McKinsey&Company

Deepening capital markets in emerging economies

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Introduction

Deeper capital markets in emerging Asia could free USD 800 billion in funding annually,[1] mostly for mid- to large-sized corporations and infrastructure, accelerating economic growth and potentially lifting millions from poverty. Instead, these emerging economies do not have access to predictable capital market funding at scale and investors lack the financial instruments to deploy long-term savings. Meanwhile, their capital markets are poorly allocating their resources.

Taking advantage of this potential and addressing these issues depends on policymakers' ability to build vibrant capital markets. The building blocks of well-functioning capital markets are understood and documented, but policymakers require both the tools for a detailed diagnostic and a change management approach to carry out the necessary changes.

Building vibrant capital markets requires policymakers around the world to:

- ***Diagnose** performance at a granular level:* Traditional approaches to benchmarking capital markets compare size to GDP. We have developed a set of metrics—the McKinsey Asian Capital Markets Development Index—to help policymakers better benchmark their markets.

- ***Design** markets for sustainable rather than fast development:* Incremental market design and infrastructure revisions can improve short-term performance. But sustainable improvement is achievable only through changes in economic (and sometimes, social) policies that alone underpin long-term growth.

- ***Implement** a nationwide change management approach:* Policymakers and their advisors in many emerging economies understand what needs to be done to deepen capital markets, but carrying out those measures is challenging. Sequencing and implementing numerous interdependent initiatives over a long period of time calls for a change management mindset and approach with which few policymakers are familiar.

We hope that this report will meaningfully contribute to policymakers' understanding of building deep capital markets. At its heart, this is not a technical issue but a nationwide (and in some cases, regionwide) change management challenge that requires a new mindset. The stakes are enormous.

1 Estimate based on market penetration to GDP, McKinsey Asian Capital Markets Development Index

1. Raising the performance bar

We used the McKinsey Asian Capital Markets Development Index methodology to compare the performance of emerging capital markets with that of more developed markets, asking three fundamental questions:

1. Can issuers raise *affordable* capital *at scale* through capital markets?

2. Do capital markets provide *attractive* and *diverse* avenues to deploy short- and long-term domestic savings?

3. Do capital markets offer high-quality *pricing information* to maximize the efficiency of resource allocation?

While our initial focus was on Asian markets, expanding our research to a handful of non-Asian emerging markets led to similar conclusions—that emerging markets are significantly behind developed markets, with considerable financial, human, and social costs (Exhibit 1).[2]

Exhibit 1

McKinsey Asian Capital Markets Development Index

1 Weight allocated: 50% while arriving at total score
2 Weight allocated: 40% while arriving at total score
3 Weight allocated: 10% while arriving at total score

2 The detailed index and its findings are included in the appendix

1.1 USD 800 billion in missed opportunities every year

Emerging capital markets face challenges regarding the availability, diversity, and pricing of capital.

- **Significant funding gap:** Primary markets are more volatile and less reliable sources of funds for issuers in emerging markets. This is especially true for mid-sized companies and infrastructure projects that are crowded out by larger issuers and governments. Deeper capital markets in emerging Asia could free approximately USD 500 billion in the private sector and USD 300 billion in the government sector every year.[3] This extra money could make a big contribution to the infrastructure needs of emerging Asia and the Pacific, estimated at USD 1.7 trillion a year through 2030.[4]

- **Limited choice:** Emerging market issuers lack options to diversify funding and to match funding with their needs. For example, the absence of a long-dated bond market reduces the flexibility of corporate borrowers to align funding structure with assets and future earnings.

- **Expensive capital:** Issuers in these markets face a more volatile and higher cost of capital compared with developed markets. For example, they pay roughly a 120 percent higher real cost for debt securities.[5]

This makes it harder to raise funds for new ventures and to grow or innovate except as part of existing large companies or conglomerates. Ultimately, this stifles economic growth.

1.2 Lack of avenues to deploy domestic savings and a mediocre risk-reward profile

Investors in emerging markets face similar challenges. They put a large part of their savings in physical assets such as real estate and gold, and bank deposits. The limited investments in financial assets are mostly in government bonds, AAA-rated corporate bonds, and equities. They also face poor risk-adjusted returns on capital market products, mostly because of higher volatility—for example, an average Sharpe ratio of 0.8 between 2008 and 2015 (for the equity assets).[6]

The inability to match long-term savings with future pension and health requirements, combined with aging populations, risks creating a generation of poor retirees.

1.3. Poor pricing efficiency likely to lead to inferior resource allocation

Pricing efficiency is a complex topic and there is a healthy debate about the best way to measure it. However, there is substantial evidence from both event studies and (more recent and less tested) mathematically-oriented approaches that emerging Asian equities markets are less efficient than more developed markets. Faster economic development is about allocating human and financial resources to the most attractive opportunities. Capital markets are failing to maximize these opportunities in emerging Asia.

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3 Calculation based on McKinsey Asian Capital Markets Development Index

4 Infrastructure cost needs are estimated to be around USD 26 trillion through 2030, or USD 1.7 trillion a year, in emerging Asia and the Pacific, including climate change adaptation and mitigation costs. ADB press release of 28 February 2017 (https://www.adb.org/news/asia-infrastructure-needs-exceed-17-trillion-year-double-previous-estimates)

5 Calculation based on McKinsey Asian Capital Markets Development Index

6 Markets included here are primarily the emerging markets of Asia—China, India, Indonesia, Malaysia, Pakistan, Philippines, Thailand, and Vietnam

2. Balancing performance and health

Sustaining performance requires balancing short-term growth with longer-term "health" considerations. Private companies and world-class athletes alike understand this trade-off. Markets that promote growth at all costs suffer from bouts of volatility and liquidity crises. And markets that leave no space for risk and experimentation do not develop fast enough. Both mistakes lead to high human and economic costs.

Policymakers can embed sustainability in their growth models by focusing on building the foundations required for longer-term market growth. This requires decisions at two levels:

- **Policymaking:** Making a small number of critical policy decisions to enable and create the foundation for longer-term growth
- **Market architecture and design:** Defining the required regulatory framework, institutional setup, legal structure, tax environment, and market infrastructure

Both levels are critical and need to work hand in hand. The policies related to capital market development are far-reaching—they require executive, legislative, and popular support and hence, unavoidable time and commitment. Market architecture and design is a constant work in progress in both developed and emerging markets, and can only be effective if the right policies are in place. There are different building blocks for capital market development (Exhibit 2), and we have used this framework to benchmark two markets in a "health scorecard" (Exhibit 3).

Exhibit 2

The building blocks for sustaining long-term capital market growth

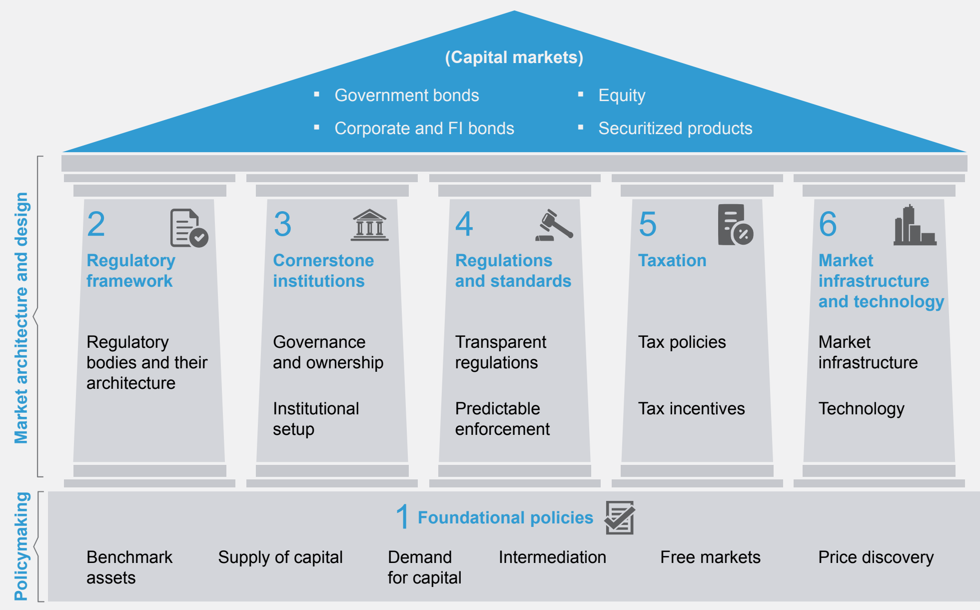

Exhibit 3

Health scorecard for India and Indonesia

1 Both foundational policies and market architecture and design have 50 percent weightage in overall health score

SOURCE: Interviews with capital market participants

2.1 Policymaking: Enabling longer-term development

Short-term incremental improvements are possible by tweaking market architecture and design. However, longer-term sustainable improvements are often underpinned by deep changes in economic and social policies. Six policies stand out:

- Develop a liquid government debt securities market (benchmark assets).
- Promote the development of a deep and broad investor base (supply of capital).
- Increase issuer participation (demand for capital).
- Encourage competition among market participants (intermediation).
- Set a path for sustainable integration into global markets (free markets).
- Support price discovery and resource allocation (price discovery).

2.1.1 Develop a liquid government debt securities market (benchmark assets)

A benchmark asset helps to price other assets and provides hedging mechanisms against interest-rate risks. A liquid government debt securities market is the only such credible benchmark. Building such a market first requires an important policy decision to issue debt on an ongoing basis. This is often controversial. There is, however, no real trade-off between fiscal prudence and building a vibrant government debt market. It is important to issue government debt securities regularly and predictably, even in markets with sustained or occasional budget surpluses.

Second, building such a market often requires an overhaul of the way debt securities are issued and managed, which includes providing a predictable issuance calendar, reopening large on-the-run[7] benchmarks rather than creating many off-the-run issues, or designing compelling primary dealer programs that balance the duties and privileges of dealers. This is not an issue only for emerging economies—France started this transformation in the 1980s with the objective of smoothing the government's debt maturity profile, fostering liquidity in secondary markets, and lowering the cost of debt service.[8]

2.1.2 Promote the development of a deep and broad investor base (supply of capital)

Four categories of investors have a complementary role in capital market development. These groupings include **"buy and hold investors"** like insurance companies or pension funds; **"buy and trade investors"** like mutual funds; **"active investors"** like hedge funds; and **"private market investors"** such as private equity or venture capital funds. Policymakers have considerable influence on the development of these categories:

- **Buy and hold:** Defined-contribution public and private pension funds are critical to longer-term capital market development. The policies adopted by Chile and Singapore are often cited as examples in this area.
- **Buy and trade:** Policymakers can help to develop these types of investors through educational programs as well as policies to incentivize and encourage the middle class to place savings in mutual funds, unit-linked insurance, and other medium-term products.
- **Active investors:** Some academics and government officials, among others, attribute volatility and liquidity crises in emerging markets to active investors, prompting many markets to restrict their ability to trade. In their defense, bilateral and syndicated loans are much more volatile elements of capital supply than portfolio flows. Also, active investors provide liquidity, encourage transparency, and improve the quality of pricing in the market. Policymakers should seek an appropriate balance in the regulation of active investors, given the benefits they offer financial markets.
- **Private market investors:** These investors provide capital for growth, for pre-listing stages, and for financial and operational restructuring.

7 "On-the-run": the most recently issued debt securities of a particular maturity, that are more liquid. "Off-the-run": bonds that have been issued before the most recent issue and are still outstanding, and are less liquid

8 *Structural evolution and reforms of the French banking and financial system since the 1980s,* Christophe Blot, Jérôme Creel, Anne-Laure Delatte, Fabien Labondance, and Sandrine Levasseur http://fessud.eu/wp-content/uploads/2013/04/Structural-evolutions-and-reforms-of-the-French-banking-and-financial-system-since-the-1980s-...-Workin-Paper-66.pdf and *Banking deregulation and industry structure: Evidence from the French banking reforms of 1985,* Marianne Bertrand, Antoinette Schoar, and David Thesmar http://faculty.chicagobooth.edu/marianne.bertrand/research/papers/banking_deregulation_jf.pdf

2.1.3 Increase issuer participation (demand for capital)

Policies also significantly influence issuer demand for capital markets funding, specifically:

- **Listing or privatizing government-controlled entities:** Privatization or listing of state-owned or state-controlled enterprises has proven to be one of the strongest levers for influencing issuer demand. Several large European markets were kick-started in the 1970s and 1980s by waves of privatization. In emerging markets, China is a recent and powerful example of this trend.

- **Promoting or mandating the use of debt capital markets:** In similar ways, policies can lead state-controlled entities to use debt capital markets to diversify at least part of their debt funding from the banking sector. Similar policies mandating diversification could easily be extended to large companies.

- **Promoting capital markets for financing infrastructure:** Though few emerging markets have successfully done so, this could be a powerful lever.

- **Promoting the development of fast-growing small companies outside of conglomerates:** Often decried as opaque and too diversified, conglomerates play an important role in providing capital for innovation and growth in emerging economies. This innovation, however, seldom leads to demand for capital market products. Developing vibrant startup ecosystems and venture capital industries to supplant conglomerates as the main source of funding for innovation would have a considerable impact on the demand for IPOs in the medium term.

2.1.4 Encourage competition among market participants (intermediation)

Many emerging economies have policies to restrict the operations of foreign intermediaries. They also strictly regulate the hiring of foreign staff. These are often well-intended policies to promote local talent in capital markets, sometimes also helping to maintain broad popular support for the development agenda. Emerging-market policymakers cite Argentina as an example of what happens without such restrictions and when affiliates and branches of foreign multinationals dominate the domestic financial system. Such restrictions may be self-defeating; also, the lack of competition could put domestic firms at a formidable disadvantage when the market eventually opens up to foreign or domestic competition.

2.1.5 Set a path for sustainable integration into global markets (free markets)

There are great benefits to opening domestic capital markets to foreigners and allowing local investors to place money abroad. Such measures would help diversify capital and investments, expose the market to globally accepted practices, and, as a result, accelerate the growth of capital markets. However, emerging economies can be unstable, a condition often attributed to volatile foreign investment inflows and outflows. But the biggest issue is foreign currency lending to large institutions, infrastructure projects, and financial institutions. Such lending can be more destabilizing than portfolio investments.

The appropriate path for free markets clearly depends on the nature of the emerging economy. In the past, opening up markets or capital accounts too soon has destabilized economies. The fast internationalization of the Japanese yen in the 1980s is now recognized as "too much, too fast" for the country. Most research on the topic shows that a clear, long-term, step-by-step strategy for internationalization would have served Japan better.[9] Such a strategy would have included setting transparent and predictable milestones for opening up the market. Outside Japan, this is probably the most effective approach to help all stakeholders—regulators, investors, and intermediaries—get ready for market integration.

2.1.6 Support price discovery and resource allocation (price discovery)

What policymakers do when they object to the way markets behave sets precedents and influences market development. How much intervention is justified? On the one hand, no market is perfect and interpretations of day-to-day or month-to-month price movements will vary. Some circumstances could call for direct or indirect intervention to suppress the adverse impact of excessive volatility or to redistribute resources to different groups of people in the economy. These decisions mirror economic, political, and human development priorities.

On the other hand, systematic and direct intervention stifles market development, distorts price signals, and slows the development of sophisticated investors.

This is a difficult balancing act for policymakers. Intervention policy is also the most important and hardest to sustain to ensure that markets actually develop. One approach is to limit intervention and instead use market mechanisms to execute policy objectives. This does not mean abdicating policy, but rather using the market and incentives embedded in them to carry out policies.

2.2 Market architecture and design

Architecture and design include five pillars:

- Architect the regulatory and supervision framework.
- Set up cornerstone institutions.
- Establish transparent rules and predictable enforcement (regulations and standards).
- Define taxation policies in line with development objectives.
- Use technology to develop state-of-the-art market infrastructure.

There is no one-size-fits-all answer for emerging markets for any of these pillars. Policymakers are faced with a number of imperatives (which we call "must haves") and need to address these through certain choices (which we call "design decisions"). We have tried to delineate both "must haves" and "design decisions" for each pillar.

9 *"Internationalisation of Yen" or "internationalisation of Yuan": Policy science of domestic decision-making processes for Asian Monetary Cooperation,* Kamikubo Masato, March 2012, http://www.ps.ritsumei.ac.jp/assoc/policy_science/193/193_17_kamikubo.pdf

2.2.1 Architect the regulatory and supervision framework (regulations and standards)

Must have: Independent, accountable regulators with access to outstanding talent are a requirement for market development. A single model or a one-size-fits-all formula cannot be recommended for emerging economies as these models and formulae work and fail in different ways. The first difference between success and failure lies in crafting a system with clear accountability and governance in place. The second difference lies in attracting exceptional talent, both local and foreign, to work within regulatory bodies.

Design decisions:

With this in mind, policymakers must make important decisions about the architecture and governance of their regulatory and self-regulating bodies:

- **Define the architecture to enhance collaboration:** Much has been written about the comparative benefits of having a single regulator like the Monetary Authority of Singapore (MAS) versus setting up multiple regulators as in Hong Kong or India. Both models can work as long as it is clear how different bodies collaborate toward common objectives.

- **Decide what to regulate to promote innovation:** With appropriate oversight, self-regulated organizations—such as securities dealer associations setting standards for their industries—can have a positive impact on development.

2.2.2 Set up cornerstone institutions

Must have: Cornerstone institutions such as a stock exchange, clearing corporation, depository, or credit rating agencies, etc. play an important role in setting standards, pooling resources, and focusing development.

Design decisions:

- **Decide on governance and ownership:** There has been a trend toward privatizing some cornerstone institutions. Stock exchanges and clearing houses were demutualized and listed early in places like Hong Kong, Malaysia, and Singapore; these moves had an overall positive impact on market development. However, some markets have decided to maintain parts of their infrastructure as public or shared utilities. Policymakers must decide on the balance among privately-owned commercial organizations, industry-sponsored shared utilities, and government-controlled utilities.

- **Decide what institutions to create:** While few people debate whether a market needs its own local stock exchange, there are other, more contentious issues. Does the capital market require a credit enhancement institution to support the development of debt markets and securitization? Does it need a mortgage corporation to support the development of securitization and to achieve broader objectives in the real-estate market? There is a healthy discussion to be had on whether emerging economies should follow the example of Hong Kong or Malaysia, both of which have a mortgage corporation. Also, infrastructure is at the heart of so many development issues in emerging economies. Policymakers could consider the need for an institution to look after the development of capital markets to fund infrastructure rather than leave it to be coordinated among several bodies.

2.2.3 Establish transparent rules and predictable enforcement (regulations and standards)

Must have: The main objective of sound regulation is to create a transparent environment with predictable enforcement. A secondary objective is for both regulatory and self-regulated institutions to promote standardization, and as a result, decrease financial cost and risk for market participants. Pursuing these goals will often require a bespoke approach. However, countries can achieve a good part of their objectives by adopting standards and regulations that have worked in other markets and have been adopted broadly in international markets, such as those set by bodies like the International Organization of Securities Commissions.

Design decisions:

- **Strike a balance between supervision and regulation:** One important decision for emerging market regulators centers on finding the right balance between supervision and regulation. The oft-heard motto is "more supervision, less regulation." While this is directionally right—emerging economies have tended to tilt toward detailed regulation over supervision—a more effective way to frame this idea might be better regulation and more engaged, development-minded supervision.

- **Find an enforcement mechanism that matches the maturity of the legal system:** Most developed markets rely heavily on an independent, efficient, and well-functioning judiciary to support market development. This is not the case in many emerging markets, and fit-for-purpose institutions or processes could be considered to replace or complement the judiciary. While this may be beyond the scope of work for emerging market regulators, they could benefit from creating avenues to debottleneck disputes, such as arbitration forums (as in Hong Kong and Singapore) to settle commercial disputes and specific paths to resolve challenges like bankruptcy. India, where this is a major issue, has set up the National Company Law Tribunal. This is an adjudicating authority with the exclusive jurisdiction to deal with all disputes of Indian companies, including insolvency-related cases. The approach should result in faster resolution of commercial conflicts.

2.2.4 Define taxation policies in line with development objectives

Must have: Taxation policies and development objectives go hand in hand for the deep penetration of capital markets in an economy. Tax policies have a strong influence—they can support, hamper, or distort the development of capital markets. The first imperative is not to harm market development. For example, Malaysia removed double taxation rules that hampered the development of the Sukuk[10] market. It quickly achieved leadership in this market by offering tax deductions on Sukuk issuance expense, removing stamp duty on Sukuk transfers, and exempting income tax for special-purpose vehicles established for Sukuk issuances.[11]

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10 Islamic bonds

11 2014/2015 Malaysian tax business booklet, Price Waterhouse Coopers, https://www.pwc.com/my/en/assets/publications/2015-malaysian-tax-business-booklet.pdf

Design decisions: Many markets have decided to go beyond tax-neutral policies to provide tax incentives to promote specific activities and asset classes (for example, tax breaks on long-term investments in equities or infrastructure and eliminating capital gains tax on the short-selling of bonds and stocks). Malaysia created tax policies to deepen select asset classes, including fully exempting domestic investors from income tax on the interest from fixed income instruments and exempting non-resident investors from withholding tax on similar instruments.

2.2.5 Use technology to develop state-of-the-art market infrastructure

Must have: Technology is transforming financial services. In wholesale markets, this transformation has been quiet; indeed, technology has displaced few established institutions. Rather, technology is permeating every existing institution and process. Policymakers should directly and indirectly support the development of high-quality market infrastructure. Directly, they could promote technology in key infrastructure areas such as payments. Indirectly, they could support private players to develop capital market infrastructure at scale. Many market regulators are allowing new technologies to be applied by new and existing players in areas such as the use of blockchain technology for client clearing and settlement, and data mining and analytics for credit analysis and fraud detection.

Design decisions: The most important decision for policymakers in the area of technology is whether to promote specific areas for accelerated use of technology, and if yes, how. This issue is closely related to the preferred governance of cornerstone institutions mentioned above, and a choice between investing directly as a government, supporting an industry-sponsored utility, or opening a market function to private competition. Governments often lack the resources to make technology decisions or set technology standards. They can, however, seed important initiatives and debottleneck the development of market-critical infrastructure.

3. Implementing nationwide change management

Emerging-market policymakers understand the important role capital markets play in supporting the real economy and the necessary building blocks for creating vibrant and well-performing capital markets. Many, however, struggle with the challenges of *implementing* the required change.

Indeed, success requires coordinating and sequencing a complex set of concurrent, interdependent initiatives while gathering sustained, long-term public and legislative support. It is critical that policymakers and regulators be ready, trained, and equipped to make such change happen. Over the years, we have identified a number of common challenges that must be overcome.

- **No compelling case for change:** Policymaking frequently happens behind the scenes. This is especially true when it involves obscure or technical regulatory areas under the purview of niche committees or departments. But sustained public and political support is necessary. It requires changing mindsets and managing a broad range of different stakeholders by establishing a strong case for the overall reforms—painful or otherwise—with a wide audience. Such a case is often missing.

- **A piecemeal approach:** Deepening capital markets requires orchestrating a large number of interdependent initiatives. Sequencing matters here—done wrong, it can lead to vicious cycles of underdevelopment. For example, many countries have tried to develop a long-tenure corporate bond market without a liquid government bond market. Others have tried to build a government bond market but then imposed holding large volumes of government bonds as bank reserves, which guaranteed that the government bonds would be illiquid. Done right however, a comprehensive approach can take advantage of continuous feedback in ways that benefit rather than hinder growth.

- **Limited private sector engagement:** Policymakers and regulators' responsibilities should be weighed against the interest of economic and market development. This is the case in all markets. However, it is particularly true in emerging economies, where policymakers are often loath to appear as favoring different stakeholders, especially private economic interests that may benefit from new or evolving regulation. As a result, private sector engagement is often missing or happens too late to matter.

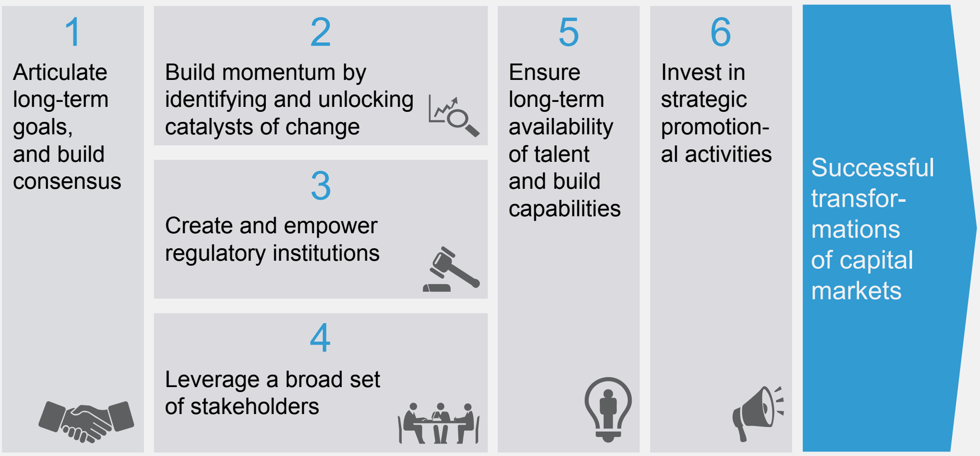
  Managing this balancing act requires constant and positive engagement with private sector stakeholders. Private sector participants must have the right incentives to promote and support the market development agenda. One example is balancing the privileges and duties of primary dealers who support the development of government bond markets.

- **Limited personnel resources:** Many smart people join regulatory bodies in emerging markets, but more are needed, especially those with sharp execution skills. It is often easier for the private sector to attract talented individuals, but the overall pool available to the industry is usually small. Many emerging economies have lost talented people to global financial centers, and local financial institutions find it difficult to get them to return to their home countries.

These challenges are daunting but not insurmountable. Much can be learned from how one emerging market carried out a successful transformation as well as how large private sector organizations have orchestrated change. We pulled together this combined experience in one approach focusing on six action areas (Exhibit 4).

Exhibit 4

A "change management" approach to implementation



In the late 1990s, Singapore undertook a transformation of its international financial center, its domestic financial services industry, and its local capital markets.[12] Singapore's main objective was its development as an international financial center, not the development of its capital markets. Nonetheless, we see it as a powerful example of the type of concerted approach policymakers could adopt (Exhibit 5). Implementing all the above measures enabled Singapore to achieve its dream and more—from aspiring to be the financial center of Asia to becoming the third-ranked financial center in the world, after London and New York.[13]

12 Expert interviews; MAS website—http://www.mas.gov.sg/; Press search

13 Singapore ranks third globally in the Global Financial Centres Index, beats Hong Kong, http://www.cnbc.com/2016/04/08/singapore-ranks-third-globally-in-the-global-financial-centres-indexbeats-hong-kong.html

Exhibit 5

Case example: Singapore's journey to deepen its capital markets

Articulate long-term goals, and build consensus

- Top-down **vision to make Singapore a premier full-service financial center** in Asia set by then Prime Minister and Deputy Prime Minister (late 1990s)
- Vision was made a national priority and **linked to achieving social and economic objectives of job creation and high GDP growth respectively**

Invest in strategic promotional activities

- **Extensive promotion and transparency from the government**, including involving the press regularly, public announcements to general public and companies, etc.
- **Separate promotions department** for handling roadshows and investor campaigns

Ensure long-term availability of talent and build capabilities

- **Education sector was reformed,** e.g., tailored courses, invitations to foreign universities, focus on research and innovation in academics, etc., so that they could produce a talent pool for financial services
- **Foreign talent were offered support** to come and stay in Singapore

Create and empower regulatory institutions

- **Ownership to execute vision was given to an apex body:** Monetary Authority of Singapore (MAS)
- **MAS was empowered by the government** to take all necessary measures to achieve the vision

Leverage a broad set of stakeholders

- **Private sector was actively engaged for inputs** regarding policy formulation and implementation
- **Private sector was offered incentives** to enhance its market participation

Build momentum by identifying and unlocking catalysts of change

- Merged and **demutualized exchanges**
- **Modernized the government bond market** to deepen broader debt markets
- **Transformed the fund management and private banking industry**

SOURCE: Interviews; press reports

3.1 Articulate long-term goals, and build and maintain consensus

Sustainable, long-term change must be sold over and over again. It also needs to be sold differently to different stakeholders, reflecting their specific interests, preoccupations, and incentives. In practice, this means:

- Spelling out a vision with clear and measurable objectives
- Translating this vision into concrete economic and social outcomes and crafting specific messages targeted at different stakeholders
- Identifying the right mouthpiece—from heads of states to street-level social activists—to convey the message over a long period
- Communicating success and early wins—translated into things that matter to people and free of technocratic market jargon—to create momentum
- In most cases, appointing a champion to lead and to give change a face (in many cases, that of a head of state)

How Singapore defined its goals

Singapore decided in 1997 that it wanted to be the financial center of Asia. This dream of the then Prime Minister and Deputy Prime Minister was spelled out in a vision for the country—to make Singapore Asia's premier full-service financial center. The government emphasized the need for a change in the mindset and policies of the financial sector at every opportunity.

The vision was given wings by linking it to Singapore's macro-objectives. The development of capital markets was positioned as a long-term process tied to achieving social (job creation) and economic objectives (GDP growth). It would have been impossible to miss that this was a critical and important aspiration for the country and its people.

3.2 Build momentum by identifying and unlocking catalysts of change

Early wins in the right areas make the difference between a successful program and a theoretical vision. First, focusing on the main bottlenecks can unlock virtuous growth cycles when changes in one area are required to build up momentum in others. Second, early wins build conviction and resolve among those whose support and involvement is needed.

The right approach is market specific but here are some illustrations:

- **Change the exchange governance:** Would demutualization and listing of exchanges prompt innovation and investment in the equities markets? Hong Kong, Malaysia, and Singapore all followed this route.

- **Reboot government debt programs:** Would a modernization program of government bond issuance, carried out over 12 to 18 months, spur growth in debt markets? Examples include Hong Kong and Singapore in the 1990s and France in the 1980s.

- **Reform pension systems:** While pension reform only has impact in the long term, would it increase awareness and promote education within the investing public, which would in turn promote investment in mutual funds? This is what happened in Hong Kong with the introduction of the Mandatory Provident Fund in 1998.

- **Privatize or list state-controlled entities:** Would the privatization or simply listing of government-owned or controlled institutions increase the size and activity in the equities market? France in the 1980s or China over the past 15 years show how these approaches can be catalysts for change in developed and emerging markets alike.

- **Focus on mortgage securitization:** The benefit of setting up a mortgage corporation is hotly debated in many markets. Mortgage corporations can, in certain circumstances, act as catalysts for the securitization market and, as a result, the broader debt securities market. The Cagamas in Malaysia and the Hong Kong Mortgage Corporation are examples of two different approaches to this issue.

- **Boost infrastructure financing:** There are compelling arguments why infrastructure financing could spur broader development. First, there is significant and unsatisfied demand from domestic investors for long-tenure fixed income products. Second, there is massive need for infrastructure investment (USD 26 trillion in emerging Asia and the Pacific through 2030).[14] Third, government and policymakers have significant influence on how, and by whom, infrastructure projects are financed.

How Singapore unleashed its catalysts of change
Singapore identified a few initiatives that would act as catalysts for supply and demand in the financial markets:

- Exchanges were merged and demutualized and transformed into commercial organizations.
- The Singapore Government Securities (SGS) market was quickly modernized, resulting in more liquidity.
- The investment rules for the Central Provident Fund (CPF) were changed to allow more choice and more diversity, thus developing the local fund management industry and offering opportunities to firms willing to invest in Singapore.
- The government transformed the fund management and private banking industry. It used many government-related investment funds to allocate more money to external managers across different styles. This was a way to reform the management of national savings and pensions. It also incentivized institutional asset managers to move to Singapore.

3.3 Create and empower regulatory institutions

Change governance can either help or hamper the change process. For example, it is often important to create a coordinating body, coordinating mechanisms, and new communication processes to harness and orchestrate the efforts of multiple regulators. This setup must be bespoke. Emerging economies with multiple regulators must find ways to achieve strong coordination and maintain momentum. However, other governance elements are common across markets, including:

- Establishing clear responsibility for development for each regulator and accountability for implementation
- Creating coordination forums
- Creating ownership among the senior-most leaders for key actions, including executive and legislative actions, depending on the business and political context
- Setting up ad hoc committees with specific responsibilities and time-bound mandates

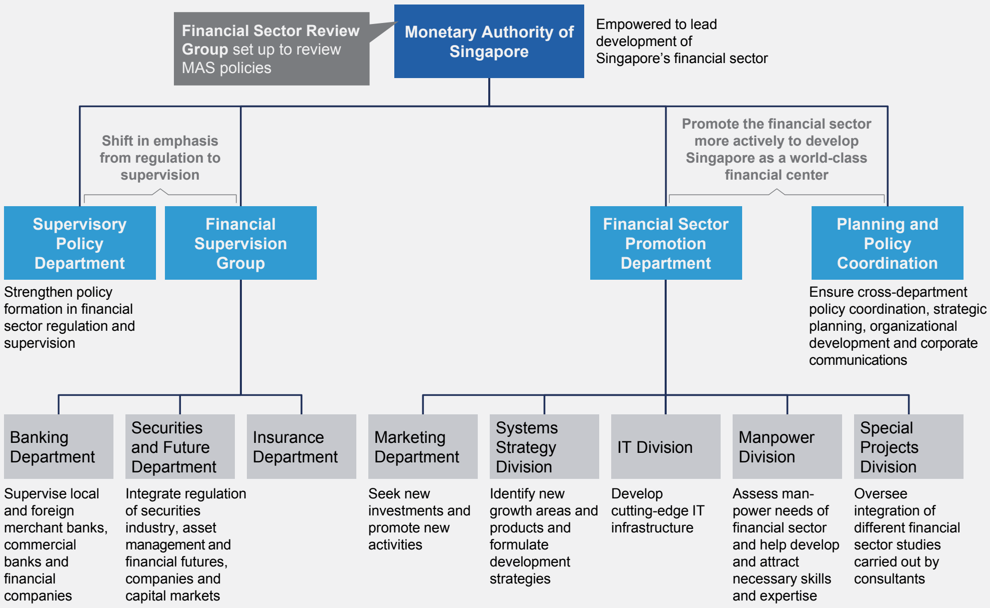
14 https://www.adb.org/news/asia-infrastructure-needs-exceed-17-trillion-year-double-previous-estimates

How Singapore empowered its institutions

- The Financial Services Review Group (FSRG), chaired by the Deputy Prime Minister, was established to define, start, and oversee the transformation of financial services in Singapore.
- MAS was empowered by the government to take necessary measures and to work with other government bodies to achieve Singapore's vision.
- Multiple small teams were set up within MAS to supervise different areas of the financial vision. The accountability of each institution was also clearly defined (Exhibit 6).

Exhibit 6

Institutional ownership in Singapore



SOURCE: MAS annual report

3.4 Leverage a broad set of stakeholders

Private and public companies, foreign firms, supranational agencies, foreign policymakers, and the general public all play an important role in the development of capital markets. Here is a non-exhaustive list of the types of engagement that we have seen succeed:

- **Cede part of the leadership to the private sector:** Domestic industry associations (for example, the local securities dealers association or the association of banks) can provide valuable input. Associations' day-to-day experience is useful but regulators must manage their role to avoid self-serving actions.

- **Leverage foreign financial institutions:** Countries can involve institutions that have access to knowledge and experience beyond the reach of policymakers of most emerging markets.

- **Launch broad and transparent outreach for input and feedback:** There is little downside in seeking input from a broad range of constituencies. Technology now allows doing this efficiently at scale.

- **Create and empower national champions:** Leading financial institutions should shoulder part of the development agenda. They benefit the most in the long term so they should have the incentives to invest.

- **Use tax incentives, grants, and preferential business access:** Reward those institutions that make an impact. Policymakers have a large number of tools to promote this engagement.

- **Employ moral suasion:** While moral suasion might not be available everywhere, we have seen it work well in many markets.

How Singapore engaged with its stakeholders

- Singapore set up private sector committees to collect industry input in many waves—first, in 1997 to get direction, and then, in 1998, to support specific recommendations. These committees generated an overwhelming number of ideas. Many were implemented, such as recommendations for a disclosure-based regulatory system, increased participation by institutional investors, and consolidation of securities regulation in MAS.

- MAS invited many foreign financial institutions to provide advice. The FSRG was set up to oversee this change. It also invited foreign advisors to its meetings to offer guidance and advice.

- The market transformation coincided with the consolidation of the domestic financial industry (with the merger of UOB and OUB and that of DBS with POSB Bank), thus creating national and regional champions for the industry.

- Singapore employed incentives to attract the private sector, including tax exemptions and access to business opportunities such as mandates from the sovereign wealth fund.

3.5 Ensure long-term availability of talent and build capabilities

Talent is an important—and frequently overlooked—priority in developing capital markets. While there are few quick wins to be had, there is much that policymakers can do to address short-term issues and prepare for the long term. For example:

- **Short term: Attract talent.** Policymakers should focus on attracting talent to their countries. In many cases, the priority will be to bring home local talent that has left to work in leading global financial centers. Many emerging markets have a considerable expatriate pool of talent that can be drawn back by presenting an inspiring vision and longer-term prospects. This step also includes attracting foreign talent into the market. This is a move that might sound obvious but, in fact, several countries have made it more difficult for foreign talent to participate in their longer-term development.

- **Medium term: Train and retrain talent.** In the past, this would have involved classroom workshops or seminars. Technology offers the possibility of efficiently training or retraining existing talent at scale. For example, students and workers in emerging markets have taken up new approaches to education such as Mass Open Online Courses (MOOC).

- **Long term: Reform university education and ongoing vocational training.** Developing financial markets courses at top universities is important (although this has historically fed the benches of international banks at global financial centers). Countries can do this organically or through cooperation with leading international universities. This approach should be complemented with improved standards for ongoing training and certification. Leveraging technology is critical to scale the latter efficiently.

In addition to training and education, compensation in the public sector is often a major bottleneck to hiring and (especially) retaining talent in the key bodies responsible for the development or regulation of financial markets. A lack of resources is only part of the problem. This is a taboo subject in many countries and few have addressed it head on.

How Singapore built a talent pool

- **Short term: Attract talent.** In 1997, the International Talent Division of the Ministry of Manpower launched “Contact Singapore”—a program to welcome foreign talent to Singapore. Similarly, the “Singapore Talent Recruitment” (STAR) Committee was formed in 1998 and the “Scheme for the Housing of Foreign Talent” was developed to provide affordable yet comfortable accommodation for incoming foreign talent. These programs went beyond financial services but contributed significantly to building Singapore’s financial services industry.

- **Medium term: Train or retrain talent.** The Financial Sector Development Fund (FSDF) was set up to provide grants to financial institutions for training their staff. MAS encouraged academic institutions to conduct research in financial services and pushed the establishment of think-tanks that focused on the financial sector.

- **Long term: Reform university education and ongoing vocational training.** Singapore launched numerous initiatives to reinforce financial and business management in Singapore at the undergraduate and graduate levels. For example:

  — Singapore's universities tailored courses to address the growing needs of the financial sector. The National University of Singapore and the Nanyang Technological University introduced a graduate program offering a degree in financial engineering.

  — Well-known foreign schools such as INSEAD and the University of Chicago were encouraged to set up their Asian campuses in Singapore.

3.6 Invest in strategic promotional activities

Marketing and sales is rarely a core function of regulatory institutions. Many lack the training and capabilities to conduct promotional activities. Leading institutions understand, however, that promotion is the critical last mile to development work and invest accordingly for the short and long term. In practice, this means:

- Dedicating trained resources to promotion

- Creating and monitoring explicit objectives and targets for marketing and promotion

- Involving top country leaders in these promotion efforts in a structured and sustained fashion

How Singapore promoted its capital market

- A separate promotions department (the Financial Markets Development Department) was set up in MAS to conduct roadshows and investor awareness campaigns to promote capital markets.

- Senior government leaders promoted the city-state's capital market not only at home but also internationally.

* * *

Policymakers intent on deepening capital markets have a challenging task. We hope this report and the research behind it offer a step toward a more comprehensive, implementation-oriented approach.

Appendix: McKinsey Asian Capital Markets Development Index

The McKinsey Asian Capital Markets Development Index evaluates the performance of capital markets based on three parameters—funding at scale, investment opportunities, and market efficiency (Exhibit A.1)—and the underlying sub-parameters.

Exhibit A.1

Constituents of McKinsey Asian Capital Markets Development Index

Theme	Sub-theme	Metric	Description
Funding at scale	Availability	1 Financial depth of primary market	3-year average issuances of equity, government bonds (>1 year), corporate and FI bonds, and securitized products, as percent of GDP
		2 Availability of long-term debt	Ratio of long-term (>10 years) to short-term (1 to 3 years) debt issuances, vis-à-vis overall size of the debt market
	Diversity of sources	3 Availability and stability of foreign investment	Stock of Foreign Portfolio Investment (FPI) as percent of GDP, vis-à-vis 5-year standard deviation of FPI flows
	Affordability	4 Competitiveness of cost of capital	Cost of equity and debt adjusted for inflation
Investment opportunities	Availability	5 Availability of investment opportunities across asset classes	Stock of all capital market assets (comprising outstanding equity, corporate and FI bonds, government bonds, and securitized products) as a percentage of GDP
	Return	6 Appropriate risk-adjusted returns	7-Year Sharpe ratio, 2008–2015, for investments in cash equity products
Market efficiency	Pricing efficiency	7 Quality of pricing information	Efficiency index comprising:[1] ▪ Long-term memory/Hurst Exponent, measuring correlation in the long-term series ▪ Fractal dimension, measuring correlation in shorter fractions of the earlier long-term series ▪ Approximate entropy, measuring the availability of information which can be used to predict market trends

1 FINMAP Financial Distortions and Macroeconomic Performance, Kristoufek and Vosvrda (2014)

Assessing Asian markets on these parameters helped to develop a ranking or index of Asian capital market development, ranging from very deep, such as Japan, to very shallow, such as Pakistan or Vietnam (Exhibit A.2).

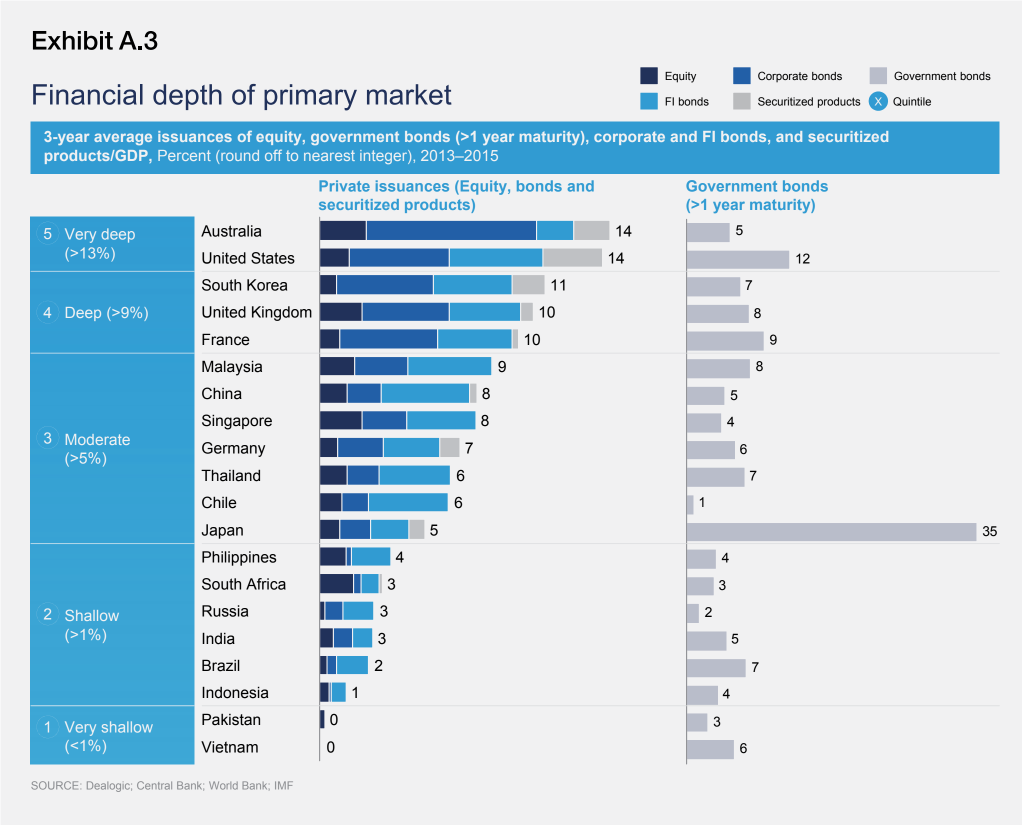
Exhibit A.2

McKinsey Asian Capital Markets Development Index

1 Weight allocated: 50% while arriving at total score
2 Weight allocated: 40% while arriving at total score
3 Weight allocated: 10% while arriving at total score

1. Financial depth of primary market

An analysis of the average issuances of capital market products over three years found emerging capital markets lying between very shallow to moderate depth (Exhibit A.3). They have some depth in equity and government securities markets, but are weak in bond issuance by corporate borrowers and lack issuance of securitized products.



2. Availability of long-term debt

The ability to raise long-term debt is a critical element of well-functioning capital markets. Our analysis yielded mixed findings—some developed and emerging economies are more long term–oriented, such as Japan, South Korea, and Thailand, while some developed and emerging economies are short term–oriented, such as China, India, Malaysia, and the United States. (Exhibit A.4).

Exhibit A.4

Availability of long-term debt

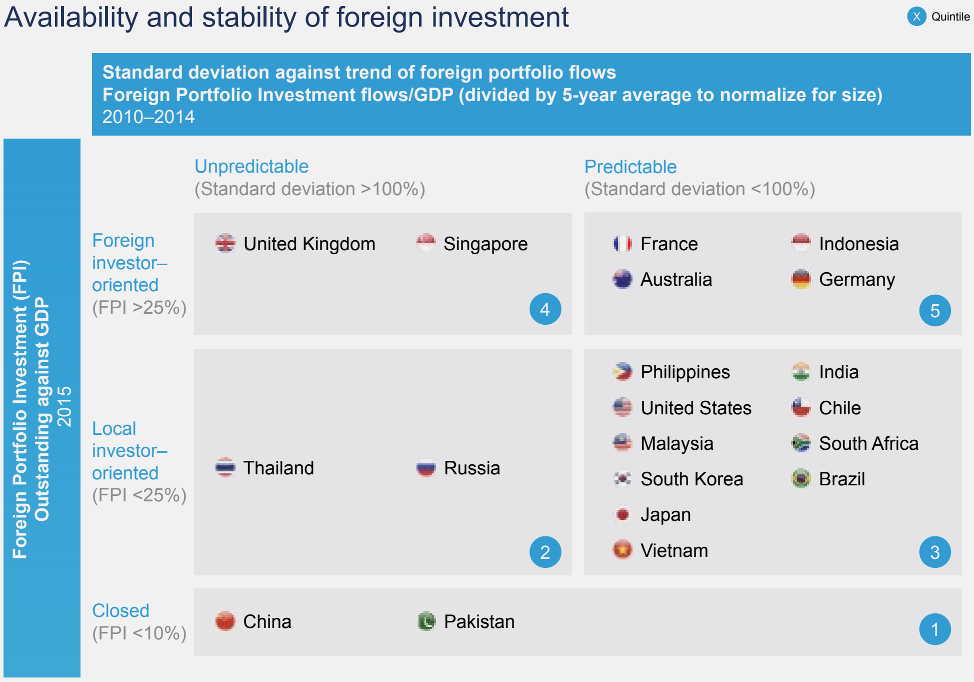
SOURCE: Central Bank; World Bank; IMF; Bloomberg

3. Availability and stability of foreign investment

The availability and stability of foreign investment varies widely across economies (Exhibit A.5). Indonesia is grouped with developed economies like France and Germany for a predictable trend of foreign portfolio flows and a near-equal split between domestic and foreign investment, indicating stability and diversity between 2010 and 2014. Emerging economies such as India and Malaysia have stable foreign portfolio flows, but a low share of foreign investment in total capital market assets. Some emerging economies are quite closed to foreign capital—China's and Pakistan's foreign portfolio investment share is under 10 percent.

Exhibit A.5

Availability and stability of foreign investment



SOURCE: Coordinated Portfolio Investment Survey (CPIS); IMF; World Bank

4. Competitiveness of cost of capital

Developed economies like Germany, Japan, the United States, and the United Kingdom are classified as having affordable costs of capital. These countries have a cost of equity of less than 10 percent compared with between 10 and 20 percent in most emerging economies in Asia. Similarly, most emerging economies in Asia have a relatively higher cost of debt than developed economies (Exhibit A.6).

Exhibit A.6

Competitiveness of cost of capital

X Quintile

	Real cost of equity[1] Percent, 2015	**Real cost of debt**[1] YTM of safest corporate bond, Percent, 2015
5 Cost of equity <8% Cost of debt <1%	Japan, Chile, Malaysia	Brazil, Russia, France, Chile, Germany, Japan, United Kingdom
4 Cost of equity <10% Cost of debt <2%	Germany, United Kingdom, China, Australia, Indonesia, United States, Singapore, France	South Korea, China, United States, Australia
3 Cost of equity <10% Cost of debt <3%	South Africa, South Korea, Thailand, Russia, Brazil	Philippines, Singapore, India, Thailand, Malaysia
2 Cost of equity <14% Cost of debt <4%		Indonesia
1 Cost of equity >14% Cost of debt >4%	India, Vietnam, Philippines, Pakistan	South Africa, Pakistan, Vietnam

1 Adjusted using the Consumer Price Index (CPI)

SOURCE: Thomson Eikon; World Bank

5. Availability of investment opportunities across asset classes

Markets like the United States and the United Kingdom have many investment opportunities, including equity, financial institution and corporate bonds, central government and municipal bonds, and securitized products. Emerging capital markets lack such breadth (Exhibit A.7).

Exhibit A.7

Availability of investment opportunities across asset classes

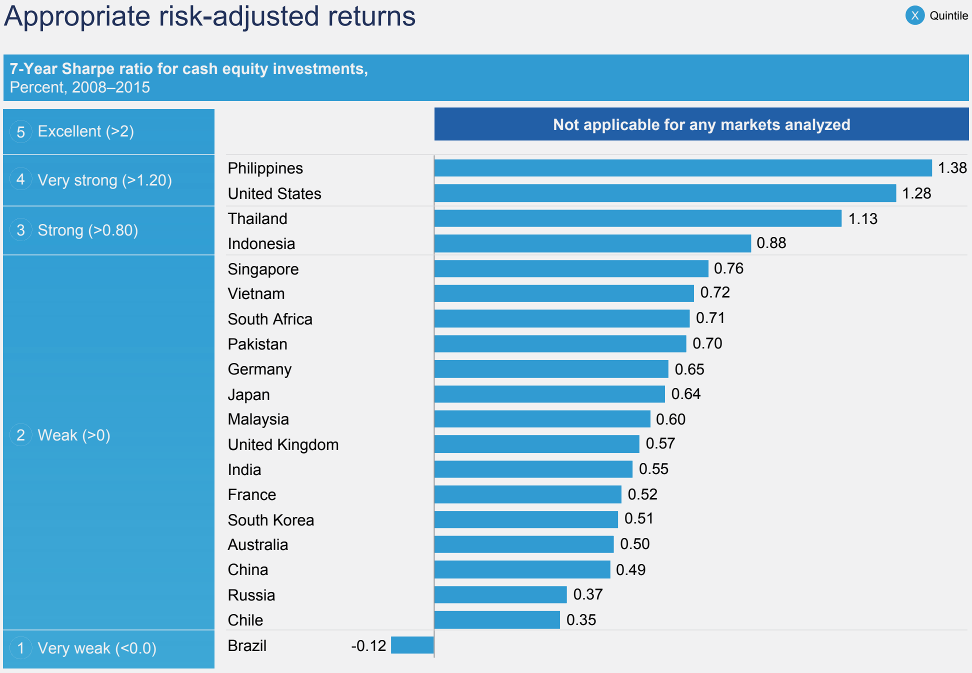
SOURCE: Central Bank; World Bank; IMF

6. Appropriate risk-adjusted returns

We measured the Sharpe ratio for the period 2008 to 2015. Our starting point was about a year after the financial crisis began, when markets were gradually returning to normal. Given the period, most markets did not fare well with regard to the risk taken by investors. Only three markets, the Philippines, Thailand, and the United States had a Sharpe ratio of more than 1, indicating excess returns over risks (Exhibit A.8) for investors.

Exhibit A.8

Appropriate risk-adjusted returns



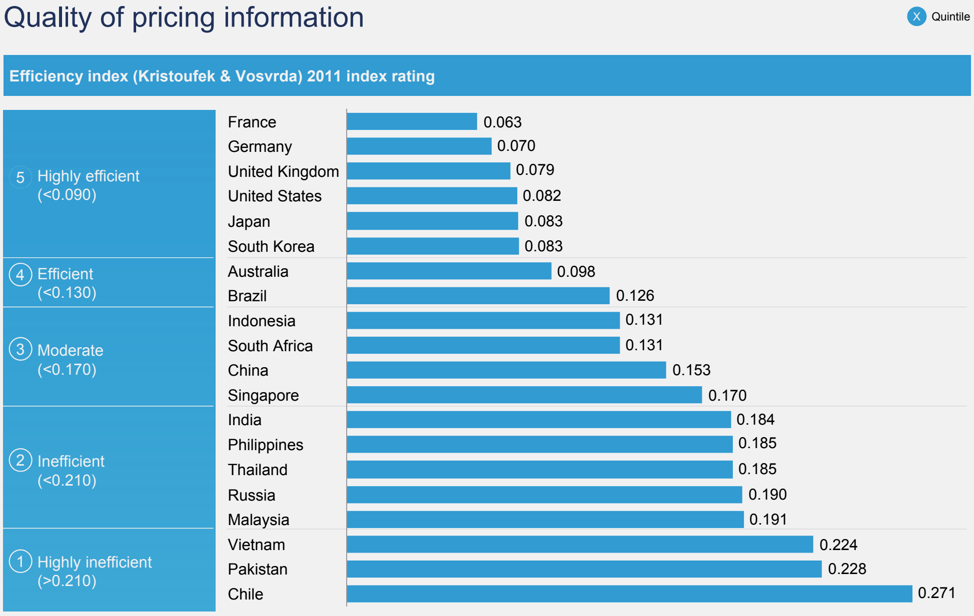
SOURCE: Bloomberg

7. Quality of pricing information

Research into the complexities of the quality of pricing information is relatively new, yet a useful starting point. Some of it is in the form of third-party benchmark efficiency indices,[15] which suggests that developed economies seem to offer timely and accurate pricing information more consistently and reliably than most emerging markets. While Japan and South Korea are considered highly efficient, at par with Germany and the United States, emerging markets like Pakistan and Vietnam appear to be highly inefficient in their pricing measures (Exhibit A.9).

Exhibit A.9

Quality of pricing information



NOTE: Efficiency is measured according to the Efficient Market Hypothesis which states that in an efficient market all changes in a market are random and higher returns occur by chance or by undertaking higher risk. The Efficiency Index has three input variables: Long-term memory/Hurst Exponent (measuring correlation in the long-term series), fractal dimension (measuring correlation in shorter fractions of the earlier long-term series) and approximate entropy (measuring the availability of information which can be used to predict market trends). Countries are compared to a benchmark for the most efficient market wherein according to the first two metrics, there is no correlation in the time series and entropy is high (meaning markets are less deterministic). Countries with comparable efficiency indices as per the study are classified in the same peer groups.

SOURCE: FINMAP Financial Distortions and Macroeconomic Performance; Kristoufek and Vosvrda (2014)

15 For the purpose of this work, we are using original research developed by Ladislav Kristoufek and Miloslav Vosvrda. They have tried to replace traditional event studies with a set of new statistical measures of efficiency that are more scalable and easier to replicate using only historical price data. *FINMAP Financial distortions and macroeconomic performance,* Ladislav Kristoufek and Miloslav Vosvrda, 2014

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