply to USD 31.4 billion, an estimated increase of 81 percent compared to 2016. The total number of trading accounts reached 1.9 million.

Government bond market

- Market Cap: There are 612 bonds listed with a total market value of VND 1.015 quadrillion (equal to 23 percent of GDP).

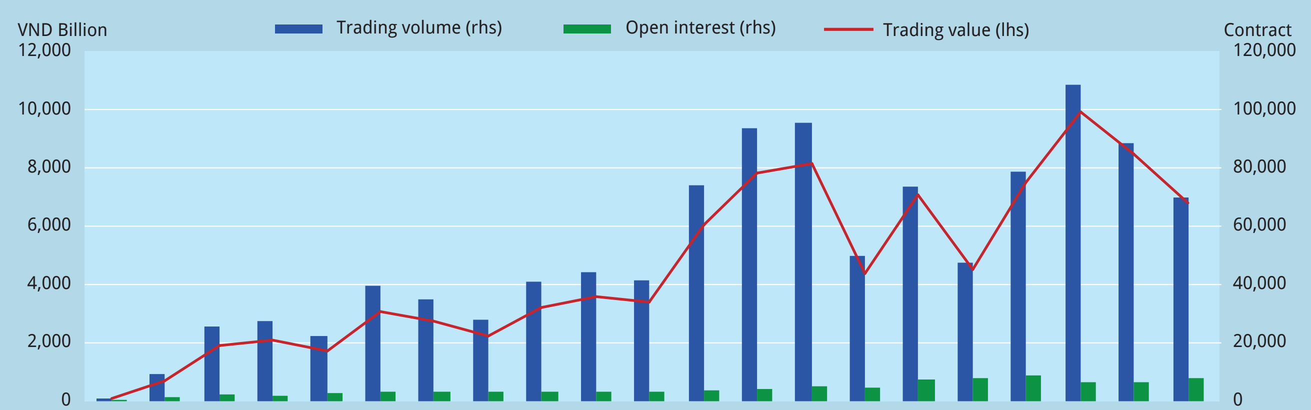
- Trading volume: The average trading volume was VND 8.89 trillion per trading section, an increase of 38 percent compared to 2016. The market gained an in depth development with the total value of repo transactions up by 72 percent compared to 2016, which accounted for 48 percent of the total market trading volume (as end of November 2017).

Figure 1: The VN Index Chart in 2017



Source: State Securities Commission

Figure 2: Weekly Trading Volume and Value of the Derivatives Market



Note: From 10 August to 29 December 2017
Source: State Securities Commission

- Maturity range: Average maturity of outstanding bonds increased from 8.7 years to 13.5 years between 2016 and 2017. The percentage of bonds with maturities from 20 to 30 years increased considerably, accounting for 25 percent of the total issuance volume.*2 For the first time, the government succeeded in mobilizing more than VND 27 trillion of government bonds at 30-year maturity, which contributed greatly into the public debt restructuring plan. The winning interest rates decreased over all maturities.

Table 1: Trading Data of the Derivatives Market

Criteria	Unit	August	September	October	November	December	Total
Trading volume	Contract	58,444	131,903	238,330	320,064	357,612	1,106,353
Trading value	VND Bil	4,362	10,299	19,370	28,484	33,781	96,297
Open Interest volume	Contract	2,166	3,275	3,949	8,122	8,077	25,589

Note: From 10 August to 29 December 2017
Source: State Securities Commission

Derivatives market

The derivatives market only started operation in early August 2017, with the first product of the VN-30 Index futures, but it has shown impressive development in both the number and value of contracts.

- Trading volume: As of 29 Dec 2017, there were 1,106,353 contracts were set up within the last four months, reaching the total notional value of more than VND 96 trillion. On average, trading volume was around 10,954 contracts per day, with the notional value of the contracts reached around VND 953 billion per trading section (Table 1). The contract number and the trading volume increased by 51 percent and 59 percent respectively per month (Figure 2).

- Trading accounts: Presently there are around 15,000 trading accounts set up, double the number of the initial month of operation. However, the majority of accounts belonged to individual investors, while accounts of the domestic institutional investors were at a very modest level, mainly focused on dealing activities. There is implicitly potential room for market development in the future.

Toward 2018 with Higher Achievements

The year 2018 can be seen as a crucial year in the Market Development Strategy 2016-2020 (approved by the government in 2012), as it will be the turning point for the State Securities Commission (SSC) not only to review, update and attain the main targets set in the current Strategy, but also to set up a higher vision in a new Strategy toward 2030. In the period 2018-2019 the following will be the main areas of concentration for the SSC.

Set up the second generation of the Securities Law

With the aim to create a comprehensive legal framework as well as to enhance the surveillance and supervision activities of regulators in the securities market, the Ministry of Finance (MoF) has submitted to the government the documents to revise and set up a new Securities Law, which is expected to be considered by the government and submitted to the National Congress by late 2018. The current Securities Law was approved by the National Congress in 2006 and revised in 2010. In recent years, some important laws relating to the securities field have been updated and revised, such as the Enterprise Law 2014, Investment Law 2014, Civil Law 2015 and the Law on Administrative Violations and Punishment 2012. Therefore, incorporating the improvements of the current laws in a new second generation, Securities Law is crucial work to meet the changing facts, in addition to increasing requirements in the market as well as encouraging an environment of international integration. The new Securities Law will be set up based on the following orientation:

- Enhance the SSC's empowerment in supervision and surveillance activities, set up clear regulations on the responsibilities of the related organizations in the collaboration process (in the fields of banking, taxation, business registration etc.)
- Adjust and update regulations on market products, foreign investors, listed and public companies, and services of market intermediaries.
- Enhance regulations on information disclosure in the securities market with the aim to improve transparency and fairness.
- Enhance the structure and operation of the stock exchanges towards a single national exchange, of the Vietnam Securities Depository (VSD) and of the securities firms and asset management companies based on international standards for corporate governance and risk management.
- Set up and update regulations relating to intermediaries such as credit rating agencies, evaluation firms, asset management companies, and independent audit firms to enhance their capabilities and responsibilities in the securities market.

Establish a single national stock exchange (merging the current two stock exchanges)

Following the Restructure Plan approved by the Prime Minister in 2012, the setting up of a synchronous market (merging two current stock exchanges) was one among the four main pillars of the Restructure Plan. The other pillars are the investor base, market products and institutional organizations.

During the 20 years since establishment and development of the securities market, Vietnam had to maintain the two exchanges in Hanoi and Hochiminh City – the two main economic hubs of the country – due to various factors. Nowadays, as the technological advances close the geographic gap and mergers of stock exchanges is on the rise around the world and in the region, the merging of HOSE and HNX into one single bourse – Vietnam's Stock Exchange – is highly feasible and crucial to creating the best conditions for the market as a whole and to pushing it into a higher development phase, especially in the context of regional integration.

Under the newest plan submitted to the government by the MoF in late 2017, the merging of the two exchanges might be carried in two stages: (1) the first stage (2017-2019) – establish a single Vietnam Stock Exchange based on the merging of the HOSE and HNX, while maintaining the same operating markets in each exchange - subsidiaries. The trading of large-size listed companies, investment funds and covered warrants (expected to operate in 2018) would be in Hochiminh City. Meanwhile, trading of small sized listed companies and registered public companies, derivatives and bond products would be provided in Hanoi. (2) the second stage (from 2020): Based on synchronous technology infrastructure, the single bourse will include the specialized market for listed and registered companies in Hochiminh City, while the specialized market for government and corporate bonds, derivatives products will be in Hanoi.

Once the Prime Minister issues final approval on the merging plan of the two stock exchanges, it will be done through three steps: merging the organizations of the two exchanges, then introducing the market technology infrastructure, and finally adopting a synchronous management system for different market segments, including the stock, bond and derivatives markets.

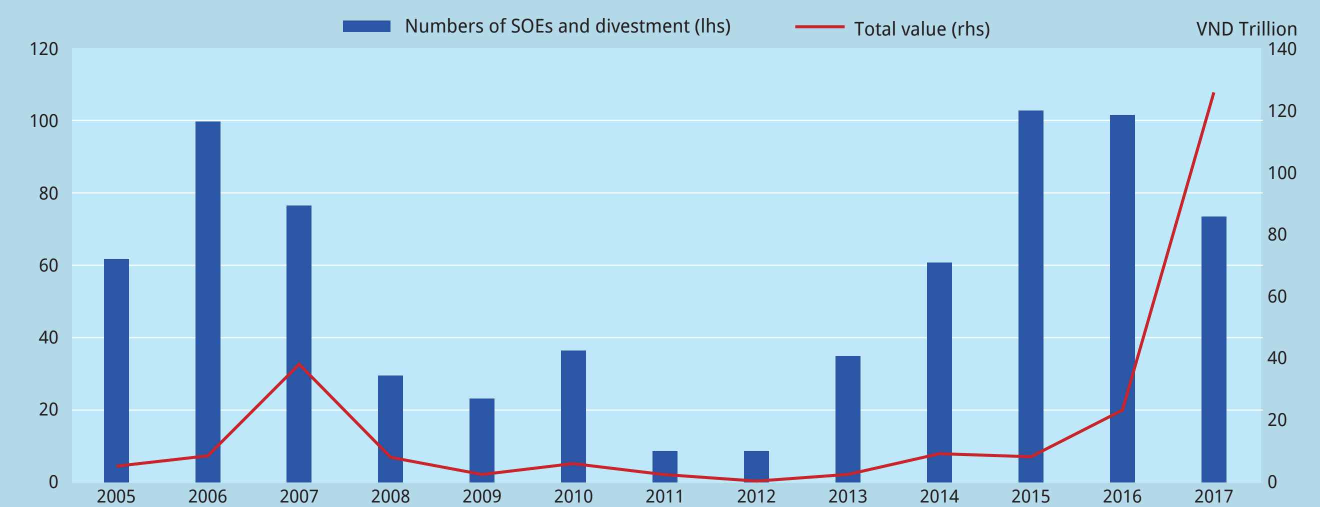
Vietnam's government recognized the establishment of a single national stock exchange as a means not only to benefit all related market participants, but also to strengthen the status and credibility of the Vietnam Stock Exchange as well as to create opportunities for cooperation with other exchanges around the world.

Improve the quantity and quality of the market products

Stock market:

The important policies and initiatives for the stock market include (1) accelerate the equitization process of the SoEs in association with their registration in UpCom and listing on the stock exchange; (2) SSC, in coordination with MoF, set up the book-building procedure for equities selling in SoEs; (3) research and set up mechanism for mortgage management and services of mortgage-backed securities trading in VSD; (4) set up market maker system for listed market; (5) set up procedure guidance for FDI companies which are converted into public shareholding companies to list on the stock exchange; (6) enhance the supervision of information disclosure of listed and public companies, especially on capital use and corporate governance; (7) participate in the Project on International Accounting Standards Application in Viet-

Figure 3: The Equitization and Divestment Process of Vietnam's SoEs



Source: State Securities Commission

nam led by MoF.

The UpCoM – trading market for public but not yet listed companies in Vietnam – is expected to be a highlight of 2018. In addition to the outstanding achievement of the listed market, UpCoM witnessed a sharp increase in 2017. At the end of 2017 there are 681 companies registered in UpCoM with total capitalization of more than VND 600 trillion, double the figure at the end of 2016 with 417 companies. Market liquidity increased sharply, average total trading volume reached 11.6 million stocks per trading section, and total trading value reached VND 218 billion per trading section, increases of 35 percent in trading volume and 71 percent in value compared to last year.

The establishment of UpCom in 2009 was aimed to step by step narrow the grey market of unlisted public companies and to push the transaction and liquidity of equitized but not yet listed stocks of SoEs and public companies. During recent years, with the aim to increase the transparency of public companies and to protect small and individual investors, the government issued several policies, such as Prime Minister's Decision No 51, which require all public companies that have not yet met listing requirements to register in UpCom within one year after their IPO completion. Moreover, following Decree 126/2017/ND-CP issued in 2017 within 90 days after the IPO completion, equitized companies should complete company re-registration, stock custody in VSD, and trading registration in UpCoM. In May 2017, HNX issued a code of principles to classify registered companies in UpCom based on capitalization criteria. All such new regulations are expected to push the equitized SoEs to UpCoM, to enhance their transparency and to create a qualified supply source for Vietnam's securities market in 2018.

The SoE restructure program has been carried by Vietnam's government for nearly 20 years, and closely links with restructuring, renovation and equitization in the SoE sector. In the SoE equitization process, the securities market plays an important supporting role matching the supply side (SoEs to be equitized) and the demand sides (investment demand from public investors) and providing equitized companies with chances for listing/registration on the exchanges.

Vietnam's government recently has voiced various clear messages on the equitization and divestment of SoEs such as strong determination to (1) equitize SoEs, especially the large sized SoEs; (2) apply modern corporate governance principles and public, transparent information disclosure; (3) instruct SoEs to follow the market mechanism; (4) improve the supervision of state-owned capital use in equitized companies; (5) sharply decrease state ownership in equitized SoEs; (6) allow large stake selling for foreign strategic partners; (7) require equitization in association with listing/registration in the securities market.

In 2017, equitization and divestment through two the stock exchanges were pushed sharply. The number of equitization auctions reached 73, with total value sold of around VND 125 trillion (Figure 3). Despite the fact that the number of auctions was lower than in 2016 (102 auctions in 2016), the total value sold was 5.7 times larger (2016 total value of VND 22 trillion only).

With the government's strong emphasis on equitization and divestment, in 2018 it is expected that some big-name SoEs, such as MobiFone, Infrastructure Investment and Development Cooperation, and Hanoi Housing Investment and Development Cooperation, will be equitized. The total number of SoEs to be equitized and divested in 2018 are 64 and 181 companies respectively. Therefore, 2018 will be seen to have the highest concentration of big IPOs, restructuring and divestment activities of large SoEs in the period 2018-2020.

Bond market:

Within the next two years an important task for MoF and SSC will be to develop the corporate bond market. Currently, the bond market in Vietnam mainly comprises government bonds (accounting for 84-85 percent of market share), while the corporate bond sector is still very limited, accounting for only 15-16 percent of market share. The following are the main challenges for the corporate bond market in Vietnam:

- **Very small market size compared to the regional average development scale:** At present the corporate bond market accounts for only 5.27 percent of GDP – quite a small share compared to the average of 22 percent in ASEAN+3 corporate bond markets.*3

- **A basic foundation of the legal framework has been established, however, some regulations not suitable for the corporate bond market might require amendment or supplementary mechanisms:** At present, the regulations for public offering of securities (both stock and bond issuances) require at least 100 investors excluding professional investors. It seems very hard to comply with this regulation in the case of bond issuance due to the small size of the current market and the primary role of the professional investors in the market.

- **Lack of effective credit rating agencies (CRAs) and services has hampered the corporate bond issuances, leading to the under-development of the corporate bond market:** the existence of the CRAs have been seen as a crucial factor for the effective development of the corporate bond market. CRAs play an important role in the evaluation process of the issuer's financial performance, improving the disclosure transparency of the issuances and providing a standardized reference on the risks and benefits of the issuances for investors. Decree 88/2014 issued in 2014 by MoF is considered the first legal foundation for the establishment of CRAs in Vietnam. It stipulates the requirements, structure, operating mechanism as well as the code of conduct for CRAs. It is expected that MoF will soon reveal detailed regulations that create more favorable conditions to encourage the establishment of domestic CRAs, such as the additional services and activities besides CR service that CRAs might provide domestic companies. For the success of the CRAs, there should depend on some conditional factors such as: a sound accounting/auditing system to support disclosure transparency of companies and a knowledgeable and well-trained staff with high-standard of integrity, as profits of the credit rating business are linked closely to credibility and trust.

- **The absolute dominance of private placement issuances with illiquid OTC trading market makes information transparency even worse:** The potential issuers are discouraged from seeking funding in the market due to the insufficient information and high cost of private placement issuance compared to their traditional funding channel via bank loans, while potential investors are not provided with systematic, transparent and reliable information.

- **The market products are simple, undiversified and not attractive enough to draw investor attention, with a high concentration in middle-term maturities:** The issuance maturity is quite clearly segmented depending on the funding purpose of the issuers. Short-term maturities (one to two year terms) belong to securities companies to meet their demand for short-term investments or lending to customers. Meanwhile, local commercial banks and reputable large scale private companies often issue 10-year maturities for refinancing and main business purposes respectively. The major maturities are in three to five year terms, accounting for nearly 60 percent of the total issuance market.*[4]

- **The dominance of commercial banks in the local investor base (more than 75 percent), with very modest role for long-term institutional investors in the market (less than four percent):** Under the main feature of Asian bank-based intermediation, it is understandable that banks are normally the major corporate bond buyers in Vietnam in this initial stage of the market.*[5] On one hand, with current scrutiny set by the State Bank of Vietnam (SBV) for local commercial banks in order to enhance the risk and capital management under the application of Basel II, local banks might not easily invest in corporate bonds without tighter constraints.*[6] This will affect to the demand side of the market. However, on the other hand, to meet the criteria of Basel II's capital adequacy requirements (CARs), many large local banks should accelerate their long-term bond issuance schedule for refinancing purposes, so they will also push the supply side of the market. In this situation, the enhancement of institutional investors like pension funds and investment funds is essential for further effective development of the market. The constraints applied on bank borrowings also encourage local companies to look for alternative long term funding channels rather than relying on traditional relationship-based bank loans.

  The modest market investment by pension funds is partially explained by the lack of regulations on the activities of voluntary pension funds (defined contribution, DC type) in Vietnam.*[7] With the issuance of Decree 88/2016 in June 2016 by MoF in coordination with Ministry of Labors, Invalids and Social Affairs (MoLISA), the basic regulation of the mechanism and activities of DC-type pension funds was set up, and this is expected to motivate deeper involvement in the market by institutional investors.

- **The insufficient supporting infrastructure for corporate bond market development:** Currently, there is no electronic system to support online registration, International Securities Identification Number (ISIN) code for the bond issuers; no reference quotes/bond pricing system to support OTC trading; and no centralized bond information mechanism to support issuers and investors (Table 2). The quality and synchronization of the market infrastructure has been considered as a main factor for the successful development of the corporate market due to its specialties of the risk levels of the corporate issuances, round lot OTC trading and the main involvement of professional investors.

- **The limited awareness and knowledge among local issuers, financial intermediaries and investors of the importance of the corporate bond market:** In general, local companies do not have good enough corporate governance systems. Therefore, issuance and continuous disclosure and information transparency are still very limited, which in turn creates negative impacts on the success of bond issuances. As a result, many local companies do not pay enough attention to or hesitate to choose bond issuance over traditional bank borrowings.

  The Development Strategy to 2020 specifies the following quantitative targets for the bond market in Vietnam: (1) Market size: enhance the market size, market depth and

Table 2: Comparison between Bond Market Infrastructure in Vietnam and the Region

	Common corporate bond market infrastructure in the region and in the world	Vietnam bond market infrastructure	
		Corporate bond sector	Government bond sector
1	Electronic registration system/Online application submission system	No	Not required
2	Standard auctioning system or Online	No	Yes, the standard auctioning system run by HNX
3	ISIN code system	No	Yes, but used internally by VSD
4	Profile Listing system (on exchange)	No	Yes, the Info Bond system run by HNX
5	OTC electronic trading platform (mainly follows the interdealer model)	Yes Reuter's and Bloomberg's systems can be used as an alternative tool, however, low efficiency for corporate bond trading.	Yes The trading platform of HNX allows the market participants to do the OTC based trades.
6	Settlement system	Yes · For listed corporate bonds: DVP system via VSD · For unlisted corporate bonds: direct payment at the issuing companies or via transferring agencies	
7	Reference price quotations/bond pricing system	No Due to the lack of CRAs, there is no reference yield curve for CB market and no CB index. No bond pricing agencies	Yes, in HNX Benchmark curve for Government Bonds (GBs) GB index. Electronic screen on the reference bond pricing for main maturities of GB provided by HNX
8	Bond information system (at national level)	No Bond issuance statistics are collected and stored in the Issuance Department, SSC and in the Department of Financial Institutions and Banking, MoF	Yes Supplied by the synchronized auctioning, trading and information platform for GB in HNX

Source: HNX report on the Development of Corporate Bond Market in Vietnam (2015).

liquidity (with target stock market capitalization of 70 percent of GDP and bond market capitalization of 36 percent of GDP by 2020, of which the government sector comprises 31 percent of GDP and the corporate sector seven percent of GDP). In the long-term Vietnam's corporate bond market should gradually reach the average size of ASEAN corporate bond markets, 21.7 percent of GDP; and (2) Market liquidity: reach a turnover ratio (outright trading volume/total outstanding volume) of 30 percent.

To realize the above targets, the major issues that MoF and SSC have to deal with within 2018-2019 include: (1) adjust the current legal framework (specifically, Decree No 90 on corporate bond issuance issued in 2011) and standardize issuance activities; (2) apply the regional experience with developing a specialized corporate bond platform for professional investors only;*8 (3) set up a national information dissemination system on corporate bonds, as a base for gradually developing an effective infrastructure system to support issuance, trading and bond information dissemination; (4) set up initiatives to develop qualified CRAs to support corporate bond issuance. A Project on the Corporate Bond Market Development in Vietnam, which deals with the above-mentioned issues, has been carried by SSC since 2016 and is expected to get final approval from MoF in 2018.

Derivatives market:

In 2018 HNX bears the task to develop further effective derivatives products, such as Government Bond Futures and other stock indices futures, which combine the major listed stocks in both HOSE and HNX to prepare for the merging of the two exchanges in the near future.

Besides, to increase the liquidity and efficiency of the newly operating market, SSC should create initiatives for local securities firms to play the market maker role and improve the capacity and supporting technology system to supervise and identify potential speculative activities and frauds in both the underlying and derivatives market, with the final aim to protect the individual and minor investors as well as to protect the market stability.

Setting up a synchronous and comprehensive technology infrastructure

The enhancement of the informatics and technology system, with the aim to support market trading activities at max level, is a crucial point to push Vietnam's securities market to a higher development stage. A new synchronous and comprehensive technology infrastructure will be set up within SSC, Vietnam's stock exchange and VSD, and local securities firms to meet various market demands, especially in the context of the up-coming regional integration of banking and finance.

Strengthen supervision and surveillance power and activities to guarantee market transparency and fairness

Implement regulations on penalties for violations in the securities field, which are stipulated in the Criminal Code 2015 and its amendments and to be enacted from January 2018; implement regular inspection activities in securities firms, auditing companies and listed/registered companies; and enhance close cooperation among the related organizations with the aim to detect and prevent fraud and punish strictly violations in the securities market, and guarantee the sustainability of the market.

Following its fabulous development in 2017 with impressive facts and figures, Vietnam's securities market has surpassed many regional markets to become the fastest growing market in the region. International and domestic investors are expected to bring further achievements in the year 2018, which will be marked with the potential big IPOs divestments of big-name SoEs, which in turn will enlarge the market capitalization of Vietnam's securities market. All the progress can be seen as obvious evidence of the firm commitment of Vietnam's government in general and of SSC in particular to enhance the quality as well as the prestige of Vietnam's securities market in international financial markets.

Notes

*1 HOSE and HNX started operation respectively in 2000 and 2005.

*2 Of which the 20-year maturity accounted for 10 percent and 30-year maturity accounted for nearly 15 percent.

*3 The report on the development of Corporate Bond Market in Vietnam, Hanoi Stock Exchange, 2015, pp.16

*4 BaoViet report on the Vietnam's Corporate Bond Market in the first 9 months of 2016 (slide 11)

*5 Deutsche Bank. "What's behind recent trends in Asian corporate bond markets" Jannary 2014, pp.2

*6 In 2016 SBV issued Circular 22/2016 on the corporate bonds purchased by the local credit institutions, which requires the credit rating on the issuances/issuers and the internal control rules on the credit limits. From now on, the outstanding bonds purchased by the local banks will be categorized as an item in the total outstanding credit provided by the banks and should comply with the SBV regulations on the credit limits and capital adequacy requirements. SBV also required the experimental application of Basel II for ten large local banks since February 2016.

*7 Only the Government Social Security Fund (government-owned agency) involves in the market, but in the government bond market only due to the high-rating products investment constraint.

*8 Korea and Malaysia are the regional top 2 specialized corporate bond markets for the professional investors which gained considerably impressive achievements. In Korea, the corporate bond sector accounts for 60.7 percent of the total value of the bond market. In Malaysia, the figure for the corporate bond sector accounts for 41 percent of the total bond market. ("2017 Report on Vietnam's Bond Market" – MoF)

Bibliography

Hanoi Stock Exchange. (2017) "Annual Report 2017," December 2017

Market Development Strategy for Vietnam's Securities Market in period 2011-2020 (issued in 2012)

Nguyen, Thi Thanh Huong. (2016) "The Initiatives to develop an efficient corporate bond market in Vietnam," December 2016

Report on corporate bond market in Vietnam 2015 – Vietcombank Securities Company (VCBS)

Summary Report on Vietnam's Securities Market in 2017 and Action Plan in 2018 – SSC, November 2017

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Panel Discussion at the 2015 Forum

Lord Mervyn King at the 2015 Forum

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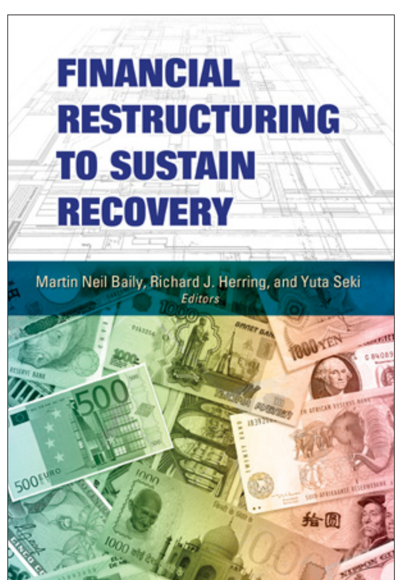

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