

Financial Innovations in EMC Capital Markets

I. Preface

Recently, the global capital market and financial industry have experienced a new wave of financial innovation, brought on by technological breakthroughs and digital disruption. In its report in 2012, the World Economic Forum employed a study by Lerner and Tufano¹ to define Financial Innovation as “the act of creating and then popularizing new financial instruments, as well as new financial technologies, institutions and markets.” The Lerner and Tufano study also mentions in detail that “the innovations are sometimes divided into product or process variants, with product innovations exemplified by new derivative contracts, new corporate securities or new forms of pooled investment products, and process improvements typified by new means of distributing securities, processing transactions or pricing transactions. In practice, even this innocuous differentiation is not clear, as process and product innovations are often linked. Innovation includes the acts of invention and diffusion, although in point of fact these two are related as most financial innovations are evolutionary adaptations of prior products.”

The OECD published the Oslo Manual in 2012, wherein the four types of innovation – product, process, marketing, and organizational innovation – are described in detail. Product innovation is the introduction of a good or service that is new or significantly improved upon with respect to its characteristics or intended uses. Process innovation is the implementation of a new or significantly improved production or delivery method. Marketing innovation is the implementation of a new marketing method which involves significant changes in product design, product packaging, product placement, product promotion or pricing. Lastly, organizational innovation is the implementation of a new organizational method in the firm’s business practices, workplace organization or external relations.

The majority of financial innovation can be found in the field of Fin-Tech, a convergence between financial products and services and the latest technology. Fin-Tech quickly became one of the most hotly discussed topics, and has been the central theme at a number of high-profile global gatherings, including IOSCO’s Annual Conference and World Economic Forum meetings. Global financial regulators also began to turn their attention to Fin-Tech, as it often integrates previously distinct industries, thereby creating loopholes in the existing regulatory framework. Some of the most popular examples of Fin-Tech include Bitcoin, a cryptocurrency established in 2009, and Blockchain technology.

Aside from these examples of innovations equipped with cutting-edge

¹ Lerner, J. & Tufano, P. (2011) The Consequences of Financial Innovation: A Counterfactual Research Agenda. Annual Review of Financial Economics, 3, p. 6

technologies, other types of financial innovation also exist, such as crowdfunding and micro-financing, which have transformed the traditional structure of the funding and lending business. With crowdfunding, for example, a new approach to the traditional financial system – where a bank lends money to those in need – has been taken, enabling people and companies which are seeking funding to connect directly with potential contributors. Many advanced markets, such as the United States and Japan, as well as a number of emerging markets, including Malaysia and South Korea, have already designed a regulatory framework for crowdfunding and opened up the door to new sources of capital for ventures, start-ups and SMEs.

In this paper, we find compelling case studies for financial innovation in emerging markets. For the purpose of this study, we consider financial innovations to be newly introduced – innovated – financial products, processes or organizational changes within a given member country's own financial industry, as opposed to within the larger global context.² The case studies will include the historical background, structure, benefits and added value to the industry and society, and possible risks to investors for these innovations, as well as policy recommendations for emerging market regulators to nurture further innovations in the financial sector.

II. Mandate

Considering the increasing importance of innovation and its impact on the financial industry, ICSA's Emerging Markets Committee (EMC) has decided to conduct a study on financial innovations in the capital markets of emerging market countries. The EMC's proposal was approved by ICSA members during the Interim Meeting held in October 2015 in Zurich, Switzerland.

ICSA's EMC is chaired by the Korea Financial Investment Association (KOFIA), with the committee being composed of the following members:

1. Turkish Capital Markets Association (TCMA)
2. Asociación Mexicana de Intermediarios Bursátiles, A. C. (AMIB)
3. Association of Thai Securities Companies (ASCO)
4. Brazilian Financial and Capital Markets Association (ANBIMA)
5. Bombay Stock Exchange Brokers' Forum (BBF)
6. Association of National Exchanges Members of India (ANMI)
7. Taiwan Securities Association (TSA)

² In this sense, the creation of the securities exchange in Myanmar can be seen as a financial innovation within that country, although the concept of an exchange in a global sense has existed for some time.

III. Case Studies

This part of the study consists of case studies from each EMC country on financial innovation within its jurisdiction.

1. KOREA

A. Internet-Only Banks

- Basic Concept

An Internet-only bank offers web-based financial services without the need for brick-and-mortar branches.

- Background

In June 2015, the Financial Services Commission (FSC) announced its detailed plan to introduce Internet-only banks in Korea. They are expected to provide financial consumers with access to more convenient banking services at lower costs, and to promote competition and innovation in the banking sector.

The Internet and mobile banking sector is vibrant in Korea, where tech-savvy consumers prefer convenient online and mobile transactions to visiting branches.

In this light, the Korean government introduced Internet-only banks as part of its efforts to deregulate and advance the financial sector as it seeks out new economic growth drivers. Their purpose is to stir up competition in a stagnant sector where margins have been shrinking amid a slowing economy and record low interest rates.

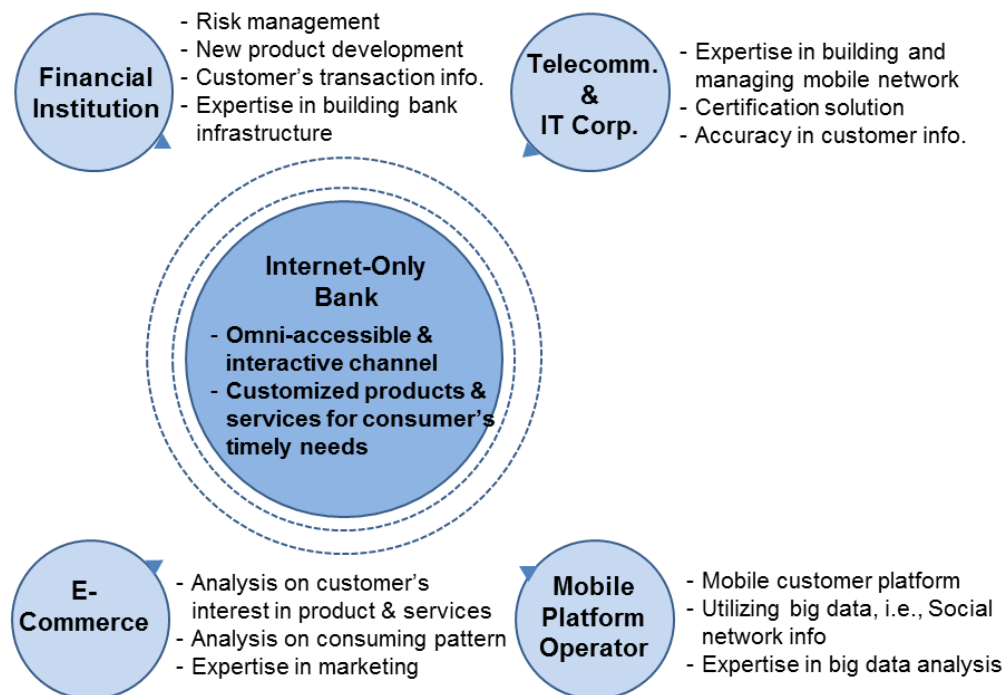
In September 2015, the Financial Services Commission (FSC) began receiving applications for a preliminary license for Internet-only banks. In this heated race, Kakao Corporation and KT Corporation have emerged as winners, obtaining licenses to launch Korea's first Internet-only banks.

Kakao Corp., the operator of Korea's largest mobile chat app, has teamed up with ten other companies, including Korea Investment Group and Kookmin Bank, to set up Kakao Bank.

KT Corp., Korea's largest telecommunications service provider and second-largest mobile service provider, led the creation of the K-Bank consortium, comprised of 21 companies, including Woori Bank, GS Retail and Hanwha Life Insurance.

Following the granting of preliminary licenses to the two consortiums in November 2015, they are now moving on to the next stage, developing the necessary IT and securities systems and recapitalization, in order to acquire a full license for an Internet-only banking business.

- **Structure**



- **Regulatory Framework**

Type of Barrier	Internet-Only Banks	Commercial Banks
Separation of Banks & Non-Financial Companies	Shareholding by non-financial companies: up to 50%	Shareholding by non-financial companies (industry capital): up to 4%
Minimum Equity Capital Requirement	KRW 50bn	KRW 100bn for commercial banks, KRW 25bn for local banks
Business Scope	Same as commercial banks	Traditional activities such as credit/deposits; credit card business; combined business activities, i.e., bancassurance; other additional activities
Prudential Regulations	In principle, subject to same regulations as commercial banks (will be granted a grace period on meeting Basel I standards in the early stages of operation)	Basel III Standards

1) Easing of shareholding restriction

The current Banking Act bans non-financial companies from holding more than 4% of shares in a bank. This restriction makes it impossible for ICT companies to enter the banking business. Therefore, the FSC will ease the restriction on shareholding by non-financial companies from the current level of 4% to 50% for Internet-only banks.

Supplementary measures will be devised to pre-empt possible side effects of easing the shareholding restriction. Among non-financial companies, business groups subject to cross-shareholding restrictions³ will be exempted from the eased shareholding regulation to prevent a small number of conglomerates from exercising a disproportionate amount of economic control. Therefore, while the FSC will raise the shareholding ceiling by non-financial companies to the 50% stake necessary for controlling power over management, they will be kept in check through the other shareholders.⁴ To avoid conflicts of interest, Internet-only banks will be subject to stricter regulations with regard to a large shareholder. The credit ceiling that a bank can provide a large shareholder will be cut from the current 25% of the bank's equity capital to 10%. Internet-only banks will be prohibited from acquiring shares issued by a large shareholder.

2) Equity capital requirement

The minimum equity capital requirement will be lowered to KRW 50 billion for an Internet-only bank, half of the requirement for a commercial bank under the current Banking Act.

3) Business scope

Internet-only banks will be allowed to engage in the same businesses as commercial banks.

4) Prudential regulations

In principle, Internet-only banks will be subject to the same regulations on financial soundness and business operations as commercial banks. However, they will be granted a grace period for some regulations that could be an excessive burden in the early stages of operation. For

³ As of the end of 2014, 61 companies with assets more than 5 trillion won are designated as 'business groups subject to cross-shareholding restrictions.' Among them, those which are deemed 'non-financial' are not subject to the 4% shareholding restriction under the current Banking Act.

⁴ The Commercial Act (Article 434) requires affirmative votes by more than two-thirds of shareholders to make a critical decision in management at a general shareholders' meeting.

example, with regard to BIS capital requirements, while Basel III standards are applied to commercial banks, Basel I standards will be applied to Internet-only banks. Regarding liquidity coverage ratios, Internet-only banks will be required to meet 60%, while commercial banks are required to meet 80% in 2015 and 100% by 2019. After the grace period, such regulations will be gradually strengthened to the same level at that of commercial banks.

5) Outsourcing of IT facilities, etc.

Outsourcing: Internet-only banks will be allowed to outsource their IT facilities to IT companies to reduce initial costs.

Credit card business: Internet-only banks will be allowed to engage in the credit card business as a concurrent service.

Non-face-to-face identification: In May, the FSC decided to loosen the strict requirement of face-to-face identification when customers open a new bank account by allowing alternative, non-face-to-face identification methods.⁵ The eased identification rules, expected to be implemented from December of this year, will facilitate the establishment of Internet-only banks.

6) Regulatory approval

The same standards under the current Regulation on Supervision of Banking Business will be applied to Internet-only banks. However, given the purpose of introducing Internet-only banks, their review will focus on the following factors: (i) innovativeness of business plan, (ii) stability of business model, (iii) consumer convenience, (iv) contribution to the competitiveness of Korea's financial sector, and (v) possibility of global expansion. Supplementary criteria will be added for Internet-only banks to review whether they possess an appropriate response system for emergencies such as electronic failures or whether large shareholders have an appropriate plan to recapitalize in the event of a liquidity crunch. A detailed guideline will be released in July.

- Benefits to Industry / Society

⁵ Banks will be required to choose at least two of four possible methods of non-face-to-face identification: (i) copy of an ID card, (ii) video call, (iii) ID verification upon delivery of a debit card, or (iv) use of information from existing accounts

Theoretically, the biggest advantage of operating an Internet-only bank is its cost-efficiency. There are no overhead costs involved with the operation of such banks, which would, in turn, allow them to offer their customers higher interests rates on savings and lower rates on loans. Based on these cost advantages, these banks are expected to introduce differentiated services, spurring competition in the banking industry and prompting existing banks to improve their services.

In Korea, the two consortiums are expected to focus primarily on providing medium-cost loans to people with a low credit standing. Currently, self-employed people and owners of microenterprises are only able to acquire loans with high interest rates, provided by shadow banking institutions.

To serve these people, the two Internet-only banks will need to be able to analyze their creditworthiness based on an unconventional credit rating system by relying on their big data analysis skills. For example, they can analyze certain customer information, such as a change in wealth, marital status, or employment status, based on a customer's activities on social network services.

Aside from that, another benefit with Internet-only banks is that they will effectively be in operation 24 hours a day, allowing customers to access the bank via website at any time.

- **Potential Risks**

To enable Internet-only banks to fulfill their intended role, the present law on bank ownership should be amended. Under the current law, non-financial companies are not allowed to own more than 10 percent of a bank, and this also applies to Kakao and KT, which own a 10 percent stake in their consortiums. With such a small stake, they cannot become majority shareholders and exercise managerial rights. Unless the ownership rule is revised, it will be difficult for these two companies to enact the innovative changes that we expect to see.

Secondly, due to the nature of Internet banking, almost all transactions will take place through non-face-to-face channels, which could cause miscommunication between the bank and the customers, as well as the illegal acquisition and trading of bank accounts, putting these banks at reputational risk.

Thirdly, the business model for Internet-only banks relies heavily on the utilization of an IT system, thereby leaving them highly exposed to IT and cyber-security related operational risks.

Other risks might include excessive competition within the industry being

brought on by these banks, and a lack of competitiveness arising from overlapping services with traditional banks' Internet or mobile banking services. To this extent, if Internet-only banks fail to create niche products and services, they will have a hard time competing with Internet banking services offered by traditional banks.

- **Implications**

Advanced economies such as the UK, US, and Japan have already introduced an Internet-only banking system, beginning in 1995. One thing all three economies have in common is that the government has played a pivotal role by placing FinTech high on the agenda, and taking initiatives in revising necessary rules and regulations.

B. Equity Crowdfunding

- **Basic Concept**

The practice of funding a company or a project by raising capital from a group of people in exchange for the company's securities.

- **Background**

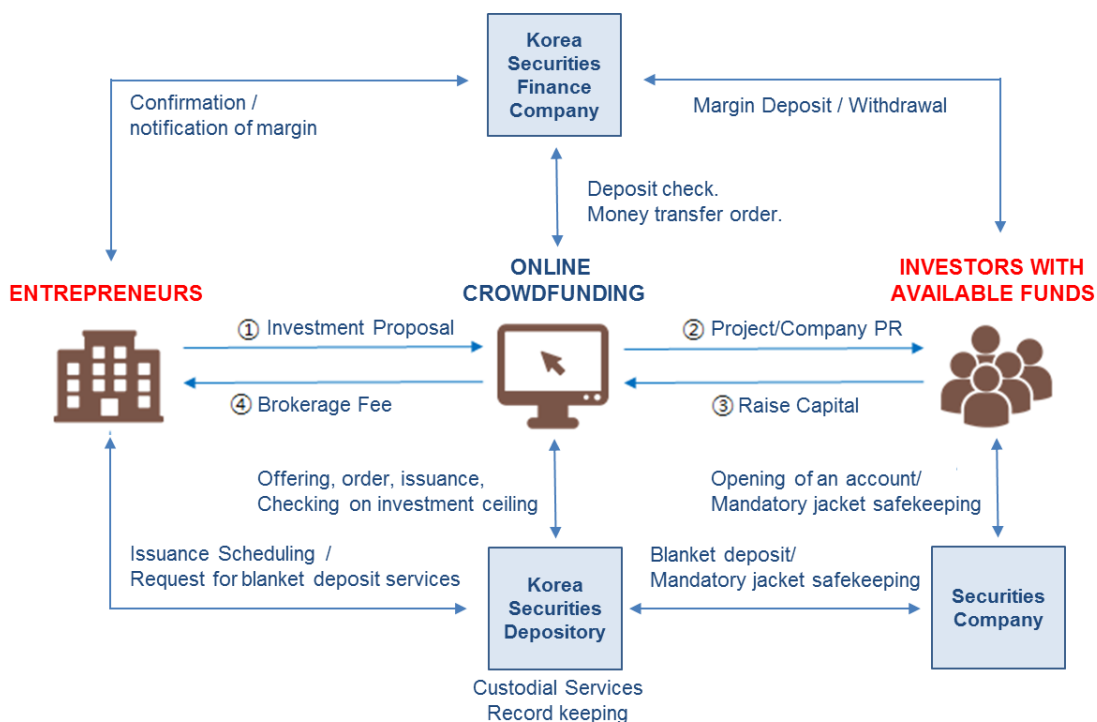
Traditionally, Korean entrepreneurs could not ask their compatriots for small investments in return for perks, the basis upon which crowdfunding exists. Their only options were to invest their own money, raise larger investments from Korea's small-but-growing pool of VC money, or look to crowdfunding platforms abroad.

In July 2015, the FSC made the announcement that start-ups and SMEs would be allowed to raise funds through crowdfunding, and amended the relevant rules and regulations. This was done in order to create new investment opportunities and introduce a new source of funding for start-ups and SMEs.

The concept of crowdfunding existed before the law took effect. In 2013, there were approximately 20 crowdfunding platforms, with an estimated market size of around 40 billion won. Most of them took the form of lending-based and reward-based crowdfunding platforms.

In January 2016, equity crowdfunding, which, as opposed to charity crowdfunding, involves the offer of securities and the prospect of financial returns, was initiated.

- Structure



- Regulatory Framework



The Financial Investment Services and Capital Markets Act (FSCMA) was amended to fully utilize crowdfunding as a financing channel for new start-ups. For example, disclosure requirements for securities issuance, such as registration statements, were alleviated for small-scale online securities offerings, and online intermediaries were introduced.

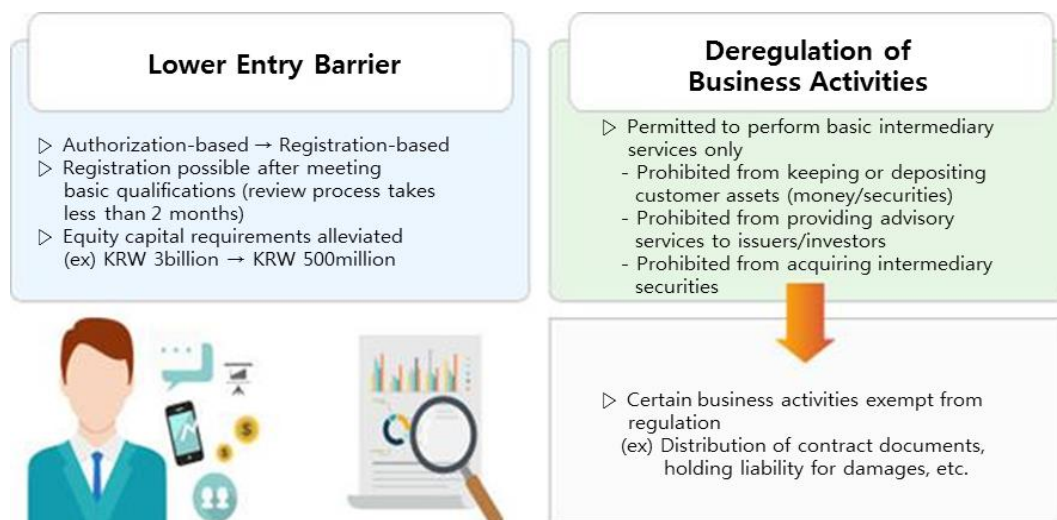
As part of the effort to promote crowdfunding as a reliable and sustainable channel, action was taken to prevent investors from being disadvantaged due to the information asymmetry that arises from weaker disclosure requirements. Online intermediaries are required to disclose the

confirmation of details, and hold the liability for damages. They are also prohibited from actively soliciting investments and placed with investment limits.

In the case of traditional securities offerings or sales, the issuer must submit a statement regarding the offering or sale and ensure that it has been received by the Financial Services Commission (FSC). However, in the case of offering securities through crowdfunding, the issuer is not required to submit such a statement.

Furthermore, the FSCMA allows the issuer to disclose information on the terms for issuance, financial status, and business plan on the online intermediary’s webpage, etc., so that opinions regarding such information can be exchanged between the issuer and investors, and among different investors.

Regulations on entry for online intermediaries are relatively simplified, as the business scope of online intermediaries is narrow compared to traditional intermediaries, and because they do not manage investor assets.



1) Scope of issuers: Smaller and start-up companies that have been in business for less than 7 years will be allowed to issue securities through crowdfunding. Venture companies and SMEs engaging in projects such as technology development and cultural business will be allowed to raise capital through crowdfunding regardless of how many years they have been in business.

2) Registration requirements for crowdfunding intermediaries: To be registered as an intermediary for a crowdfunding offering, a company must have minimum capital of KRW 500 million and meet requirements similar to those for investment advisory services and discretionary

investment services.

3) Investor Protection

(1) Limits on capital-raising by issuers: A company is allowed to raise up to KRW 700 million per year through crowdfunding.

(2) Limits on investments by investors: Investors are subject to differentiated caps on the amount they can invest, depending on their professional knowledge of investments and risk-taking capacity.

	Max Investment Per Company	Max Investment Per Year
General Investors	2 million won	5 million won
Investors with Specified Income Requirements ⁶	10 million won	20 million won
Professional Investors, etc. ⁷	No cap	No cap

(3) Exception to ban on securities sales by investors: In principle, investors are prohibited from selling securities within a year of issuance. However, issuers, large shareholders and professional investors are exceptionally allowed to sell their holdings prior to this.

- Benefits to Industry / Society

With the introduction of crowdfunding, in general, promising ventures and SMEs and those that have been performing outstandingly will have better opportunities to secure funding for their business activities. People will also get a chance to invest in their own communities, thereby contributing to economic sustainability and health.

In order to maximize the benefits to industry and society, the Korean government is implementing various measures.

First, there are plans to provide intermediaries with access to an information search system, owned by the Small and Medium Business Administration (SMBA), for angel investors. This gives intermediaries greater access to finding issuing companies, as they will be able to log in to the DB of a start-up looking for angel investors, thereby improving

⁶ Individuals subject to financial income taxation.

⁷ Including 'professional investors' as defined by the FSCMA (e.g., financial institutions) and investors with professional knowledge & risk-absorbing capacity (e.g., venture investment funds, angel investors, etc.).

accessibility to a wide range of corporate information.

Promising companies, including the K-Global 300 Start-ups, will be introduced to intermediaries as well. K-Global 300 Start-ups, companies participating in Creative Korea, and outstanding mentees from start-up mentoring programs will receive an introduction to crowdfunding and be encouraged to participate.

Efforts will also be made to associate crowdfunding with start-up idea contests supervised by the Ministry of Science, ICT and Future Planning by having intermediaries take part.

The SMBA will introduce crowdfunding at a briefing on its yearly plan for SME support and distribute related information to participating companies. It will also reinforce related advisory services.

Secondly, in order to boost investor participation, the website ‘www.crowdnet.or.kr’ has been established. The website, which provides crowdfunding guidance to the general public, features a general introduction to the crowdfunding system and direct links to registered intermediaries, as well as up-to-date, collective information on them. It is also anticipated that it will prevent unauthorized forms of crowdfunding.

Additionally, KOFIA’s K-OTC Bulletin Board (BB), a platform for the trading of all non-listed stocks in Korea, will be utilized as a trading channel for crowdfunding-related equities. A dedicated section within the K-OTCBB will be provided to crowdfunding investors so that investors can easily make redemptions.

As professional/qualified angel investors were included in the definition of professional investors who are not subject to the investment limits prescribed by the Enforcement Decree, the SMBA will amend regulations and relax the requirements for qualified angel investors. More specifically, efforts will be made to lower the requirements for qualified angel investors by relaxing the minimum investment amount from KRW 100 million/KRW 40 million across a two-year timeframe to KRW 50 million/ KRW 20 million across two years. The current number of qualified angel investors stands at around 400.

- **Potential Risks**

With equity crowdfunding, there are a few potential risks to consider. Default risk is one of them. An IOSCO study⁸ reveals that, when

⁸ <http://www.iosco.org/research/pdf/swp/Crowd-funding-An-Infant-Industry-Growing-Fast.pdf>

comparing the default rates of P2P lending platforms to the average default rate for each platform's jurisdiction, the default rate for P2P lending platforms was much greater than the average rate. Also, according to IOSCO market intelligence, start-up businesses have a 50% chance of failing within the first 5 years.

Investors could also face a risk born by information asymmetry. Equity crowdfunding investors may only obtain information about their investment from the company they have invested in, but equity crowdfunding regulations exempt issuers from the disclosure requirements, thereby causing information asymmetry.

C. Individual Savings Account (ISA)

- Basic Concept

The ISA is an integrated system to manage a number of different financial accounts, from ordinary savings accounts to securities accounts, in one platform, giving tax benefits on all financial products up to a certain limit held in an eligible account.

- Background

In late 2014, the Korean government set a policy objective with the aim of offering new tools for financial asset accumulation amid Korea's prolonged low-interest-rate, low-growth environment. Additionally, the net savings rate in Korea has been below the OECD average, in spite of the fact that the country will soon have a hyper-aging society. This means that people urgently need to seek out retirement income sources. Also, looking at Korea's household accounts, 70% of the assets were parked in real estate, which was and is becoming a highly illiquid asset these days.

In August 2015, the FSC announced a plan to introduce the Individual Savings Account (ISA) in order to establish a nationwide wealth accumulation system and alter existing household financial asset trends, thereby allowing more money to flow into the capital market.

- **Structure**

Category	Ordinary Type	For Working Class
Subscriber Eligibility	Persons receiving earned or business income, farmers/fishers (excluding those subject to aggregate taxation on previous year's financial income)	Persons with less than KRW 50mn in earned income or KRW 35mn in aggregate business income
Investment Limit	KRW 20mn/yr, KRW 100mn over 5 yrs	Same as ordinary
Tax Benefits	Tax exemption of up to KRW 2mn in net profit, separate taxation of 9.9% on the exceeding amount (tax imposed on the sum of all gains and losses within ISA account on settlement date)	Tax exemption of up to KRW 2.5mn in net profit, separate taxation of 9.9% on the exceeding amount
Eligible Financial Products	Savings/deposits, bank balance, funds, derivatives-linked securities, RPs	Same as ordinary
Mandatory Account-Holding Period	5 yrs (3 yrs for young subscribers)	3 years
Legal Structure	Trust, discretionary investment (limited to asset allocation type)	Same as ordinary
Account Providers	Trust businesses, discretionary investment services companies (securities companies, banks)	Same as ordinary
Period of Subscription	Jan 1, 2016 - Dec 31, 2018 (3 years)	Same as ordinary

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Despite the similarity to other overseas ISA programs, Korean ISAs are unique, and take into consideration many factors, such as annual contribution limit, withdrawal limit, eligible financial products, tax benefits, legal structure, and so on.

Korean ISAs have no age requirement, and residents who had earned or business income in the previous year are eligible. The newly employed can also subscribe in the same year by submitting a withholding certificate.

The annual contribution limit is set at KRW 20 million. Korean ISAs cap the amount of tax-free capital gains or profits at KRW 2 million. Capital gains and proceeds exceeding that amount are taxed separately at 9.9%.

During the 5-year mandatory account holding period, subscribers cannot take out the principal or the interest. An exception is granted for low-income earners – below KRW 16 million – or youth aged between 15 and 29, with the mandatory holding period relaxed to 3 years.

The financial products ISA subscribers are allowed to invest in are bank savings and deposits, funds, and derivatives-linked securities such as ELS. Stocks and bonds are not yet eligible financial products for ISAs.

Under the ISA system, customers can choose to give banks or securities firms discretion to make investment decisions. If clients entrust their money in this manner, the institutions can invest the money in accordance with client appetites based on discretionary judgments.

	Trust-Type ISA	Entrusted ISA
Institution's Discretion	Clients designate what and how much to invest	Institution has the discretion to invest the client's assets with consideration to client's asset type, risk appetite, etc
Proposal of Model Portfolio	Not allowed	Required
Duty of Rebalancing	Not mandatory	Every quarter
Client Notification	Not mandatory	Required on every sale
Marketing Notification	Not allowed	Allowed
Online Sales	Not allowed	To be allowed

- **Regulatory Framework**

In order to implement the tax benefit measure for the ISA system, the Restriction of Special Taxation Act was accordingly revised. In addition, in order to prepare a foundation to facilitate the operation of the ISA system, in which discretionary investment businesses, as opposed to only companies, may take part, the FSCMA was revised as well.

- **Benefits to Industry / Society**

Compared to other specialized savings programs, a variety of financial products, such as deposits, funds and DLS can be included in an ISA account, with the annual contribution limit being raised to KRW 20 million. In addition, the ISA system allows subscribers to change financial products according to the current market environment. Other specialized savings programs, such as the 'Wealth Accumulation Savings Program' and 'Tax-Saving Long-Term Fund', only permit certain investment products to be included and have an annual contribution limit of KRW 12 million, and subscribers are not able to switch between products. Thus, with this new system put in place, subscribers are able to manage their account with greater flexibility while enjoying more tax benefits.

2. TAIWAN

A. Digital Financial Environment 3.0 in Taiwan

- Basic Concept

One of the recent financial innovation programs introduced in Taiwan is the “Digital Financial Environment 3.0”, also known as the “Digital Financial Environment Building Program”.

- Background and Recent Developments

In July 2015, the bank ranked 2nd in terms of the number of branches in Taiwan announced that it would be shutting down 20 branches, approximately 10% of the total. This signals that Taiwan has kick-started the move into the digital financial environment.

The business model and territory of Taiwan's financial services industry is going to drastically transform and change in line with five digital trends: (1) developing an Internet of things, (2) thriving social media networking sites, (3) popularizing mobile Internet use, (4) applying data analytic technology, and (5) prevalent cloud storage. In the past decade, Taiwan's banking sector was the leader in the cash flow business because of the advantage of owning a sizable number of physical branches.

However, in recent years, the emergence of Internet and mobile as a payment and/or financial instrument platform among individuals and companies has attracted a number of new non-financial competitors to the banking services industry.

At present, telecommunications carriers and retail stores are offering bill payment services, value-added services in the form of value cards, and electronic wallet accommodations. The telecommunications and mobile Internet sector is quickly seizing business opportunities in the financial services industry, further threatening the traditional banking system in Taiwan.

In response to this new wave of Internet and mobile development, the Financial Supervisory Commission (FSC), Taiwan's top financial regulator, announced in January 2015 the official launch of the "Digital Financial Environment Building Program" plan, under which it will strive to upgrade the "Internet network" and "mobile communication" for Taiwan's financial services industry.

- The Government's Strategy

The FSC stated that the promotion of the digital financial environment is

focused on three areas: encouraging the innovation of Internet financial services, disseminating mobile payment and third party payment applications, and strengthening financial mega data analysis.

1) Innovative Internet financial services

Through deregulating the laws for the banking, insurance and securities industries, the FSC has encouraged these industries to explore online business practices and create new online financial services, in a bid to catch up with newly emerging consumption patterns and behaviors.

Following deregulation, the banking industry is now able to offer current card holders, loan borrowers, and direct depositors up to 12 different online services, including closing accounts, applying for personal loans, obtaining additional car loans and mortgage loans, applying for credit cards or an online balance transfers for personal loans, opening trust accounts. The industry has also implemented Know Your Customer (KYC) procedures and other business practices. To simplify the application procedures for bank customers in the future, lower risk e-banking businesses can be made available to the public once safety standards compliance is confirmed by the compliance, internal audit, and information systems departments. Following this, the business may be established without having to report further to the FSC.

With regards to the securities industry, securities firms now can offer part of their online underwriting business and online signing of contracts for buying new financial instruments to their current customers. For the account opening service, they can provide new customers with alternative methods to verify their identification online.

The FSC has also considered developing an equity-type crowdfunding system abroad. It is working with the private sector to connect Internet financing and fundraising channels, enhancing fundraising capabilities for innovation and entrepreneurship. In mid-2015, the FSC allowed securities firms which met specific criteria to run an equity-type crowdfunding platform. Taiwan is the seventh country in the world, and the second in Asia, to introduce such measures.

Regarding the insurance industry, insurers have expanded their online presence by providing clients with the option to insure and to increase their desired amount of insurance online. Subsequently, this will broaden the variety of insurance purchases and boost amounts insured online.

2) Universal mobile payments & third-party payment applications

To promote the use of mobile payment services in the financial services industry, the FSC has finalized the enactment of the relevant laws and regulations for electronic payment applications, and has also granted a number of licenses, including for mobile credit card payment. This has been done to supply consumers with more diversified payment services. Furthermore, in 2015, the FSC initiated a relaxation of restrictions on the way banks handle payment operations for a trial period.

3) Promoting the analysis and application of Big Data

The application of Big Data is rapidly transforming the way the traditional banking industry does business. The analysis and application of Big Data can create tremendous value not only for Taiwan's financial services industry, but also for other businesses. The FSC has therefore worked together with surrounding government and non-government financial organizations to create 12 Big Data application programs. In the future, these programs will be available to both financial institutions and the public. Three programs had been completed in November 2015 – the credit card Big Data platform, the real estate credit statistical platform, and statistical information of industry analysis, with the other 9 set to be completed by the end of 2015.

Furthermore, the FSC continues releasing open financial data. As of the end of June 2015, 640 financial datasets had been made available to the public by the FSC. These datasets include categories related to banks, securities and futures, insurance, financial inspections, financial consumer protection and administration. Other information includes daily trading data in the securities market, common fees among financial institutions, and analytical datasets by fraud type for credit cards. In total, 1,007 datasets were expected to be released by the end of 2015.

- Taiwanese Government's Future Plans

1) Allowing banks to invest in the Fintech industry

The FSC expected to finalize regulations by August 2015 which would allow the banking, securities, and insurance industries to make a 100% investment in core financial businesses related to Big Data companies, mobile payment businesses, biometric authentication businesses, and other FinTech businesses in the financial technology industry.

The FSC will not only continue to watch electronic payment institutions after they have been founded, but also refer to the new operating models used by electronic payment institutions abroad when allowing these institutions to carry out different types of business.

2) Conducting research on allowing Internet banking

In the wake of financial institutions expanding their range of services into online and mobile banking, the FSC hopes to further its understanding on Internet banking operation. The FSC will take into consideration changes in the domestic financial market and technical advancements in science and technology to assess the possibility of establishing an Internet banking system.

3) Continuing to encourage innovation and development of new services and digitalization of physical branches

The FSC will continue to keep an eye on online businesses and review newly introduced services, such as extending cloud services to securities and futures and strengthening the application of value-added services. The FSC requires that the financial services industry also strengthen its IT investment and improve its internal processes to cope with the advent of the digital era.

Meanwhile, the FSC will encourage the digitalization of physical branches. Because the digital banking trend impacts the careers of more than 500,000 Taiwanese financial industry employees, the FSC has issued a directive to all financial institutions, requiring that they provide a transformation plan by the end of 2015.

- Conclusion

Digitalized, networked, and mobilized banking will revolutionize the financial industry. As evidenced by the gradual shift from physical branches in the Bank 1.0 era to online banking in the Bank 2.0 era and the thriving of mobile banking in Bank 3.0 times, the traditional banking business model is changing. The future digital capability of banks will be their core competing ability.

How a bank strengthens its digital capabilities, seizes opportunities in the Big Data banking business, markets to a variety of consumers through the Internet and social networking sites, combines different industries and continuously innovates digital banking services, and launches efficient virtual branches will all affect its future competitiveness.

Furthermore, the financial services industry will need to properly manage

risk through the following:

Strengthening information security, and establishing electronic banking job security control baselines; enhancing online identity confirmation processes to prevent phishing; prioritizing the management of personal data protection, disclosing service-level agreements, and protecting the rights and interests of consumers; and expanding IT manpower and financial professional expertise.

In short, to build up the digital banking environment within Taiwan's financial services industry, it is necessary to create customer-oriented products and services and ensure regulatory compliance, while mitigating the risks of business wrongdoings.

3. INDIA

India, with an economy that is the world's third-largest and rapidly growing, has a highly innovative economy and capital market that is positioned to be a game changer for emerging markets. The infrastructure of its capital market, which consists of two stock exchanges, two depositories, 14 clearing banks and over 25 million retail investors, makes India one of the most attractive markets in the world for financial innovation.

To that end, the Indian government has launched several key initiatives, which are elaborated upon below.

A. SME Platform

Small and medium enterprises (SMEs) are vital to the success of emerging economies, serving as the backbone of the financial system. In India, SMEs accounted for 45% of total exports and Rs. 400 billion in total industrial production. Furthermore, they play a vital role in ensuring high job creation at the grassroots level.

India's stock exchanges are integral to getting SMEs listed on SME Platform. Being listed on SME Platform grants SMEs access to financial industry funds, which enables them to enjoy further growth and development and raise equity capital for their expansion. Then, after sufficient growth, they may transfer to the Main Board.

SMEs provide immense opportunities to the following market participants: Entrepreneurs are able to raise capital in a cost-effective manner and investors can identify and invest in good companies in the early stages.

☞ Guidelines for Listing

1. Capital

The post issue face value capital shall not exceed **Rs. 250 million**.

2. Trading lot size

The minimum application and trading lot size shall not be less than Rs. 100,000. The minimum depth shall be Rs. 100,000, and at any point in time, it shall not be less than this value. Investors holding less than Rs. 100,000 shall be allowed to offer their holdings to the market maker in one **lot**. However, in functionality, the market lot will be subject to revival after a stipulated period of time.

3. Participants

Existing exchange members may be listed on the platform.

4. Underwriting

The issues shall be 100% underwritten, and merchant bankers shall underwrite 15% in their own accounts.

☞ Benefits of Listing

1. Easy Access to Capital

BSE SME provides an avenue to raise capital through equity infusion for growth-oriented SMEs.

2. Enhanced Visibility and Prestige

The SMEs benefit from having greater credibility and enhanced financial status, leading to increased demand for their shares and higher company valuations.

3. Encourages Growth of SMEs

Equity financing provides growth opportunities through expansion and mergers and acquisitions, making it cost-effective and tax-efficient.

4. Ensures Tax Benefits

In the case of listed securities, the short-term gains tax is 15%, and there is absolutely no long-term capital gains tax.

5. Enables Liquidity for Shareholders

Equity financing enables liquidity for shareholders, and provides growth opportunities through expansion and mergers and acquisitions

6. Equity Financing through Venture Capital

Provides incentives for venture capital funds by creating an exit route and thus reducing the lock-in period.

7. Efficient Risk Distribution

Capital markets ensure that the capital flows to where it is most needed, and riskier activities with higher payoffs can be funded.

8. Employee Incentives

Employee stock options ensure greater employee commitment, participation and recruitment incentives.

☞ Snapshot of SMEs listed on stock exchanges (as of “**date needed**”)

No. of companies listed on SME Platform previously	120
No. of companies transferred to main board	13
No. of companies currently listed	107
No. of companies suspended	0
No. of companies eligible for trading	107
No. of companies traded	30
Market cap of listed companies	Rs. 69.30 bn (USD1.2 bn)

B. Institutional Trading Platform (ITP)

In order to facilitate the participation of different classes of companies in raising money from the market, the government has introduced the Institutional Trading Platform, through which a start-up or SME can list itself without bringing an IPO.

The benefits of listing on ITP are as follows:

- Facilitates capital-raising by SMEs and start-ups
- Provides easier entry and exit options for informed investors (angel investors, VCFs, PEs, etc.) from companies
- Provides better visibility and a wider investor base
- Relaxed compliance and cost-effective listing
- Tax benefits for long-term investors

The eligibility criteria for a company wanting to be listed are as follows:

1) Regulatory Criteria

The company, its promoter, group company or director does not appear on the list of willful defaulters at the Reserve Bank of India as maintained by Credit Information Bureau (India) Limited (CIBIL).

There is no winding up petition against the company that has been admitted by a competent court.

The company, group companies or subsidiaries have not been referred to the Board for Industrial and Financial Reconstruction within a period of five years prior to the date of application for listing.

No regulatory action has been taken against the company, its promoter or director, by the Board, Reserve Bank of India, Insurance Regulatory and Development Authority or Ministry of Corporate Affairs within a period of five years prior to the date of application for listing.

2) Exchange Criteria

The Company shall satisfy at least one of the following criteria as of the date of application:

- Minimum of Rs. 10 million in net tangible assets (net fixed assets plus net current assets); OR
- Net income* (excluding extraordinary and other income) of Rs. 5 million as per the latest audited financials. *(Net Income = Sales – Purchases)

There has been no change in the promoters of the company within the year preceding the date the application was filed with the BSE for listing on ITP segment. Mandatory signing of a tripartite agreement with both depositories.

3) Financial Criteria

The company's paid-up capital has not exceeded 250 million rupees in any of the previous financial years.

The company has at least one full year of audited financial statements, including the immediately preceding financial year, at the time of application.

The period since the company's incorporation is less than 10 years, and its revenues have not exceeded 1 billion rupees in any of the previous financial years.

At least one of the following criteria:

1. At least one alternative investment fund, venture capital fund or other category of investors/lenders approved by the Board has invested a minimum amount of 5 million rupees in equity shares of the company.
2. At least one angel investor who is a member of an association/group of angel investors which fulfils the criteria laid down by the recognized stock exchange, has invested a minimum amount of 5 million rupees in the equity shares of the company through such association/group.
3. The company has received financing from a scheduled bank for its project financing or working capital requirements, a period of three years has elapsed from the date of such financing, and the funds so received have been fully utilized.
4. A registered merchant banker has exercised due diligence and has invested no less than 5 million rupees in equity shares of the company, which shall be locked in for a period of three years from the date of listing. The same merchant banker is also required to submit a due diligence certificate as per the format given in Form A & Form H of Schedule VI of the SEBI (ICDR) Regulations, 2009.
5. A qualified institutional buyer has invested no less than 5 million rupees in the equity shares of the company, which shall be locked in for a period of three years from the date of listing.
6. A specialized international multilateral agency or domestic agency, or a public financial institution as defined under section 4A of The Companies

Act, 1956 has invested equity capital in the company.

C. Payments Banks

The government has established a payments bank system, which is intended to encourage the unbanked to become a part of the banking system, and in turn, the mainstream economy, increasing India's level of financial inclusion.

Objectives:

The objectives of setting up payments banks are to further financial inclusion by providing: (i) small savings accounts; and (ii) payments/remittance services for the migrant labor workforce, low income households, small businesses, other unorganized sector entities and other users.

1) Eligible Promoters

Existing non-bank Pre-paid Payment Instrument (PPI) issuers and other entities such as individuals/professionals, Non-Banking Finance Companies (NBFCs), corporate Business Correspondents (BCs), mobile telephone companies, supermarket chains, companies, real sector cooperatives that are owned and controlled by residents, and public sector entities may apply to set up a payments bank.

A promoter/promoter group may partner with an existing scheduled commercial bank to create a payments bank. However, scheduled commercial banks may only hold an equity stake in a payments bank to the extent permitted under Section 19 (2) of the Banking Regulation Act, 1949.

Promoter/promoter groups should be "fit and proper", with a sound track record of professional experience, or a minimum of five years of experience running their businesses, in order to be eligible to promote payments banks.

2) Scope of Activities

- Accepting demand deposits. Payments banks will initially be restricted to a maximum balance of Rs. 100,000 per customer.
- Issuing ATM/debit cards. However, credit cards cannot be issued.
- Providing payments and remittance services through various channels.
- Acting as the BC of another bank, subject to the Reserve Bank's guidelines on BCs.
- Distributing simple, non-risk sharing financial products, such as mutual

fund units, insurance products, etc.

3) Deployment of Funds

A payments bank cannot undertake lending activities. Apart from the amount maintained as a Cash Reserve Ratio (CRR) with the Reserve Bank on its outside demand and time liabilities, it will be required to invest a minimum of 75 percent of its "demand deposit balances" in Statutory Liquidity Ratio (SLR) eligible government securities/treasury bills with a maturity of up to one year, and may hold a maximum of 25 percent in current and time/fixed deposits with other scheduled commercial banks for operational purposes and liquidity management.

4) Capital Requirements

The minimum paid-up equity capital for a payments bank shall be Rs. 1 billion. A payments bank shall have a leverage ratio of no less than 3 percent; i.e., its outside liabilities should not exceed 33.33 times its net worth (paid-up capital and reserves).

5) Promoter Contributions

The minimum initial contribution to the paid-up equity capital of such a payments bank for promoters shall be at least 40 percent for the first five years from the commencement of the business.

6) Foreign Shareholding

Foreign shareholding in a payments bank shall follow the Foreign Direct Investment (FDI) policy for private sector banks.

7) Other Conditions

Bank operations shall be fully networked and technology-driven from the outset, and conform to generally accepted standards and norms. The bank shall also have a high-powered Customer Grievances Cell to handle customer complaints.

8) Application Procedure

As stipulated under Rule 11 of the Banking Regulation (Companies) Rules, 1949, applications were to be submitted using the prescribed form (Form III) to the Chief General Manager, Department of Banking Regulation, Reserve Bank of India, 13th Floor, Central Office Building, Mumbai – 400 001. In addition, applicants were required to furnish a business plan and other requisite information as indicated. Initial applications were accepted until the close of the business day on January

16, 2015. Based on the experience gained through dealing with establishing payments banks, applications will later start to be received on a continuous basis. However, these guidelines are subject to periodic review and revision.

9) Procedure for RBI Decisions

An External Advisory Committee (EAC) comprised of eminent professionals such as bankers, chartered accountants, finance professionals, etc., will evaluate the applications. The decision to issue an in-principle approval for setting up a bank will be taken by the Reserve Bank. The Reserve Bank's decision in this regard will be final.

D. Aadhar Unique Identification Number

While India's capital market possesses an infrastructure consisting of two national stock exchanges that are supported by 14 clearing banks and two depositories, there are only 250 million investors registered. In order to encourage more of India's population of 1.2 billion to register, the Indian government has introduced the Aadhar Card, a biometric card that provides the individual with a unique identification number. This financial inclusion drive is the biggest to be attempted in the world, given India's large population. To date, 92 million cards have been issued.

This unique identification system is expected to increase financial inclusion through the enhancement of KYC capabilities by creating a single KYC document in the Aadhar Card. This is expected to attract more investors to the capital market and streamline the investment process, thereby allowing investors to effectively channel their savings into investments.

E. Jan Dhan Yojana

The government has also launched another financial inclusion initiative, called Jan Dhan Yojana, to get more people into the banking system, which consists of 26 public sector banks, 25 private sector banks, and 43 foreign banks. So far, nearly 30 million no frills bank accounts have been opened through this initiative. These accounts enable holders to store their savings, thus contributing to the welfare of the nation.

The objective of this initiative is to bring the unbanked, including the rural Indian population, into the formal financial system. Rural demand plays a vital role in India's economy, since the majority of the population's purchasing power originates from the rural sector. It would also help channel savings from the rural population into the capital markets, bringing greater depth to the market.

F. Jan Aadhar Mobile (JAM)

Mobile penetration in India is very high, with almost 90% of the population having mobile connectivity. Therefore, the government is planning to synchronize three concepts into one, Jan Dhan Yojana, Aadhar Card, and Mobile (JAM). As it has become increasingly common to access bank accounts through mobile banking, JAM is expected to allow customers, using their Aadhar Unique Identification Card, to open a bank account via Jan Dhan Yojana through their mobile. This use of technology, together with the expanded rural outreach, will help foster a robust investment and savings culture in India.

G. Application Supported by Blocked Amount (ASBA)

ASBA (Application Supported by Blocked Amount) is an exclusive system which ensures that the money a customer has allocated to an Initial Public Offering (IPO) is not withdrawn until the IPO shares have been allotted. This has made the application process far more convenient for investors, since their capital is not removed from their bank account until the transaction is completed. This in turn has led to higher participation by new retail investors in the IPO market, deepening India's capital market.

H. International Finance Centre (IFC)

The Indian government made the landmark decision to establish its own International Financial Centre. India's IFC would be comparable to those found in Singapore, Hong Kong and Dubai, and would be global-investor-friendly. Indian financial services companies with offices in the IFC would be able to trade in international markets, and international players would be able to enjoy a level playing field owing to tax exemptions. There are 1,300 brokers in India, and around 250 have FII trading licenses. Traditionally, Indian clients who wished to trade in the international markets were required to form a subsidiary in offshore markets, but now they will be able to trade in international markets domestically. BSE BROKERS FORUM initiated the Rs. 2.2 billion project, with 103 member brokers setting up offices in a 30-story, 500,000 square foot building with a unique, state-of-the-art infrastructure.

I. Electronic Initial Public Offering (E-IPO)

E-IPO (Electronic Initial Public Offering) enables clients to register for the securities market online. India has 402 million internet users, demonstrating the country's high level of internet services access. This initiative would ensure that Indians, who are generally tech-savvy, all over the country are able to invest in the securities market and buy shares. There are two ASBA models: Normal ASBA, and Syndicate ASBA.

With Normal ASBA, the customer approaches the bank, and then the bank blocks the customer account for the amount and bids on the exchange. This is also known as the Block & Bid route.

Under this model, the bank receives a commission. This raised concerns with brokers, as it affected their profits from carrying out the IPO. As such, they stressed to the SEBI the need to create the Syndicate ASBA model.

In the Syndicate ASBA model, the process is reversed. The investor approaches the brokers, who bid on the exchange terminal, and then sort out the relevant bank forms and send them to the bank to initiate the block. Once the signature has been verified, the bank blocks the amount.

4. THAILAND

A. Crowdfunding

- Basic Concept

Crowdfunding is an alternative fundraising channel enabling SMEs and start-up businesses to access more sources of financing. Funds are raised from the general public, with each individual investing a small amount of money through an Internet-based system called the “Fund Portal”. SMEs and start-up businesses will be able to raise funds from friends, followers and the community, without the need to file an IPO. This system permits individuals to invest in equities via crowdfunding transactions, and is subject to certain investment limits.

- Background

In Thailand, SMEs account for 95% of all businesses and employ over 50% of the workforce. As such, they are vital to the creation of jobs and incomes, and certainly a fundamental part of the country’s economic development. Accordingly, it is important to facilitate access to capital with a low cost for SMEs and start-ups, especially those related to science, technology and innovation, in order to boost their strength and growth.

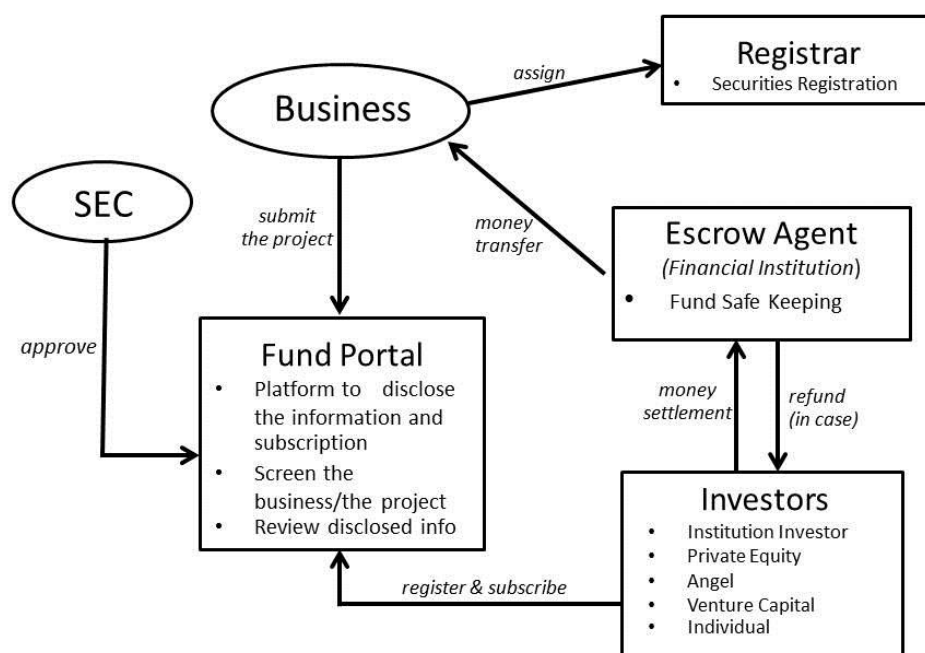
- Structure

In general, there are four types of crowdfunding – donation, reward, peer to peer lending, and investment-based. In Thailand, the SEC is currently drafting rules for investment-based crowdfunding.

Regulations will allow companies to raise funds through crowdfunding portals approved by the SEC. These crowdfunding portals will screen the

companies intending to raise funds through their facilities. The companies will also be required to disclose relevant information and provide a mechanism for proceeds obtained from share subscription. For investors, they must become members of the crowdfunding portals to gain access to share offering information, and prior to making an investment, must pass a knowledge test on the risks associated with the investment.

The structure of Thailand’s crowdfunding is outlined in the chart below:



- Regulatory Framework

In Thailand, crowdfunding can be only driven through Fund Portals which are approved by the SEC. The general crowdfunding rules in Thailand are as follows:

- 1) A business will be able to raise up to THB 20 million (approx. USD 0.60 million) in funds for the first 12-month period, and the total cannot exceed THB 40 million (approx. USD 1.20 million).
- 2) The following type of investors – Institutional, Venture Capital, Private Equity, Qualified/Angel and Individual– are permitted to invest through the crowdfunding platform.
- 3) In a 12-month period, individual investments in one business cannot exceed THB 50,000 (approx. USD 1,515), and the total amount invested in crowdfunding businesses cannot exceed THB 500,000

(approx. USD 15,151).

- 4) Investors can cancel their share subscription at any time, except when the remaining offering period is less than 48 hours.

- **Benefits to Industry / Society**

Crowdfunding will benefit both the business side and investor side. On the business side, crowdfunding provides start-ups access to low-cost funds. In addition, raising funds will only take a short amount of time, approximately three months. On the investor side, the general public will have more choices when investing in securities than just the stock market.

- **Potential Risk**

There are some significant risks associated with investing through a crowdfunding platform.

- 1) Investment risk: Investing in SMEs and start-up businesses carries risks as well as the possibility of high rewards. Investors could lose all or part of the sum that was invested, and therefore not see a return of profit.
- 2) Liquidity risk: Equity investments through crowdfunding will be highly illiquid. A business seeking funding through crowdfunding will not have a secondary market for its shares.
- 3) Other risks: Dilution of shareholding, scarcity of dividends, fraud, accuracy of disclosed information.

5. MEXICO

A. Energy and Infrastructure Investment Fund – FIBRA E

- **Basic Concept**

Fibra E is an energy and infrastructure investment trust, established according to Mexican laws, which issues stock certificates of investment (CBFEs). According to the Mexican capital markets law – Ley del Mercado de Valores – these certificates will provide property rights pro rata with respect to the assets in the trust to their holders.

- **Background**

As oil prices and the exchange rate plummeted during the last months of 2015 and through the first weeks of 2016, the government needed to find

another way to attract resources in order to finance projects for both Pemex (national oil company) and CFE (state-owned company in charge of distributing energy).

FIBRA E instruments are based on Master Limited Partnerships (MLPs) in the US, which have a market value of close to USD \$511 billion⁹.

- **Structure**

The assets comprising Fibra E include projects in an advanced stage of growth, although new projects may also be taken into account. At least 75% of the total assets should be the former, while the latter can make up a maximum of 25%.

The trust settlor in Fibra E should act as the sponsor of the trust, adding to the trust stocks by making contributions in kind in the event of mergers or split-offs to the legal entities owned by the trust. These legal entities must be registered in Mexico for tax purposes. This way, the certificates issued by the trust will be held by investors through the stock exchange and the sponsor. Among the different types of certificates available for issuance are preferred, with limited voting rights, and subordinate, generally issued for the sponsor.

- **Regulatory Framework**

Fibra E has a very similar regulatory framework as Real Estate Fibras (REITs); however, with Fibra E, the assets are not owned directly by the trust, but instead by a legal entity owned by the trust known as a “Promoted Company”. This enhances tax transparency, as tax is paid by Fibra E investors.

The main requirements for the tax regime are:

- 1) A trust established according to Mexican laws, for which the fiduciary is a credit institution established in Mexico or an authorized Investment Bank;
- 2) The Promoted Company stockholders should be established in Mexico for tax purposes;
- 3) At least 90% of its earnings should be proceeds from “exclusive activities”;

⁹ Índice Alerian MLP. Ernst & Young. Forbes.

- 4) Gains earned from the alienation of land and fixed assets, as well as deferred expenses, may be considered part of the 90% of earnings as long as these assets are used to develop the “exclusive activities”;
- 5) State-owned production companies and their subsidiaries, as well as enterprises participating in hydrocarbon exploration and extraction, are not qualified to participate as Promoted Companies;
- 6) New assets (in operation for less than 12 months) may not count for more than 25% of the trust’s assets book value;
- 7) At least 70% of the trust investments should be directed to Promoted Companies – the remaining 30% may be invested in government instruments or debt funds;
- 8) The Fibra E contract should state the fees payable to the trust manager, settlor, and related people.

- **Benefits to Society / Industry**

The key aspects which make this instrument attractive for investors are:

- 1) Promoted Companies will not be forced to retain income tax on dividends;
- 2) Certificates sales will be tax-exempt;
- 3) Provisional payments by Fibra E or its Promoted Companies are not needed.

Taxes for the Fibra E will be paid according to each investor’s participation and taxation.

- **Potential Risks**

Among the risks inherent to Fibra E stated by analysts, we can mention future cash flows valuations. As a wide range of projects and durations will be held in each Fibra E, this will make the instrument particularly complex to value.

Furthermore, declining oil prices and depreciation of Mexico’s currency are putting pressure on projects potentially look for investments through Fibra E.

B. XBRL Adoption

- **Background**

The XBRL reporting standard was made mandatory for all issuers in the

Industrial, Commercial and Services sector of the Mexican Stock Exchange. This is the international standard for digital reporting of financial, performance, risk and compliance information.

- **Structure**

This standard works through a number of mechanisms to deal with very complex reporting requirements, including sophisticated multi-dimensional data, complex interrelated forms, and individual presentation requirements, and allows regulators and corporate users to greatly improve the quality and consistency of the reported financial information.

As of today, a vast number of countries have adopted or are in the process of adopting this standard. In Europe: Belgium, Germany, the Netherlands, France, Italy, Spain, the UK; in Asia: China, Japan, South Korea, India, Singapore; in the Americas: Canada, Bolivia, Chile, Cayman Islands, the United States and Mexico.

- **Regulatory Framework**

The Comisión Nacional Bancaria y de Valores (CNBV) the highest authority in the financial sector, issued an amendment at the beginning of 2015. In the amendment, it was stated that every company within the Industrial, Commercial and Services sector of the capital market on the Mexican Stock Exchange is expected to report their financial information through this standard from first quarter of 2016, among other items.

The CNBV and the Mexican Stock Exchange have been supervising this amendment to ensure it is fulfilled on time, and that the companies and intermediaries utilizing the financial information are ready to report, receive, and process such data through the standard in order to achieve the potential benefits that XBRL adoption will provide to the Mexican market.

- **Benefits**

XBRL is designed to facilitate financial reporting and the exchange of financial information between companies and countries, since it has unique tags associated with reported facts which allow people publishing reports to do so with confidence that the information contained in them can be consumed and analyzed accurately. The provided information can also be tested against a set of business and logical rules in order to avoid mistakes at the source.

C. Professional Certification on Money Laundering and Terrorist Financing

- Basic Concept

This financial innovation consists of the creation of a procedure aiming to certify the AML/TF minimum standards and knowledge that professionals who work for financial persons/entities supervised by the CNBV must have.

- Background

To our knowledge, this certification is highly innovative, given that there are no records in other jurisdictions where such a certification exists.

Since 2014, when Mexico's financial reform was issued, one consequence was that the CNBV received faculty by law to certify professionals such as independent external auditors, compliance officers and other professionals who contribute to overseeing regulatory compliance regarding Anti Money Laundering and Terrorist Financing (AML/TF).

This certification verifies that people who are in charge of verifying compliance related to AML/TF issues possess the knowledge to perform their tasks according to the highest international standards on the field.

- Structure

The certification will be obligatory for professionals who work for financial institutions regulated by CNBV, as well as those who may perform such activities in the future.

After those who are required to possess the AML/TF certification (independent external auditors, compliance offices, and others whose activities contribute to oversight of AML/TF regulatory compliance) have passed a general knowledge test on AML/TF administered by CENEVAL, the institution responsible for the evaluation process, the CNBV awards the certification.

The test consists of a series of questions related to both national and international AML/TF regulations from all Mexican financial sectors.

Once the test is passed, the participant is authorized by law to act as an interlocutor between the CNBV and the financial person/entity being represented.

According to the calendar issued by the CNBV, the certification process will gradually be phased in for each financial entity supervised by the CNBV. The entire Mexican financial sector is expected to be certified by

the end of 2016.

Participants' personal data is not disclosed through CNBV's web page without their express approval.

- **Regulatory Framework**

On October 2nd, 2014, the general provisions for certification of independent external auditors, compliance officers and other professionals in the prevention of transactions with illegal proceeds and terrorist financing was published in the Official Gazette of the Federation (Mexico's main official government publication)¹⁰.

On March 13th, 2015, the OGF also published the agreement which discloses the calendar for the relevant certification process¹¹.

- **Benefits to Industry / Society**

The most relevant issues regarding this instrument implementation are:

- 1) The verification of AML/TF minimum standards of knowledge.
- 2) Greater confidence in the financial sector regarding professionals' AML/TF knowledge.
- 3) Standardization of knowledge among financial sector participants.
- 4) Reassessment of compliance officer activities.
- 5) Enhanced control of independent external auditors.
- 6) Increased competence in the financial sector.

6. TURKEY

A. Electronic Fund Distribution Platform (TEFAS)

- **Basic Concept**

TEFAS is an electronic platform that provides access to all mutual funds available in the Turkish capital markets via a single investment account. In essence, TEFAS is a fund supermarket that enables investors to access mutual funds of their choice with relative ease.

¹⁰ Source: http://www.dof.gob.mx/nota_detalle.php?codigo=5362353&fecha=02/10/2014

¹¹ Source: http://www.dof.gob.mx/nota_detalle.php?codigo=5385412&fecha=13/03/2015

- **Background**

Prior to TEFAS, investors could only invest in investment vehicles available on their broker's platform. Given that most brokerages offer a small, select array of investment products to their investors, most investors only had a small arsenal of securities to invest in. TEFAS was introduced to enhance the range of securities available to investors and foster competition between asset management firms in order to entice investors. The system went live on January 9th, 2015.

- **Structure**

All investors can use TEFAS through their accounts in investment firms. Investment accounts are linked to the TEFAS platform, which provides access to the entirety of mutual funds run by every asset management firm in Turkey.

Before choosing among investment alternatives in their brokerage accounts, investors can access the "Fund Information Platform" on <http://fundturkey.com.tr>. Users can view detailed information on various funds' properties, historical returns, management fees, and restrictions prior to making their selection.

- **Regulatory Framework**

TEFAS was established with the authorization of the Capital Markets Board (CMB), Turkey's securities market regulator. TEFAS is operated by the Istanbul Settlement and Custody Bank. Participation in the TEFAS platform is mandatory for investment firms.

- **Benefits to Industry / Society**

TEFAS is designed to assist investors in comparing investment instruments and making informed investment decisions. TEFAS provides the opportunity to access all mutual funds through a single screen.

- **Potential Risks**

In the absence of independent financial advisors, the growth of the system might remain limited.

- **Implications**

Wide-spread adoption of TEFAS among the investing community is expected to stimulate competition in the Turkish asset management industry and enhance fund performance. TEFAS allows retail investors to choose from among various investment products at no additional cost.

Thus, TEFAS is expected to contribute to the long term-success of Turkish capital markets and contribute to the efficient allocation of savings.

B. Borsa Istanbul Private Market

- Basic Concept

The Borsa Istanbul Private Market is a web-based, members-only platform which brings companies and investors together without the need to go public.

- Background

The Private Market was designed to improve the Turkish entrepreneurial ecosystem by providing opportunities for equity financing to growth companies. The Private Market's most important feature is that it brings start-up companies and rising companies together with qualified investors, and therefore offers them equity financing and liquidity without having to go public and without being subject to Capital Markets Board regulations. The Private Market started accepting members on November 17th, 2014.

- Structure

The Private Market is a membership-based platform that is open around the clock. Public companies subject to Capital Markets Board regulations are not admitted to the Private Market. The transfer of shares and cash are realized out of the Private Market by the concerned parties, with the Private Market holding no liability. Borsa Istanbul Private Market provides only a medium for interaction, and is not liable to protect or inform participating companies or investors. Transactions in the Private Market may be realized through intermediaries, although it is not obligatory.

Trading in the Private Market is available only for professional/qualified investors. Professional/qualified investors include:

1) Natural persons who hold a "Business Angel Certificate" issued by the Undersecretaries of the Treasury. Those who wish to hold a Business Angel Certificate require a minimum annual income of TL 200,000 (approximately US\$ 70,000) or a minimum net worth of TL 1,000,000 (approximately US\$ 350,000), as well as personal start-up and management experience.

2) Business angels residing outside of Turkey who can provide documentation proving residency status and business angel network membership.

3) Both natural and legal persons with "Qualified Investor" status with

active investment accounts at banks and brokerages.

Qualified investor status is available to natural persons with a net worth of at least of TL 1,000,000 (approximately US\$350,000) and legal persons (financial institutions) such as portfolio management companies, pension funds, etc. Non-financial institutions may also qualify as qualified investors, and are subject to minimum asset, earnings and capital requirements.

Companies can register in the Private Market as either “start-up” or “rising” companies, which are subject to different requirements.

1) Start-up companies: A minimum of 6 months, and no more than 5 years, must have elapsed since the foundation date.

2) Rising companies: At least 2 years must have elapsed since the establishment of the company. The minimum amount of assets or sales revenue in one of the past two consecutive year’s annual or quarterly financial statements must be TL 5,000,000 (approximately US\$ 1,750,000). Companies are required to file audited financial statements for the past two consecutive years.

- **Regulatory Framework**

Trading in the Private Market is subject to the provisions of the Turkish Commercial Code and Code of Obligations, not to the Capital Markets Law. Borsa Istanbul is not responsible for any losses that may incur through transactions in the Private Market. Companies are exempt from capital markets regulations and are not subject to public disclosure regulations. Companies are delisted from the Private Market when they are listed on Borsa Istanbul’s main market, or when the number of shareholders exceeds 500.

- **Benefits to Industry / Society**

The Private Market provides easy and low-cost financing solutions for companies and investment opportunities for investors. Investors can choose from among numerous companies of various sizes and sectors to invest in, with a specific focus on growth companies. Certified angel investors enjoy special tax advantages, such as corporate income tax exemption for up to 5 years, by investing through the Private Market. Companies do not have disclosure requirements and enjoy confidentiality. The Private Market provides services including legal and financial consultancy, valuation, and brokerage, which are provided upon request.

- **Potential Risks**

Growth companies are inherently risky investments. Investors face the risk of losing a significant portion or the entirety of their investments. The absence of disclosure requirements may mean less informed and riskier investment decisions.

- **Implications**

In the Private Market, companies can raise capital in lieu of going public or raising funds through the debt markets. The Private Market was specifically established to create a medium where entrepreneurs can access equity financing without regulatory hurdles, while investors can enjoy high-risk, high-return investment opportunities. The Private Market is expected to encourage domestic entrepreneurial activities and stimulate the investment landscape.

C. Borsa Istanbul BISTECH (NASDAQ)

- **Basic Concept**

The BISTECH program was started by Borsa Istanbul in April 2013 as a “transformation with technology program” to initiate a series of steps in an effort to make Turkish capital markets more globally competitive.

- **Background**

In order to enhance and amplify the efficiency, effect and reach of the Turkish capital markets, Borsa Istanbul entered into a strategic partnership with NASDAQ in December 2014 to substantially renovate Borsa Istanbul’s existing market applications and technological infrastructure.

- **Structure**

The BISTECH program was planned as a two-phase program. The first phase of the program went live on November 30 with the launch of the equity market trading and settlement system together with surveillance, risk management and other surrounding systems. Derivatives, debt securities, and the precious metals and diamond markets will go live in the second phase. As a result, all markets currently running on completely separate systems will begin to operate on a single, common platform.

Within the scope of the BISTECH transformation program, Borsa Istanbul also launched a new data center which offers co-location services that will facilitate high-frequency and algorithmic trading, and provides faster access for investors in remote locations.

- **Regulatory Framework**

Borsa Istanbul is subject to the Capital Markets Board's regulations and supervision.

- **Benefits to Industry / Society**

The BISTECH program was developed to enhance the existing technological infrastructure of the Borsa Istanbul, in order to emphasize its role as a regional capital markets hub.

- **Potential Risks**

N/A

- **Implications**

The strategic partnership with Nasdaq underscores Borsa Istanbul's position and brand as the capital markets center for the Eurasia region, serving global issuers and investors.

D. Real Estate and Venture Capital Asset Management Companies

- **Basic Concept**

As per Capital Markets Board regulations on asset management companies, a special type of asset management company can be founded exclusively to establish and manage real estate investment funds or venture capital investment funds. These asset management companies are called real estate and venture capital asset management companies.

- **Background**

The Capital Markets Board designed the real estate and venture capital asset management companies in January 2014 in order to encourage entrepreneurial activity and growth in the real estate industry.

- **Structure**

The funds managed by real estate and venture capital asset management companies invest in real estate and property rights, and venture capital investments, respectively. The minimum capital of a real estate and venture capital asset management company must be at least TL 1,000,000 (approximately US\$ 350,000), which may increase up to TL 5,000,000 (approximately US\$ 1,750,000), depending on assets under management. These companies cannot offer retail asset management or investment advisory services. The funds can also invest in deposits, debt securities, investment funds, repo, money market instruments, real estate certificates, warrants, certificates and derivatives. Only qualified investors (owning TL 1,000,000 or more in cash or securities) can invest in real

estate or venture capital investment funds.

- **Regulatory Framework**

Asset management companies are subject to the Capital Markets Board's regulations. There are currently some uncertainties related to tax regulations for real estate and venture capital asset management firms.

- **Benefits to Industry / Society**

It is expected that Turkish capital market investors will benefit from a growth in the number and quality of asset management firms and the investment products offered.

- **Potential Risks**

Currently, there are some uncertainties regarding tax regulations for real estate and venture capital asset management firms.

- **Implications**

To date, one real estate asset management firm has been established and became a member of the Turkish Capital Markets Association. No venture capital asset management firm has been established as of January 2016.

E. SME's Access to Finance (Borsa Istanbul)

- **Description**

In order to facilitate access to financing for Small- and Medium-Sized Enterprises (SMEs), a protocol was signed on April 16th, 2015 for the collective bond issue by SMEs. This cooperation protocol was signed between the Turkish Capital Markets Association (TCMA) and a group of banks and asset management firms under the leadership of Borsa Istanbul. The Small and Medium Enterprises Development Organization (KOSGEB) and Credit Guarantee Fund (KGF) are working closely with these organizations to participate in the project as active stakeholders.

The protocol intends to provide SMEs with easy access to capital markets, while venture capital funds founded by the asset management firms will be able to buy bonds issued by the SMEs that have been independently audited and rated as investable. These venture capital funds will buy all the bonds issued, and fund shares will be sold to qualified investors.

IV. Conclusion

In conclusion, if we look across the board at financial innovation initiatives among EMC countries, the emergence of certain patterns is quite clear. These patterns can be broken down into four broad categories, as depicted in the table above: SME Financing, Digitalization/Automation, Financial Inclusion/Asset Formation, and Alternative Investment.

	SME Financing	Digitalization/ Automation	Financial Inclusion/ Asset Formation	Alternative Investment	Others
Korea	• Equity Crowdfunding	• Internet-Only Banks • Equity Crowdfunding	• ISA		
Taiwan	• Digital financial environment 3.0	• Digital financial environment 3.0	• Digital financial environment 3.0		
India	• SME Platform • ITP	• E-IPO	• Payments Banks • Jan Dhan Yojana • JAM		• ASBA • IFC
Thailand	• Crowdfunding				
Mexico		• XBRL Adoption		• Fibra E	• AML Certification
Turkey	• Borsa Istanbul Private Market • Real Estate & Venture Capital AMC	• TEFAS • BISTECH		• Real Estate & Venture Capital AMC	

The most significant pattern, which has been observed across nearly all EMC countries is SME financing. In particular, crowdfunding has arisen as the most popular method for acquiring capital for start-ups and SMEs, and, with the impact of new technologies, has become even more accessible and reliable for investors. Another financing vehicle is the creation of a dedicated SME market within regulated exchanges, which allows them to grow as they prepare to transfer to the main market. As well, the establishment of an OTC platform for SMEs can ease the burden of disclosure requirements for start-ups. Such platforms generally offer other helpful services as well, including legal and financial consultation.

Another notable trend is the increasing shift toward digitalization and automation. The introduction of new technology means that many functions of the traditional financial market are now accessible through web-based platforms. Investors are able to buy shares of IPO companies online, and may also compare prices and rates of returns between all of the mutual funds that are available without having to visit brokerage firms, instead buying them online through their computer or mobile.

Other EMC trends that emerged were the promotion of financial inclusion, and exploration of new alternative investment channels. In terms of financial inclusion, new financial products and services have been created to assist the unbanked/underbanked with access to financial services and asset formation, especially in Korea and India. Meanwhile, Mexico and Turkey have been actively seeking out new financial options for fostering

the advancement of growing sectors, such as energy and real estate investment.

As the global financial industry has been witnessing innovative changes, either due to the particular needs of a country, or due to new disruptive technologies, it can be observed that some countries are adjusting more effectively to these changes than others.

EMC countries could benefit from looking into ways to minimize irrational/ineffective rules and regulations based on a cost-benefit analysis. Through such reforms, innovative businesses will have an easier time getting up and running, thereby protecting investors' rights and maintaining market integrity.

Additionally, with respect to financial regulations, EMC countries may benefit from taking a negative-based approach. Some countries utilize a regulatory framework that is heavily reliant on positive, rules-based regulations, which prohibits any other activities that are not specified in the law from being performed. For example, in the case of the US, even though the financial industry has an intricate regulatory framework in place, new types of businesses that are not specifically prohibited in the law are permitted to be created as long as they don't violate the existing law. This is why many IT firms and financial institutions in the US are able to be at the forefront of the Fintech industry.

During the Davos Forum in 2016, many speakers have testified that the emerging markets, which have had hard time having access to traditional financial services, are much more eager to adopt and experiment with new technologies than developed markets are. Owing to this outlook, EMCs are poised to pave the way for innovation in other countries through the reform of their rules and regulations. Given this trend and the patterns noted above, emerging market countries are now drawing a great deal of attention, as they are anticipate to introduce a number of influential new concepts and ideas as they adapt to the changing financial environment.