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Industry Agenda

Accelerating Emerging Capital Markets Development

Corporate Bond Markets

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Contents

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Preface

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The World Economic Forum is pleased to release *Accelerating Emerging Capital Markets Development: Corporate Bond Markets* – an inaugural report from our initiative on Accelerating Capital Markets Development in Emerging Economies. The initiative explores how the process of developing and deepening domestic capital markets in emerging economies can be made more effective and efficient and partners with engaged governments and market stakeholders to catalyse concrete initiatives to do so.

At the report's core is a practical set of recommendations for policy-makers and regulators to consider as they navigate the capital markets development process. The report draws insights from multistakeholder discussions and secondary research to propose actions for accelerating the development of a country's domestic capital market and tools for evaluating the impact of these policy actions.

The recommendations are intended for emerging[1] and frontier[2] market economies where capital markets have remained significantly underdeveloped relative to the current size and future potential of their economies. Given that the topic of capital markets is broad, this report focuses on the development of corporate bond markets, a critical enabler of economic growth and stability in the financial system, but an area of capital markets that is relatively less understood and developed among emerging economies.

In today's environment, accelerating the development of domestic capital markets, particularly for local currency debt, is more crucial than ever. Global financial reforms have transformed banks' willingness and ability to lend. Recent events have highlighted the limitations of relying heavily on foreign investments alone and the potential repercussions of borrowing significantly in non-local currencies, at least for businesses that are not export-focused. As the US and other developed economies normalize their macroeconomic policies, there are legitimate concerns that foreign investments that had flocked to emerging markets in search of higher yields will quickly reverse, creating a funding gap that cannot be adequately filled by existing domestic capital pools. Furthermore, should relative values of emerging-market currencies decrease, the challenges of servicing the large volume of now-more-expensive debt may cripple some emerging-market businesses, resulting already in a number of headline defaults.

Stable access to long-term capital from diversified sources is important to the sustained growth of the real economy and stability of the financial system. Well-functioning corporate bond markets efficiently mobilize savings to fuel the private sector and finance valuable projects, diversify credit and funding risk from the banking system, and facilitate the maturity transformation of domestic short-term savings to long-term investments.

Yet, emerging corporate bond markets remain relatively underpenetrated; emerging countries' corporates, many of which are unable to tap into international markets, continue to rely heavily on banks for debt financing. Given the pace of growth experienced by emerging countries over the past decade, their private sectors capital needs will evolve beyond the volume and complexity that can be efficiently satisfied by banks alone, particularly as lending tightens in the post-crisis environment.

While there is not a lack of investors who are keen to invest in emerging markets, wariness – whether founded or not – of political and economic instability and other market frictions limit investor participation and drive up expectations on risk premiums. Issuers, faced with the high cost of financing and the burden of ongoing regulatory compliance standards, often shy away from accessing

corporate bond markets. Therefore, even investors who are willing to participate in emerging markets often discover that there is insufficient volume of and breadth in offered securities to meet their investment needs. Furthermore, the process for developing corporate bond markets is often viewed as one that is complex and necessarily drawn out. Thus, this report provides general frameworks and policy action considerations to support policy-makers and regulators in navigating this process.

This is by no means intended to be a comprehensive guide, but rather a supplement to the tremendous intellectual capital that has already been developed on this topic. As such, it does not attempt to detail each step in the corporate bond markets development process, but instead focuses on the key levers for accelerating it. For brevity, the report does not elaborate on factors that are important but not specific to corporate bond markets, such as fundamental rule of law and disciplined macroeconomic policies.

A key theme that has emerged in the preparation of this report is that corporate bond market development is most successful when there is strong government sponsorship supported by multistakeholder engagement. In this spirit, the recommendations have been developed through interviews with a spectrum of market participants that includes banks, institutional investors, asset managers, stock exchanges, financial information and data providers, policy-makers and others. They also draw from cross-country case studies and are complemented by an in-depth review of existing literature. Throughout this process, intellectual guidance was provided by a steering committee and an advisory committee composed of subject matter experts. We wish to thank everyone involved for their invaluable support and insight.

Lastly, the report is intended only as a starting point for productive discussions and partnerships between policy-makers and market participants. While the recommendations are primarily intended for emerging country policy-makers, they also highlight opportunities for market participants (e.g. banks, investors, infrastructure and data providers) to play a supportive role in this development process. We hope that emerging markets will find the practical recommendations valuable as they navigate the challenging process of developing the robust capital markets required to support continued private-sector and economic growth.

Executive Summary

Since 2005, most emerging countries' corporate bond markets (including both domestic and international issuances) have grown faster than their overall economies.[3] Notably, Brazil, Russia, India, China and Turkey have all seen their corporate bond markets grow at over a 20% compounded annual growth rate between 2005 and 2014E.[4]

As emerging corporate bond market values have grown, an increasing proportion of the issuances have been on domestic markets and in local currency. The value of domestic corporate bond markets – the focus of this report – grew from 18% of emerging countries' GDP in 2005 to 23% in 2014, while internationally issued emerging corporate bond values grew from 4% to 6%, respectively.[5]

While these are encouraging signs, emerging economies' use of capital markets relative to their GDP continues to trail behind that of more developed countries, which can have implications for their future growth. Corporate bond markets, in particular, remain the most underdeveloped. Emerging economies produce 39% of global output (51% on a purchasing power parity basis), yet they account for only 14% of the global corporate bond market value. Total outstanding corporate bonds (including both domestic and international issuances) represent 104% of total GDP of developed countries versus only 29% of total GDP in emerging countries.[6] This suggests that emerging economies may be able to better utilize corporate bonds to finance their private sector and, consequently, their growth. Furthermore, as the landscape for bank-intermediated financing transforms under new regulatory reforms and technological advances, the need and opportunities for domestic corporate bond markets development are apparent.

Drawing insights from interviews with market participants and experts on the topic, country case studies and extensive literature review, this report offers emerging market policy-makers and regulators recommendations for evaluating, shaping and accelerating their plan for domestic corporate bond market development. The report is divided into three sections:

Corporate Bond Market Landscape provides a contextual overview of corporate bonds, their markets, and the key stakeholders and components that compose these markets. The section concludes with an examination of the important role that corporate bond markets play in the financial system and the broader economy, specifically in:

- *Supporting private sector and economic growth* by efficiently channelling capital to productive investments. Development of domestic corporate bond markets is particularly important as they allow for the raising and investing of capital in local currency, thereby minimizing exposure to FX risk for domestic issuers and investors.
- *Encouraging domestic long-term and diversified investments*, which, in turn, help support a stable accumulation of private wealth and make available pools of capital for funding projects (e.g. infrastructure) and innovation that would otherwise be gaps in the market.
- *Diversifying sources of credit and associated risk*, which also leads to greater financial market stability. The development of a domestic investor base, which is a critical component and enabler of domestic corporate bond market development, supplements foreign investments to provide stable flows of capital.
- *Promoting greater market discipline and transparency* by requiring information disclosure, greater corporate governance and adherence to a uniform set of market standards.

Premature corporate bond market development may be inefficient and futile, while late development can hinder further economic progress and turn into a risk for financial stability. Understanding the role of corporate bond markets in supporting financial sector and economic growth can help policy-makers prioritize their development against other policy issues.

Evaluating Corporate Bond Market Development summarizes the key factors and challenges impacting issuer and investor participation in emerging corporate bond markets and, hence, their growth. These include:

- *Ability to access the market.* Example challenges include unnecessarily complicated issuance processes and the country's exclusion from global benchmarks, which prevent global emerging market funds from investing in the market.
- *Perceived risk of the market framework.* Example challenges include weak regulatory framework, limited corporate governance and history of unexpected changes in government policies.
- *Relative cost and returns from participating in the market*. Example challenges include insufficient breadth and size of issuances to meet investors' needs, high premiums on capital relative to bank loans and limited secondary market liquidity, which prevents investors from easily exiting their positions.
- *Ability to effectively match supply and demand.* Example challenges include limited disclosure of company and market information to allow for efficient price discovery, and lack of credit rating agencies or low investor confidence in rating credibility.

With this as context, the report proposes a framework for evaluating market development using metrics associated with each of these four factors. Effective market-development policy actions should positively impact these factors and, as a result, associated metrics should improve as the market matures.

However, to ensure the stability of the market and the broader financial system, policy actions should not only emphasize market development as a trade-off for prudent risk management. The report outlines a five-stage framework for sequencing market development to meet stakeholder needs while managing the increasing risks involved with a more complex financial market.

Accelerating Corporate Bond Market Development proposes policy recommendations that have emerged, through the course of preparing for this report, as key enablers that emerging economies can take to improve the efficiency and effectiveness of their corporate bond market development. They have been categorized by their primary market impact area include actions to:

- *Foster increased issuer participation* by optimizing issuance processes and procedures, and reviewing economic policies that bias against borrowing in the corporate bond market.
- *Improve investor value proposition* by introducing reforms to encourage domestic long-term private investments, strengthening regulatory and legal frameworks to protect investors, and establishing a strong corporate governance framework.
- *Enhance market efficiency and transparency* by improving data collection and dissemination, and enhancing competitiveness of the market infrastructure and the financial intermediation industry.
- *Attract global interest* by adopting and communicating a strategy for capital markets development, ensuring the tax regime aligns with financial development objectives, and positioning the country to be included in emerging-market benchmarks and global portfolios.

While the report attempts to address the many opportunities that are applicable across emerging countries, it is also important to recognize that each country is different, with varying structural constraints, financial development histories and political backgrounds. Therefore, the recommendations will not apply equally across all countries.

It is also important to emphasize that the successful implementation of these recommendations requires strong government sponsorship of and commitment to the development process – a significant task against a backdrop of many other important issues. As such, policy-makers should carefully consider their country's context to determine whether corporate bond market development is an objective they would like to champion and, if so, the appropriate actions to pursue and their prioritization.

I. Corporate Bond Market Landscape

As context for the recommendations in this report, this section provides:

- An overview of the ways corporate bonds can be issued and structured
- A description of the corporate bond market ecosystem – principal stakeholders and key components of the market
- An examination of the role that corporate bond markets play in financial and economic development

Corporate Bond Markets – Definitions and Key Stakeholders

Defining corporate bonds

Capital markets are rarely the first or only source of financing that companies use to fund their operations and growth. In fact, many companies may never require any form of capital-markets financing. Capital markets do, however, play an important role in meeting the funding and risk-management needs of numerous corporates as they evolve to become larger, more mature and complex organizations.

Within capital markets, corporates have access to a range of financial instruments including the traditional asset classes: equities (stocks), cash equivalents (money market instruments) and fixed income (bonds). While each of these plays a uniquely important role for corporate financing, this report focuses on markets for corporate-issued fixed-income securities or bonds, which typically refer to debt securities with greater than one-year maturity – an area of capital markets that, while important, remain underdeveloped in emerging economies.

Issuers have wide flexibility in how they structure and issue debt securities to best meet their financing needs and ensure repayment schedules can be met by their expected income flows. Two options important for the topic of developing stable corporate bond markets in emerging economies are issuers' choices in the market (domestic versus international) on which their debt securities are issued and traded, and the currency denomination of their securities (local versus foreign). These two features are often interlinked, as many issuances are denominated in the currency of the market in which they are issued, although this is not always the case. For example, Eurobonds is a term that refers to bonds that are issued, typically by a foreign entity, in a currency other than that of the market where the bond is issued and traded.

Market for issuance and trading

Issuers have the option to issue debt in their domestic capital markets (markets in the countries where they are headquartered or are their primary locations for operation) or internationally, typically in more advanced markets. International markets may appeal to issuers when domestic corporate bond markets lack sufficient depth as they allow issuers access to a global pool of investors. They also help companies with international operations and trade avoid exchange-rate risk, as often times international issuances are denominated in the currency of the market where they are listed.

Currency of issuance

Corporate bonds can be denominated in the company's local currency (LCY) or in "hard currency" – typically the G3 currencies (US dollar, euro and yen) that would appeal to a broad range of foreign investors. While domestic emerging-market issuances can be in local or foreign currencies, a large portion (especially for corporate bonds) is in local currency; as such, the size of a domestic market is often used as a proxy for the size of the LCY market (particularly where more precise LCY market data is lacking).

As mentioned, while there could be advantages to issuing debt internationally and in foreign currencies, having liability denominated in another currency can also expose the issuer to significant risks. For example, if the issuer's domestic economy (presumably their main location of operation) suffers from inflation or currency devaluation, then repaying international foreign currency debt obligations will, relatively, become more expensive as the issuer's revenue stream will continue to be in the now-devalued local currency.

Furthermore, emerging markets are typically characterized by underdeveloped currency swap markets[7] and businesses with limited financial management capabilities, both rendering it difficult for firms to adequately hedge their foreign currency exposure.

Deep domestic, local currency capital markets can also be important tools for financial stability and social economic policies. They decrease reliance on foreign capital, which can have associated risks and volatility and encourages as well as provides a means for the local population to invest and receive returns in their domestic currency. As such, domestic capital markets have important roles alongside international markets.

Historically, emerging markets, particularly EM sovereigns, often issued debt in hard currencies as few foreign investors were willing to bear the risks involved with investing in local currency debt. Recently, however, the volume and share of emerging-bond issuances denominated in local currency have been increasing as EM LCY debt becomes increasingly recognized as its own asset class.

Other aspects of debt structuring

The many ways that debt securities can be structured render them flexible to issuers' and investors' needs. For example, debt securities may be structured such that their payment obligations are backed by a guarantee or collateral such as a bundle of smaller loans or mortgages. While the report primarily focuses on traditional debt securities without such guarantees or collateral-backing, it is important to recognize that innovative structuring of debt securities can help support access to financing for unique segments of issuers (i.e. SME-loan collateral backed debt securities, infrastructure credit guarantees).

Figure 1: Benefits and drawbacks of participating in international foreign currency vs domestic local currency markets

Market:	International	Domestic (for relatively deep emerging capital markets)
Currency:	Foreign "hard" currency	Local currency (floating*)
Investor perspective	+ Potentially less inflation risk + Potentially less currency risk (for foreign investors) + Typically greater information availability + Access to a wide set of issuers + Falls under international regulatory/legal jurisdiction which in many instances are more investor-friendly – Potentially greater currency risk (for certain domestic issuers, i.e. those with limited international trade or operations)	+ Exposure to issuers who cannot access international markets + No asset-liability currency mismatch (for domestic investors) – Potentially greater currency risk (for foreign investors) – Potentially higher inflation risk – Size of domestic issuances may not be sufficiently large for foreign investors to dedicate resources
Issuer perspective	+ Access to a wide set of investors, hence, for known issuers, issuances more likely to be fully subscribed + Likely lower cost of financing as compared to typically less liquid domestic emerging market – Asset-liability currency mismatch (if issuer's cash inflows are not also in hard currency) – More burdensome documentation process including requirements for internationally-recognized credit rating – More expensive issuance costs and longer execution time frame (avg. 10-12 weeks), particularly for first-time issuers	+ No asset-liability currency mismatch (if issuer's cash inflows are primarily in domestic currency) + Typically quicker execution (average 3-4 weeks) + Fewer financial disclosure/compliance requirements – Limited set of investors – Higher chances that issuances will not be fully subscribed – Potentially higher cost of financing as investors demand greater risk premium

Source: World Economic Forum
*Note: Analysis of benefits and drawbacks for local currency issuances is for floating currencies only. Issuances in pegged local currencies are uncommon, though they would share some similar benefits and drawbacks to foreign currency issuances.

Figure 2a: Local and foreign currency EM bond markets by absolute size ($US TN)[8]

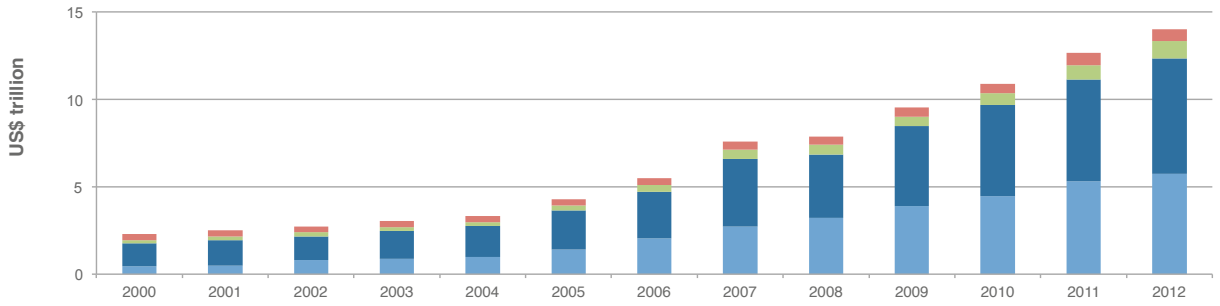
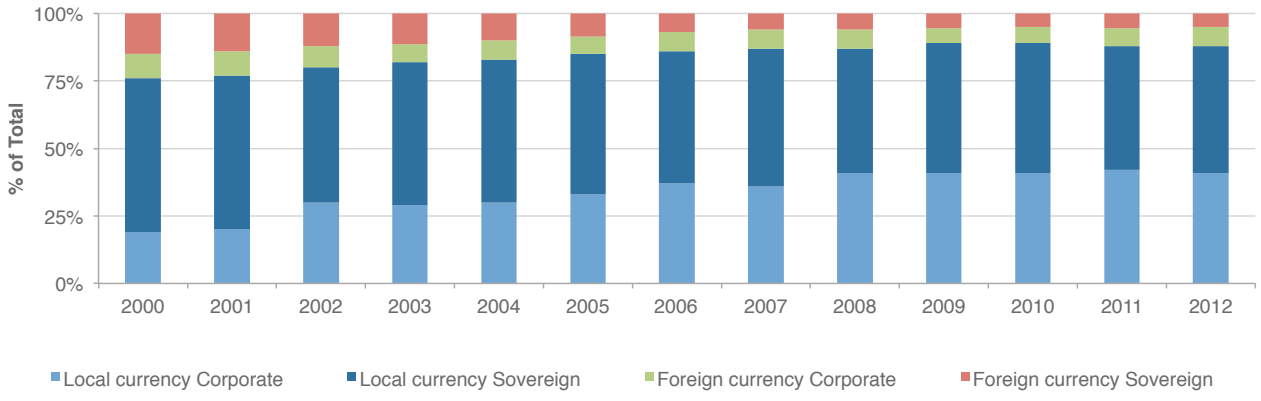


Figure 2b: Local and foreign currency EM bond markets by share of total size (%)



Source: Bank for International Settlements debt securities data; Bank of America Merrill Lynch Bond Index Almanac[9]
Note: Corporate volumes include issuances by both non-financial and financial institutions

Key stakeholders

Issuers

Characteristics of domestic issuers such as entity type, sector, ownership structure, credit rating and maturity affect their ability and need to access, and hence the propensity for market growth.

Entity type/sector: The report focuses on access to debt financing for corporates, which include financial and non-financial institutions. Like non-financial institutions, financial institutions may access debt markets to fund their own operations and growth, but they may also recycle the proceeds to finance their own lending businesses, especially among financial institutions with high loan-to-deposit ratios. In fact, two-thirds of emerging market corporate debt is issued by the financial sector.[10]

In many emerging markets, corporations continue to rely heavily on the banking sector for financing, as banks were traditionally able and willing to provide relatively low-cost capital as a means of building broader business relationships. Banks can source cheap capital from deposits (particularly in deposit-rich countries) or in the capital markets (as the most recognized or creditworthy corporations in the market).

However, financial reforms, such as Basel III, are pressuring banks to retain a higher volume of liquid capital and, as a result, re-evaluate their lending practices; already, many international banks are deleveraging in emerging markets. While domestic banks have an opportunity to increase their role, access to financing for the private sector through bank loans will likely become more constricted. In light of this, corporate bond markets and other channels for attaining debt financing will become increasingly important.

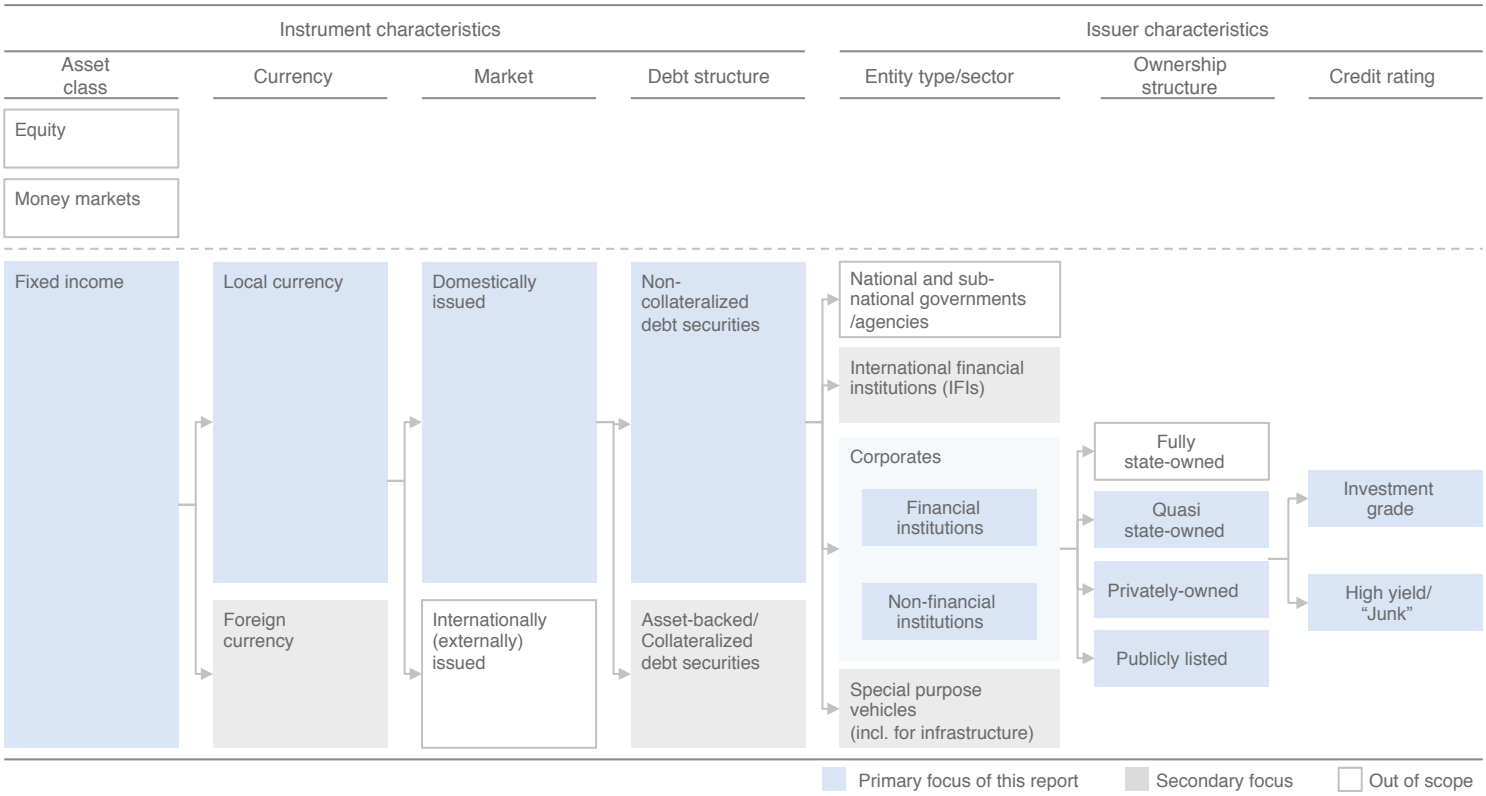
Ownership structure: The report does not focus on debt issuances by fully-state owned enterprises, as their funding needs and capital structure may be very different than purely private-sector players. However, the recommendations do consider the conditions required to support issuances by quasi state-owned entities (majority or minority state-owned), as they often play a large and significant role in many emerging markets.

These organizations may have state-backing or inherent political affiliations that make their requirements for accessing bond markets different than purely private-sector players and, consequently, have implications for market development. For example, state-owned enterprises often act as first movers into the market, as they can attain relatively attractive cost-of-financing due to their implicit government guarantees.

However, capital markets dominated by state-owned enterprises could diminish investor appetite for non-guaranteed issues. Concerns about government interference in the firms' operations and finances could also deter investors, particularly where contract laws and the regulatory framework have traditionally been weak.

Credit rating: This report makes recommendations for building a corporate bond market that supports a wide breadth of issuers across the rating spectrum.

Figure 3: Defining the fixed income/bond market – Instrument and issuer characteristics



Source: World Economic Forum; Oliver Wyman

Investors

There are two broad categories of investors: *asset managers*, which are institutions that manage funds on behalf of other individuals or institutions (e.g. hedge funds, private equities, mutual funds, banks, defined contribution pension funds), and *asset owners*, which are investors that invest their own capital (e.g. banks, institutional investors such as defined benefit pension funds, sovereign wealth funds and insurance companies, individual retail investors, governments and agencies). Some investors, such as banks, may be both asset managers and asset owners.

Investors' portfolios differ based on their risk appetite and future cash flow needs. Corporate bonds cater in particular to investors not seeking to make returns from dividends or volatilities in valuation, but who desire consistent and reasonably reliable cash flows and security of invested capital. The stable cash flows of corporate bonds also make bonds useful as hedging instruments. For example, pension funds can match the interest payments from corporate bonds with their payment obligations along the same maturity schedule.

Because investors have different mandates, incentives and knowledge of the market in which they are investing, they may also behave differently during times of volatility. Emerging economies with underdeveloped capital markets have traditionally relied heavily on foreign investors for infusions of capital. Foreign investors play important roles in promoting the growth of local financial markets and institutions, including building local capacity and providing pressure for reform. However, a study by the IMF on past financial shocks and their impact on capital flows to emerging markets also highlighted that foreign investors are quicker to withdraw their capital during external financial shocks.[11] Therefore, forming a wide and diverse investor base that balances domestic and foreign investments is crucial for reliable capital flows and the development of stable corporate bond markets.

EM local bond markets at a time of taper: challenge or opportunity?

Contribution by Gerardo Rodriguez – Managing Director and Portfolio Manager, Emerging Markets, BlackRock

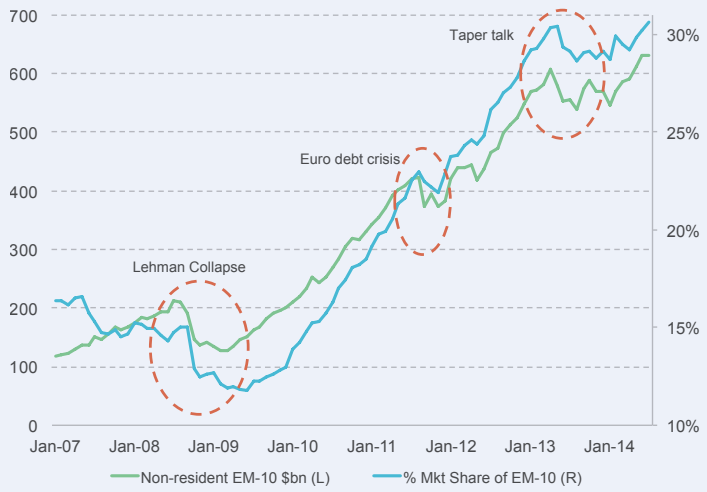
The recent spike in volatility has brought back painful memories of emerging markets (EM) crises. Previous periods of monetary policy tightening in the US in 1994 and 1999 proved to be difficult episodes, causing significant damage to emerging economies and their asset prices. But those difficulties also brought about a hidden blessing. In the past, it was not the Fed tightening itself that caused EM crises; rather, it was because these economies did not have the proper policy buffers and financial flexibility to process a smooth adjustment towards tighter monetary conditions. By exposing these weaknesses, the Fed-tightened cycles actually helped foster improvements in EM's overall macroeconomic policy framework.

After the turbulent period of the 1990s, many emerging economies were forced to float their currencies. This transition, in turn, helped now-autonomous central banks adopt credible inflation-targeting regimes. The improved policy framework was complemented by the development of a term structure of local interest rates and the terming-out of public debt.

The combination of flexible exchange rates and interest rates has allowed EM financial markets to self-equilibrate more effectively. When currencies move and bond prices fluctuate, they operate as automatic stabilizers, taking pressure off real economic variables and reducing the probability of experiencing a "traditional" EM financial crisis of the sort we saw in the 1990s.

Some of this progress is already evident: EM local markets have already gone through a full Fed-tightening cycle in 2004 and, after initial market volatility, the asset class held on rather well as the Fed funds rate went from 1% to 5.25% in the course of 24 months. Local markets were also able to withstand the 2008-2009 crisis.

Figure 4: Foreign holdings of EM local debt



Source: CS, includes Brazil, Turkey, Mexico, Poland, Malaysia, Thailand, South Africa and Russia

The increased policy flexibility in EM, alongside faster economic growth and easy global financial conditions, has driven capital flows to emerging economies over the past few years. But, as the Fed now enters a new phase of monetary policy normalization, it is natural to wonder how EM bond markets will adjust and adapt to tighter external financial conditions, especially after the sizable inflows that they have received since 2007.

The question is: What factors will help emerging economies adapt to the tightening most effectively, and why?

It is important to understand that local currency EM bonds are a new asset class. The relevant indices to guide portfolio composition in local markets were introduced less than 10 years ago. These indices triggered the creation of a new segment of the global asset-management industry dedicated to local emerging bond markets. And, while the increase in participation has been impressive, at around 30% of total debt outstanding, it compares to the level that EM equity markets have had for the past 10 years.

The structure of the market has also changed significantly over the last decade. Global fixed-income indices have been gradually incorporating a small component of EM local markets, like the World Government Bond Index (2.4%) and the Barclays Global Aggregate (6%), anchoring the demand from cross-over investors (investors that participate in both developed and emerging markets) and capturing the attention of the global investment community to this asset class. Through a wide variety of global relative value trades, cross-over investors have helped to reduce the generalized contagion that was prevalent in asset price corrections in EM. Instead, this has allowed for fundamentals to play a more important role in the movements of financial markets, which is now particularly relevant as the Fed battles between exit and re-entry policy.

The level of complexity of local markets has also increased over time. For investors, EM currencies have represented 76% of the risk, while only explaining 14% of the returns. Separating the management of rates and currencies will become increasingly important to the success of these investments.

Going forward, the assessment of the prospects of EM local bond markets has to take into account the correction that markets have already experienced in the past few months. EM currencies have been weakening steadily since 2011, but those countries with poor external balances have experienced an additional depreciation of more than 30% since the "taper tantrum" of May 2013. Local interest rates have also already gone up 200bps in the long end of the curve.

The movements of interest rates and currencies have facilitated some of the macroeconomic healing that has been taking place. Countries like India, Turkey and Thailand are improving their current account balances by more than 1% of GDP. Credit growth has also slowed to more sustainable levels in countries like Brazil, India and Indonesia.

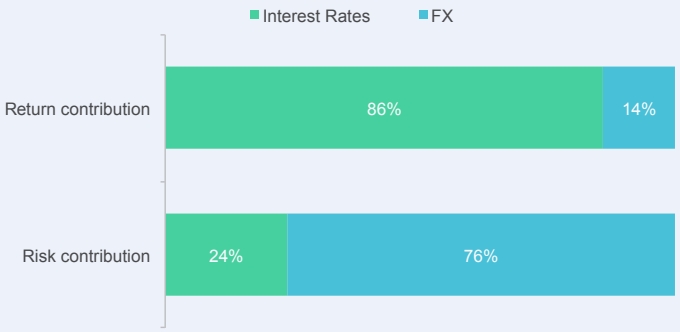
If the Fed is forced by positive economic activity to trigger tapering and raise rates much faster than expected, it would also be positive for economic growth in emerging economies and help buoy asset prices (more so in equity vs fixed-income markets, particularly for those active in the export sector). Additionally, the moderation of growth prospects in China, which hurt EM broadly last year, is a reality that has been gradually internalized by financial markets.

It would be unrealistic to assume that, if long rates in the US go up, EM rates won't. Similarly, if risky assets sell off due to persistent deflation concerns, it would be difficult for EM financial assets to perform. The adjustment process, however, would likely be smoother than some market participants expect.

But the resilience of EM local bond markets will continue to be tested. Fundamentals and policy response are going to become more important drivers of asset price returns as the Fed moves into rate-rise mode. Dispersion is likely to increase as volatility comes back to historical levels.

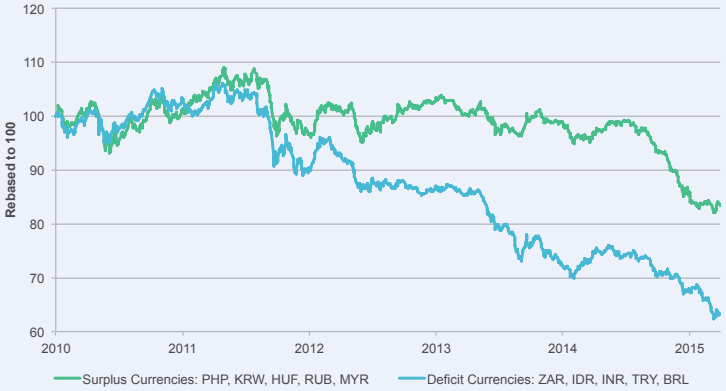
The question should not be whether emerging economies and local bond markets will withstand higher base rates in the US, but rather how investors should take advantage of this to enhance returns. EM local bond markets are here to stay.

Figure 5: Local currency debt markets' contribution to risk and return (2003-2004)



Source: BlackRock

Figure 6: EM FX: Current Account Surplus vs Deficit



Source: Thomson Reuters Datastream, BlackRock Investment Institute 19/03/2015

Corporate Bond Market Ecosystem

Macro-fundamental prerequisites

Well-functioning capital markets, including corporate bond markets, need to first and foremost be supported by strong macro-fundamentals. These factors are exogenous and not specific to the corporate bond market itself, but are nevertheless critical to its growth and stability and therefore can be viewed as prerequisites. While the report does not elaborate on these macro-conditions, it is important to recognize the important backdrop they lend to the development of corporate bond markets and without which participation in the market and hence its growth will be limited. They include:

Sustained macroeconomic and political stability. A stable macroeconomic and political environment provides a solid and predictable foundation for businesses and investors. In contrast, an unstable macro-environment deters investments and becomes a source of vulnerability to the financial system. Macroeconomic weaknesses are reflected in high premiums which in turn deter issuers from entering the market or, else, significant volatility in asset prices attracts investments that are speculative. Furthermore, high or volatile inflation rates erode market returns and cause uncertainty in the direction of the market, which discourages investors.

Empirical research (Guscina, 2008) has shown that, at least for government debt markets, unstable macroeconomic environment, poor institutional characteristics and political uncertainty hinder their development and securitization. Reducing economic and political vulnerabilities can improve the countries' credit rating, increase flow of funds and reduce cost of capital.[12]

A stable macroeconomic and political environment is supported by a few key pillars: monetary stability, market-based and relatively stable exchange and interest rates, fiscal stability and sustainability, financial stability and political stability.

Capital account liberalization. Governments need to liberalize their capital accounts at least to some degree to allow for and attract foreign investment. Capital account liberalization may also serve as a signal that the government is committed to market-friendly economic policies. A well-balanced sequencing of capital account liberalization is challenging, but important for market stability; with more open capital accounts, the influence of global factors on interest rate and market spreads increases.

Limited capital account liberalization may be necessary in early stages of financial development to shield the country from external volatilities, but may gradually be expanded as the country's financial market matures. As capital accounts are liberalized, a transparent and well-documented legal framework that serves as guidance and parameters for foreign-investor participation becomes increasingly important.

Fundamental rule of law and strong institutional framework. A strong and stable regulatory and legal framework is critical to the effective and efficient development and functioning of domestic capital markets. It is one of the first factors that issuers and investors evaluate when determining whether or not to participate in a given emerging market. Accountable institutions broaden the appeal of a market and increase investor confidence.

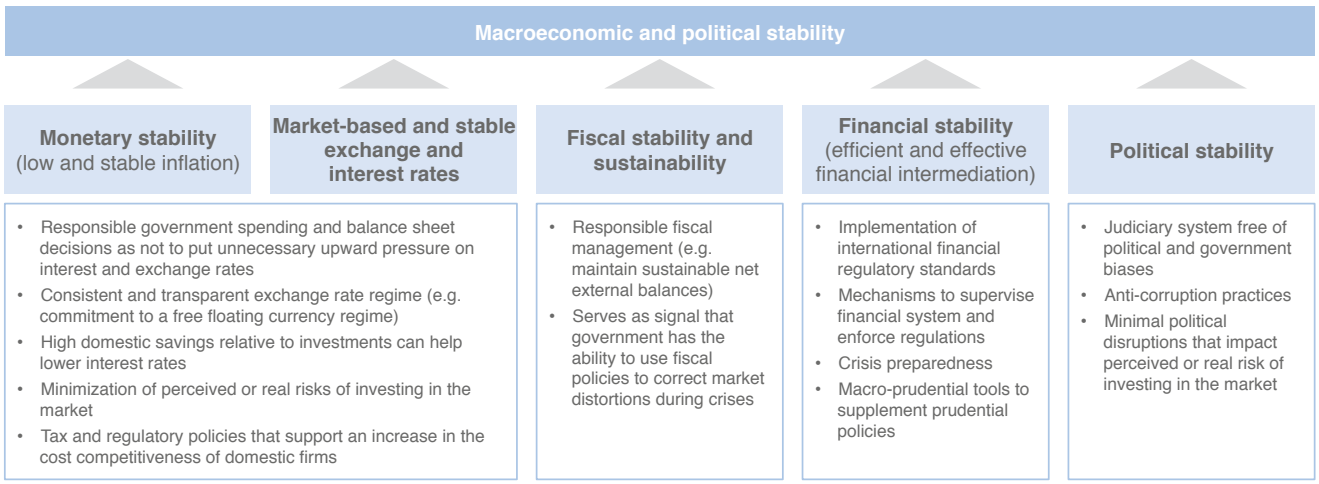
Empirical research (Yartey, 2007) has shown that institutional quality, such as law and order, democratic accountability and bureaucratic quality is important, at least for equity-market capitalization.[14] A strong institutional framework should protect investors' rights and have in place adequate mechanisms to enforce it. This includes clear legal guidance on how business is conducted and what happens in cases of bankruptcy, processes for implementing the appropriate regulations, and an unbiased judicial system to enforce the laws.

As the financial market becomes increasingly complex, the legal regime is expected to evolve to meet its complexity. Credibility through consistent and transparent application of the framework is important to curb perceptions of risk.

Sound banking system. Domestic corporate bond market development should be viewed in the context of the broader financial system. A deep corporate bond market and a sound banking sector should exist as complements in an effective financial system. In particular, in the early stages of development, the banking system helps support the establishment of the corporate bond market.

Banks are typically the "first movers" in the markets – as issuers, investors and intermediaries. They are also generally the predecessors to capital-markets lending and establish the initial financial reporting, credit rating and pricing expectations. Furthermore, banks help provide liquidity to capital markets by acting as market-makers, trading securities on behalf of their own account and that of their clients.

Figure 7: Key pillars for macroeconomic and political stability



Source: Adapted from "Building Capital Markets". New Zealand Government. February 2013[13]

Market infrastructure and intermediaries

In addition to these macro-fundamental prerequisites, the issuer and investor base, other key components that make up the corporate bond market ecosystem include:

Market intermediaries and infrastructure providers: Market players who provide the services or infrastructure to support efficient capital exchange. These include:

- *Financial intermediaries/agents* who facilitate exchange on behalf of the issuer, investor, or both. In many instances, investors and/or issuers may themselves also be financial intermediaries/agents. For example, banks are financial intermediaries as they consolidate deposits and transform the funds into loans. However, many banks also invest on behalf of their own balance sheet, rendering them also investors. Similarly, asset managers, such as pension funds, are also financial intermediaries, as they facilitate the pooling of capital for investing in capital markets.

- *Information/rating providers* who disseminate market information. This, in turn, allows investors to determine the benefits and risks of investing in different issuances and markets, allows for better price discovery and, thus, improves overall market efficiency.

- *Market infrastructure providers*, which include the facilities, platform and technology required to execute primary (and secondary) market trades and post-trade activities.

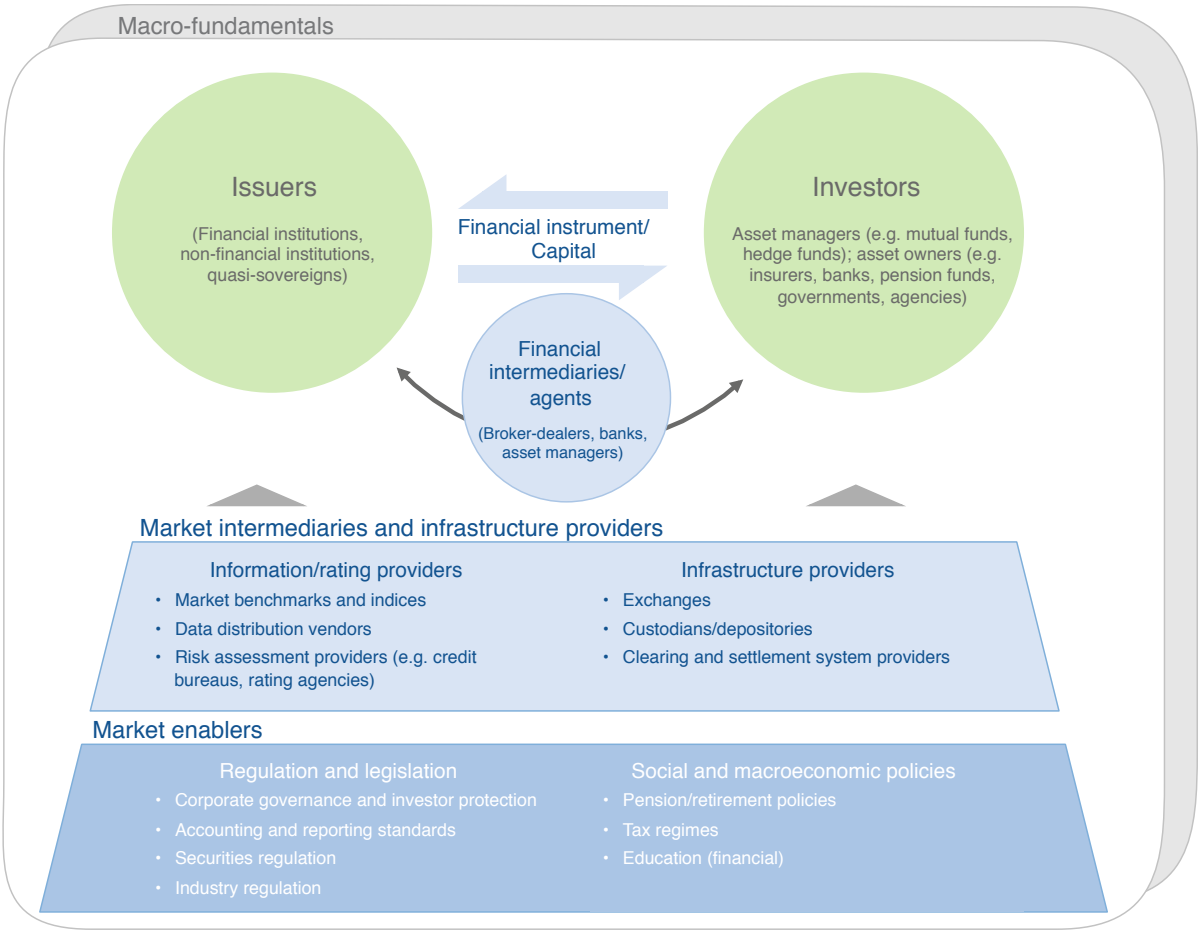
Market enablers: Additional policy actions and tools that support market functioning and enable further market development; these include:

- *Securities and industry legislations and regulations* to govern and standardize market actions and players, ensuring that they are enforceable and unbiased. Some legislations and regulations may also help promote market participation by providing favourable conditions for investors or issuers (e.g. lowering of withholding taxes)

- *Social and macroeconomic policies* that promote increased market participation, usually by encouraging the development of the domestic issuer and investor base (e.g. by fostering private capital old-age provision thus encouraging savings through pension funds or deepening the usage of insurance)

While *hedging instruments*, such as derivatives (e.g. futures and options) and liquid, "risk-free" securities (e.g. government bonds or notes) are not necessarily a component of the corporate bond market ecosystem, they play an important role in supporting market participation, particularly at more advanced stages of development. Investors who are frequent participants in a market will look to incorporate appropriate hedging instruments into their portfolio to counterbalance the risks associated with investing in a particular corporate bonds or set of bonds.

Figure 8: Corporate bond market ecosystem



Source: Oliver Wyman

Understanding the Role of Corporate Bond Markets

While corporate bond markets are not typically the first stage of financial development, well-functioning markets play an important role in the financial system and broader economy by:

Supporting private-sector growth

Corporate bonds are one of the means by which companies fund their business operations (working capital) and expansion (growth capital). As corporations require an increasing amount of working and growth capital as they grow, needs for financing eventually evolve beyond that which can be stably and efficiently met by the banking system alone. That becomes an important inflection point for capital markets, including corporate bond market, development which has become more urgent as financial regulatory reforms compress banks' willingness and ability to lend.

Besides the size of the company, the issuer's choice among different sources of credit is also influenced by the availability and relative costs of different forms of financing; the latter is affected by the company's maturity and the amount of information available on the company (See Exhibit 18 in Appendix) as well as the depth of the corporate bond markets. In many emerging markets, where corporate bond markets are underdeveloped, firms remain heavily dependent on banks for financing.

For issuers, corporate bonds offer several advantages relative to other sources of financing, including:

- *Favourable funding terms*: In comparison to bank loans, corporate bonds can typically be longer tenured and benefit from fixed versus variable interest rates.
- *Flexible term structures*: Issuers have the flexibility to structure the terms of the bonds such that the bond's maturity can best match expected business cash flows. Bonds can thus avoid risks of maturity mismatches in cash flows more efficiently than is possible through bank loans.
- *Financing at lower cost*: In efficient, well-functioning markets, disintermediation from banks can help lower the cost of capital, especially for longer-tenured debt. Furthermore, as regulations, such as Basel III, place demands on banks to have higher liquidity-coverage ratios, extending long-term loans may become less viable for banks and hence more expensive for businesses to attain.
- *Scalable source of financing*: Bonds are also more scalable than bank loans as issuers can finance ongoing business needs and projects through successive issuances.

Supporting economic growth

In supporting effective and efficient allocation of capital to productive investments, corporate bond markets, in turn, help bolster economic growth. Early empirical research by Goldsmith (1969), McKinnon (1973) and Shaw (1973) documented a positive correlation between financial development and economic growth.[15,16,17]

While there is some debate about the findings and other empirical research shows inconclusive or mixed results depending on the subset of countries and stages of institutional and economic development, the important role of capital markets in economic progress is widely accepted.

Furthermore, while recent research does not completely resolve the issue of causality, it continues to strongly suggest that financial development, including the development of capital markets, is an important determinant of future economic growth.[18] Beckaert, Harvey and Lundblad (2005) found that equity market liberalization led to an average 1% increase in annual real economic growth.[19]

Meanwhile, a 2014 study published by Credit Suisse found a strong correlation between the growth in corporate bond market value relative to GDP and economic productivity, as measured by per capita GDP in nominal dollar purchasing power parity terms.[20] While corporate bond markets help support economic growth, an economy probably needs to be of a threshold size to be able to generate domestic corporate bond markets of sufficient size and liquidity.

Encouraging domestic long-term and diversified investments

Capital markets development is usually accompanied by and encourages development of the asset management industry, which facilitates maturity transformation of short-term savings to long-term investments.

In early stages of financial development, a country's population tends to deposit its savings either outside of the financial system or almost exclusively in banks. As wealth increases, savers increasingly seek to diversify the allocation of their accumulated capital to generate better returns, better smooth out their future consumption (e.g. through retirement and insurance products) and hedge financial risks. This provides the foundation for capital markets development (See Exhibit 19 in Appendix).

Deep capital markets, including corporate bond markets, allow the population to invest privately and, in the long run, decrease dependence on social welfare. Long-term, patient capital also provides important sources of financing for societally important needs that would otherwise be unfilled in the market, such as innovation, or projects such as infrastructure, both of which may have a longer time frame for return on investment.

Importance of corporate bond markets in developed economies

It is interesting to note that, even among developed countries, the relative depth of corporate bond markets to the size of their economies varies considerably. For example, while the UK and Germany have very similar GDP per capita ($41.8K and $46.3K, respectively, in 2013)[21], the UK corporate bond market was ~140% of GDP, while Germany's corporate bond market was only ~58% of GDP.[22]

A country's degree of bank versus capital markets intermediated private-sector credit could be impacted by various factors, including historical financial and economic regulations and policies and the type and size of the domestic corporate base.

For example, in the US, economies of scale and banking regulation may have played an important role. Securities issuance is typically characterized by high set-up costs, but low incremental costs as the size of the securities issue increases. As such, for the numerous large US corporates, capital markets as a source of financing could be much more compelling than the alternative of using depository institutions. Additionally, historical banking regulations have kept the securities business separate from commercial banking for most of the past 70 years; and, until the past 30 years, restricted the banking system from being as concentrated as other countries, including by limiting geographical expansion. Both of these factors have fostered competition, limited the dominance of the banking sector and contributed to corporate bond market growth.

On the other hand, the UK has been a key financial centre since World War I and the government's commitment to maintaining that role has spurred capital markets development. Its advantage as first mover draws foreign issuers, including from neighbouring European countries, which helps generate a virtuous cycle based on scale.[23]

To compete with the UK and other international markets, the European Commission recently announced the intention to form the Capital Markets Union, which will integrate the capital markets of the 28 member states of the EU to reduce fragmentation among the markets, improve and diversify financing access for EU businesses – particularly for small and medium-sized enterprises (SMEs) – and strengthen cross-border capital flows (refer to "Regional integration and harmonization" on page 26 for discussion of other capital markets integration efforts among emerging markets).

Demographics may also be an important – although not the sole – determining factor that affects the relevant size of the market. For example, Denmark, a country with a population of ~5.6 million people (smaller than that of countries with less-developed corporate bond markets) has a corporate bond market that is ~210% of GDP (2013) owing in large part to its unique mortgage system.

Diversifying sources of credit and associated risks

In addition to intermediating capital, corporate bond markets also intermediate risk outside of the banking system. They help diversify lending and, hence, credit risk away from banks alone. They provide alternative channels to access capital, important particularly when other sources of financing are tightened, as appeared to be the case during the 2008-2009 global financial crisis when there was a surge of domestic corporate bond issuances in emerging markets.

The development of local corporate bond markets and domestic capital pools also prevents excessive reliance on foreign capital and the risks associated with it, such as foreign exchange risk and potential for quick reversal in capital flows ("hot capital") during financial shocks. All of these support a more stable financial system.

Promoting greater market discipline and transparency

Participation in corporate bond markets requires information disclosure and abiding by a uniform set of market standards. As a result, corporate bond market development helps strengthen the financial industry by promoting greater corporate governance and information gathering and distribution. In turn, they also support a more stable economy.

Furthermore, deep corporate bond markets serve as barometers of credit risk and business conditions in a given country and are thus a good channel of information; for example, changes in credit spreads are often leading indicators of market sentiment and expectation of changes in a country's conditions.

Despite their benefits, corporate bond markets do not develop naturally as a consequence of financial development. A cross-country study (IMF and World Bank, 2001) comparing financial development (sum of all private funding including bank loans, corporate debt and stock market capitalization) to corporate debt – both as percentages of the countries' GDP – shows that corporate debt level varies between countries with similar levels of financial development.[24] This suggests that corporate bond market development usually comes about as an active decision by policy-makers with regard to the type of financing system they want to promote.[25]

Recent examples of successful emerging capital markets development have strongly highlighted the critical role of government assistance and sponsorship in providing a long-lasting framework that supports steady-state, continuous corporate bond issuances.

The case for capital market development in emerging markets and unintended consequences

Contribution by Lutfey Siddiqi - Global Head, Emerging Markets - FX, Rates and Credit, UBS; and Edward Teather, Senior Economist, UBS

Unintended consequences lie at the very heart of any economy. Adam Smith's invisible hand is based on the benign unintended results of self-interested behaviour. Meanwhile, writings by early economists – for example John Locke (1692) and Frédéric Bastiat (1848) – debate the unintended consequences of regulation.

Plus ça change, plus c'est la même chose. The more things change, the more they stay the same. The arguments in favour of capital market development and openness have been well-rehearsed. Nonetheless, although those arguments are intellectually appealing, the experience of recent decades has highlighted again and again that, without due care, capital market development can have unintended consequences.

The case for capital market development in emerging markets

Capital markets facilitate the efficient accumulation of a productive capital stock by bringing together those with surplus funds and those with inadequate funds. They allow a factory worker in Detroit to finance a hospital in Lima or a palm oil grower in Malaysia to fund a semiconductor plant in Kuala Lumpur. At their best, capital markets allow investors with varying preferences for return, risk, liquidity and tenor to participate in financing undertakings with equally varied funding requirements.

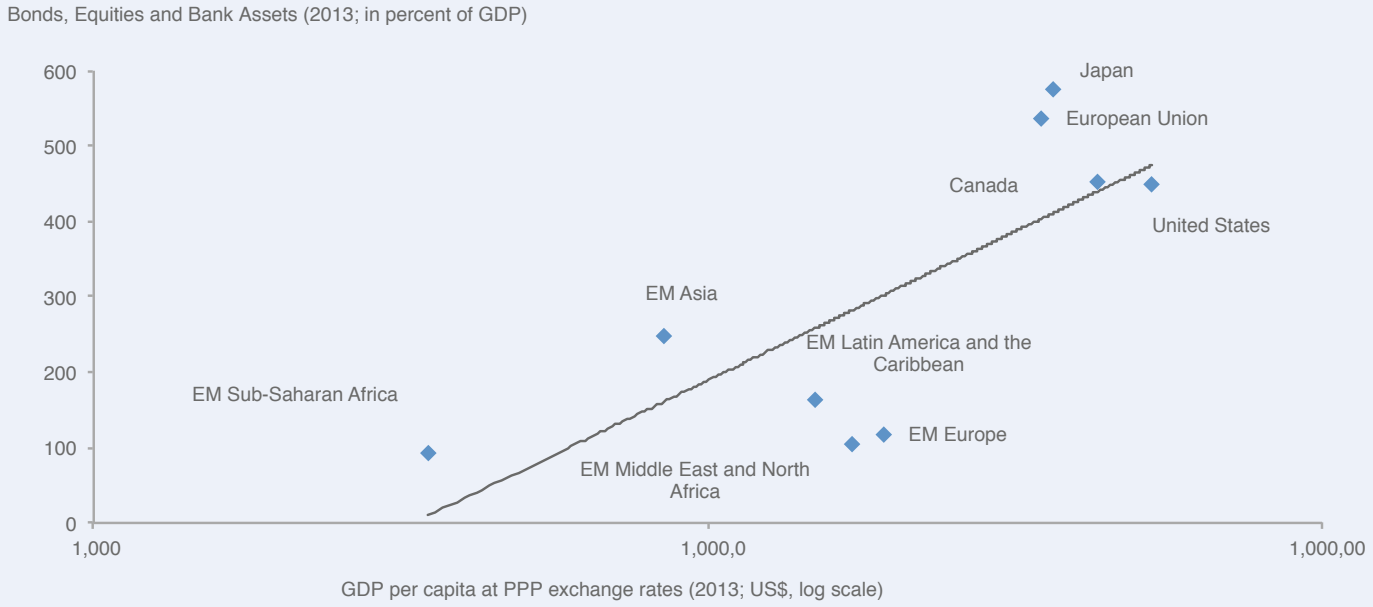
Crucially, institutions like banks and bond and equity markets allow this to happen without direct knowledge or contact between the original provider of funds and the funds' final recipient. Our Detroit factory worker, contributing to her 401k, need have no explicit intention of investing in a Peruvian hospital, while semiconductors need not be on the mind of our Malaysian palm farmer when he deposits his earnings in the local bank.

By developing capital markets, policy-makers support:

- Financial inclusion – the ability of an individual to access a greater pool of investment opportunities or funding options than otherwise
- Transformation of risk, liquidity or tenor via products like insurance or annuities
- Pricing transparency through, for example, the use of centralized exchanges or the creation of benchmark yield curves in the bond market

Figure 9 relates both banking-sector assets and the market capitalization of the bond and equity markets to economic development in terms of GDP per capita. Far from being alternatives, banks and capital markets provide complementary avenues for the mobilization of capital. Banks can provide more flexibility in financing arrangements than markets and are better at gathering local client-specific information. Markets offer diversification in sources of funding and clearer feedback on the evolving cost of capital. Moreover, markets provide equity raising and securitization opportunities – allowing banks to concentrate their business where value added to the economy and, hence, growth is highest.

Figure 9: Capital market development goes hand-in-hand with higher productivity (2013)



Source: UBS

Table 1 shows that capital market development in East Asia is positively correlated with economic progress (GDP per capita). This also underlines that, within regions, there is scope for capital market development to help support an improved deployment of capital and higher incomes.

Table 1: East Asian capital markets – varied levels of development (End of year 2013)

End year 2013	Domestic Equity Market Capitalization (% GDP)	Local Currency Bond Market Capitalization (% GDP)	Foreign Currency Bond Market Capitalization (% GDP)	Aggregate Market Capitalization (% GDP)	GDP per capita at PPP exchange rates (USD)
Vietnam	23	17	2	42	5,295
Indonesia	40	12	7	59	9,635
China	41	50	2	93	11,868
Philippines	80	37	16	133	6,597
Thailand	91	71	4	166	14,136
Korea	95	126	13	233	33,791
Malaysia	160	100	11	270	23,160
Japan	97	203	3	303	36,654
Singapore	250	82	16	347	78,762
Hong Kong	1132	71	48	1251	52,984

Source: World Federation of Exchanges, ADB Bonds Online, IMF

As such, the case for developing capital markets in emerging economies is straightforward. Greater access to finance and transformative investment products should help efficiently build a nation's capital stock. The greater and more efficient the capital stock, the more positive the prospects for labour productivity, income and wealth.

Unintended consequences

Unfortunately, reality has not always worked out quite like that. The history of capital market development includes a litany of abuses and crises. These unintended consequences result from the crucial attribute of markets to allocate capital relatively efficiently, despite imperfect information available to investors and the related importance in financial markets of human psychology – fear and greed.

Properly functioning capital markets do a remarkable job of allocating capital despite this, due to the complexity of the world economy and imperfectly informed market participants. No financial market participant can claim greater knowledge than the aggregate market, but many participants (brokers, company management, governments) have local information advantages.

The family business groups that dominate in many emerging markets provide a ready example of local information advantages and associated governance challenges. As such, to function properly, markets need to embody certain institutional characteristics. They need general agreement on acceptable behaviour or ground rules such as the use of local information advantages – some but not all of which can be codified. When these rules are misunderstood or abused, things go wrong.

Even when the accepted norms are followed, financial markets are a good deal more volatile than they should be given the ups and downs of the real economy. One does not have to go further than Shiller's *Irrational Exuberance*, Kindlebergers' *Manias, Panics and Crashes* or even most people's personal experience to find evidence of financial markets becoming dominated by greed or fear.

The potential for capital markets to overshoot or become unforgiving on occasion can present political challenges such as how to reconcile the longer-term benefits of capital markets with the loss of economic control in times of stress. Indeed because greed and fear are ultimately based on information asymmetries between buyers and sellers, one often finds financial markets becoming subject to abuse, booms and busts at the same time.

Three steps to smoother capital market development

We believe that market institutions can be built to minimize the risks of abuse and excessive volatility. First, regulators can minimize the implications of information asymmetries by mandating and enforcing strict governance regimes on both investors and issuers of securities. Encouraging a suitable mix of risk-absorbing equity and risk-enhancing leverage could ensure that market participants have "skin in the game" and an incentive to behave accordingly.

Second, the impact of market psychology can be minimized by encouraging an appropriate mix of market participants, including those with deep knowledge of the local market, those with experience in managing market risk or those with long investment horizons and, hence, risk tolerance.

Third, the impact of both human psychology and information asymmetry can be further managed by the maintenance of liquid markets. Markets with many inconsequential and diverse participants should be less subject to abuse and emotion than an illiquid market.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II. Evaluating Corporate Bond Market Development

This section provides recommendations for how to evaluate progress along corporate bond market development by:

- Summarizing the key challenges limiting issuer and investor participation
- Proposing metrics for evaluating the progress of corporate bond market development
- Outlining a general framework for the sequencing of market development to balance stability while meeting market-growth objectives

Challenges with Corporate Bond Market Development

Four key factors impact issuer and investor participation in domestic corporate bond markets:

- *Ability to access*: Whether there are obstacles preventing or limiting the desire for capital users and providers to enter the market
- *Perceived risks of the market framework*: Whether, the market framework, such as the regulatory or legal regime, may be deemed too risky or unstable to attract issuers and investors.
- *Relative cost and return of participating in the market*: Whether the potential costs and benefits of participating in corporate bond markets outweigh the cost to participate and the potential returns of other financing sources (e.g. bank loans) and investment options (e.g. other markets)
- *Ability to effectively match supply and demand*: Whether there are proper pricing and intermediation mechanisms in the market to allow issuers and investors to effectively match their supply or demand

Figure 10 highlights some of the key challenges that limit issuer and investor participation in domestic capital markets that have emerged through market stakeholder discussions and country case studies.

Figure 10: Key challenges limiting issuer and investor participation in domestic capital markets

	Key challenges for:	
Factors	Issuers	Investors
Ability to access	– Lengthy and costly issuance process – Burdensome corporate governance or reporting standards (companies either not sophisticated enough to comply with standards or reluctant to do so) – Burdensome regulatory approval process	– Market not included in a global benchmark(particularly important for foreign investors) – Difficulty for foreign investors to get to scale in the market due to limited skilled capacity and remoteness of the market – Underdeveloped asset management industry – Restrictions on investment criteria
Perceived risk of market framework	– Concerns that issuing corporate bonds to banks will cannibalize the issuer's bank lending lines	– Volatile macroeconomic and political conditions (or history of) – Weak regulatory/legal framework – Inconsistent application or enforcement of the regulatory and legal framework – History of unexpected changes to policies – Limited standards around corporate governance
Relative cost and returns from participating	– High cost of capital relative to other sources of debt financing, such as bank loans – High premium on primary market issuances due to perceived risks of the market framework and/or lack of secondary market liquidity	– Insufficient number and size of issuances to meet investors' requirements – Limited secondary market liquidity making it hard for investors to exit their positions without causing disruption to the market price
Ability to effectively match supply and demand	– Lack of financial intermediaries willing to be market makers for the issuance – Lengthy transaction and execution time frames	– Limited financial reporting – Low capture or transparency of market information – Limited credibility in credit ratings – Limited secondary market activity from which to base pricing of primary and secondary market offerings – Underdeveloped financial intermediation industry

Source: World Economic Forum

Measuring Corporate Bond Market Development

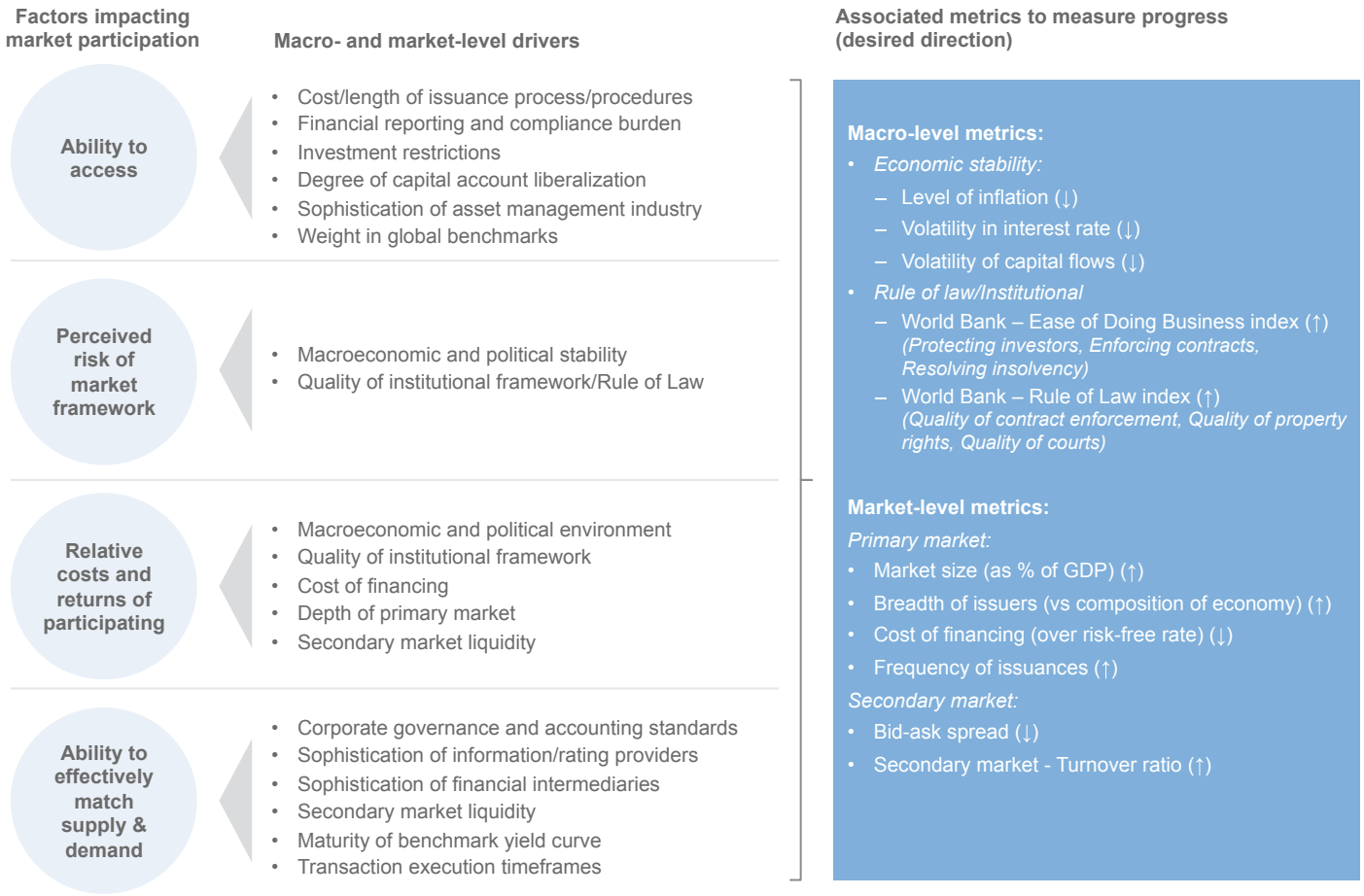
Various macro- and market-level drivers can positively and negatively affect: issuers' and investors' ability to access corporate bond markets, perceived risk of the market framework, relative cost and returns from participating in the market, and ability for them to effectively find a match for their supply or demand. Effective corporate bond market development should leverage these drivers to positively impact these four factors.

Progress along corporate bond market development could be evaluated by measuring the improvement of these drivers in the direction desired to promote market growth. While it is difficult to identify all of the underlying drivers and, in addition, measure them (particularly as capture of market data tends to be limited in emerging markets), we have suggested a set of proxy metrics that policy-makers can use to evaluate the success of and progress in corporate bond market development.

Additional metrics relevant for other areas of capital markets (e.g. equity markets) can be supplemented to this set to build a more comprehensive framework for measuring broader capital markets development.

The anticipation is that, as countries progress along the stages of market development, the evaluated metrics should improve in the desired direction.

Figure 11: Measuring progress in corporate bond market development



Source: World Economic Forum

Staging Corporate Bond Market Development

The process of corporate bond market development can be segmented into several generalized stages, each with different core objectives. Key policy actions differ at each stage but, at each stage, actions need to balance both market-growth and risk-management objectives to ensure a sustainable and robust market.

Stage 1: Establish the foundational bond market ecosystem and processes. The basic infrastructure for the corporate bond market (e.g. exchanges, credit agencies) is usually established along with the often-times preceding sovereign bond market or equity market. An important element unique to the corporate bond market, however, is a benchmark yield curve. The yield curve provides a reference point for investors to determine the relative value of other securities. For most markets, the yield curve is formed by sovereign bond issuances.

Stage 2: Enhance infrastructure/processes for the corporate market. Additional infrastructure enhancements or development may be needed specific to corporate bonds. Other market enablers such as corporate bond issuance procedures, corporate governance, and accounting and reporting standards will also need to be established if they did not exist previously.

Stage 3: Widen the issuer and investor base.
Market access, at first, may be limited to the largest or most sophisticated issuers and investors. Expanding access to other participants is important for addressing the breadth of private-sector financing needs and, thus, creating a truly effective corporate bond market.

Stage 4: Improve liquidity and risk management.
A common challenge even for more mature emerging capital markets is achieving liquidity in the secondary market. Large volumes of the market's securities may be held by institutional investors who engage in buy-and-hold behaviour. Lack of market information and market-makers for a given security also limits its trade. However, liquidity is important as it permits efficient price discovery, lack of which becomes a hurdle for investors to exit their positions. This either deters investments altogether or results in demands for higher premiums.

As a market grows in size and complexity, risk management becomes increasingly challenging. Introduction of new products and evolution in regulations may be required to support changing stakeholder needs and manage additional risk. For example, the development of bond futures can help investors hedge their investment positions and promote activity in the primary market. Another example may be the gradual loosening of investment restrictions or requirements for what assets (e.g. sovereign vs investment grade corporate bonds) can be used as collateral for trades as the market matures to allow flexibility for growth.

Stage 5: Expand integration with international markets.
Depending on a country's financial sector development objectives (i.e. countries may desire to be financial hubs), further actions may be required to liberate its market and enhance its linkage to international markets. This may include integration with existing international infrastructure for clearing and settlement. Technological advances and regional integration efforts are accelerating the integration of domestic capital markets with international markets.

While only the core objectives are highlighted before, supplemental development and risk management actions should occur in parallel to support overall market development. For example, as the market matures, market intermediaries and components should grow in sophistication to support increasingly complex market needs. Regulations should also continuously adapt to manage increasingly complex risks.

Recommendations in the next section of this report focus primarily on how to accelerate the first three stages of development.

Figure 12: Generalized sequencing of corporate bond market development

Stage:	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Key objectives:	*Establishing basic bond market 'ecosystem' and processes*	*Enhance infrastructure/ processes for corporate bond markets*	*Widening the issuer and investor base*	*Improving liquidity and risk management*	*Expand integration with international markets*
Policy/development actions					
Market and product development	• Set up basic market infrastructure (typically through partnership between the public and private sector) • Establish benchmark curve through government bond issuances • Develop institutional investors	• Introduce corporate bond issuances • Establish wholesale credit market/establish credit ratings system	• Reduce issuance costs and accelerate issuance timeline • Promote growth of asset management industry • Promote among issuers an investor relations culture and ability to manage compliance of covenants	• Introduce more sophisticated financial instruments • Enhance investor/issuer awareness • Development of a domestic swap curve and a basis swap curve • Ability for repos – securities borrowing/lending	• Introduce (regulatory) approval processes for international issuers • Potential linkages of domestic market with international markets (e.g. linking of exchanges, collateral management, and clearing systems)
Risk management	• Establish regulatory body to govern securities markets	• Restrict permissible investments for institutional investors • Establish market standards (e.g. for accounting/corp. governance) and regulations (e.g. insider trading laws) • Standardize minimum level and frequency of documentation (e.g. comfort letters, sub agreements, pricing supplements, offering circular) and disclosure	• Some relaxation of investment criteria for institutional investors (e.g. increase volume of investment in non-government securities) • Evolve regulations to better reflect regional/international standards and meet evolving stakeholder needs • Test legal system/enforcement	• Continue to relax investment criteria for institutional investors (e.g. allow for investments in infrastructure and other types of assets) • Refine regulations to adapt to more complicated market structure and instruments • Adopt "prudent man's rule"	• Potential bilateral or international treaties to facilitate and govern cross-border capital flows • Extend capital account liberalization
Market characteristics – Types of market participants					
Issuers	• Government • Quasi-government	• Government/Quasi • Financial institutions • Largest corporates	• Government/Quasi • Financial institutions • Medium – Large corporates	• Government/Quasi • Financial institutions • Wider range of local corporates	• Government/Quasi • Financial institutions • Wide range of corporates (including some foreign)
Investors	• Foreign investors (limited) • Banks • Domestic institutional investors (limited)	• Foreign investors • Banks • Domestic institutional investors	• Foreign investors • Banks • Domestic institutional investors • Sophisticated domestic retail investors	• Foreign investors • Banks • Institutional investors • Retail investors • Alternative investors	• Foreign investors • Banks • Institutional investors • Retail investors • Alternative investors

Source: World Economic Forum; Oliver Wyman

Regional integration and harmonization

Today's capital markets are primarily national. However, recent years have seen a growing interest in regional integration and harmonization, particularly for smaller economies, as countries seek to access a larger investor base, channel savings more productively, better facilitate increasing cross-border activities and achieve the economies-of-scale required to compete with international markets. An increasingly regional approach to capital markets development may allow emerging markets to achieve scale and integrate with international capital markets more quickly.

For example, following the 1997-1998 Asian crisis, East Asian countries recognized the need for regional financial cooperation to promote more regional savings for regional investments and limit short-term foreign currency-denominated financing. The ASEAN group of countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam) in partnership with China, Japan and South Korea, spearheaded the Asian Bond Market Initiative (ABMI). Its objectives were to:[26]

1. *Promote greater issuance of local-currency denominated bonds*, including launching the Credit Guarantee and Investment Facility with an initial $700 million of capital to provide credit guarantees for LCY corporate bonds[27]
2. *Facilitate the demand for LCY bonds*, including in cooperation with Asian Development Bank, establishing Asian Bond Online in 2004 to collect and disseminate data about regional bond markets
3. *Improving the regulatory framework*, including standardizing and harmonizing regional market regulations (i.e. a mutual recognition scheme for securities issuance)[28]
4. *Improving related infrastructure for the bond market*, including the proposed establishment of a regional settlement intermediary, and standardizing and strengthening regional credit-rating systems

These efforts have helped grow the LCY corporate bond market in the region from $48 billion at year-end 2007 to over $3 trillion at year-end 2013 - a 30% compound annual growth rate.[29]

Improvements in technology have also played a large role in accelerating integration by connecting regional capital markets. For example, in Latin America, the Mercado Integrado Latinoamericano (MILA) links the exchanges of Chile, Colombia, Mexico and Peru, making it the second-largest exchange in the region after Brazil. Investors are able to access MILA through a local broker registered for the common trading platform; therefore, issuers listing on the MILA have access to the pool of investors across the four countries.

The West Africa and East Africa regions are pursuing different courses to regional integration. The West Africa Capital Markets Integration Council, with representatives from BRVM (Bourse Régionale des Valeurs Mobilières), Cote d'Ivoire, Ghana, Nigeria, and Sierra Leone, focuses on synchronizing countries' market infrastructure while minimizing changes to existing regulations and laws. It will not address supply-demand topics (i.e. encouraging companies to list and investors to invest). In contrast, the East Africa Community, comprising Burundi, Kenya, Rwanda, Tanzania and Uganda, has expressed a more extensive goal of achieving freer movement of goods, services, capital and people.

However, increasing integration of markets can also bring increased risks. For example, domestic markets become more susceptible to global volatilities and operational and concentration risks may arise from adoption of new, more interconnected and consolidated technologies and platforms. Prudent risk management should not be overlooked as emerging countries seek greater integration with regional and international markets.

Role of and Implications for the Banking Sector

The banking sector plays numerous crucial roles in the corporate bond market and, alongside it, in the financial system. As emerging corporate bond markets develop and lending becomes increasingly disintermediated, it is important to understand how banks' activities will evolve to support and, at the same time, grow alongside corporate bond markets.

A sound banking system alongside well-functioning corporate bond markets helps fortify the financial system and expand access to private credit.[30] Banks are also important participants in corporate bond markets; they act as *issuers* to attain funds to supplement deposits for lending (and thereby act as financial intermediaries of credit) and in some economies – such as Indonesia and previously in Argentina, Brazil, Chile and Malaysia – as major *investors*.[31]

As corporate bond markets develop and institutional investors and the asset management industry develop over time, banks' role in both those capacities typically diminishes.

Banks also serve as *financial agents* (or broker-dealers) by guaranteeing or underwriting issuances. By holding inventories of debt that they agree to underwrite and providing quotes on price and availability, banks also help generate liquidity in the secondary market.

The convergence of foreign and domestic banks' expertise in this role is important. Foreign banks bring with them a wealth of specialized expertise, a deep network of buyers and an understanding of the buyers' needs (e.g. what they are interested in buying, their holding periods, their pricing expectations) based on their broad and long relationships.

On the other hand, domestic banks have the advantage of more detailed knowledge on the creditworthiness and history of domestic corporates. In some markets where foreign participation has lagged, local banks may also have greater access to local pools of capital through entrenched relationships. Some countries may also require businesses to use domestic banks to underwrite their debt through legislation (e.g. South Africa) or through politically vested interests.

Over time, whether domestic or international banks gain a greater share of the market for financial intermediation appears to differ across emerging countries. In some instances, such as Indonesia and Colombia, local brokers' share of debt capital market fees were observed to have declined in the period post-crisis (2008-2013) as compared to pre-crisis (2000-2007), whereas for other countries, such as Malaysia, China and Thailand, the trend was reversed. However, overall across emerging markets[32], the share of bond issuance fees awarded to local brokers has increased to 60% after 2009 from an average or 41% in the period of 2000-2008.[33]

Furthermore, there may be opportunities for domestic banks to play an increasingly important role not only within domestic capital markets, but also as intra-regional champions – particularly as regulatory reforms have encouraged international banks to reconsider the profitability of their lending and capital markets businesses in certain emerging markets.

Growth in emerging corporate bond markets will have implications for both international and domestic banks. Most directly, bank lending to the largest corporates is expected to decrease. This would free up the bank's balance sheet for lending to SMEs as well as households, both of which are underpenetrated as compared with developed markets.

In particular for households lending, emerging-market mortgage penetration is very low as compared with the developed world. As the market becomes increasingly advanced, banks may securitize these loans and issue collateral-backed bonds on the debt market, recycling the proceeds for further lending. This transition could help expand financing to a wider set of users of credit – for both businesses and households.[34]

III. Accelerating Corporate Bond Market Development

Section I provided an overview of corporate bond markets and highlighted the key role they play in the financial system and overall economic development. Section II, however, highlighted the numerous challenges and extensive effort involved with developing corporate bond markets. The following section provides recommendations for policy actions that can be taken to overcome some of these key challenges and accelerate corporate bond market development. This section is not meant to cover all potential development actions, but highlights select actions that hold the most potential to deliver impact.

The report's recommendations are grouped into four categories:

- **Foster increased issuer participation**: How to minimize the obstacles for issuers to the market and the relative costs to participate in the market
- **Improve investor value proposition**: How emerging markets can encourage the development of a domestic savings pool and lower actual and perceived risks of participating in the market for domestic and international investors
- **Enhance market efficiency and transparency**: How to enhance market infrastructure and intermediary activities to lower the burden and costs associated with participating in the market and allow supply and demand to be matched more effectively
- **Attract global interest:** How to establish a national direction for market development and improve the attractiveness of the domestic market relative to global markets

While recommendations are separated into categories based on their primary market impact areas, they are anticipated to have secondary effects that resonate across different areas of the market.

Successful implementation of the recommendations assumes the following conditions:

- *Macro-fundamentals have been established and/or are being addressed*, which include sustained macroeconomic and political stability, capital account liberalization, fundamental rule-of-law and strong institutional framework, and a sound banking system.
- *Government is committed to the corporate bond market development process*. Successful examples of EM corporate bond markets development have all been supported by government sponsorship.
- *Policy actions taken by the government should be communicated clearly and applied consistently*. Whereas investors are able to account for known market risks and price accordingly, unpredictability of doing business in a country dissuades investors from entering altogether.

Furthermore, ongoing partnership and dialogue with private-sector market participants is important to an effective market development process. Examples of how the government can partner effectively with the private sector include:
- In drafting regulations, the government can consult with or form advisory groups consisting of a diverse set of private-sector market players.
- Prior to launching new regulations and policies, policy-makers and regulators can release an initial draft for public commentary and allow the feedback to guide revisions.

Policy-makers should be reactive to the market and adapt as needed when unintended consequences of new regulations or reforms appear to adversely impact market participants.

Lastly, while the recommendations are primarily intended for emerging country policy-makers, they also highlight opportunities for market participants to support and play a role in this development process.

Figure 13: Summary of policy recommendations and intended outcomes

Action Category	Key Recommendations	Key Outcomes
A. Foster increased issuer participation	A1. Limit market distortions that bias against corporate bond markets A2. Optimize the issuance process and costs – Streamline issuance processes – Expand issuance options to cater to a diverse set of corporations – Harmonize the regional issuance framework	– Expand access to and use of corporate bond markets – Lower cost of financing – Improve efficiency and time to market
B. Improve investor value proposition	B1. Introduce reforms to encourage domestic long-term savings – Encourage an investment culture through education – Incentivize or mandate private domestic savings B2. Strengthen regulatory and legal framework to offer credible investor protection – Develop an effective and efficient process for settling disputes – Strengthen insolvency regime B3. Establish a strong corporate governance framework	– Growth in size of local capital pool – Improved market certainty and investor confidence in entering market – Improve recovery rates
C. Enhance market efficiency and transparency	C1. Improve information availability and accuracy – Establish robust accounting and reporting standards – Improve collection and assimilation of market data C2. Enhance the competitiveness of market infrastructure and intermediaries – Minimize fragmentation in market infrastructure – Ensure market infrastructure is competitively positioned – Develop a sophisticated and competitive environment for financial intermediation	– Improve ability for market participants to assess cost/benefits of the market – More effectively match capital supply with demand – Increase secondary market liquidity
D. Attract global interest	D1. Form and communicate a clear strategy for capital markets development D2. Implement a tax regime that is aligned with financial development objectives D3. Position country to be included in global indices and portfolios	– Increase exposure in global emerging market portfolio – Better position to be a financial centre

A. Foster Increased Issuer Participation

A1. Limit market distortions that bias against corporate bond markets

A country's economic development history can affect the characteristics of its private sector and financial system. This, in turn, may affect the ability of corporate bond markets to develop. Addressing these structural constraints is a crucial initial development step.

Regulators should consider whether there are historical policies or conditions in place that have protected the banking sector, leading corporations to favour borrowing from banks over borrowing from capital market investors. These distortions may come in the form of state-backing or other incentives such as more lenient regulatory requirements or tax exemptions. They may allow or incentivize banks to finance what would otherwise be unprofitable corporate lending, which promotes reliance on bank credit rather than reforms to improve financial market efficiencies.

Market distortions may have emerged for various reasons, including:

- *Historical weakness in the financial system*: For example, government sponsorship or protection was needed to ensure banks could continue to operate as facilities for deposits and loans.
- *Protection of national champions*: For example, to protect national banks from international competitors, governments may have offered local players incentives or encouraged consolidation.
- *Low creditworthiness of the private sector*: For example, governments may have needed to provide banks with incentives to offer credit to small or young companies.

Market distortions can also bias investments towards sovereign bonds. For example, this can occur when regulators place overly restrictive requirements on the types of instruments that domestic institutional investors can hold (e.g. requiring pension funds to hold a minimum volume of government securities and prohibiting buying of non-investment-grade corporate bonds).

For example, India's government has a strong role in the domestic banking sector. Most Indian banks were nationalized in 1969 and, today, approximately 75% of loans are from public-sector banks. Forty per cent of loans must be made for priority sectors, primarily agriculture. Government bonds dominate the debt market due to several factors: banks must invest 23% of their deposits in government bonds, limiting capital available to invest in corporate bonds; the Reserve Bank of India manages government-bond yields to keep them high, resulting in a prohibitively high cost of debt borrowing for local corporations and incentivizing investors to hold high-yielding government bonds.[35]

A2. Optimize the issuance process and costs

Laborious procedures to issue debt and the high costs associated with issuance can prohibit issuers from entering the market. Emerging markets could:

Streamline issuance processes

Emerging markets should facilitate access to corporate bond markets by ensuring the requirements and process for issuers to issue debt are not unduly onerous and that the time frame for approval is reasonable. Lengthy approval processes may be attributable to factors such as having multiple authorities involved in the registration or approval of a bond issuance, which lead to duplicative processes, excessive information disclosure requirements, and incomplete prospectuses submitted by issuers due to a lack of understanding of the requirements.[36]

Furthermore, issuance procedures should evolve as the market becomes more sophisticated and less oversight by the regulator is required. For example, emerging markets with nascent corporate bond markets tend to apply a merit-based approval regime where the regulator conducts a comprehensive assessment on the issuance, including its viability.[37]

Policy-makers should consider eventually migrating to a disclosure-based framework for registration as the market matures or for frequent issuers. Under this framework the evaluation of issue quality is left to the market rather than to the regulator who, instead, focuses on the timeliness and quality of the information provided in the offering document. This makes the registration process less time-consuming and simpler; however, this requires a sufficiently sophisticated market where participants have the skills and information required to assess a given issuance, including access to credit ratings and company information.

Expand issuance options to cater to a diverse set of corporations

A menu of issuance methods, both within the public-offer framework (e.g. regular public offers and fast-track public offers such as shelf-registration) and outside (e.g. private placements), should be gradually introduced to meet the needs of an increasingly diverse set of issuers and allow them the option of selecting their tolerance and preference based on their own funding needs. Private placements, for example, may appeal to smaller issuers who want to target a select set of investors, but regulators may consider putting in place guidance to limit private placement participation to certain types of or more sophisticated investors, as information disclosure requirements are typically lower.

Many emerging markets also have offering frameworks that have mixed features of pure public offers and pure private placements. In fact, in some EMs, such as Malaysia and Brazil, this alternative offer regime makes up a significant portion of issuances (e.g. 81% and 70% in 2010, respectively). Although specific requirements differ

between markets, in general, these "hybrid" regimes are alternative channels that exempt issuers from submitting a full prospectus (as is the case for a public offer) yet allow access to secondary market (which is limited in private placements).[38]

Introducing a shelf-registration process allows creditworthy corporations to issue recurring debt through a simplified process. This promotes market liquidity; as a company becomes a regular issuer, its securities are more likely to be traded since investors have multiple points of reference for pricing.

Harmonize the regional issuance framework
Nascent markets can bypass the process of establishing their own issuance procedures by aligning them directly with that of more advanced markets in the region. As globalization pushes markets around the world to be more integrated, standardizing issuances processes – at least regionally – will facilitate cross-border offerings and allow issuers to more readily extend their financing options within and outside domestic borders.

For example, the ASEAN Capital Markets Forum (ACMF) has proposed the ASEAN and Plus Standards Scheme, which is expected to reduce the cost and burden for corporates to cross-list their debt securities offerings within ASEAN. The approval time for registration of offering will also be more closely harmonized and is expected to be shortened substantially in many markets (e.g. when implemented in Indonesia, the filing period is expected to decrease from ~45 days to 7-21 days).[42]

The Scheme has two levels: a set of common ASEAN standards and a set of limited additional standards known as the Plus Standards. The Plus Standards are required by some ASEAN jurisdictions due to their individual market practices, laws or regulations. So far, the Scheme has only been implemented by Malaysia, Singapore and Thailand.[43]

SME financing on the corporate bond market

While the SME credit gap is estimated to be around ~$1.5 trillion globally – two-thirds in emerging markets – SMEs around the world face challenges attaining the required financing.[39] Their small issuance sizes and limited market history have traditionally made it difficult to attract traditional fixed-income investors who seek liquidity.

However, in more advanced markets, corporate bond markets are increasingly considered as alternative platforms for SMEs to raise debt capital. Some developed markets have introduced special bond platforms or access channels for SMEs. An example is Deutsche Börse's Entry Standard Segment, a retail investor-targeted bond platform where SMEs can bypass traditional bank underwriting and, instead, arrange their own prospectuses and issue directly on the exchange with the help of a "listing partner", an independent service adviser.[40] This is expected to help issuers save on issuance time and costs.

Other exchanges have launched similar platforms such as the MARF in Spain and Düsseldorf and Stuttgart in Germany, although there is still a limited number of SMEs listed on the exchanges. Recently, the European Commission announced a vision for creating an EU Capital Markets Union (CMU), which could "cut the cost of raising capital, notably for SMEs and help reduce [the EU's] very high dependence on bank funding."[41]

While these alternative solutions to improve access to financing for SMEs are gaining traction in developed markets, emerging economies should, however, be cautious. Having too many different issuance platforms or sub-segments of the market can fragment liquidity in the early stages of development. Furthermore, policy actions to promote access to capital for SMEs should not undermine the continued important role banks should play alongside corporate bond markets in SME financing.

Country case study

Malaysia

After the 1997-1998 Asian crisis, many Asian governments took actions to reform their economic policies and deepen their capital markets, including establishing deeper corporate bond markets as a complementary source of financing to bank lending and equity markets and as prevention against future crises.

Along these lines, the Securities Commission of Malaysia announced their Capital Market Master Plan 1 in 1999 - a 10-year plan to deepen their domestic capital markets as well as to meet the strong demand for Sharia-compliant assets and establish itself as the Islamic financial hub.

Plan 1 included a wide variety of market-supporting initiatives. Particularly important for the development of the bond market was the creation of a facilitative regulatory framework, improvements to corporate governance standards, enhancements to the rating process, improved data collection and price transparency, and implementation of a tax policy that is favourable to debt issuers.[44]

Along with these initiatives, the Capital Markets Plan 1 also included significant enhancements to the primary market debt-issuance framework, including introducing a disclosure-based approval framework and shelf registration, lowering the minimum rating requirement (although at least one rating is still mandatory), removing underwriting requirements and eliminating restrictions on utilization of proceeds from corporate bond issuance.

These enhancements sought to simplify and clarify the issuance process so corporates could better understand how to get to market and predict how long the process would take. Prior to this, the approval and issuance process had taken up to 4-6 months; with the new disclosure-based framework, the Securities Commission is now mandated to approve applications for bond issuance within 14 days (from 1-3 months previously) and the overall issuance process has fallen to 2-3 months.[45,46]

The success of Plan 1 was followed by Plan 2 in 2011. Today, Malaysia is the second-largest LCY corporate bond market in East Asia in terms of debt outstanding as a percentage of GDP (42.8% as of 3Q 2014) only behind South Korea.[47]

B. Improve the Investor Value Proposition

B1. Introduce reforms to encourage domestic long-term savings

Savings behaviour differs across emerging markets around the world, although savings rates (gross national savings as a percentage of GDP) are generally higher than those of developed nations. Among the largest emerging economies,[48] China has the highest savings rate at 47%, followed by Indonesia, South Korea, Russia and India. Brazil and Turkey, on the other hand, are among those with the lowest savings rates – comparable to those of developed economies (~15% and ~13% in 2013, respectively).[49]

This generally high savings rate, along with a relatively youthful and fast-growing working population, points encouragingly to the potential for a large local investor base from which capital can be redeployed to the domestic private sector. However, this is contingent on these sources of capital being pooled and invested effectively; as such, the establishment of asset managers, particularly institutional investors, is critically important. It is unanimously agreed that a broad domestic institutional-investor base plays a crucial role in capital markets development as key participants and first movers in the market.

Encourage an investment culture through education

Migrating savings from traditional bank deposits and hard assets to investment products requires educating the public on the benefits of long-term investments. Particularly for countries where the population has historically been low income, the tendency for savings and investments and the understanding of financial options and the benefits and limitations of investing in corporate bonds and other capital market products, are likely limited.

Furthermore, historical volatility in the financial system may affect the local population's risk appetite as well as perception of the risk of participating in capital markets. For example, in Asia, there is a strong culture of buying hard assets, such as real estate or gold, rather than corporate bonds as a means to store and increase capital value. This could be driven by a variety of factors, including historically high inflation, historical volatility in the financial system and insufficient investor protection.

Developing an investment culture takes time. As such, while financial education may seem like a low priority in the early stages of economic development among other high-priority issues, emerging markets would benefit from it in the long run through the establishment of a healthy domestic capital pool.

Incentivize or mandate private domestic savings

To grow the domestic pool of capital, countries can encourage savers to deposit their savings with local institutional investors, such as pension funds, insurance companies and mutual funds, which in turn invest these assets in the market. Favourable tax treatment is one method of incentivizing populations to place their wealth with institutional investors. For instance, the US's introduction of pre-tax, defined-contribution 401(k) retirement plans in 1978 propelled growth in the mutual fund industry and, consequently, its capital markets.

Countries can also mandate that populations place their wealth with institutional investors, as Chile did in the 1980s; this has been credited with being instrumental to the country's corporate bond market development.

While many emerging markets are moving in this direction, some emerging countries are instead implementing pension reforms that could negatively impact corporate bond market development.

For example, Poland (in 2013) and Hungary (in 2010) have recently nationalized their Tier II private-capital-funded pension scheme, setting terms that would require all pension holders to move their assets from their privately-funded pension system to the state system. The reforms were intended to lower the governments' budget deficit positions by acquiring the pension fund assets on their balance sheets. This not only calls into question the governments' fiscal management practices, but also limits the development of a diverse domestic investor base.[50,51]

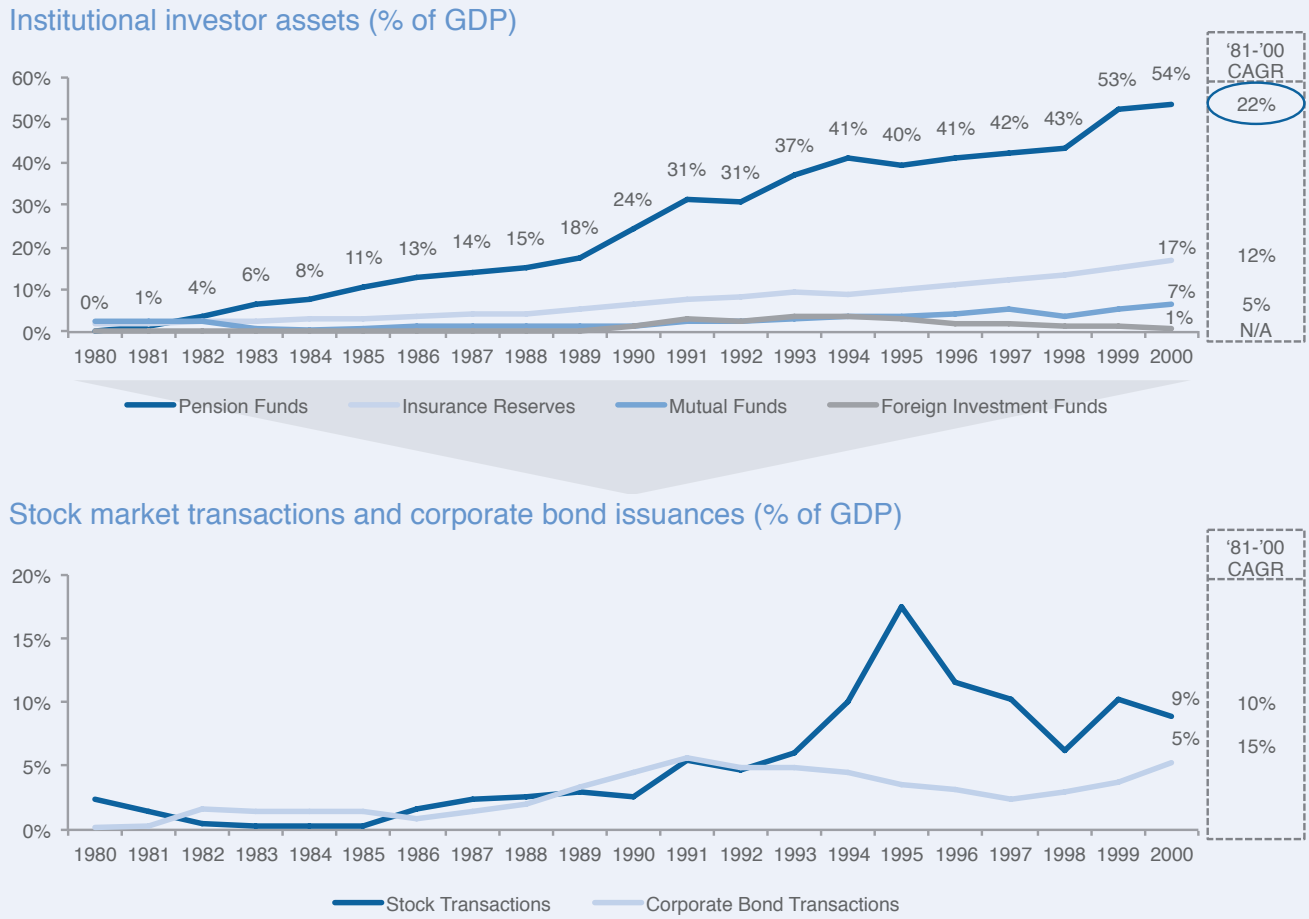
Country case study

Chile

Following a political reform in 1973, Chile's new government reversed its previously nationalist policies and began embracing free market policies. The following decade of financial liberalization set Chile on a path towards capital markets development. In the early 1980s, Chile reformed its regulatory regimes and introduced laws to govern capital markets activities. The reforms included a landmark change to Chile's pension system, replacing the existing state-operated, pay-as-you-go system with a fully funded, private system. The growth in corporate bond issuances is often attributed to the development of the pension system, which at first invested a large portion of its assets in fixed income.

The presence of insurance companies and pension funds in Chile shaped the bond market's characteristics. Insurance companies and pension funds are often restricted to only investing in bonds above a certain credit rating; they also tend to hold bonds for a longer period of time given the tenor of their liabilities. Chile's significant amounts of pension and insurance assets have contributed to a corporate bond market that is heavily investment grade and long-tenured, with relatively low turnover and limited foreign investor participation.

Figure 14: Pension reform and the development of Chile's capital markets



Sources: US Social Security Administration, Social Security Bulletin Vol. 68 No. 2 (2008); BIS Papers No. 11, "Capital markets in Chile" (2002).

B2. Strengthen regulatory and legal framework to offer credible investor protection

Discussions with investors highlighted the importance of a robust regulatory and legal framework that offers investors protection in cases of dispute or default. While the combination of higher claim priority and preferential tax treatment for interest payments for debt issuers should make the cost of debt lower than the cost of new equity, deficiencies in investor protection frameworks may outweigh these advantages, resulting in higher risk premiums. In fact, several empirical studies (La Porta et al., 1997; Levine, 1999; Djankov et al., 2008) have shown the strong correlation between efficiency of debt enforcement and the ratio of private credit to GDP.[52]

Develop an effective and efficient process for settling disputes

An efficient and effective judicial system to resolve commercial disputes and enforce contracts lowers overall the temporal and monetary costs of investing in a market. An effective system should:[53]

- Minimize the time (from filing to trial and judgement to enforcement) required to resolve the dispute
- Minimize the attorney, court and enforcement costs relative to the claim value
- Minimize the complexity of the procedures to file the case, and obtain and enforce judgement

Emerging economies have been making steady progress towards enhancing their dispute resolution frameworks. One common reform is the introduction of case management systems and automation of court proceedings. For example, countries such as Brazil, Greece, South Korea, Turkey and Saudi Arabia have recently implemented an electronic platform for filing complaints. This increases transparency, expedites the filing and service process, and limits opportunities for corruption and loss or destruction of court records.

Many emerging countries have started creating specialized commercial courts or divisions for settling disputes, particularly among sub-Saharan Africa economies (12 countries implemented since 2005). Specialized courts tend to improve efficiency as judges become experts in handling commercial disputes and the courts have less formal procedures. For example, Nigeria, which created its commercial court in 2007, has seen the average time to resolve a standard case decrease by 9 months.[54]

Strengthen insolvency regimes

Recent economic and financial crises have caused more scrutiny and motivated reform of insolvency laws. While the World Bank and United Nations Commission on International Trade Law (UNICTRAL) have published guidelines on internationally recognized best practices for insolvency regimes, there is little uniformity in how these are applied across countries, even among those that share common or civil law.[55]

The World Bank's Resolving Insolvency Index provides a cross-country comparison of insolvency regimes. The index evaluates two aspects of insolvency regimes:

1. Strength of the legal and regulatory framework
2. Effectiveness and efficiency of the process for resolving insolvency as measured by the recovery rate[56]

Figure 15: World Bank's Resolving Insolvency Index evaluation methodology

Components	Attributes measured/evaluated
Strength of legal and regulatory framework for insolvency	• Commencement of proceedings – Whether debtors and creditors can initiate proceedings – Standards for commencement of insolvency proceedings • Management of debtor's assets – Ability for debtor to continue and reject contracts during insolvency – Avoidance of preferential and undervalued transactions after proceedings have been initiated – Post-commencement financing receives priority over ordinary unsecured creditors • Reorganization proceedings – Adherence to international standards on approval and content of the reorganization plan • Creditor's right – Participation in selection of insolvency representative and approval of sale of substantial assets of the debtor – Right to access information about insolvency proceedings and to object to a decision of the court
Efficiency and efficacy of insolvency process (as measured by recovery rate)	• Function of time, cost and outcome of insolvency proceedings • Cents on the dollars recoupled by secured creditors through reorganization, liquidation, or debt enforcements • Outcome of the business (e.g. whether business continues operating as a going concern or whether its assets are sold in piecemeal) impacts maximum value that can be recovered • Official costs of proceedings and depreciated subtracted

Source: World Bank Group

Reforms to insolvency regimes in emerging markets have focused on strengthening creditors' rights. Research has shown that, if creditors are not protected or allowed to participate in insolvency proceedings, they will have less incentive to invest in the future, leading to a less-developed credit market.[57]

For example, recently, several foreign investors in a major Indonesian telecom were barred from participating in the company's debt restructuring negotiations. The local court judged that these investors were not allowed to vote on the workout arrangement because their defaulted notes were issued by an offshore special-purpose vehicle. Global asset managers are monitoring the proceedings closely, as almost 90% of all Indonesian non-state corporate dollar notes have been issued via offshore entities. Thus, this case could set an important precedent for how similar restructurings could occur. Doubts over the ability to enforce foreign investors' rights could adversely impact the availability of credit to other Indonesian firms.[58]

Effective insolvency regimes also help distinguish viable firms for reorganization versus unviable firms to be liquidated. When Colombia introduced a new bankruptcy code in 1999, the financial health and recovery of the average reorganized firm improved significantly afterwards, as compared with under the old law.[59]

End-to-end insolvency proceedings should be as efficient as possible. Establishing time limits for insolvency proceedings is one means. Long proceedings reduce creditors' chances of recovering outstanding debt and create uncertainty for all parties involved. Whether the outcome is liquidation or reorganization, the process should be as effective as possible.

Limited default precedence in many emerging markets may also hinder investor confidence. Recent examples of bankruptcies provide opportunities for investors to evaluate whether these situations are handled effectively and whether legal rights are upheld consistently.

While emerging markets' corporate default for speculative-grade issuers was lower than that of the US between 2003 and 2013,[60] and recovery rates for senior unsecured debt in emerging markets have compared favourably to counterparts of the US since the 2009 financial crisis where the information is available, these data points may be biased by limited sample size and continue to leave investors wary. Emerging markets should continue to improve their bankruptcy procedures to close investors' perceived gap of their risk.

B3. Establish a strong corporate governance framework

Interviewees unanimously agree that corporate governance – the lack or perceived lack of – is a key issue among emerging capital markets and a key lever for improving investor participation and market functions. Emerging market industries are often dominated by large state-owned or family-owned businesses, whose political affiliation, complex organizational structure and lack of information-reporting draw investor concerns on corporate governance.

Policy-makers should promote the adoption of international corporate-governance standards and can leverage partnerships with exchanges and trade organizations to ensure that these standards are widely implemented. The availability of high-quality talent, particularly at the management level, and an independent board within businesses is also important to the adoption and application of corporate governance standards as these individuals are ultimately responsible for companies' decision-making, investment choices and stakeholder management.

"Corporate governance" can be interpreted to encompass a range of activities, but typically includes the activities the company should engage in to ensure fairness, accountability, independence and transparency. While this report does not cover in detail all the elements of a strong corporate governance framework (as they are explored in much more detail in other reports such as OECD's *Corporate Governance Framework*[61]), key elements that have been highlighted in interviews as particularly important to investors include:

- *Disclosure and transparency*, including: Do companies follow international reporting and accounting standards? Are they disclosed in a way that can be easily accessed and consumed by the public?
- *Risk management*, including: Is the company continuously monitoring potential sources of risk and reporting them to their investors? Do companies have contingency plans to react to emerging risks?
- *Internal audit and management practices*, including: Are there checks in place to ensure that executives and employees act ethically and, if not, whistleblowing procedures to report unethical behaviour?
- *Incentive structures,* including: Is the management committee compensated in a way that promotes actions that improve stakeholder value and protect investors?

C. Enhance Market Efficiency and Transparency

C1. Improve information availability and accuracy
Market transparency is important for assessing the risks and returns of participating in a market, supporting an efficient price discovery process and, thus, providing confidence to investors to enter a given market. In an efficient market, market stakeholders should have unbiased access to timely and accurate market and company information, as well as historical records of this information to evaluate performance on an extended time horizon. To improve market transparency, emerging markets could:

Establish robust accounting and reporting standards
The pay-offs for adopting international accounting and reporting standards are significant as investors are less likely to invest in companies where properly documented and audited financial information is not available. Many emerging market companies that have traditionally relied on internal funding or bank financing may not have found the need to establish rigorous accounting standards.

Furthermore, if the company is closely held, there may be no practice of regular, standardized reporting of the company's information. Developing this practice can be a large undertaking and, many times, the company may not have the necessary skills to do so; therefore, the development of an industry for financial advisory is important.

The World Economic Forum's annual Global Competitiveness Index evaluates countries on the strength of their financial auditing and reporting standards. Consistently over the past 10 years, emerging markets and frontier markets have underperformed the developed countries, although emerging markets are starting to converge with developed markets' levels.

South Africa stands out as the leader in auditing and reporting standards among all markets – developed, emerging and frontier – for the past four years.[62] South Africa decided to lead the adoption of the globally recognized International Standards on Auditing (ISA) as well as the International Financial Reporting Standards (IFRS) in 2005. The country has also implemented a series of other reforms over the past decade to strengthen its corporate financial reporting system, such as adopting the principles of corporate governance in the King III Code and requiring listed companies to prepare and issue annual integrated reports in place of an annual financial report and a separate sustainability report.[63]

Improve collection and assimilation of market data
Investors face challenges in evaluating emerging markets due to limited information on the local companies and because historical market activities are not always captured and made available. Some emerging market central banks and securities commissions have started providing information on the performance of their domestic financial markets through their own websites, but the amount of information that is captured and the ease by which they can be used and analysed still have significant room for improvement.

The *Asia Bond Monitor* provides an example of efforts by ASEAN – backed by the Asian Development Bank – to improve the capture and availability of information on their bond markets. The quarterly publication provides a thorough review of the recent developments in East Asian LCY bond markets along with an examination of the outlook, risks and discussion of policy options. It has greatly improved understanding of the general ASEAN bond markets and supports investors in their own evaluation of the markets.

Quality of ratings is only as good as the disclosure and auditing regime

Contribution from Henrik Raber – Global Head of Capital Markets, Standard Chartered

Credit rating agencies can help disseminate information to bond investors. Should issuers choose to have their bond issuances rated, credit rating agencies provide an independent evaluation of issuers' accounts and the legal agreements governing the bond issuances to determine the overall creditworthiness and likelihood of default. Issuers can also enhance the credit quality of their issuances by seeking various forms of guarantee. Examples include partial-credit guarantees from the government or international organizations, financial guarantees from bond insurers (i.e. "wrapping" their bonds) and collateral guarantees, such as asset-backed securities.

Issuers can choose to have their bonds rated by a local credit-rating agency, an international credit-rating agency, or both. Although international rating agencies can work in nearly every country and provide greater standardization of ratings across markets, issuers may select a local rating agency due to:

- Lower fees: local rating agencies generally have lower staff costs and fees
- Language: local rating agencies are more likely to have analysts who speak the local language
- Operating environment: idiosyncrasies of the country's operating environment may be more familiar to local analysts

However, investors have expressed certain concerns with ratings from local agencies. First, some local rating agencies publish only a summary of their analysis. The detailed analysis – which may contain adverse comments – is provided by local convention only to the issuer. Second, local rating agencies are commercially incentivized to issue ratings based on the information that they receive, which may be limited, rather than the detailed and audited financial information that they would prefer.

In contrast, international rating agencies may simply refuse to rate issuers who provide insufficient information. Local agencies may not have that luxury because their businesses may depend entirely on domestic issuers that operate in an environment of poor disclosure. This tension between the commercial and analytical aspects of local rating agencies is heightened during economic downturns.

Many of the local agencies' clients are impacted by the same market cycles, and severe ratings downgrades amid an economic downturn could alienate clients. Rating agencies focused on any one country can only be as good as the disclosure and auditing regime in that country.

C2. Enhance the competitiveness of market infrastructure and intermediaries

As market institutions worldwide become increasingly integrated, local market infrastructure providers will face stiffer global competition. Policy-makers should ensure that domestic market infrastructure is competitively positioned in cost and efficiency relative to other markets to attract issuers and investors to the market.

Minimize fragmentation in market infrastructure

Many emerging countries have, through legacy or other reasons, multiple similar market infrastructure providers (e.g. several credit rating agencies) that may have overlapping functionalities. While multiple players in the market increase competition, it can also lead to market fragmentation and inefficiencies.

Policy-makers should weigh the benefits of local competition relative to the benefits of economy of scale and then determine whether to encourage consolidation among market infrastructure providers or limit new entrants, for example, for post-trading activities such as clearing and settlement, where consolidation has significant benefits for managing financial risks and improving market transparency. Strategic alliances with global partners should also be considered when they can enhance market operations better than can be achieved locally.

Ensure market infrastructure is competitively positioned

Market infrastructure providers have to be responsive not only to changing demands from market participants, but also to globalization, innovation and technology. To do so, their business structures and strategies should be well-positioned to take advantage of new business opportunities. Market infrastructure providers, like corporations, may operate differently under various incentive and ownership structures.

In early stages of market development, it may be more effective to have government-backed or closely held market institutions. Policy-makers should encourage privatization or demutualization as the market expands to ensure they remain competitive.

Advances in technology have made it possible for emerging markets to accelerate their capital market development. Emerging countries that choose to adopt internationally recognized market infrastructure and technology will not only be more efficient in attracting foreign investor capital the short run, but will also be able to scale up more easily as the market grows.

Country case study

Turkey

In December 2012, Turkey passed the New Capital Markets Law to modernize its financial markets, including merging its three securities exchanges (Istanbul Stock Exchange, Istanbul Gold Exchange and Derivatives Exchange of Turkey) into one umbrella exchange (Borsa Istanbul). Borsa Istanbul is 49% owned by the Turkish government, with plans to completely privatize.

In another example of Turkey's public-private partnership model, NASDAQ holds a minority stake in Borsa Istanbul as part of a strategic partnership agreement that allows Bursa Istanbul to use NASDAQ's market technologies.

Turkey is currently negotiating with Euroclear Bank to permit Euroclear, the world's largest bond settlement system, to process Turkish debt trades. Allowing Euroclear to settle Turkish debt trades would open the Turkish market to more international investors, many of whom require Euroclear settlement.

Develop a sophisticated and competitive environment for financial intermediation

Issuers typically go through a bank to underwrite their debt issuances, which usually involves significant costs, such as advisory and underwriting fees. Policy-makers should encourage the development of a strong financial intermediation industry and foster constructive competition through deregulation of bank activities and fee structures to place downward pressure on issuance costs.[64]

Promoting the acquisition of talent in the financial intermediation industry will also help bring down the long-term costs associated with these services. International banks play a key role, particularly in the initial stages of development, by bringing their wealth of experience and expertise; even for simple processes such as issuing a bond to an international investor, the paperwork navigation can be complex and daunting even for new sovereign issuances, let alone for corporates. International banks also typically have internal specialists for these functions (e.g. evaluating credit, underwriting, etc.) and can help introduce best practices in these activities.

The landscape for financial intermediation is changing. Financial regulations are increasingly limiting international banks' ability and willingness to underwrite debt and take on additional liabilities on their balance sheets. Technological advances are also opening access to financing, particularly for smaller businesses, through non-traditional channels such as crowdsourcing or peer-to-peer lending.

Emerging and developed markets alike should evaluate how the traditional capital markets model could evolve to address these new changes and take advantage of opportunities to expand access to financing both within and outside of corporate bond markets.

Improving efficiency of the secondary market? Opportunities for standardization, centralization and "electrification" in the secondary market

As the global corporate bond market continues growing, the status quo infrastructure and process for secondary market activity is facing challenges in keeping up with evolving demand. Recent regulatory reforms have further reduced liquidity in the secondary corporate bond market; greater capital requirements for banks are decreasing banks' ability to hold large inventories of corporate bonds for market-making. Regulators are also pushing for greater transparency, which is currently lacking in corporate bonds' secondary markets.

Most corporate bonds are traded over the counter (OTC) where transactions are handled bilaterally between dealer and customer or dealer and another dealer; the dealer typically holds the bonds in inventory on their balance sheet. OTC markets are decentralized, and pricing information is limited to quotations provided by dealers to their clients. This limits market transparency and price discovery as these activities are often not publicly disclosed.

Furthermore, dealers withdrawing from the market can disrupt the ability of market participants to buy and sell a given security, further diminishing liquidity. In contrast, stocks are typically traded in multilateral agency markets, where trades are more standardized and conducted electronically via exchanges, clearinghouses and electronic communication networks.[65]

In many countries, trading for the more robust sovereign bond market is still not done electronically or through an exchange, which limits adoption for the corporate bond market. As a result, some in the industry have debated solutions to bring about greater transparency and efficiency and, in turn, liquidity to the secondary market.

First, shifting trading activity onto centralized electronic platforms such as exchanges could improve liquidity by bringing together multiple buyers and sellers on a common trading platform. Increased "electrification" could help speed up trading processes, improve data collection and transparency, and limit bureaucratic interference.

Second, changing the mechanism for trade execution would also be important. Corporate bonds are currently traded when a buy-side client asks several sell-side dealers for price quotes before choosing a dealer with whom to transact. Moving away from such a "request for quote" towards a "central limit order book" method will allow buy and sell quotes to be matched up more efficiently. Complete disintermediation of dealers, however, is unlikely to occur in the near-term and furthermore, may be a difficult model to sustain.[66]

Last, a key reason that corporate bonds have continued to trade OTC – even in developed markets – is because the bond universe is highly fragmented. Corporates issue bonds whenever market conditions are favourable and as financing needs arise, resulting in a large number of bond issuances. For example, comparing the number of bonds and equity securities outstanding for the 10 largest US issuers, each company has one common equity security outstanding, as compared to over 9,000 total bond issuances outstanding collectively.[67]

Standardization in bond issuance characteristics (e.g. minimum tranche sizes, interest payment calculation, principal repayment dates) could improve liquidity by reducing the number of unique issuances outstanding. However, issuers would need to weigh the potentially lower issuance costs from standardization against the loss of flexibility.

A number of structural challenges of the corporate bond market have resisted its transition to a new model; these include the lack of issuance standardization, large number of instruments, low trading velocity and volatile liquidity.[68]

Regulation and technology should help drive innovative solutions to overcome these challenges; despite this, transitioning from an OTC model will be a significant undertaking and its benefits likely not evident for emerging markets until later stages of corporate bond market development, when there is a sizeable volume of potential transactions on the secondary market.

D. Attract Global Interest

D1. Form and communicate a clear strategy for capital markets development

As government sponsorship is a crucial element of successful corporate bond market development, the formation and communication of a capital markets strategy is important for signalling that the government is committed to the development process, understands the key challenges and required actions, and is taking a comprehensive approach to development.

Furthermore, a credible strategy can promote market growth by minimizing market confusion and scepticism, and provide a platform for productive collaboration between government and public sector market participants. As part of forming the strategy, policy-makers should:

- Define a clear vision for the country's capital markets, including any ambitions to be a financial centre and plans for regional integration
- Evaluate the current state of capital markets development and identify competitive advantages and structural challenges
- Outline an actionable and prioritized list of development initiatives
- Lay out an implementation framework, including proposed sequencing of the initiatives
- Establish a desired time frame for implementation

The plan should not treat each area of capital markets – equity vs bond markets – in isolation, but should try to communicate a broad view of the landscape in which investors and issuers can expect to participate. Public communication of the strategy can also serve as effective marketing.

D2. Implement a tax regime that is aligned with financial development objectives

Taxes related to capital market activities are often important sources of revenue for emerging countries. As such, regulators need to evaluate the trade-offs between their ambitions for capital markets development and fiscal objectives to determine whether to use tax incentives to encourage market participation.

There are elements that can be taxed that emerging countries can use as levers for tailoring their taxation framework to best support their financial development goals. These include the type of product taxed, the type of market player taxed, the base for taxation and taxation on holding periods less than the defined time frame. Chile is an example of a country that has imposed taxes on foreign investments with a holding period less than one year.

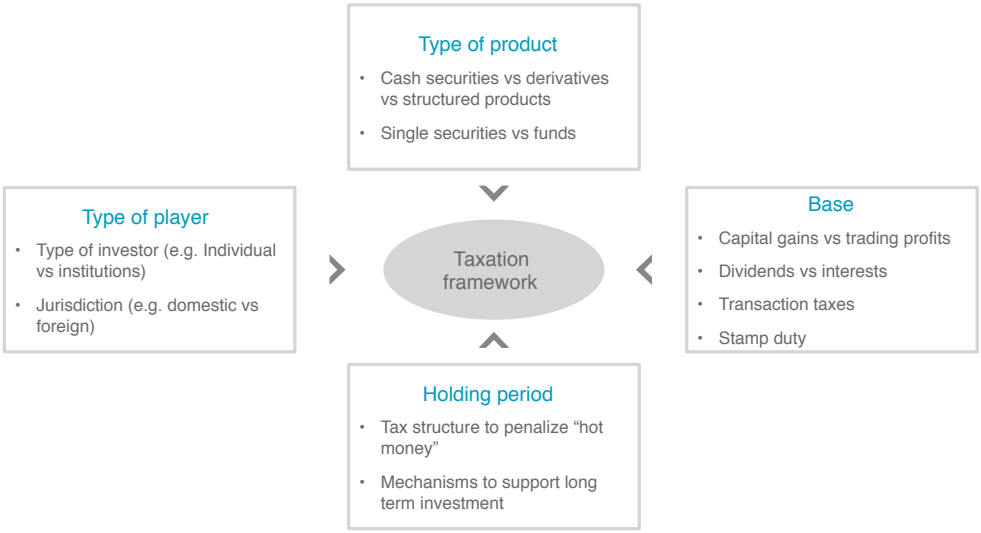
Regulators can determine the best lever to use by first defining which participants and capital markets sub-sectors should be incentivized as priority. Also, during the course of restructuring their taxation framework, regulators should review the current tax regime to see if there are any areas that may create disincentives for participation in the market (e.g. having a capital gains tax for foreign investors when regional peers do not).

For countries that have the ambition to establish themselves as a financial centre, minimizing or completely eliminating these withholding taxes may be essential to encourage foreign participation and remain competitive versus other international trading centres.

For example, Hong Kong, Singapore[69] and the United Arab Emirates do not have capital gains or interest income withholding tax. Indonesia is another example of an emerging market that is considering tax breaks for investors in domestic corporate bonds.[70]

Last, tax code and operations should be articulated to minimize confusion among market participants.

Figure 16: Taxation framework



Source: Oliver Wyman

D3. Position country to be included in global indices and portfolios

Foreign investors typically construct their emerging market portfolios based on an emerging market benchmark index. Countries that are not categorized in these benchmarks stand to lose out on significant investments as asset managers are not allowed to include securities from these countries in their emerging market portfolio (conversely, some countries may decide that *not* being included in global indices is a strategy that can provide global investors with options for higher yield and diversification).

While countries should not form their financial development plan based solely on the criteria required to be included in an index, the criteria provide good benchmark goals to guide sovereigns as they develop their bond markets.

While there are different bond indices and each has its own criteria for including a country, some common factors exist across the providers. Composition and weightings of these indices are typically affected by the countries' economic and market growth. The most widely-used for EM corporate bond markets include the J.P. Morgan Emerging Markets Bond Index (EBMI) suite of three bond indices – EMBI+, EMBI Global and EMBI Diversified. However, issuances included in the benchmark must be denominated in US dollars and have a threshold outstanding volume and maturity.[71]

While EMBI only tracks US-dollar-denominated sovereign debt, other index providers construct local currency benchmarks, such as the four EM LCY non-sovereign bond indices launched by Bank of America Merrill Lynch in 2013.

In addition to inclusion in global indices, the international credit ratings of emerging market sovereign governments' issuances are also important. The EM sovereign credit rating will also impact the ratings and hence cost of capital for domestic corporate issuances, as only in limited instances is corporate debt priced more attractively than its sovereign counterpart.

International credit ratings for sovereign issuances consider the key factors that would affect a sovereign government's willingness and ability to service its debt on time and in full. This includes some of the macro-fundamental factors that were discussed in Section I, such as institutional effectiveness and political risks, economic structure and growth prospects, external liquidity and international investment position, fiscal performance and flexibility, and monetary flexibility.[72]

Countries can also construct their own bond indices composed of key domestic issuances, which can lead to greater visibility to foreign investors. Indices can allow foreign fund managers to incorporate the country's issuances more readily in their own portfolio by simply replicating the index's composition or tracking their performance against the index. Furthermore, a country corporate bond index may drive issuers to proactively address their gaps in order to be included in the index.

Countries may also take further action – such as conducting international roadshows or marketing – to improve awareness of their securities as distinct from the emerging market asset class.

Country case study

Singapore

While the development of Singapore as a financial centre began in the late 1960s with the emergence of the Asian Dollar Market, the 1997-1998 Asian crisis highlighted the need for a broader range of financing to supplement the dominant banking sector and existing equity market. As such, in 2000, the Monetary Authority of Singapore (MAS) launched a series of initiatives to bolster the domestic bond markets and, in parallel, support Singapore's objective for financial sector development.

Prior to 2000, Singapore's bond markets were relatively undeveloped. Consistent budget surpluses meant that the government did not need to raise funds in the capital markets. Thus, Singapore first started by building the government bond market as a means to create a liquid benchmark yield curve for the corporate bond market. Consequently, the corporate bond market grew in tandem with the government bond market.

In line with its financial sector development objectives, Singapore sought to transform its corporate bond market into an attractive marketplace for both domestic and international issuers and investors. Starting in 1998, the country progressively liberalized its long-standing policy that discouraged the internalization of the Singapore dollar (SGD) and allowed foreign institutions to issue SGD-denominated bonds. Furthermore, regulations were fine-tuned in 2009 to qualify high-grade securities by foreign entities as regulatory liquid assets.[73] Now, foreign entities account for more than one-quarter of the domestic market issuances.

Singapore's stable political environment, strong economic fundamentals, prudent fiscal policies and strategic location in Asia make it an attractive market for foreign investors. Additionally, there are no capital controls, investment or hedging restrictions, and no withholding tax on interest income for qualifying debt securities.[74]

In 2001, the MAS conducted an international non-deal roadshow to promote Singapore government securities as well as other Singapore-dollar fixed-income financial instruments. In 2005, Singapore became the first Asian nation outside of Japan to be included in the Citigroup World Government Bond Index and was consequently included in numerous other global indices. Furthermore, the SGD bond market's historical performance has tracked the overall Asian bond market fairly well, which has made SGD bonds an efficient tool for foreign investors looking to replicate the Asian bond market.[75]

From 2000 to 2013, Singapore's LCY corporate bond market grew from SGD 34.4 billion to SGD 119.5 billion and is now one of the most developed in Asia.[76]

Moving beyond the Common Framework

Corporate bond markets have developed tremendously over the past decade. Many emerging countries have seen their corporate bond markets expand significantly. These countries' development paths provide additional contemporary models and common frameworks that today's emerging markets can reference and provide examples that underpin the policy recommendations outlined in this report.

While these precedents are helpful, policy-makers should still not fail to consider their unique country situation when determining the strategy for their own corporate bond market development. It is important to recognize that a country's development path will be shaped by various factors such as its economic and political situation (e.g. whether the government has traditionally been running a budget surplus or deficit), structure of its private sector (e.g. whether they have a large number of state-owned enterprises) and economic policy tendencies (e.g. whether governments are inclined to issue debt). Rather than viewing these as constraints to the adoption of known frameworks, emerging countries have the option of exploring alternatives, which may well help them accelerate their corporate bond market development process.
One example of this is the currently shared view that a well-developed (where well-developed can be defined by extended maturity, sufficient liquidity and stable credit risks and yields) government bond market is necessary to establish a benchmark yield curve for the corporate bond market. For emerging countries that have not yet been able to establish a well-developed government bond market, governments may consider an alternative option as a substitute or complement in the near term to prevent stalling corporate bond market development.

Developing a benchmark yield curve – current and potential alternative approaches

As discussed earlier, government debt markets generally precede corporate bond market development as governments are typically the first major borrower requiring access to large volumes of long-term capital. Sovereign bond issuances also play an important role in the financial system by serving as:

- *An indicator of anticipated economic and political condition*: Sovereign yields generally provide good insights into the market's expectations for future interest rates as well as provide investors a view of how disciplined the government is about its financial development
- *A base asset for portfolio construction*: Government bonds are low volatility, low credit-risk assets around which banks and investors can build their balance sheets and portfolios
- *The hedging vehicle of choice*: Banks and investors use sovereign issuances to hedge away specific risks such as interest-rate risk
- *The benchmark yield curve*: Investors can price other non-government securities using this as a risk-free reference for yields at various maturities

A benchmark yield curve is a critical element of a corporate bond market. Sovereign bonds are generally seen as the ideal candidates to play this role. Following this thinking, many emerging sovereigns have increasingly been issuing debt more frequently and at regular maturities, some with the sole purpose of developing a benchmark yield curve for the corporate bond market.

Government bonds as benchmark issuances

There are three key characteristics that are required for benchmark issuances in order for them to be effective reference points for valuing corporate securities:

- *Stable credit risk*: While benchmark issuances do not necessarily need to be risk-free, they need to have relatively stable credit risk to serve reliably as a reference. Government bonds are not devoid of risk; however, they are often perceived to be the most creditworthy of borrowers. Their issuances are generally considered to be free of default risk and this is supported by very low historical sovereign default rates. For this reason, the government yield curve is widely regarded as the best proxy for the nominal risk-free rate.
- *Relatively liquid (typically associated with large regular issuances)*: Liquidity is important for price discovery; yields for benchmark issuances need to be transparent so other issuances can be priced accordingly. Empirical studies have shown that issuances need to be of sufficient size and frequency to allow for adequate secondary-market liquidity.
- *Ability to issue over a wide range of maturities*: Owing to their typically diverse and large borrowing needs, governments are able to offer a wider range of maturities than many other borrowers and are able to access the market on a frequent basis.

Because sovereign issuances commonly possess these characteristics or governments can more easily issue them such that they possess these characteristics, they are good candidates for establishing the benchmark yield curve.

Where this traditional approach may not work

However, a well-developed sovereign-based benchmark as a prerequisite for corporate bond market development may also be limiting to the latter's growth. First, establishing a well-developed government bond market takes time. While some emerging markets have had success in jumpstarting growth through a more disciplined approach to issuances, achieving the liquidity required for yield curves is still a long and complex undertaking.

Not all emerging country governments are able, in the short-term, to issue debt in the frequency or volume required to adequately serve as benchmark issuances. For example, in 2013, Barbados was forced to withdraw a new bond issue when Moody's downgraded the sovereign rating

by three notches as a result of their large budget deficit; their bonds would have been viewed as junk credit. Even prior to this, an authoritative benchmark yield curve did not exist as the government did not issue frequently enough and with enough varying maturities to achieve significant secondary market liquidity.[77]

Egypt is another example where the government bond market is underdeveloped and the establishment of a proper primary dealer system was disrupted by political instability. The country struggled to place their recent local currency bond issuances and decided to postpone additional issuances.[78]

Governments that run a budget surplus do not need to access the debt market. Among current emerging countries, Nigeria and South Africa are examples where government bond markets have substantially contracted in recent years due to the countries' strong oil revenues and low need for government financing. Some countries, such as Singapore, established a government bond market anyway solely to establish a benchmark yield curve. But this begs the question as to whether or not there is a more efficient way a market benchmark can be established.

Some countries may not want to issue additional debt if they are already highly indebted, as extensive public debt may risk causing upward pressure on long-term interest rates.[79] A sizeable government bond market may also consume investors' appetites and cannibalize corporate bond issuances, especially in countries where the institutional-investor base and asset management industry is small.

Alternative options for establishing a benchmark yield curve

Some countries may wish to grow their corporate bond markets prior to fully developing their government bond markets. Various examples exist of countries where alternative benchmarks have been used prior to a fully established government bond market. For example, in the US, it was only in recent decades that US Treasury issuances became the dominant benchmark yield curve. Previously, a major corporate (American Telephone and Telegraph – the predecessor to AT&T) served as the benchmark for pricing.

Similarly, in the past, the Japanese government did not need to access capital markets to finance their expenditures and, as a result, top-grade corporate issuances from telegraph and telephone companies as well as bank debentures served as the benchmark reference.[80]

Figure 16 examines potential alternative options and discusses their benefits and risks. These may serve as replacements for or complements to government issuances as benchmarks. They include issuances by entities such as supranational organizations, sub-national states, state-owned or government-sponsored entities and private-sector corporates; and different construction of the benchmark curve, such as using a composite benchmark, collateralized securities and other types of non-vanilla fixed-income instruments.

Risks should be properly evaluated when considering alternative approaches

While these alternative options offer viable opportunities for emerging and frontier markets that have challenges with developing a robust sovereign market in the near term, the potential risks involved with adoption cannot be emphasized enough (only a subset of which have been identified in Figure 16).

For example, if the yield curve is based on the largest issuer of bonds, such as a state-owned oil company (which is not unrealistic in many emerging markets), company scandals, decrease in oil prices or other factors that impact company's financial viability would not only impact the risk premium for its bonds, but also that of all the domestic issuances that are priced off them.

This risk was demonstrated recently with the impact of the collapse of oil prices on the bond yields for the biggest emerging market oil producers and, similarly, with the recent corruption scandal tied to Brazil's largest state-run oil firm. As the largest domestic issuer of corporate bonds, the oil company had served as benchmark for many other Brazilian companies. Without this benchmark, domestic issuers may refrain from accessing the bond markets altogether.[81]

Many credit rating agencies have not only downgraded the company from investment grade to nearly junk value, but also lowered the rating of Brazil's sovereign issuances as well as the issuances by corporates from associated sectors.

Countries should consider these alternative options, but also recognize their limitations as a long-term sustainable solution. As mentioned, the sovereign debt market serves many other functions in the financial system in addition to serving as the benchmark yield curve. Many investors may be wary of participating in the market without the existence of a robust sovereign debt market.

Some investors who are only interested in pure corporate risk may not be allowed to invest in a market unless there are sovereign issuances that can be used to hedge against the country risk. Similarly, many banks may not allow for trading of corporate bonds through liquid market trading desks without the ability to manage risk through sovereign bond trading; this risk function is important for liquidity in a local bond market.

As developing countries are considering approaches to developing their domestic corporate bond markets, they should be aware of and consider available non-traditional options and properly evaluate the benefits and risks involved with each option.

Figure 17: Exploring alternative options to government bonds as benchmark issuances

Alternative options	Potential necessary conditions	Relevant examples	Stable-credit	Liquidity	Maturity range	Potential benefits and drawbacks
Supranational organization issuances (e.g. development banks)	• Only applies for countries that are member states of a supranational organization	• Many development banks have launched "benchmark programs" (large, regular bond issuances at key maturities) to improve the liquidity of their securities • Examples include: Korea Development Bank, KfW (Germany), Islamic Development Bank (Saudi Arabia) • India: IFC issued its first onshore rupee bond (Sep 2014), setting a triple-A benchmark; innovative in its structure – four different tranches with different maturities all under same issuance	●	◕	◕	+ May be more immune to single state's political and economic risks + More willing to issue multiple maturities at once vs sovereigns – Similar to government bond market, takes time to develop a full yield curve made solely from supranational issuances (but may be able to serve as complement) while not directly contributing to the size of the corporate bond market
Sub-national states/entities issuances	• Countries need to have relatively large and stable sub-national states	• German sub-national states are often frequent issuers of debt; companies of these states can be priced based on the sub-national yield curves • Mexico, Brazil, South Africa, Hungary, and Russia all have relatively developed municipal bond markets, which (often with guarantee facilities) help to finance local infrastructure projects	◕	◑	◕	+ Sub-nationals may be more inclined to issue debt as they tend to have limited self-revenue and may lack funding from national government; many have traditionally relied on bank loans – Sovereign bond market play a critical role in the early stages of development of the sub-national market; though over time, they can develop relatively independently (World Bank, 2000) – Requires multiple sub-nationals to issue debt frequently else yield curve only relevant for sub-set of issuers and therefore less effective
Corporate issuances						
State-owned/ quasi-state owned/government-sponsored enterprises	• NA	• Mexico: Pemex, a state-owned oil company, has come to market various times with benchmark-sized bonds and has created its own yield curve	◕	◕	◑	+ May be more inclined to issue multiple maturities at once – May be linked to same challenges keeping governments from issuing their own debt
Private-sector	• Corporates should be well-established and have significant market share in order to ensure relatively stable ratings outlook • For example, utility companies with protected monopoly in a sector	• US: American Telephone and Telegraph during the 1950s and 1960s until its role was taken over by the US Treasury • Japan: Investment-grade telegraph and telephone companies during same period (Woolridge, 2001) • Korea: Prior to 1997, sizable corporate bond market led to yields on three-year corporate bonds (most with guarantees from banks, securities house or guarantee funds) serving as benchmarks (Bank of Korea, 2005)	◑	◔	◑	+ Directly accelerates the formation of a corporate bond market – Difficult to maintain liquidity condition as not that many issuers can/need to issue debt as frequently and in as large volumes as the government
Composite benchmark (Basket of issuances)	• Composite should be composed of similar issuers • For example, may work best with a group of sub-national issuers	• Primary issuances are often priced off of "comparables" • Euro area benchmark yield curve	◕	◕	◑	+ Composite of multiple issuers may provide a more accurate assessment of overall market risks and expectations + Allows for both credit and liquidity condition to be met even when one issuer gets down-graded or fails – Need sufficient number of similar issuers – Similar issuers may require debt of similar maturities therefore, does not extend yield curve
Collateralized securities/Covered bonds	• Requires relatively sophisticated financial intermediaries/institutions to construct securities	• US: Pre-crisis, Freddie Mac and Fannie Mae both issued non-callable MBS in effort to create a new benchmark yield curve • Mexico: In 1987, Telmex (monopoly phone company) securitized its telephone service receivables from AT&T. As they originated from highly reputable US company, this allowed Telmex to issue investment-grade bonds when Mexico was restructuring its sovereign debt and at higher credit rating vs sovereign issuances (PPIAF, 2008)	◔	◑	◑	+ Frees up capital for banks to generate additional loans to SMEs – Most emerging markets don't have the legal regime to govern nor adequately sophisticated financial institutions to construct and model the risk appropriately for asset-backed securities – Covered bonds are typically structured such that bond holders have seniority even over deposit holders; puts savers at disadvantage – Pre-payment risk and other embedded options may make it hard to back out interest rate expectations (Woolridge, 2001) – Requires a fairly developed industry for the underlying asset
Other fixed income instruments	• Most applicable when macroeconomic conditions make it hard for governments to issue regular bonds	• Inflation-indexed bonds (e.g. Chile) • Monetary stabilization bonds (e.g. Korea)	●	●	●	+ Allows governments to issue debt at more reasonable cost of financing even under unfavourable macro-conditions (e.g. high inflation rate) – Transfers inflation/interest rate risks to the issuer

○ Does not possess characteristic *(relative to regular government bonds)*

● Fully possess characteristic *(relative to regular government bonds)*

Conclusion

Emerging countries' economies have progressed significantly over the past decade. Along with economic growth, their financial markets have also deepened and access to private credit has expanded. Despite these advances, emerging markets have significant room for growth.

In particular, emerging corporate bond markets have remained relatively nascent. In the current credit-constrained environment, accelerating their development is more crucial than ever in order for emerging economies to sustain their economic growth. In particular, emerging corporate bond markets have remained relatively nascent; their development will be crucial as a complementary source of financing to traditional bank lending.

The report recommends actions to support emerging governments during this process. Emerging and frontier market economies that do decide to promote their corporate bond market development will reap significant long-term benefits.

Policy-makers can cultivate strong issuer participation by limiting market biases against corporate bonds as a form of financing and streamlining the process for issuing on the market.

Forming a strong market framework through robust regulatory and legal frameworks and corporate governance standards is fundamental for providing investors with the confidence to enter the market. more confident in participating in the market. To ensure stable flows of capital and functioning of the financial markets, foreign investments need to be supplemented with a sizeable domestic capital pool that can be fostered through education and the development of asset managers and institutional investors.

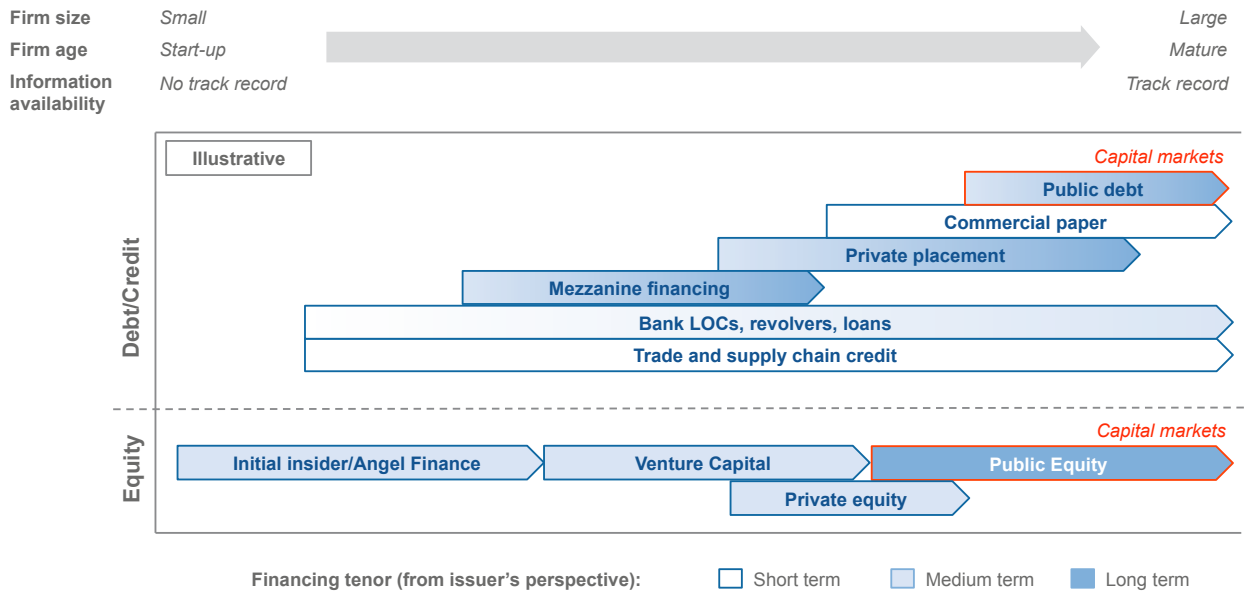
Finally, governments should ensure that the market ecosystem efficiently supports the capital exchange required by issuers and investors and, more broadly, is well-positioned to draw global interest to the country.

All of the above are most successfully implemented when supported by continuous public-private cooperation and dialogue. The World Economic Forum hopes this report serves as a useful starting point for that collaboration and highlights opportunities not only for policy-makers, but also for market participants to support capital markets development.

This report is only the first step in the Forum's initiative to support progress in emerging capital markets development; the recommendations are intended as a platform by which country-specific initiatives can be crafted with the support of local market stakeholders. As the global regulatory, financial and technological landscape transforms, these important partnerships with market stakeholders can help emerging market governments determine how that may affect the way they implement and prioritize the recommended policy actions for their country.

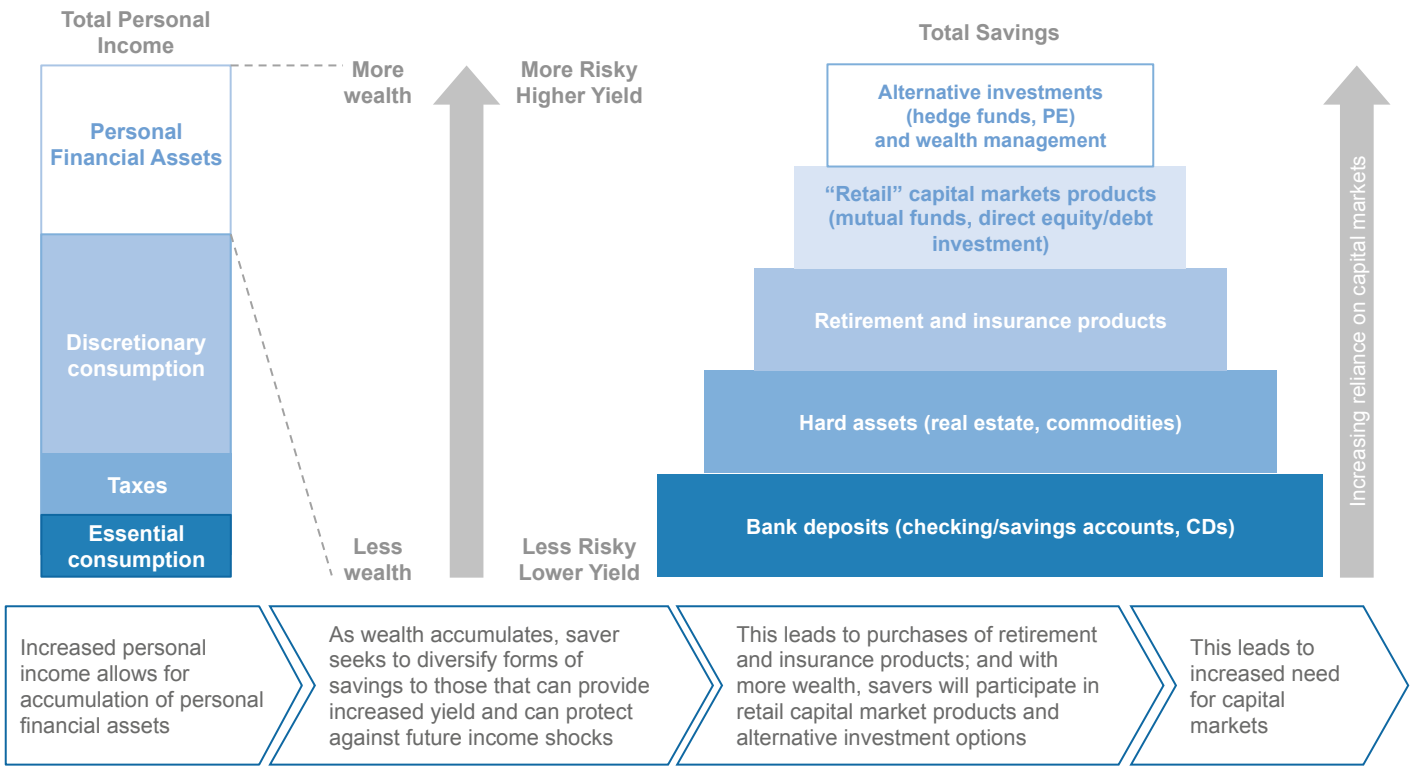
Appendix

Figure 18: Illustrative evolution in corporate financing



Adapted from Berger and Udell (Federal Reserve; 1998)

Figure 19: Illustrative evolution of capital savings and investments



Source: World Economic Forum

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Endnotes

1. For the purpose of the report, emerging markets (also referred to as "emerging markets economies" or "emerging economies" in the report) have been defined as the 23 economies that are classified as such by MSCI unless otherwise indicated. These include Brazil, Chile, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Malaysia, Mexico, People's Republic of China, Peru, Philippines, Poland, Qatar, Republic of Korea, Russian Federation, South Africa, Taiwan, Thailand, Turkey and the United Arab Emirates.
2. For the purpose of the report, frontier market economies have been defined as the 33 countries that are classified as such by MSCI as of Feb 2015. This includes Argentina, Bahrain, Bangladesh, Bosnia-Herzegovina, Botswana, Bulgaria, Croatia, Estonia, Ghana, Jamaica, Jordan, Kazakhstan, Kenya, Kuwait, Lebanon, Lithuania, Mauritius, Morocco, Nigeria, Oman, Pakistan, Palestinian Territories, Romania, Saudi Arabia, Serbia, Slovenia, Sri Lanka, Trinidad and Tobago, Tunisia, Ukraine, Vietnam and Zimbabwe.
3. Exceptions being Taiwan, Indonesia and the Philippines
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   "Emerging countries" include the 19 largest constituents of the MSCI EM benchmark (Brazil, Chile, Colombia, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, People's Republic of China, Peru, Philippines, Poland, Republic of Korea, Russian Federation, South Africa, Taiwan, Thailand and Turkey) plus Saudi Arabia. "Developed countries" include Australia, Canada, France, Germany, Hong Kong SAR, Israel, Italy, Japan, Netherlands, Singapore, Spain, Switzerland, the UK and the US.
7. Underdeveloped currency swap markets (and more generally underdeveloped markets for hedging derivatives) in emerging markets can be due to various current or legacy factors, including limited overall market sophistication, inadequate appreciation of EM policy-makers of the importance of hedging instruments, restrictive capital account and monetary policies (e.g. hesitancy in adopting a free floating currency regime) and direct restrictions on the FX market (e.g. imposing heavy requirements on non-resident FX trades thereby deterring foreign participation).
8. Emerging markets include countries categorized as "emerging" or "developing" economies by the Bank for International Settlements. These include: Argentina, Brazil, Chile, Colombia, Croatia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, People's Republic of China, Peru, Philippines, Poland, Qatar, Russia, South Africa, South Korea, Taiwan, Thailand, Tunisia, Turkey, United Arab Emirates, Uruguay and Venezuela.
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30. A much cited view (Greenspan, 2000) is that corporate bond markets act as “spare tyres” to bank lending during shocks to banks’ balance sheets and vice versa. Some evidence of this can be observed in the early 1990s in the United States and in the late 1990s in Hong Kong. An alternative view, supported by empirical research, is that bond issuances and bank lending are typically positively correlated (Jiang et. al, 2001) and bond markets provides a partial offset to cutbacks in bank lending; as such, the robust functioning of both are crucial for stable access to financing.
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