Asia's Capital Markets: Strategies for Sustained Growth

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Asia's Capital Markets: Strategies for Sustained Growth

EXECUTIVE SUMMARY

Deep, liquid and efficient capital markets are critical to the continued development of Asia's[1] economies. Encouraged by regional organizations such as APEC, ASEAN and the ADB, Asia's markets have benefitted from increased openness and a range of reform efforts over the last two decades.

While the pace of economic growth in Asia continues to exceed that of other regions, the structural development of its capital markets has not kept pace. This needs to change if growth is to continue at the accelerated pace necessary for the region to compete effectively with the mature economies in the West.

Asia's rapid growth has led to significant wealth generation, but key challenges remain to be addressed for that growth to continue in a sustainable fashion. The substantial infrastructure still needed to spread development geographically, improve productivity and sustain rising wages is straining government fiscal limits, and requires the efficient mobilization of private capital.

Asia's intraregional trade is growing, and economic slowdowns in Europe and the U.S. only highlight its increasing importance, as regional economies look to diversify away from traditional Western export markets. Increasingly, this trade will be denominated in local currencies, requiring local currency intermediation and hedging products, that in turn assume a higher level of market innovation than current regulations allow.

Changes in demand and demographics, along with critical social development needs, are now altering future prospects for the region. Success will be strongly influenced by government policy responses, market innovation and the availability of appropriately priced capital to support growth. To ensure this kind of access to capital, Asian capital markets should offer a wider and deeper array of financing and investment possibilities to complement the current bank-lending model. This requires government policies that allow and encourage market innovation, especially across borders. In the era of the Internet, investors will ultimately demand access to a greater range of products offered throughout the region.

A number of positive variables are currently at work across Asia. Trade flows are increasingly intraregional, creating a more balanced and stable growth model in the future. In addition, pension and social security pools with longer-term investment horizons are starting to mobilize domestic savings, aiding investment in infrastructure.

However, for real sustainability, capital markets should become more harmonized, transparent, flexible and liquid. National jurisdictions need to ensure genuine cross border flexibility to stimulate investor interest and commitment, while removing restrictions on market access in favor of a more open and innovative environment.

This paper focuses on the role, current state of, and requirements for the ongoing development of five major markets: Equities, Fixed Income, Foreign Exchange, Commodities and Derivatives.

[1] References to Asia in this paper refer to Asia (ex-Japan)

Equities
Equity markets provide access to capital for a broad range of needs, including infrastructure funding, investment in corporate growth, and driving innovation by channeling low cost capital to young, fast growing companies. For investors, equity markets provide growth and yield opportunities that span every industry, sector and market worldwide.

Effective equity markets are key to the real economy, providing funding for innovation and growth, supporting job creation, creating and distributing wealth, and ultimately enhancing financial stability, security and improvement in standards of living.

Asia's equity markets differ from each other in numerous ways, and range from the developed markets of Hong Kong and Singapore, emerging markets such as China, Indonesia and the Philippines and frontier markets such as Sri Lanka and Bangladesh. Continued efforts are required to provide international investors with confidence in and access to open, efficient and attractive equity markets.

Healthy, well functioning equity markets are an essential element for Asia's continuing success.

Fixed Income
As economies mature, established government and corporate bond markets become increasingly important for continued, sustainable economic growth. Developed bond markets contribute to financial stability and offer opportunities to fund a wide variety of public infrastructure and private sector enterprise.

An active local currency (LC) bond market becomes especially important as the main channel for long term investors such as pension funds and insurance companies. Other channels of financial intermediation (such as equity markets or bank financing) are generally more short term in nature, and offer different risk profiles. LC bond markets also promote financial stability by allowing policy makers to wield macroeconomic measures and monetary policies more effectively.

The current trend towards bank lending disintermediation suggests corporates will increasingly access debt capital markets, paving the way for lower issuance and funding costs, reduced stress on the banking system and increased investment opportunities for wholesale and retail investors. This trend will only continue if local markets enhance their liquidity and depth across the product spectrum, broadening investment appeal to a wider range of participants and ensuring a larger portion of Asian savings (both personal and institutional) remains within the region.

Several factors will encourage accelerated development in the bond markets: resolving retail market access issues, harmonizing legal documentation, implementing consistent and effective regulatory and legal environments, leveling playing fields for all participants, freeing information flow, developing a credit culture, and improving the bankruptcy, insolvency and resolution regimes.

Foreign Exchange
Today, the Foreign Exchange (FX) market is the largest and most liquid financial market in the world, acting as a global payment system and a key tool in international trading, currency hedging, and corporate cash flow and balance sheet management.

Due to the truly global and geographically diverse nature of the market, FX trading is a fundamental

financial activity that underpins global economic and commercial systems.

Following the Asian financial crisis, countries throughout the region responded by building foreign exchange reserves and establishing extensive swap lines among the regional central banks to overcome short term liquidity stresses. Additional flexibility in exchange rate regimes has allowed Asian currencies to fluctuate more freely.

When the global financial crisis decimated markets in 2008, Asian countries were better prepared to withstand the pressures arising from the fallout of the Lehman Brothers collapse. Increased currency flexibility and deeper USD liquidity in Asian central banks' reserves – built up as a result of the first crisis in the 1990s – sufficiently contained crippling currency fluctuations. As recovery took hold, several Asian currencies saw strong inflows resulting in rallies meeting post Asian crisis highs.

Going forward, Asian FX markets should strive to adopt international standards and practices, and address current roadblocks to market development. Issues such as excessive regulation, the introduction of centralized clearing and unnecessary margin requirements, lagging development in e-trading and a lack of currency convertibility all hinder the growth of FX markets across the region.

Commodities

Commodities markets play an important role in economies by reducing price volatility and risk, enabling price discovery and balancing production versus consumption. Presently, Asia's commodities markets vary in terms of sophistication, size and integration with global markets.

Regional markets are relatively large and sophisticated in base metals and certain agricultural commodities, where Asia is a major factor in trade flows. However, in other areas such as energy, Asia lacks sophisticated trading markets and considerable effort will be required to develop them to their full potential.

Asia accounts for more than half the world's consumption flows in most commodities traded today, but the region's commodity markets generally do not reflect this reality.

Even in Asia's "better developed" commodity markets, price discovery lags behind Western exchanges and volumes remain lower than justified by the region's significance, resulting in far higher volatilities and costs to users. This only encourages the trend of domestic capital flowing offshore to purchase relevant hedging instruments, only to return onshore to purchase the actual underlying commodity. It clearly makes more sense for all of the capital to stay within the region.

To support further development of Asia's commodities markets, countries around the region should seek to implement a consistent regulatory framework, improve regional market infrastructure and implement a consistent, regionally harmonized tax regime.

Derivatives

Derivatives markets create a number of economic benefits. Not only do they provide investors with an indication of future prices, but they also allow for effective hedging of risk – which in turn attracts more market participants, higher transaction volumes and greater liquidity.

Derivatives markets in Asia are, with some notable exceptions, small and relatively underdeveloped, especially

compared to those of the US and Europe. Although exchange traded derivatives are present in various forms (options, warrants, futures) in several markets, those markets are also fairly small.

Like all Asian and many other financial markets, the over-the-counter (OTC) derivatives market is highly fragmented, with different groups of countries having their own characteristics and levels of maturity.

In the aftermath of the financial crisis, the G-20 focused considerable attention on the role of the OTC derivatives market in the spread of systemic instability. Asian countries have responded differently to the proposed changes, and some participants may choose to scale down or even withdraw from markets if new regulatory hurdles, capital charges, reporting requirements and rising costs make their businesses untenable.

For derivatives markets to continue to grow, the region should address legal uncertainties and strengthen contract enforceability, manage extraterritoriality issues streaming from US and EU regulations, prevent fragmentation of Asian Central Counter Parties (CCPs), and accelerate development of credit derivatives markets.

SUMMARY OF RECOMMENDATIONS

1. ***Asian financial markets should harmonize and converge to encourage mutually beneficial growth.***
   A common thread across all asset classes is the importance of convergence and harmonization in a region that has no overarching governmental or even a single pan regional organization to drive such a process. The historical tendency to compete between the region's jurisdictions may no longer serve the best interests of market development. Instead, the region will benefit more from common standards and approaches that foster region wide development and growth. Mutual recognition agreements and moves towards implementing a substituted compliance regime throughout the region will pave the way for establishing global standards that work for Asia. Greater cooperation and participation by Asian policy makers at global multilateral forums such as IOSCO, G20 and the FSB may also help this process. There seems to be a real need for a more assertive regional voice amongst Asia's regulators to ensure the views and concerns of market participants and regional governments are heard, understood and acted upon at the global level.

2. ***Increase regional levels of transparency and corporate governance.***
   To enhance investor confidence and promote successful capital raising across asset classes, there is a need to continue promoting common standards and lifting the general level of corporate governance across the region. Better transparency in reporting and disclosure, along with convergence in accounting standards, will ensure that regulators are operating in a more unified fashion based on shared data, thus improving capital market quality, consistency and resiliency. A more coordinated and common approach toward listing rules, multiple share classes and the relaxation of restrictions on foreign investors will also enhance the region's capital raising environment – one in which capital raised is more likely to remain within the region.

3. ***Continue economic and policy reforms to stimulate capital markets growth.***
   Markets across Asia operate under a wide variety of laws, rules and restrictions. Reforms that permit the development of more market competition are likely to stimulate larger and more liquid capital markets for all types of investments. Policymakers will want to consider tradeoffs that may exist between measures that protect existing local market structures and those that may stimulate growth in new areas with which they may be less familiar. Financial market participants have a clear interest in articulating ideas for constructive reform; therefore, initiating greater dialogue with market participants will help to build the private/public partnerships critical to ensuring sustainable capital market development.

4. ***Develop infrastructure to support intraregional market transactions and risk management.***
   Changes now underway as a result of Basel III and other new measures are intended to drive new attitudes and approaches toward risk. Asian markets may become beneficiaries of some of these changes if they are able to create logical and efficient structures for intraregional transactions. This will require a coordinated and consistent approach to new requirements for regional trading, central clearing, trade reporting and regionalized risk management. Policymakers will also want to consider a common legal approach to counterparty responsibilities and contract enforceability across the region.

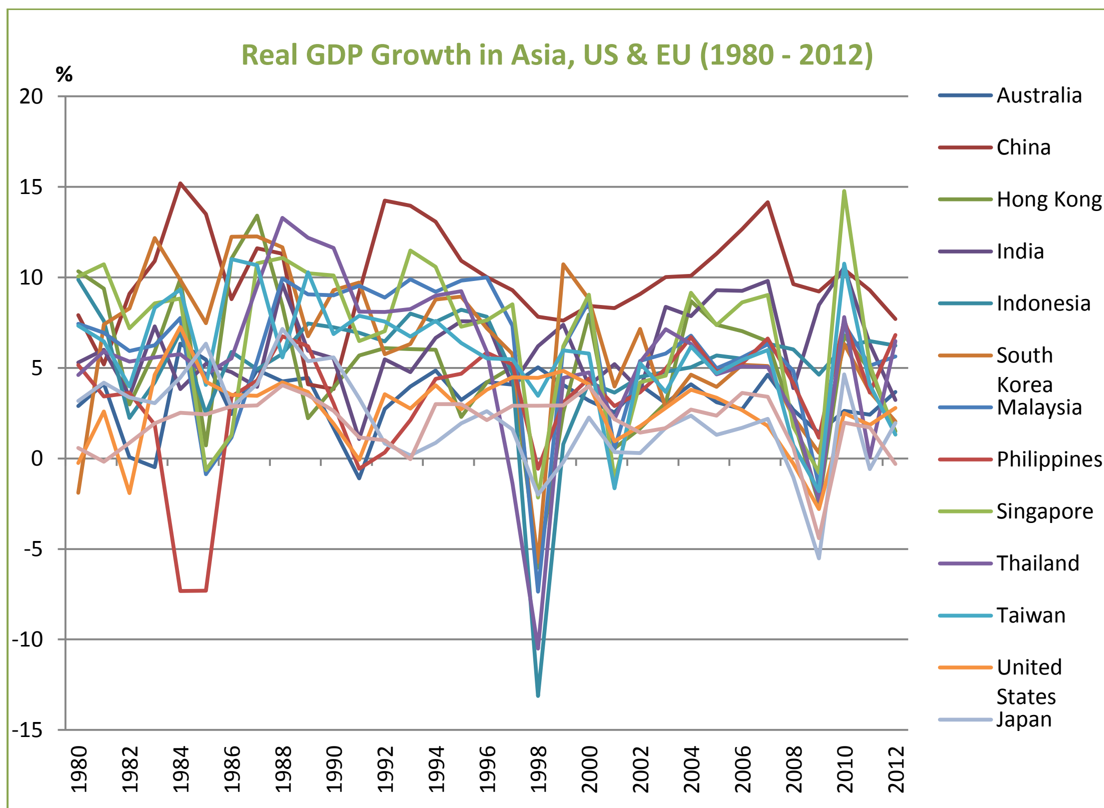
5. ***Collectively address laws with extraterritorial implications in Asia from a regional perspective.***
   The application of extraterritorial laws (Dodd-Frank, Volker, EMIR, MiFID, etc.) that will have impact in Asian markets represents a source of concern across all markets and asset classes. Regional governments should exert greater collective efforts to maintain the momentum required to address these extraterritorial encroachments. The shift of economic power to Asia puts regional policymakers in a far stronger position today, especially in light of desire to consolidate risk management responsibility more closely with locales where transactions actually arise. These efforts will be most effective when pursued jointly.

INTRODUCTION

Development of Asia's Capital Markets

Deep, liquid and efficient capital markets are critical to the continued development of Asia's economies. Encouraged by regional organizations such as APEC, ASEAN and the ADB, Asia's markets have benefitted from increased openness and a range of reform efforts over the last two decades. While the pace of economic growth in Asia continues to exceed that of other regions, the structural development of its capital markets has not kept pace. This needs to change if growth is to continue at the accelerated pace necessary for the region to compete effectively with the mature economies in the West.

Asia's rapid growth has led to significant wealth generation, but key challenges remain to be addressed for that growth to continue in a sustainable fashion. The substantial infrastructure still needed to spread development geographically, improve productivity and sustain rising wages is straining government fiscal limits, and requires the efficient mobilization of private capital.



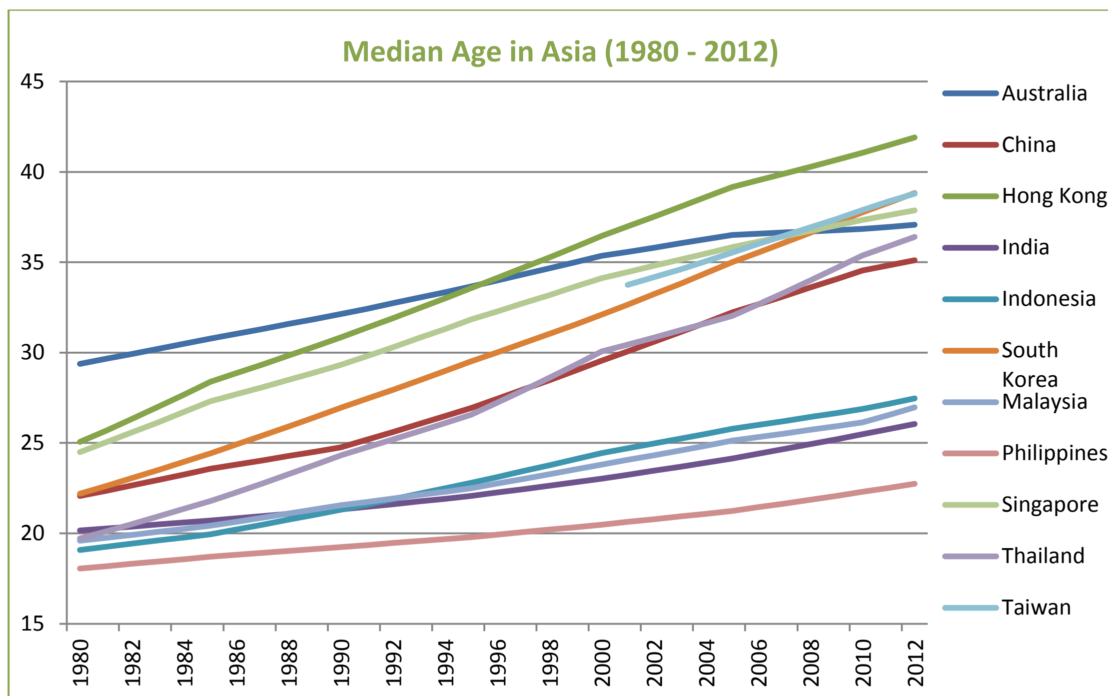
SOURCE: Haver, CEIC and United Nations

Despite diversity in the region's economies, further development of Asia's capital markets will bring widespread benefits to the region. Government policies can encourage the development of capital markets in ways that will support economic and social development objectives. Sound financial policies can also reduce concentrations of risk in the banking system, improve government and corporate credit ratings and through greater transparency, provide a better governance and control environment to the benefit of all market participants and stakeholders.

As an added benefit, effective and expanded capital markets will help to manage rising pressure to extend social safety nets. In part, this extension is

needed to encourage individuals to save less and spend more, but will also decrease traditional reliance on exports to mature markets in favor of domestic consumption.

Developed capital markets are also particularly important in areas where the demographic profile is aging. Programs to address the needs of aging populations will stretch government finances, making less public money available for infrastructure, education, health care and other needs – which in turn will require the support of larger capital markets. However, investing in the capital markets now through pensions and insurance to support the needs of an aging population in the future can ultimately be the long term funding source for infrastructure projects that are needed throughout the region.



SOURCE: Haver, CEIC and United Nations

A more efficient and comprehensive institutionalized private pension and insurance system will provide a stronger and less costly social safety net, as opposed to overreliance on government support or personal savings. This will allow the region's high savings rate to be redirected towards greater domestic consumption, thereby driving economic growth and closing the gap with the mature economies while redeploying savings within the region. This transition needs access to a wider array of domestic and foreign investment options rather than simply the reliance on governments or bank lending.

The development of robust, well regulated capital markets reduces key risks in the financial system and improves governments' credit profiles. Up to the present day, capital to support Asian growth has predominantly come from traditional bank lending, which concentrates credit risk in the banking sector. As the global financial crisis has shown, this can also accumulate contingent liabilities onto a government's balance sheet, which in turn may adversely affect government credit ratings. Banks also traditionally lend short term, which limits the duration of debt available in the

economy. Underdeveloped capital markets mean that infrastructure projects and corporations large and creditworthy enough to obtain term debt financing generally do so in international syndicated loan or bond markets, typically in a G3 currency, which likely adds to cross border transfer and foreign exchange risk.

Reliance on relationship banking for funding lacks transparency, which may lead to SMEs and startups (the drivers of growth) being squeezed for funding; whereas large, often state controlled companies receive preferential treatment in lending that may not be warranted by their business models. Robust capital markets require greater transparency, that in turn supports better corporate governance and better pricing of risk, which in turn allocates capital more effectively. In addition, stable, long term foreign investment is more readily attracted to countries with well regulated, diverse markets than those heavily reliant on bank lending, which can trap capital within borders.

Asia's intraregional trade is growing, and the economic slowdowns in Europe and the U.S. only highlight its increasing importance, as regional economies look to diversify away from traditional Western export markets. Increasingly, this trade will be denominated in local currencies, requiring local currency intermediation and hedging products, that in turn assume a higher level of market innovation than current regulations allow. So far, the development of greater intraregional capital market flows has not kept up with the growing pace of intraregional trade.

SOURCE: Haver, CEIC and United Nations

Changes in demand and demographics, along with critical social development needs, are now altering future prospects for the region. Future success will be strongly influenced by government policy responses, market innovation and the availability of appropriately priced capital to support growth. To ensure this kind of capital access, Asian capital markets should offer a wider and deeper array of financing and investment possibilities to complement the current bank lending model. This requires government policies that allow and encourage market innovation, especially across borders. In the era of the Internet, investors will ultimately demand access to a greater range of products offered throughout the region.

A number of positive variables are currently at work across Asia. Trade flows are increasingly intraregional, creating a more balanced and stable growth model in the future. Pension and social security pools with longer term investment horizons are starting to mobilize domestic savings, aiding investment in infrastructure. As good regulation and supervision are the hallmarks of strong markets, regional governments and regulators should ensure the highest quality people in supervisory roles. The strength of human capital in these positions is critical to the development of transparent, sustainable markets.

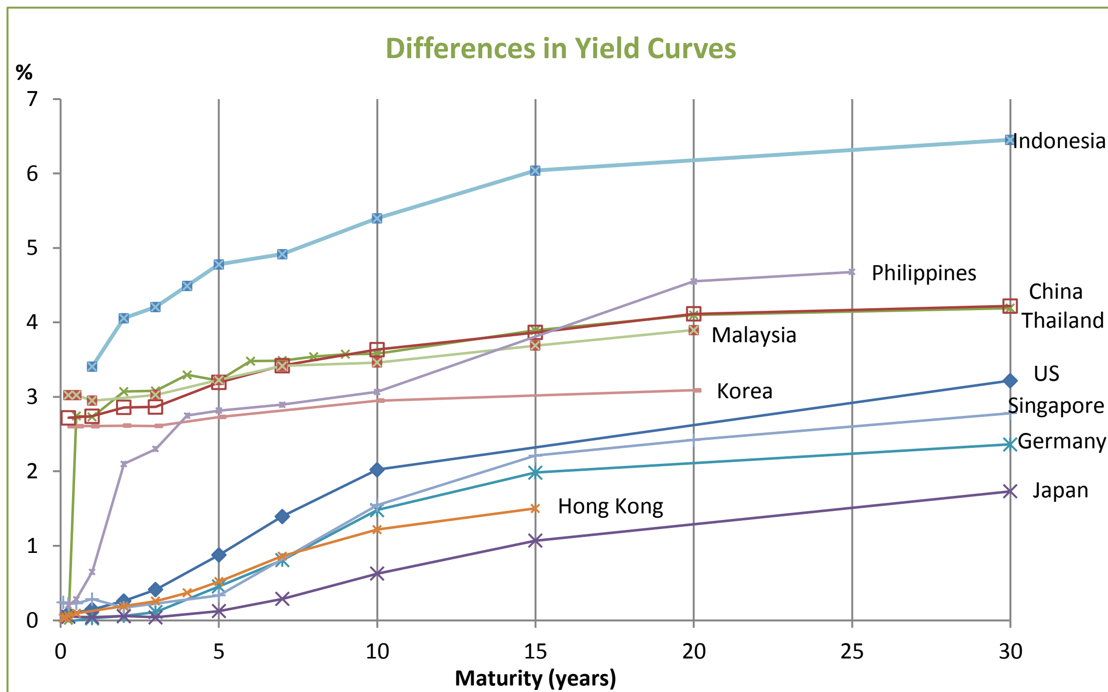
However, for real sustainability, capital markets will need to become more diverse, flexible and liquid. National jurisdictions should ensure genuine cross border flexibility to stimulate investor interest and commitment, while removing restrictions on market access in favor of a more open and innovative environment. Encouraging greater competition in trading venues would also assist in lowering transaction costs for investors across Asian markets.

Macro-Financial Environment

The macro-financial backdrop for Asia has changed in response to a variety of factors over the last several years. Many of these developments have resulted from the global financial crisis and resultant government and market responses.

Among these changes, a number of new constraints have appeared that will inhibit the availability of financing for Asian growth. New Basel III requirements have reduced bank appetite for credit provision and risk, at the same time that overall economic growth rates in the region have remained relatively high. In addition, many banks based outside the region, especially European based firms, have withdrawn lending capacity from Asia to support activities closer to home – and in some cases, in response to home country regulatory initiatives. As a result of these changes, there has been increasing demand for non-bank sources of capital to fund growth, but not necessarily the policy responses required to encourage supply.

While Asia has witnessed relatively high rates of growth, economic activity has varied considerably. For example, the mix of activities generating growth in Thailand is significantly different from that witnessed in Hong Kong, despite broadly similar aggregate growth rates. While diversity is in many ways a strength, it also underscores the fragmented nature of the region: a wide variety of key industries and significant differences in government policy approaches and regulatory regimes, compounded by significant diversity in local financial market infrastructures.



Differences in Yield Curves

SOURCE: Bloomberg as of 14 March 2013

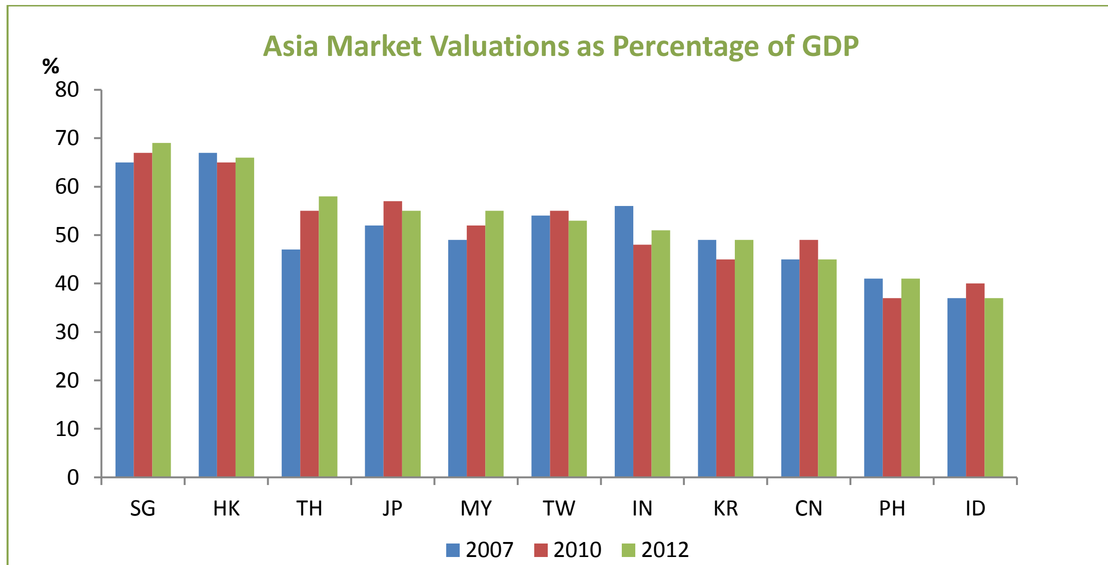
The annual "Ease of Doing Business" rankings published by the World Bank and the International Finance Corporation starkly illustrate the diversity of Asian markets, with Singapore and Hong Kong at the top of the global rankings, some near the middle, and yet others in the bottom half.

Ease of Doing Business Index, June 2013
(Country Rankings of 189 Countries)

Economy	SG	HK	KR	MY	TW	TH	CN	ID	IN	PH
Ease of Doing Business Rank	1	2	8	12	16	18	91	128	132	138
Starting a Business	1	2	24	8	3	11	21	23	173	22
Dealing with Construction Permits	2	1	26	17	4	5	24	13	182	18
Getting Electricity	2	1	3	6	3	4	16	21	105	12
Registering Property	7	11	75	6	5	4	8	15	94	19
Getting Credit	3	2	12	1	7	7	7	16	23	16
Protecting Investors	1	2	49	3	6	4	15	8	49	18
Paying Taxes	2	1	30	4	9	18	20	22	152	24
Trading Across Borders	1	2	3	3	5	4	11	6	127	8
Enforcing Contracts	2	1	2	6	14	4	3	19	184	16
Resolving Insolvency	1	3	14	6	2	8	10	17	116	20

SOURCE: Doing Business, IFC, World Bank

Corporate Governance (CG) also varies considerably across the region. Improving CG has also been correlated to higher market valuations, with dividend yield for upper half CG markets almost 50% higher compared to the lower half.[2]



SOURCE: ACGA Watch market scores 2007-12

Markets across Asia vary greatly in terms of CG – with Singapore and Hong Kong scoring near 70% in CG Watch market scores, while China, Indonesia, Philippines and Korea scored below 50%.

While governance continues to improve on a regional scale, development of individual markets remains uneven with inconsistent direction over the past five years.[3]

CG Watch Market Scores: 2007 - 2012

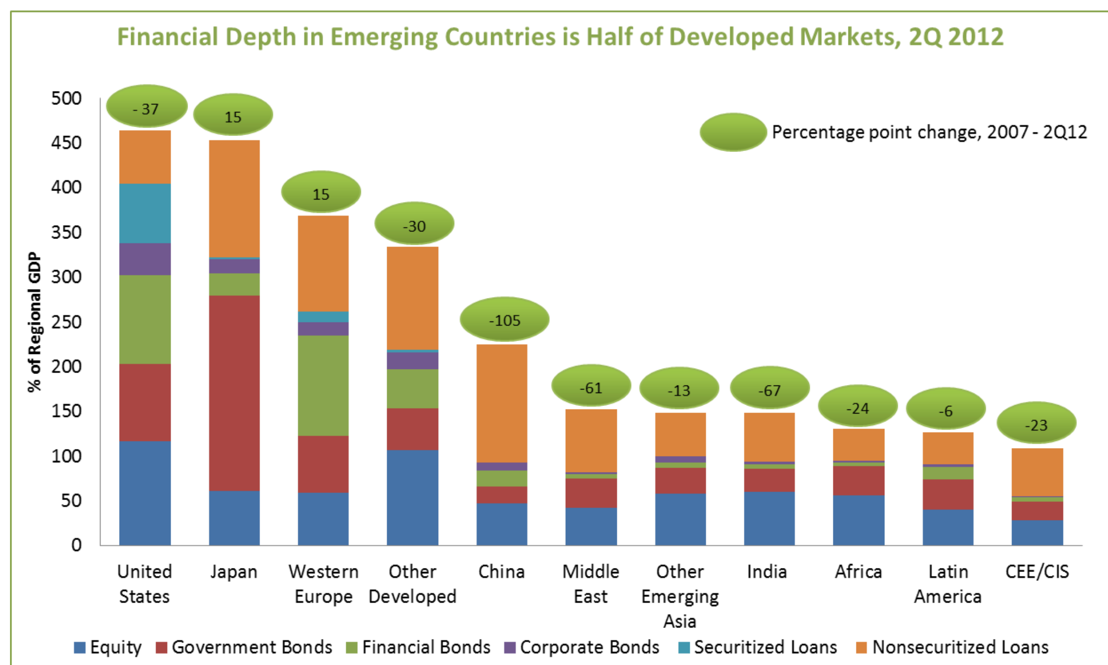
Countries	2007	2010	2012
SG	65	67	69
HK	67	65	66
TH	47	55	58
JP	52	57	55
MY	49	52	55
TW	54	55	53
IN	56	48	51
KR	49	45	49
CN	45	49	45
PH	41	37	41
ID	37	40	37

SOURCE: ACGA Watch market scores 2007-12

[2] ACGA/CLSA: CG Watch 2012
[3] ACGA/CLSA: CG Watch 2012

An obvious but essential characteristic of Asia is that it is not a single national jurisdiction with unified standards or approaches as in the EU. There is no single regulator, nor is there a single set of rules under which economic activities take place.

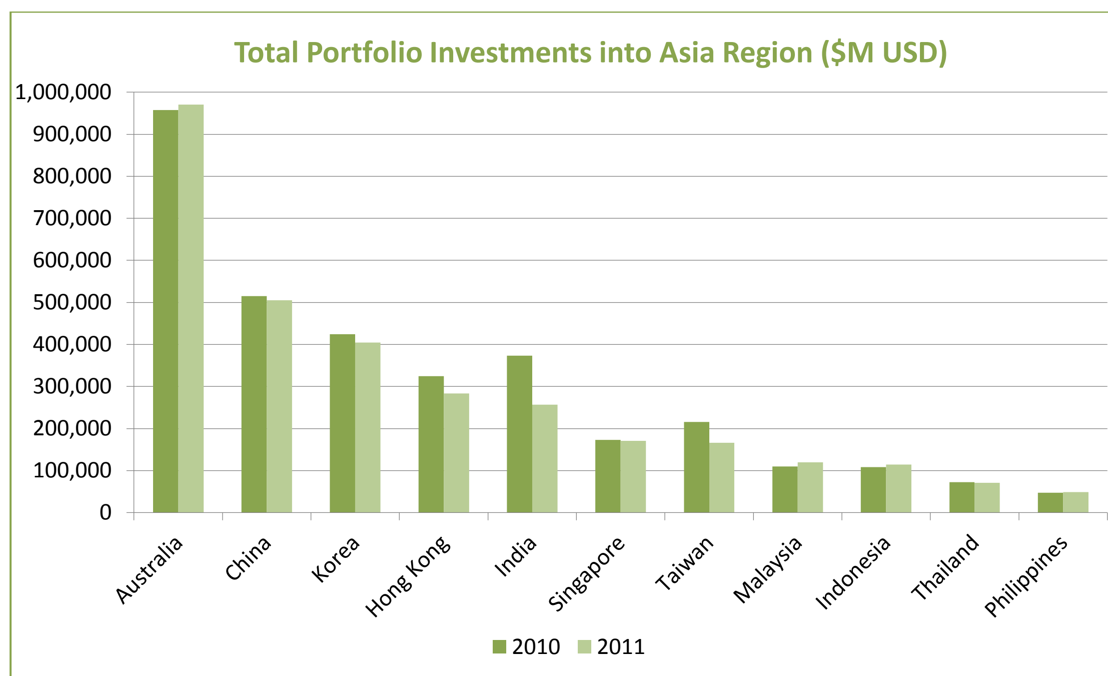
Differing tax structures, varying constraints on investment ownership and flows, limitations on currency convertibility and different legal systems explain why there are no simple, single stroke solutions to the challenges facing the region. There are, however, fairly common issues and solutions that can be applied in each individual market, as well as regional approaches that can be addressed through greater convergence and regional harmonization of policies and practices. Given the wide range of infrastructure and sophistication across local markets, Asia should be comfortable developing at different paces across the region, with various tiers of development across its markets. Specialization may also benefit economies around the region, especially in smaller countries which may have difficulty attracting deep liquidity to their capital markets. Smaller European nations have found advantage in specialization addressing niches such as back office functions, asset management, providing jurisdictions for hedge funds, concentrating on FX or commodities, etc. This same concept could be applied to the smaller Asian economies, with each jurisdiction contributing towards market completeness on a regional scale.



SOURCE: McKinsey Global Institute Financial Assets Database; McKinsey Global Institute Analysis

Today's Asian capital markets are often underdeveloped and underutilized relative to the region's economic needs, and roughly half the level seen in mature economies. There is much room for growth. However, there is also a generally positive attitude towards reform in support of economic progress. Asia's receptiveness towards change, and the clear intellectual and resource capacity to support it, means that market developments could occur quickly in the right conditions. This paper aims to help define those conditions and some of the initiatives that could be taken to facilitate future growth.

As a region, Asia has high investment needs and high savings rates, but relatively inefficient transfer mechanisms to mobilize capital. This results in savings being funneled to the deeper and better developed capital markets of the mature economies, instead of remaining within the region to fund local companies and infrastructure. Therefore, identifying the gaps in the funding chain (between bank lending and capital markets, and between construction funding and ongoing funding for infrastructure) will be a key challenge in keeping funds within Asia. A convergence of policies and regulation would help alleviate the situation, and a variety of mechanisms can assist in this process. Multi-lateral organizations can play a key role in providing forums to advocate for and promote convergence and harmonization, as demonstrated by the FSB in driving G-20 global financial regulatory reform.



SOURCE: Coordinated Portfolio Investment Survey (CPIS)

Following the Asian Financial Crisis, many Asian economies implemented capital controls due to concerns of "hot money" disrupting their markets. While many emerging economies express preference in attracting only long term investment into their markets (versus potentially destabilizing high volume inflows and outflows), effectively mitigating hot money's impact lies in creating deeper and more liquid markets, not constricting them with artificial barriers to investment.

Attempting to block high volume flows through capital controls only serves to hinder the growth of long term investment in Asia. Foreign real money investors, not willing to be locked into prescribed long term investment periods, will simply direct their attention to other markets offering greater liquidity and fewer restrictions. The key to attracting long term investment is the development of open, deeper and more liquid capital markets, as well as the establishment of stronger corporate governance and the implementation of the rule of law – which will in turn draw more liquidity and real money participants to the market.

Asia needs to focus on creating and developing new markets, improving liquidity and transparency for investors, and providing better access to capital from a variety of sources. More harmonized regulatory regimes would reduce costs and create a more consistent playing field for all participants, attracting investment both from within and outside the region. For example, initiatives such as APEC's Asia Region Funds Passport aim to facilitate cross border offers of funds throughout the APEC region by allowing fund managers of a Passport member economy the ability to market their funds in other Passport member economies under a streamlined regulatory process.

While starting points vary by market, the end result should be broader, more liquid and more diverse capital markets to support economic growth across the region.

Open and internationally accessible capital markets are the key to attracting investors, who will in turn create the depth and liquidity necessary for Asia to drive growth from domestic consumption and effectively compete with the mature economies of the West.

The following chapters focus on five major capital market segments: Equities, Fixed Income, Foreign Exchange, Commodities and Derivatives; their current state; their role in providing capital for growth; and key constraints that remain to be addressed for meaningful future development. Each section also includes recommendations for change from a regional perspective.

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ASIAN EQUITY MARKETS

Importance of Equity Markets

Equity markets provide access to capital for a broad range of needs, including government infrastructure funding and investment in corporate growth, as well as driving innovation by channeling low cost capital to young, fast growing companies. For investors, equity markets provide growth and yield opportunities that span every industry, sector and market worldwide.

Effective equity markets are key to the real economy, providing funding for innovation and growth, supporting job creation, creating and distributing wealth, and ultimately enhancing financial stability, security and improvement in standards of living. Healthy, well functioning equity markets are an essential component of Asia's continuing success.

Enhancing Asian Equity Markets

Market Accessibility

A basic requirement for healthy market functioning is accessibility to investors; however, not all regimes provide equal access to their equity markets.

Ownership Limits

Some Asian markets enforce restrictions on the amount of foreign ownership permitted in certain sectors and companies, and the rights associated with such ownership (e.g. voting rights).

While the desire to retain national control over certain companies and industries is understood, current mechanisms and models employed to limit foreign ownership are due for review as they inhibit quality inflow of investment, both international and intraregional. Some of these mechanisms not only prevent international investment but also regional inflows, which inhibit the development of greater intraregional cooperation. As a result, savings and investment outflows tend to flow to the developed markets, rather than being recycled within the region.

Ownership Identifiers

Certain Asian markets require advance registration and approval for regional and international investors (also referred to as Restricted/ID markets). Registration at the individual fund level creates delays and added costs in registering, on-boarding and trading – especially for international fund managers that manage large numbers of funds. Removing these ownership registration requirements, or permitting regional and global investors to register at a parent/manager level, would enhance market efficiency and promote greater regional and international investment.

Gross Settlement

Settlement at the individual fund level creates additional credit exposure, cost and time lag, leading to inefficiencies in post trade processing. Regional equity markets could remove these obstacles by eliminating ownership registration, permitting parent level registration or a nominee structure at broker level for settlement, and mitigating investors' market and credit risk by supporting DVP (Delivery Versus Payment) settlement.

Investment Quotas

Some markets operate to a fixed total amount of permitted foreign ownership by operating a quota system, typically referred to as a Qualified Foreign Institutional Investors or QFII system. While QFII quotas, as well as the number of qualified institutions, have been increasing rapidly, restrictions remain on investable products. In addition, foreign investors hold limited voting power and are limited to minority status. Collectively these measures limit inflow of regional and global investment.

Global Indices

Many of the largest regional and global investors choose to model their funds investment on investible indices (e.g. MSCI, FTSE), investing in the markets and companies according to the weightings assigned by the index provider. To be included in a given index, market structure must conform to the index provider's requirements. Asian markets seeking index inclusion should understand and implement these structural requirements, which will in turn lead to greater investment interest from regional and international institutions.

Market Efficiency

Investors, and intermediaries that operate on behalf of investors, expect to incur reasonable business and operating expenses. As larger global and increasingly regional investors are able to compare costs and efficiencies across markets worldwide, Asian markets should remain cost competitive to encourage inbound international investment.

Capital Efficiency

Asian markets need to offer efficient use of capital, while setting appropriate capital measures to safeguard the overall market and its participants. Capital requirements for market participants need to be in line with capital required to mitigate the actual risk to the system. For example, capital requirements for agency business models should be low, in line with the low risk to the financial system that agency brokerage activity represents. Agency brokers and Alternative Trading Systems (ATS) capital requirements should be significantly lower than requirements for firms that, for example, hold principal trading positions.

Where intermediaries invest in different classes of product on behalf of their customers and themselves, offsets are required to ensure that the cost of capital for a given market is both efficient and attractive; and that requirements to post guarantee funds, default funds and initial/variation margin are calculated on a net basis.

Operational Efficiency

Remote Membership

Large global and regional investors typically transact with larger international brokers and custodians, who generally operate from regional hubs. In order to be licensed, a number of Asian markets require brokers to be physically domiciled on shore. This is achieved by either prohibiting brokers' systems from being located offshore, prohibiting certain support functions from being performed offshore, or by mandating minimum level of staffing and particular roles to be retained onshore.

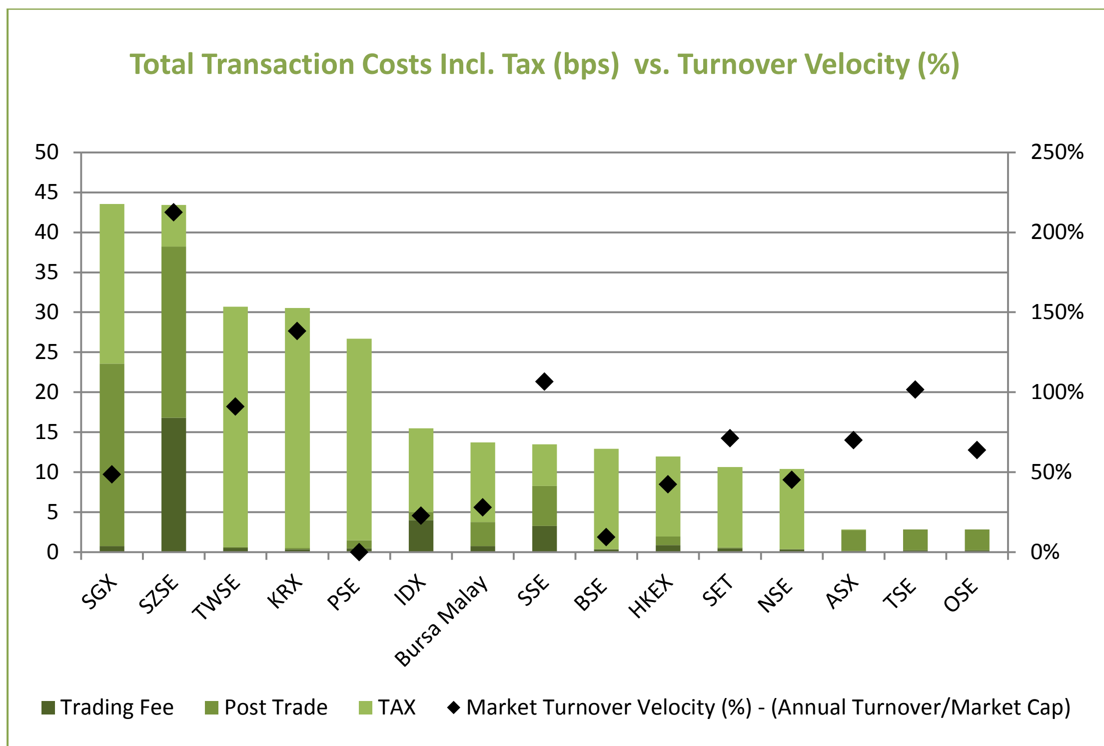
As a result, many international brokers avoid becoming members of these Asian markets, instead routing their trades to one or more locally incorporated brokers. This practice raises a number of concerns for both international investors and brokers: 1) the risk of information leakage and thus impact price loss; 2) the credit risk for international brokers facing a smaller broker, as opposed to the stock exchange and clearing house; 3) operational inefficiencies in additional back-to-back settlements; and 4) reliance upon and lack of transparency of the technical platform and capabilities of the local broker.

Asian securities market regulators should collaborate to allow substitute regulatory approval; i.e. where the brokers' approval and regulation under another regional regulator will be taken into account as part of their assessment for remote trading membership.

Electronic Trading
Prohibiting the use of Direct Market Access (DMA) [4] adds to international investors' operational challenges and costs. Therefore electronic trading should be encouraged, as well as the regional consistency of controls and measures required to support it. Sharing of best practice across markets and with industry groups will facilitate enablement, standardization and control of electronic trading.

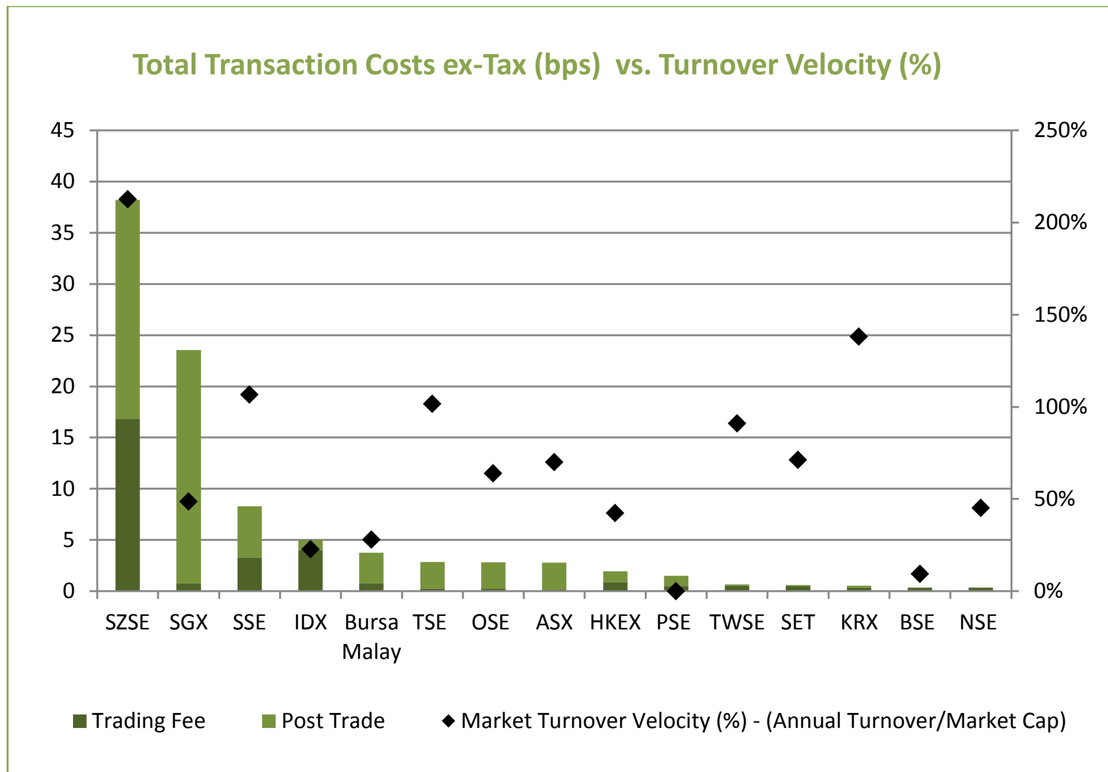
Cost Efficiency
It is important to understand cost from an investor's perspective. Explicit costs, often referred to as the "frictional cost" of investing, include exchange transaction fees, clearing fees and transaction taxes (stamp duties). Implicit costs, often referred to as "impact costs" or "slippage", arise from market liquidity characteristics, the impact on prices from transactions and information leakage.

Explicit Costs
A number of Asian markets exhibit unusually high transaction costs relative to other regional and global markets, and in some cases they are among the highest in the world. In Hong Kong and Singapore, for example, transaction costs are very high relative to other developed markets. High transaction costs and transaction taxes are a barrier to market development, and should be reduced to enhance Asia's cost competitiveness relative to global markets.

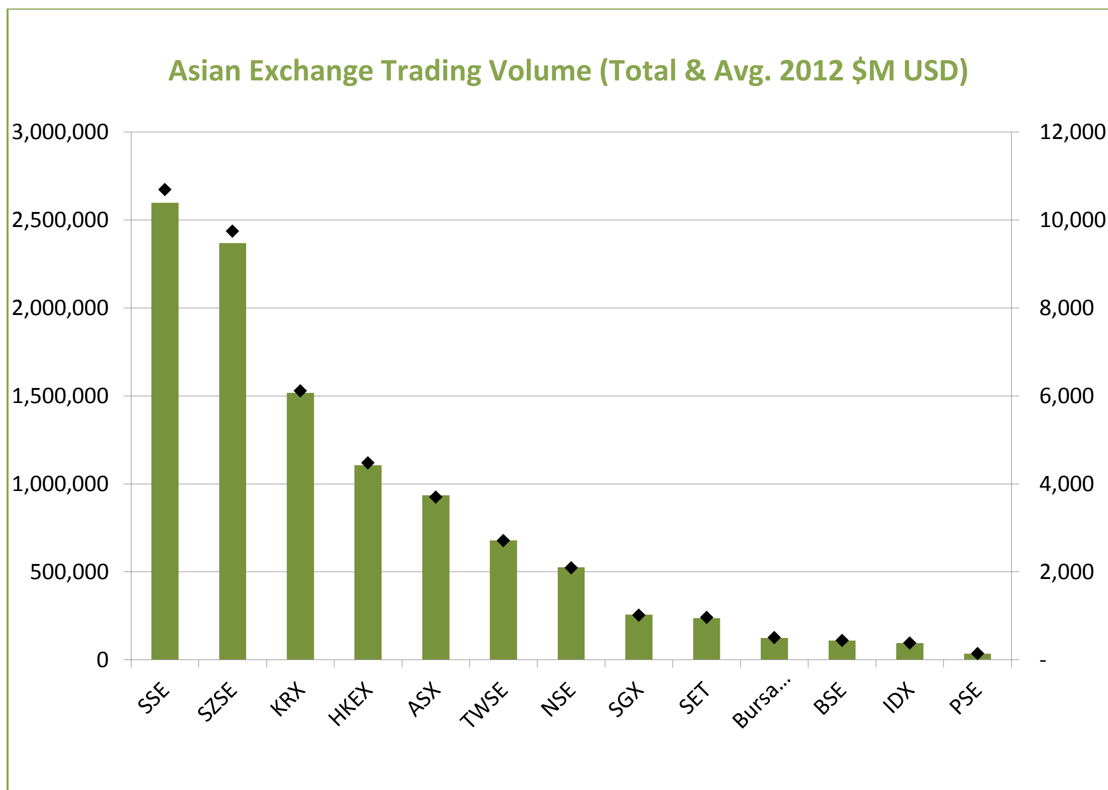


SOURCE: Singapore Stock Exchange, Shenzhen Stock Exchange, Taiwan Stock Exchange, Korea Stock Exchange, Philippines Stock Exchange, Indonesia Stock Exchange, Bursa Malaysia Stock Exchange, Shanghai Stock Exchange, Bombay Stock Exchange, Hong Kong Stock Exchange, Stock Exchange of Thailand, National Stock Exchange of India, Australia Stock Exchange, Tokyo Stock Exchange, Osaka Securities Exchange, World Federation of Exchanges

[4] Direct Market Access (DMA) is where brokers allow clients access to their order routing infrastructure for trading. Clients may enter orders themselves either manually or using computer algorithms.



SOURCE: Singapore Stock Exchange, Shenzhen Stock Exchange, Taiwan Stock Exchange, Korea Stock Exchange, Philippines Stock Exchange, Indonesia Stock Exchange, Bursa Malaysia Stock Exchange, Shanghai Stock Exchange, Bombay Stock Exchange, Hong Kong Stock Exchange, Stock Exchange of Thailand, National Stock Exchange of India, Australia Stock Exchange, Tokyo Stock Exchange, Osaka Securities Exchange, World Federation of Exchanges



SOURCE: World Federation of Exchanges

Implicit Costs

Impact cost is typically the single most important cost to institutional investors, and is incurred when knowledge of the transaction itself changes the price of the asset. Impact cost is comparatively high in Asia, and in some cases exceedingly high relative to other regional and global markets. Measures to reduce impact costs would greatly enhance the attractiveness of Asian markets to regional and international institutional investors.

An important measure to reduce impact costs is to reduce information leakage, the inappropriate and premature exposure of information regarding investors' intentions. This results in investors' returns being compromised by paying higher prices for purchases or receiving lower prices for sales.

One proven approach to reduce impact cost is via block trading. Block trades allow institutional investors to negotiate a large transaction of a stock, usually with another institution as counterparty. Such trades can be far more efficient and cost effective than entering them into the central order book of the stock exchange, which may or may not be sufficiently liquid at the time the trade is desired. By eliminating these situations, block trading serves to enhance overall market liquidity.

Closely linked to block trading is access to Alternative Trading Systems (ATS). ATSs reduce impact cost by a) operating as non-displayed venues, in that details of orders are only put into the public domain after a trade has completed thereby minimizing the potential for premature leakage of an investor's intentions, and b) midpoint matching, where both buyer and seller benefit from improved prices by matching at the midpoint between the bid and offer available on the stock exchange. Numerous studies indicate that in addition to reducing impact costs, ATSs also reduce price volatility.[5]

Although market regulators need to see timely and accurate information on all trades, information in the public domain should protect the investor's identity to limit information leakage and curtail impact cost. In many developed markets, investors' identities remain anonymous and protected on both a pre trade and post trade basis (other than where required for regulatory disclosure).

Competition and Choice

In Asia, the legal or de facto monopoly position of many stock exchanges can contribute to the high costs relative to other markets. Where alternative trading venues are permitted, they are often restricted to certain classes of investor, which limits participation and inhibits growth. Competition, in the form of competing stock exchanges, alternative trading venues and clearing houses, has been shown to significantly lower costs and increase both innovation and efficiency in other regions.

With the benefit of hindsight, Asian markets could learn from some of the mistakes made in the West to ensure that competition, innovation and consumer choice are introduced, balanced with appropriate regulatory structure.

Market Completeness and Product Breadth

Provision of a range of financial instruments is essential in attracting institutional investors that require a full menu of products, including derivatives, short selling and other financial tools, to

[5] A recent such study, for example, is "How beneficial has competition been for the Australian Equity Marketplace", Michael Aitken, Haoming Chen, and Sean Foley, Australian School for Business, University of NSW, Australia, May 2013.

execute their strategic objectives and appropriately hedge risk.

Deviations from fundamental value, in either direction, are detrimental to the market. Therefore, market symmetry (the ability to go short as well as long) is vital to the healthy functioning of the market and also helps to reduce overall transaction costs. The ability to go short at low cost requires a well developed supporting infrastructure including repo markets, securities lending, margin trading and ideally, derivatives. Short selling attracts critics, especially during periods of market stress, as companies seek to discourage downward pressure on their stock prices. Critics may seek to justify restrictions on short selling on the grounds that it is manipulative, or that it increases volatility. Most independent studies do not support such claims, and in fact more commonly find degradation in market quality after a ban on short-selling has been instituted.[6] From an economic standpoint, prices should reflect underlying fundamentals and short-selling plays a crucial role in balancing overpriced assets.

Futures, options and over-the-counter (OTC) derivatives are also useful tools essential to any fully developed market. Futures and options serve to increase the liquidity of underlying markets, enable portfolio managers to better manage asset exposure, and allow market-makers to narrow bid-ask spreads because they can hedge their net exposures. (The liquidity enhancing effect of futures has long been observed, for example, in the U.S. Treasury market, where cash market liquidity declines significantly when futures are not trading.)

Regulatory Transparency

Transparency and consistency in market practices, standards and rules provide the benefit of an even playing field for all market participants; and consistency of regulation across Asia's diverse markets would allow for greater efficiency and lower cost of trading in the region. Asian securities regulators and self-regulated organizations, such as stock exchanges, should seek to harmonize regional market structure and regulation by incorporating best practice in terms of engaging with the international investor and broker community through inclusive consultations, expert committees and industry associations.

Initiatives such as the "ASEAN Exchange" are creating linkages between ASEAN markets and are to be commended, with further regional collaborative efforts to be encouraged. Helping international investors through collaboration, sharing and partnership ultimately facilitates regional and international investment in Asia as a whole.

<u>Recommendations</u>

Accessible, fair, efficient and orderly equity markets are essential to Asia's continued growth. As providers of low cost funding, equity markets facilitate the allocation of international and domestic capital to the drivers of growth. Globally competitive cost structures and regionally consistent regulatory regimes will serve to encourage future development across Asian equity markets.

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[6] Academic studies consistently find declines in market quality resulting from short selling restrictions. See for example, "Shackling Short Sellers: The 2008 Shorting Ban", Ekkehard Boehmer, Charles M. Jones, and Xiaoyan Zhang, October 2012, cited on the blog for the Harvard Forum on Corporate Governance and Financial Regulation. "All but the smallest quartiles of firms subject to the ban suffer a severe degradation in market quality, as measured by quoted spreads, effective spreads, and volatility". (http://blogs.law.harvard.edu/corpgov/2013/05/23/shackling-short-sellers-the-2008-shorting-ban/).

1. *Provide and promote equal access to Asian Markets.*
   Increased institutional investment will support the creation and distribution of wealth, financial, economic and social security. Barriers to regional and international investor access should be removed to encourage greater market participation and liquidity.

2. *Remove/reduce the sources of implicit cost.*
   Improve the confidence of regional and international investors and protect investor returns by eliminating the causes of information leakage.

3. *Encourage innovation, choice and competition.*
   Maintain pricing tariffs that are globally competitive, introduce legislation and regulation to permit appropriate levels of competition, and reduce or eliminate transaction taxes.

4. *Encourage collaboration and consistency in regulation and market infrastructure region wide.*
   Share best practices across the region. A more proactive role in developing the region's markets is required – not by merely following Western markets, but by introducing and supporting Pan Asian solutions. At the same time, regional equity markets would benefit from greater consistency in the regulatory approach, as well as improved corporate governance structure.

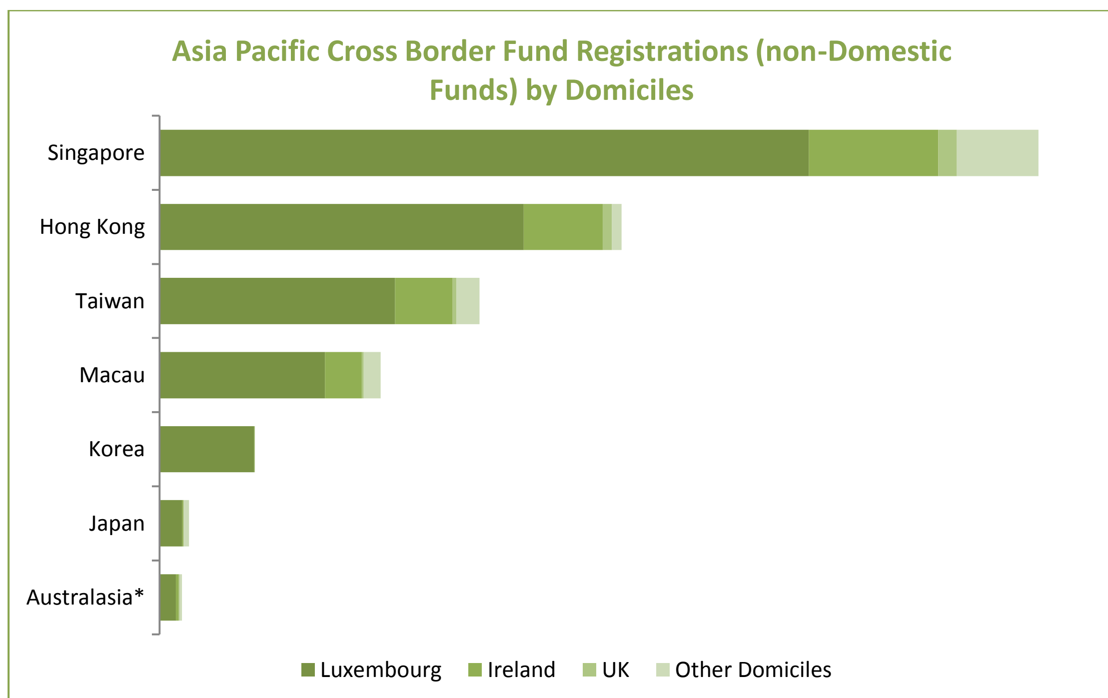
ASIAN FIXED INCOME MARKETS

Importance of Fixed Income Markets

As economies mature, established government and corporate bond markets become increasingly important for continued, sustainable economic growth. Developed bond markets contribute to financial stability and offer opportunities to fund a wide variety of public infrastructure and private sector enterprise.

Active local currency (LC) bond markets are especially important as the main channel for long term investors such as pension funds and insurance companies. Other channels of financial intermediation (such as equity markets or bank financing) are generally more short term in nature, and offer different risk profiles. Fixed income flows are also generally less capricious. LC bond markets promote financial stability by allowing policy makers to manage macroeconomic measures and monetary policies more effectively. The current trend towards bank lending disintermediation suggests corporates will increasingly access debt capital markets, paving the way for lower issuance and funding costs, reduced stress on the banking system and increased investment opportunities for wholesale and retail investors. This trend will only continue if local markets enhance their liquidity and depth across the product range, broadening investment appeal to a wider range of participants and ensuring a larger portion of Asian savings (both personal and institutional) remains within the region.

Also supporting this trend is Asia's favorable risk environment for investors. Moody's Credit Transition Model (CTM) projects that the default rate for Asia Pacific (ex-Japan) high-yield non-financial corporates will remain low, ending 2013 at 1.6%.[7]



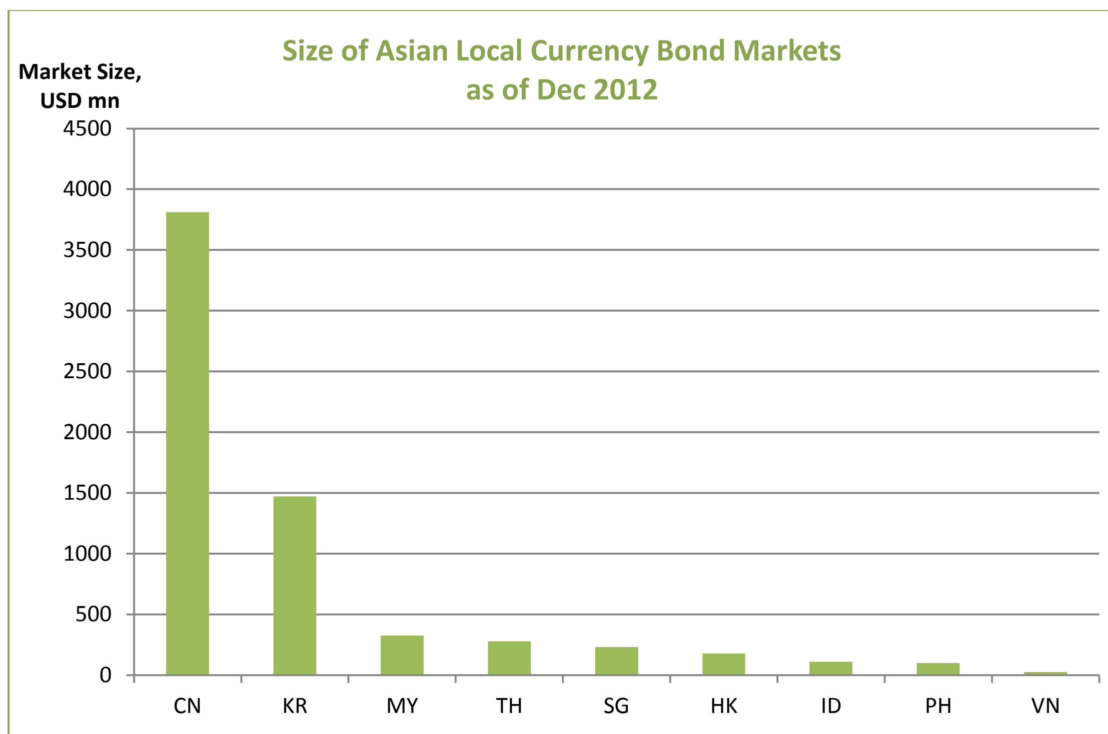
SOURCE: PricewaterhouseCoopers, Global Fund Distribution 2010

[7] Moody's Special Comment "High-Yield Corporates in Asia Pacific (ex-Japan) Expected to End 2013 with Low Default Rate" (September 12, 2013)

A Decade of Development in Asia

Asian bond markets have matured and developed over the last decade, aided by changing investor perceptions, revised attitudes toward emerging market (EM) risk and structural changes in the global economy. The past decade has seen steady improvement in ratings of Asian EM countries and lower credit-default-swap (CDS) spreads (an indicator of lower perceived risk), in marked contrast to the developed markets.[8]

At the end of 2011, Asian EM's share of the global LC bond market was 8.4%, led by China, Korea and India.[9]



SOURCE: J.P. Morgan

LC bond markets in emerging Asia have grown at an annual average rate of 16.5% since 2001[10], and at a CAGR of 21% over the past three years in particular.[11] In 2012, Asian corporate bonds accounted for 46% of all large capital debt raised during the year[12], and total LC bonds outstanding in Asian EMs reached USD6.5 trillion.[13]

However, with the notable exception of Korea, Asian bond markets remain undersized on a GDP per capita basis relative to developed economies.[14]

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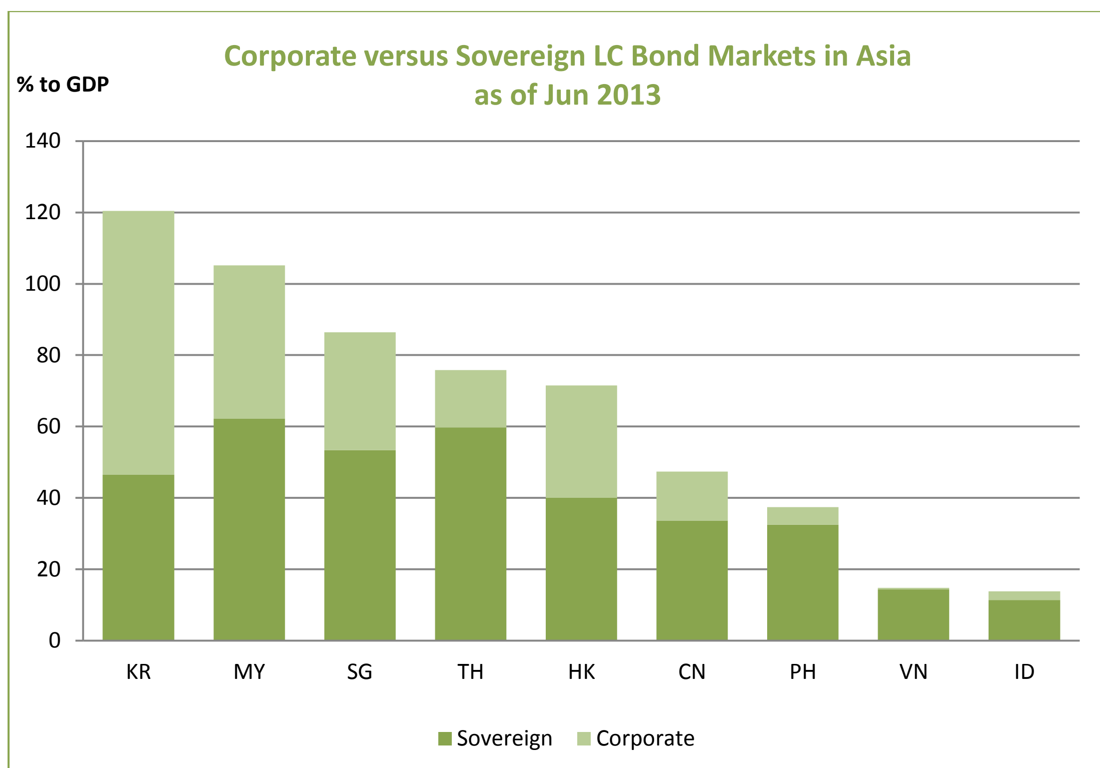
8 Allianz Sep 2012
9 ADB Sep 2012
10 BIS Jan 2013
11 MS May 2013
12 ibid
13 ADB March 2013
14 ADB May 2012



SOURCE: J.P. Morgan

It remains to be seen whether foreign investment continues to flow into Asian LC bonds, fuelled by the search for yield in a low interest rate environment and a structural shift towards greater weighting of Asian bonds in investment portfolios.[15]

Government Bond Markets

Effective government bond markets not only supply access to liquidity for infrastructure development, but can also provide a benchmark yield curve for the broader credit market. Benchmarking can lower the cost of capital across the spectrum of financial products, freeing governments and investors to put additional capital to work and supporting real economy growth.

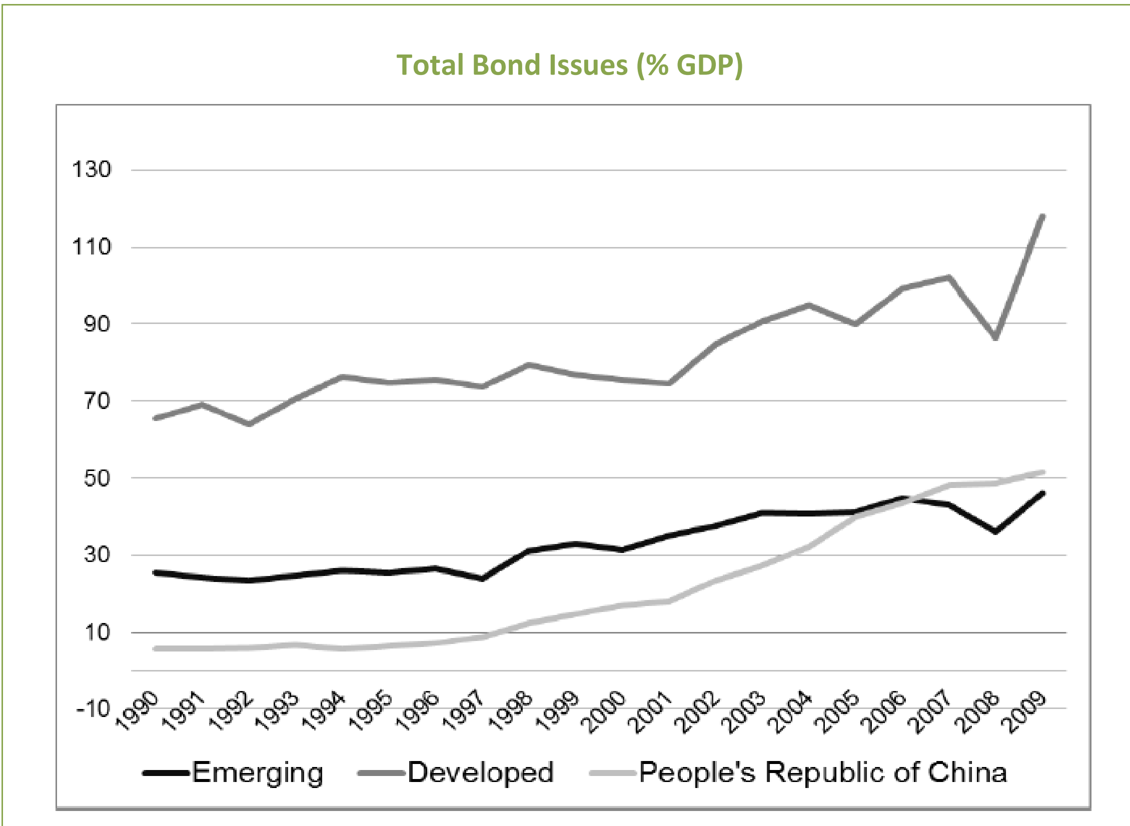
In fact, ADB research indicates that one of the most significant variables affecting development of a country's corporate bond markets is the presence of a well developed government bond market.[16]

Currently, China's bond market is the fastest growing in the world, accounting for two-thirds of Asia's total government bond market and three-fifths of the region's overall bond market.[17]

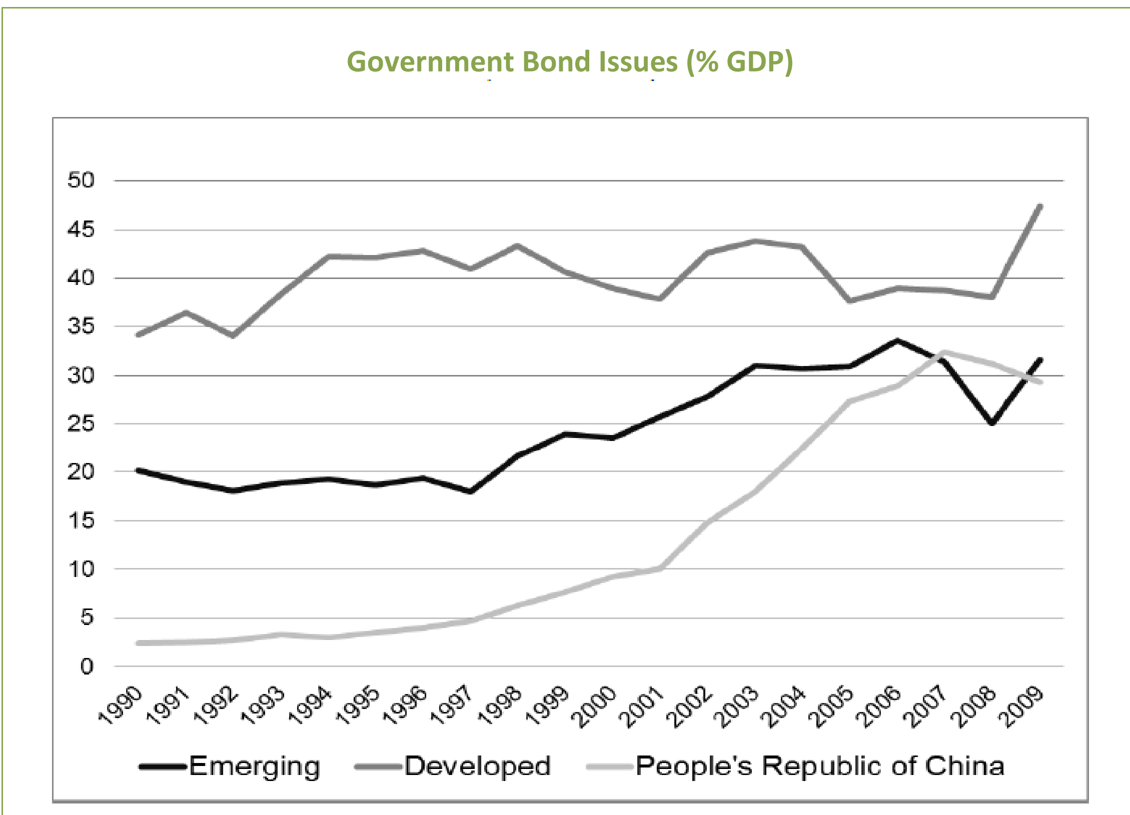
[15] BIS Nov 2012; Jan 2012

[16] ADB May 2012

[17] ADB Sep 2012, Mar 2013



SOURCE: ADB May 2012, page 48



SOURCE: ADB May 2012, page 48

Corporate Bond Markets
Whether corporates choose to access local or foreign debt markets often hinges on the scale and depth of the market, and its ability to accommodate borrowers' requirements. Accordingly, measures to improve depth and liquidity in the local bond markets are likely to be effective in increasing issuance and market size.

The size of the investor base in local markets – and in particular foreign investor presence – depends heavily on the investment climate, corporate governance and transparency and whether tax environments encourage or inhibit foreign investment.[18]

Meeting the Challenges
Achieving a mature and effective bond market in the region is a long term project requiring commitment from both policy makers (government and non-government) and the full spectrum of market participants.

Regional bond market development continues to receive critical government support, including the Asia Pacific Economic Cooperation (APEC) initiative on regional bond market development and the ASEAN+3 member countries under the Asian Bond Markets Initiative (ABMI), as well as supranational organizations such as the Bank for International Settlements (BIS) and Asian Development Bank (ADB).

The successful development of an Asian debt market requires effective financial market infrastructure across the region. Bodies such as the ASEAN +3 Bond Market Forum (ABMF) are currently working to understand market differences, and promoting the need for regional leadership in core market areas such as regulation and market practices.
The keys to a sustainable bond market include:

- Credible government, implementing sound fiscal and monetary policies within a liberalized financial system including liberalized interest rates
- Efficient regulatory, legal, accounting and tax environment
- Well developed government bond market, with a benchmark interest rate and yield curve
- A well developed classic repo market and bond futures market as efficient shorting and hedging tools
- Transparency in pricing and valuation, efficient and cost effective trading, clearing and settlement infrastructure
- Broad, active domestic and foreign investor base
- A broad, diversified base of bond issuers
- Product innovation
- Credit risk analyses tools and references, including credit ratings

Stable Government and Liberalized Financial System
In recent years the stability of regional governments, the strength of their economies and banking and financial systems, and their policy responses to the volatile global economy have taken center stage.

Domestic and foreign investors are reluctant to purchase government securities, especially medium and long term instruments, when there are expectations of high inflation, large devaluations, or high uncertainty over the risk of default.

[18] BIS Dec 2012

Asia has largely left the global financial crisis behind, supported by generally strong domestic demand. The overall political situation also remains stable. In the face of cross border tensions, we have recently witnessed relatively smooth power transitions and elections in the region (e.g. China, Japan, North and South Korea, Singapore, Malaysia).

A liberalized financial system is important in ensuring optimum allocation of market resources to match the real economy. To improve pricing of risk in primary and secondary markets, as well as sharing of risk among issuers, intermediaries and investors, interest rates should be liberalized depending on overall macroeconomic and financial conditions. Also, government bonds should not be issued with coupons at negative real interest rates.

In addition, central banks must be independent – and be seen to be independent – in setting interest rates.

Effective Market Infrastructure

Savings will only stay within Asia when they can be invested in deep, liquid bond markets. Therefore, the region should move towards the creation of Pan Asian trading platforms and clearing and settlement systems that will be more efficient, stable and less costly than purely domestic systems. Effective market infrastructure is also critical for electronic price discovery, trading and clearing and settlement.

The development of local currency markets has been impressive of late, but for them to rival the depth of mature markets, they will need to attract foreign and regional investors, which is best accomplished through a standardized regional trading infrastructure. Otherwise, markets (in particular in the smaller countries) will remain expensive and illiquid, decreasing their attractiveness to investors.

Enhancing pre and post trade transparency on government and corporate bond trading has also been shown to be helpful in expanding market liquidity. However, balance is essential as unfettered transparency would be suboptimal for liquidity and market development. Investors clearly need to understand where the price of the market is at any given point of time. However, if large trades (or trades in illiquid instruments) are disclosed, the market may move against the purchaser, which will likely result in participants not being willing to make the trade initially. Given the potentially damaging impact on market liquidity, the correlation between transparency and liquidity needs to be well understood and calibrated for efficient market development.

The ABMF is building on its regional straight-through-processing (STP) work to harmonize cross border messaging and market practices. Whilst there is still work to be done at a national level, the results have been encouraging so far, including[19]:

- Robust and sound bond infrastructure
- Listed and OTC trading
- Connection between trade systems and CSD
- Cross border STP and DVP
- Matching
- Settlement cycle
- Harmonization of terminologies and definitions
- Institutional framework
- Reporting facility
- Monitoring new issues and standards

[19] ABMF 2012

Ratings Agencies

Ratings agencies are widely used in developed and developing markets across Asia, including China, Korea, India, Malaysia and Thailand. Credit ratings play a role in the functioning of the credit markets by providing investors with a common language of credit to use in making informed credit decisions. They also provide issuers with a benchmark against which to assess their own creditworthiness.

The G20 has stated: "All Credit Rating Agencies whose ratings are used for regulatory purposes should be subject to a regulatory oversight regime that includes registration. The regulatory oversight regime should be established by end 2009 and should be consistent with the IOSCO Code of Conduct Fundamentals. IOSCO should coordinate full compliance."[20]

As such, policymakers that have not already done so should be encouraged to put in place regulatory regimes overseeing credit ratings firms that are consistent with the IOSCO Code of Conduct Fundamentals.

An open and level playing field would encourage competition amongst CRAs and the development of best practices, while responding to intraregional and international investor needs for consistency in credit risk benchmarks.

Mandatory rating requirements for issuance, minimum ratings for investment eligibility and other references to ratings in regulations should be removed. While well intentioned, these regulatory stipulations actually hinder development of a diversified, broad investor base with varied risk-reward preferences – which is essential to the development of deep and liquid bond markets.

Building an Active Investor Base

It is vital to continue to encourage a broader and active domestic and foreign investor base (including retail investors where technological infrastructure permits) in the overall development of bond markets.

A diversified investor base for fixed income securities is imperative to ensure high liquidity and stable demand in the market. A heterogeneous investor base with different time horizons, risk preferences, and trading motives ensures active trading, reduces trading costs, provides more timely risk and pricing information and improves liquidity.[21]

Recommendations

1. *Resolve retail market access issues*.
   Technology infrastructure permitting, an important policy choice is whether to enable direct retail investment in corporate bonds, or to channel investment through fund management intermediaries which participate in the wholesale market as primary dealers and market makers. If an issuer defaults, the principal on the bond is lost. Therefore, most mature economies encourage retail participation through the fund management industry, or indirectly via pension funds or insurance companies.

2. *Implement consistent and effective regulatory and legal regimes.*
   In order to promote the development of an active investor base, sound regulation of corporate bond markets is important. Investors should be afforded protection through adequate disclosure regimes,

[20] G20 April 2009 London: Leaders' Statement - G20 Action Plan for Recovery and Reform

[21] IMF/World Bank Sep 2001; ADB May 2012

certainty surrounding closeout netting and insolvency and fair and timely access to a robust legal system should the issuer default. For retail investors, regulatory redress against misconduct or poor behavior on the part of investment advisers that serve them is also required.

3. *Improve the bankruptcy, insolvency and resolution regimes.*
   At present, creditor rights and protections in the event of bankruptcy are not very well defined, and the ability to access secured assets (especially when they are held onshore but used to support offshore financing) remains difficult in several countries. Also, well connected majority or large shareholders often use their positions to stymie restructurings, which could result in more favorable resolutions for bondholders (for example, by preventing debt/equity swaps which would dilute their majority ownership). Finally, bank resolution regimes should be updated to clarify the timing and extent of bondholder bail-ins in the context of the new Basel III regulations.

4. *Develop market friendly environments.*
   Consideration should be given to promoting retail investor interest through new distribution channels, including debt mutual funds and automated trading formats; avoiding excessive consumer protection regulation in retail markets; implementing coordinated withholding tax policies for retail and institutional investors regarding both income and capital gains; and repealing unfair transaction taxes which stifle demand – such as taxation of investment in foreign securities, and equal treatment of government and corporate bond income.[22]

5. *Improve market infrastructure, standards and liquidity.*
   Greater consistency in standards and pan-regional trading and settlement infrastructure will improve access for foreign/regional investors, thereby increasing liquidity and driving trading innovation. More liquidity will attract more investors, including domestic investors. At the same time, improved transparency in disclosure will encourage better corporate governance, which enhances the overall development of the market.

6. *Standardize market practices, preferably regionally.*
   Fixed income investors are especially sensitive to a harmonized market environment and would react positively to improvements in market practice and taxation. However for bond markets to achieve their real potential, all jurisdictions will need to foster the creation of classic repo markets that facilitate market-making – along with appropriate hedging structures – for both government and corporate bonds (i.e., bond futures, interest rate swaps, and credit default swaps).

[22] ICMA March 2013

7. *Encourage the development of a credit culture.*
   Robust, deep and liquid debt capital markets can only develop within environments where a broadly diversified base of investors is free to make decisions based on well informed and objective risk reward considerations – not on explicit or implicit assurances of support. Such investor accountability needs to be built around the holistic pursuit of transparency, the free flow of information and opinions, and high standards of disclosure and governance.

There is still much to do in developing Asia's local (and increasingly regional) currency government, credit, securitization, covered bond and municipal bond markets. However, focusing on the development of these markets will help to keep capital in the region by providing more attractive alternatives for domestic investors.

ASIAN FOREIGN EXCHANGE MARKETS

Importance of Foreign Exchange Markets

Today, the Foreign Exchange (FX) market is the largest and most liquid financial market in the world, acting as a global payment system and a key tool in international trading, currency hedging, and corporate cash flow and balance sheet management. Due to the truly global and geographically diverse nature of the market, FX trading is a fundamental financial activity that underpins global economic and commercial systems.

Net-Net Basis,[1] Daily Averages in April, in Billions of US Dollars						
Instrument	**1998**	**2001**	**2004**	**2007**	**2010**	**2013**
Foreign exchange instruments	1,527	1,239	1,934	3,324	3,971	5,345
[1] Adjusted for local and cross border interdealer double- counting (i.e. "net- net" basis).						

SOURCE: BIS April 2013

Market participants range from central banks, commercial enterprises, international investors and commercial/investment banks through to global hedge funds, retail investors and professional currency traders. Central banks play a pivotal role in the FX market and are charged with controlling the supply of their country's currency: fixing overnight lending rates, purchasing and selling government securities to moderate the supply of money and determining their currency's interest rate by buying or selling it in the open market.

FX Markets Today

Central banks, commercial and investment banks (the largest market participants), corporations and global funds all participate in the institutional market – the largest of the foreign exchange markets. Participants at this level are the most active and drive a majority of the total volume available each day.

Although it is predominately an over-the-counter market, FX has been at the forefront of the electronic trading revolution over the last decade, which has brought substantial levels of transparency and efficiency to all participants. Electronic trading platforms began to emerge in the late 1980s, and today platforms, such as EBS and Reuters, are capturing a majority of dealer-to-dealer volumes globally along with other platforms, including FXAll and Currenex, which have evolved in the dealer-to-customer space.

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To further increase efficiency and mitigate settlement risk (the most significant source of systemic risk in foreign exchange), central banks, supervisors and commercial banks jointly introduced / developed a global financial market infrastructure (FMI) – the CLS Bank – which went live in 2002. Now overseen by the 17 central banks, CLS is currently the world's dominant Payment versus Payment (PvP) FX trade settlement system, settling the majority of interdealer FX trades globally in 17 currencies.

The World's Largest Financial Market

The global FX market is the world's largest financial market in terms of average daily value traded. According to the most recent April 2013 BIS study, overall wholesale FX daily trading volume totaled USD5.3 trillion in 2013. This is up from USD4.0 trillion in April 2010 and USD3.3 trillion in April 2007. FX swaps were the most actively traded instruments in April 2013, at USD2.2 trillion per day, followed by spot trading at USD2.0 trillion.

Currency Distribution of Global Foreign Exchange Market Turnover

Net-Net Basis,[1] Percentage Shares of Average Daily Turnover in April[2]

Currency	1998		2001		2004		2007		2010		2013	
	Share %	Rank	Share %	Rank	Share %	Rank	Share %	Rank	Share %	Rank	Share %	Rank
CNY[3]	0.0	30	0.0	35	0.1	29	0.5	20	0.9	17	2.2	9
HKD[3]	1.0	8	2.2	9	1.8	9	2.7	8	2.4	8	1.4	13
SGD[3]	1.1	7	1.1	12	0.9	14	1.2	13	1.4	12	1.4	15
KRW[3]	0.2	18	0.8	15	1.1	11	1.2	14	1.5	11	1.2	17
INR[3]	0.1	22	0.2	21	0.3	20	0.7	19	1.0	15	1.0	20
TWD[3]	0.1	21	0.3	20	0.4	18	0.4	22	0.5	23	0.5	23
MYR[4]	0.0	27	0.1	26	0.1	30	0.1	28	0.3	25	0.4	25
THB[4]	0.1	19	0.2	24	0.2	22	0.2	25	0.2	26	0.3	27
IDR[4]	0.1	25	0.0	28	0.1	27	0.1	29	0.2	30	0.2	30
PHP[4]	0.0	29	0.0	29	0.0	31	0.1	31	0.2	28	0.1	31
Total	200.0		200.0		200.0		200.0		200.0		200.0	

[1] Adjusted for local and cross border interdealer double counting (i.e. "net-net" basis). [2] Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%. [3] Turnover for years prior to 2013 may be underestimated owing to incomplete reporting of offshore trading in previous surveys. Methodological changes in the 2013 survey ensured more complete coverage of activity in emerging market and other currencies. [4] Turnover may be underestimated owing to incomplete reporting of offshore trading.

SOURCE: BIS Triennial Survey 2013

The BIS's 2013 Triennial Survey of FX markets continued to show strength in global FX activity with growth reported by a number of FX Market Committees, with concentration of trading in London, New York, Tokyo, Singapore and Hong Kong. In the aftermath of the crisis, newly instituted and expanded central bank swap lines appear to have substantially mitigated the issue of USD shortages – demonstrated by a well performing market during the financial crisis as well as during the stresses of the Euro debt crisis. According to BIS: "The US dollar remained the dominant vehicle currency; it was on one side of 87% of all trades in April 2013…. The turnover of the Japanese yen increased significantly between the 2010 and 2013 surveys. So too did that of several emerging market currencies…., with the Chinese renminbi entering the list of the top 10 most traded currencies."

FX Markets in Asia

Prior to the Asian financial crisis of the late 1990s, most Asian economies (and ASEAN countries in particular) ran quasi-fixed rate currency regimes against the US dollar (USD) and/or a basket of currencies heavily weighted towards the USD. With Asian currencies generally offering higher interest rates than the USD, many Asian corporates borrowed in USD to reduce costs. At the time, most borrowers believed these "fixed rate" regimes would last, and the funds raised were used in a range of projects with little regard for duration mismatches or the embedded currency risks.

The Asian financial crisis was triggered by the devaluation of the Thai baht in July 1997, and contagion quickly spread to other countries throughout the region. Due to the severe devaluation of Asian currencies, many corporates could no longer afford to repay their USD debts, leading to a cascading chain of defaults throughout the region.

As a result of the crisis, some countries in Asia learned that a buffer of USD liquidity was needed to offset currency pressure. They responded in kind by building up their foreign exchange reserves and establishing extensive swap lines among the regional central banks to overcome short term liquidity stresses. Exchange rate regimes were also made more flexible which allowed Asian currencies to fluctuate more freely – both up and down.

Additionally, Asian countries focused on developing local currency bond markets and domestic corporates were encouraged to borrow in these markets to help offset currency risks. Although Asian local currency markets have seen success over the last decade, they have not grown to sufficient size and depth to displace the USD as the primary currency for bond issuance in the region.

When the global financial crisis decimated markets in 2008, Asian countries were better prepared to withstand the pressures arising from the fallout of the Lehman Brothers collapse. Increased currency flexibility and deeper USD liquidity in Asian central banks' reserves – built up as a result of the first crisis in the 1990s – sufficiently contained crippling currency fluctuations. As recovery took hold, several Asian currencies saw strong inflows resulting in rallies meeting post Asian crisis highs (such as the Thai baht).

Regulatory Developments

Historically, FX markets have been overseen and supervised by central banks, taking into account national sovereignty and monetary policy, as well as the FX markets' importance to global stability.

Following the global financial crisis, international regulatory efforts to prevent another crisis have worked their way from the credit markets into the FX market. Liquidity requirements, clearing and

execution requirements, margin requirements, capital reserve requirements and even executive compensation caps have all had an impact on the FX market. One of the current major focal points is the Margin Proposal issued by BCBS-IOSCO in October 2012.

BCBS-IOSCO Margin Proposal

In October 2012, BCBS-IOSCO issued a consultation paper regarding the introduction of margin requirements for non-centrally-cleared OTC derivatives, which would also cover FX forwards and swaps. This was finalized in September 2013 with a recommendation not to subject FX forwards and swaps to a mandatory Initial Margin regime. Variation margin on these derivatives should be exchanged in accordance with standards developed after considering the Basel Committee supervisory guidance for managing settlement risk in FX transactions. The framework also exempts from initial margin requirements the fixed, physically settled FX transactions that are associated with the exchange of principal of cross-currency swaps which is extremely important for Asia as many markets still rely heavily on US dollar bond issuance. However, the variation margin requirements that are described in the framework apply to all components of cross-currency swaps.

The key issues taken into account during the consultation and final decision focused on the fact that physically settled FX forwards and swaps differ from other OTC derivatives in several material respects, namely:

1) The unique and integral role of physically settled FX forwards and swaps – cash products settled through the exchange of two currencies – in the global payment system, international trade, cross border activity and monetary policy.

2) The risks associated with the FX market are appropriately mitigated by the current regime, which encourages prudent supervision, practice guidelines and capital implications – and continuously reviews and enhances supervision. Settlement risk is the main source of systemic risk for the FX market and is therefore the priority focus area for both global regulators and market participants. Replacement cost risk is appropriately mitigated through collateral exchange under credit support annexes ("CSAs"), with a trend towards increased CSA usage.

Subjecting physically settled FX forwards and swaps to a mandatory initial margin regime would be inconsistent with established central bank strategies for addressing systemic risk in the FX market (which are predicated on removing settlement risk), and could also create unsafe structural economic incentives that can harm the integrity of the market.

A mandatory initial margin regime would incentivize central clearing for FX products in the absence of an approved, robust and safe clearing solution, and also jeopardize the use and role of CLS in reducing systemic risk, as the costs associated with mandatory replacement cost risk reduction via initial margin moves focus away from non-mandatory settlement risk reduction. Implementation of initial margin would also discourage legitimate trading in FX products, which might adversely affect global trade and cross border activities, and potentially disrupt the activities of central banks.

The short term nature of most deliverable FX forwards and swaps provides considerable flexibility in managing counterparty exposures in comparison to other OTC derivative contracts. However any mandatory margin regime based on

tenor would only result in a bifurcated FX market: an ineffective and undesirable outcome as market participants would be encouraged to hedge their currency risk using shorter term FX products than desired.

Given the FX market's position as the world's largest, most standardized and liquid financial market – *and as a central component of the global payment system that underpins all economies worldwide* – the potential consequences of any proposed changes to today's physically settled FX market would need to be thoroughly analyzed and assessed.

Emergence of a Non-G10 Currency: Internationalization of the RMB

Since 1994, China has embarked on foreign exchange reform by unifying its dual exchange rates and introducing a market based, unified floating exchange regime. Rapid development of the domestic financial market has paved the way for further capital account liberalization.

Senior officials have made it clear that Beijing aims to continue the gradual opening of the capital account during the 12th Five year Plan (2011-15), a policy that goes hand in hand with increasing the convertibility of the RMB. Former Premier Wen Jiabao has spoken of promoting RMB convertibility "in a steady and orderly manner", a sentiment echoed by PBoC Governor Zhou Xiaochuan. In an interview with Caixing magazine in 2010, PBoC Vice Governor Yi Gang stated: "A convertible yuan remains the ultimate goal for the nation's currency exchange rate reform."

These reforms have also been beneficial from a trade settlement perspective. A small pilot RMB trade settlement scheme introduced in July 2009 saw a four fold increase in total RMB trade settlement, reaching RMB2.1 trillion (USD330 billion) in two short years – or about 9% of China's total trade 2011. RMB growth continues its rapid development where volumes are likely to reach new records in 2013. The RMB has become the world's 9th most actively traded currencies; and RMB trade settlement accounted for nearly 15% of China's total trade by 4Q 2013. Pledging continued strong support for the RMB program, China has signed RMB2.2 trillion worth of bilateral currency swaps with 20 jurisdictions including Hong Kong, Singapore, Taiwan, Thailand, Malaysia, Indonesia and London, totaling more than USD360 billion.[23]

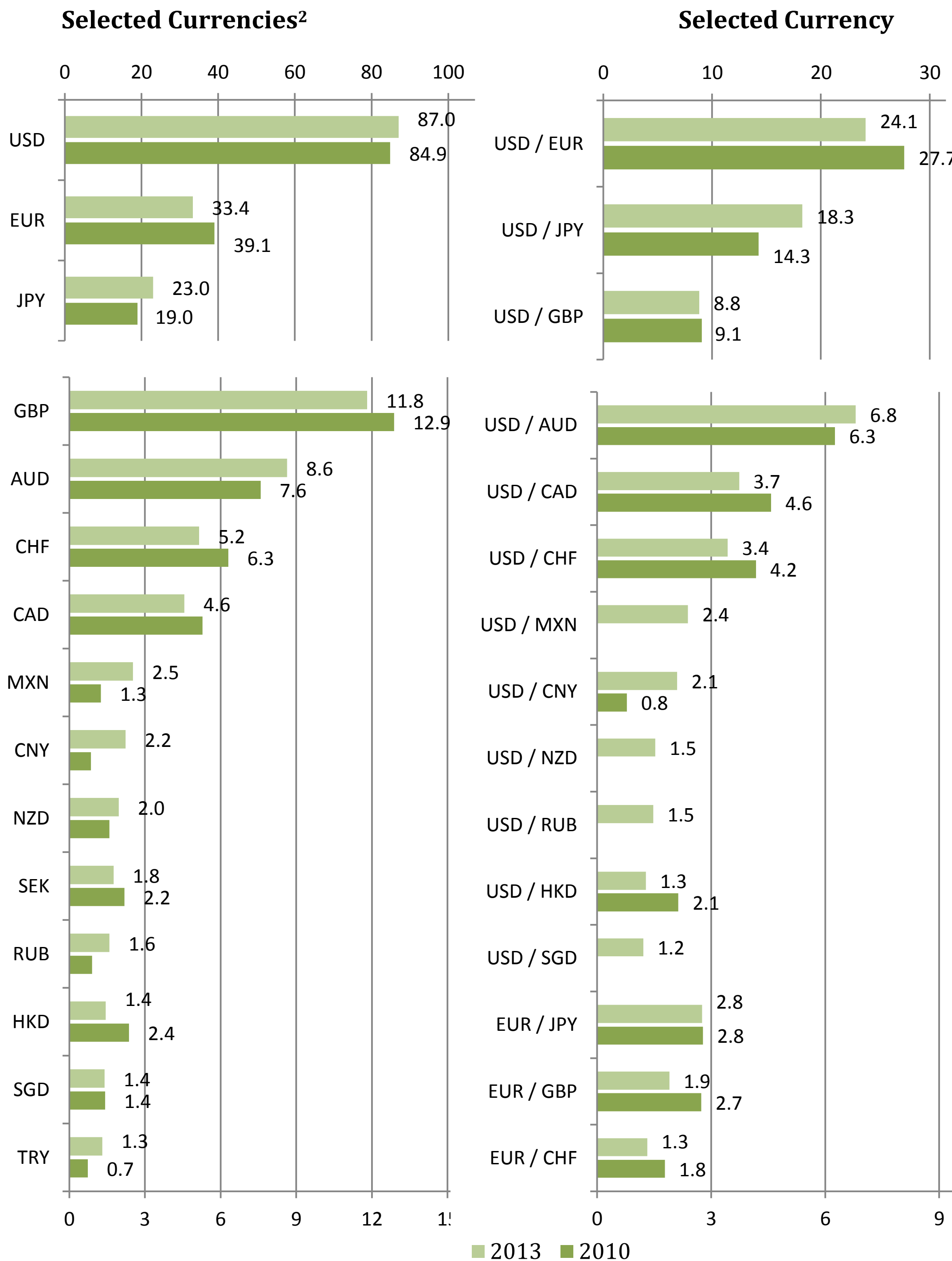
According to SWIFT, a currency is typically considered "international" when it is used as a unit of account (corporate invoices), a medium of exchange (to settle cross border trade) and a store of value (deposits, reserve currency). The RMB still has some distance to go before it can be considered truly international.

The increasing use of the RMB as a regional currency for trade settlement, as well as the future full convertibility of the yuan, will be highly welcomed developments in the long term. Increasing standardization of cross border RMB related documentation will facilitate cross border transactions, while increasing the fungibility of offshore RMB liquidity pools and liberalizing policy will help to establish more transparent and standardized legal frameworks for RMB payments and investments.

[23] SWIFT, HSBC, BIS Triennial Survey 2013

Foreign Exchange Market Turnover by Currency and Currency Pairs[1]

Net-Net Basis, Daily Averages in April, in Per Cent



[1] Adjusted for local and cross border interdealer double-counting, ie "net-net" basis. [2] As two currencies are involved in each transaction, the sum of shares in individual currencies will total 200%. The share of currencies other than the ones listed is 12.2% for 2013 and 13.7% for 2010. 3 Turnover for 2010 may be underestimated owing to incomplete reporting of offshore trading. Methodological changes in the 2013 survey ensured a more complete coverage of the indicated currencies.

SOURCE: BIS April 2013

asifma

Share of Electronic Trading per Instrument per Counterparty							
% of electronic trading	Inter dealer (40%)[1]	Asset managers (16%)	Client banks (14%)	Hedge funds (12%)	Corporate (12%)	Aggregator (6%)	% of e-trading per product
Spots (38%)[2]	90%	80%	85%	80%	75%	100%	89%
Forwards (12%)	80%	70%	75%	40%	50%	100%	72%
FX swaps (45%)	50%	35%	45%	20%	25%	100%	41%
Options (5%)	15%	10%	15%	10%	5%	100%	14%
% of e-trading per counter party	70%	51%	60%	38%	38%	100%	58%

[1] Counter-party market share in terms of trading volume
[2] Instrument market share in terms of trading volume

SOURCE: BoE, Celent, Greenwich Associates, Oliver Wyman analysis

Electronic Trading Platforms

As the FX market continues to grow and develop, the use of electronic trading platforms will also increase due to investment and commercial bank adoption, the rise of High Frequency trading and Algorithmic trading, ease of access, increased transparency and cheaper execution costs.

However, the uptake of electronic trading in Asia is still relatively lower than in the US and Europe, where electronic trading accounts for more than half of total trading volume. There is still much room for growth. Most importantly, as currencies begin floating more freely and capital accounts open up, greater use of e-trading will facilitate integration with global best practices and leading trading platforms, such as EBS and Reuters.

Recommendations

FX markets are unique due to their importance to economies, national needs and global development. As a truly global market, trading 24 hours a day, 6 days a week, the movement of capital through the FX markets will be greatly enhanced through truly integrated, consistently regulated infrastructure.

1. *Strive to adopt international standards and practices.*
   Asian FX markets should focus on convergence and harmonization with international standards and practices, and should consider the possibility of integration with existing global trading platforms, and

settlement infrastructure such as CLS.

2. *Address current roadblocks to market development.*
   Excessive regulation, the introduction of centralized clearing or unnecessary margin requirements, lagging development in e-trading and the lack of currency convertibility would hinder the growth of FX markets across Asia.

3. *Support the internationalization of the RMB.*
   Increase standardization of cross border RMB related documentation to facilitate cross border transactions; increase fungibility of off shore RMB liquidity pools; and introduce additional policy liberalization to establish more transparent and standardized legal frameworks for RMB payments and investments.

ASIAN COMMODITIES MARKETS

Importance of Commodities Markets

Commodities markets play an important role in the real economy by reducing price volatility and risk, enabling price discovery and balancing production versus consumption.

Commodities markets act as key price discovery mechanisms that underpin virtually all world trade; and the reliance on them by producers, traders and consumers to efficiently translate supply and demand into price is a cornerstone of their business models.

Banks provide liquidity in commodities markets through market making activities, bringing together buyers and sellers that have different needs, risks, time horizons and incentives. Market making activity provides liquidity to exchanges and the OTC markets, plus the availability of hedging, financing and other intermediation services. Increased liquidity is associated with lower price volatility, narrower bid-ask spreads and reduced basis risk for hedging strategies.[24]

Markets have evolved over substantial periods of time and historically have been located in traditional western centers of trade, but more recently with the emergence of the dominant consuming markets we are seeing these traded markets move eastwards. This move reflects trading patterns, growth of emerging markets and time zone preferences for key decision makers.

In many commodities, the construct of the markets incorporates a physical element to this discovery mechanism, ensuring the convergence of financial market prices with the physical markets.

Other financial markets often look to the commodity markets for indicators of economic direction, and so through this mechanism their impact is amplified across the world's financial markets.

Moving towards greater use of capital markets also frees up bank balance sheets, allowing for more real world assets to be put towards SME lending, ultimately driving domestic growth within local economies.

Building Volume and Liquidity in Asia

Asia's existing commodities markets vary in terms of sophistication, size and integration with global markets.

Regional markets are relatively large and sophisticated in base metals and certain agricultural commodities, where Asia is a major factor in trade flows. However in other areas, such as energy, Asia lacks sophisticated trading markets and considerable effort will be required to develop them to their full potential.

Even in Asia's "better developed" commodity markets, price discovery lags behind Western exchanges and volumes remain lower than justified by trade actualities, resulting in far higher volatilities and costs to users. This only encourages the trend of domestic capital flowing offshore to purchase relevant

[24] IHS Global, "The Role of Banks in Physical Commodities", 2013

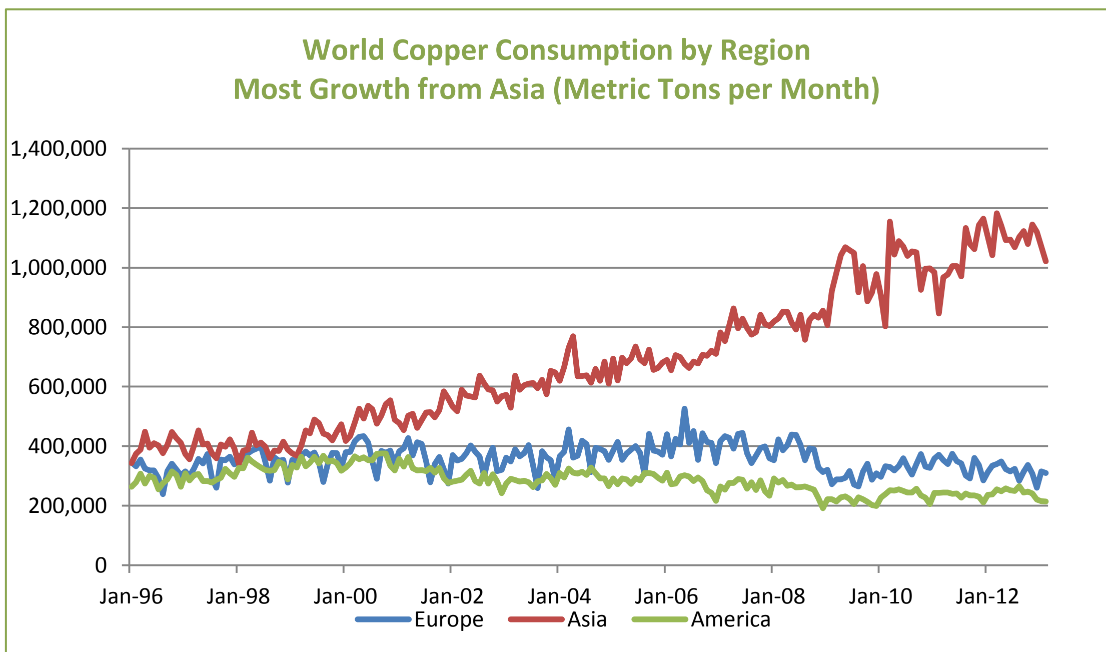
Hedging instruments, only to return onshore to purchase the actual underlying commodity. It clearly makes more sense for that capital to stay within the region.

Asian market segments vary in terms of sophistication and market knowledge. For example, commodity traders and corporates in the energy segment (large players) tend to be highly sophisticated – in contrast to base metal consumers (primarily China and Korea), who have a domestic focus and are very regionally centered. Closing these gaps will lead to better markets.

Asian Commodity Markets Today

Across Asian commodities futures exchanges today, there are 23 organized commodity futures exchanges or trading platforms in 9 jurisdictions. The oldest and most established are in Japan and Singapore, while some of the newest and fastest growing are in China. [25]

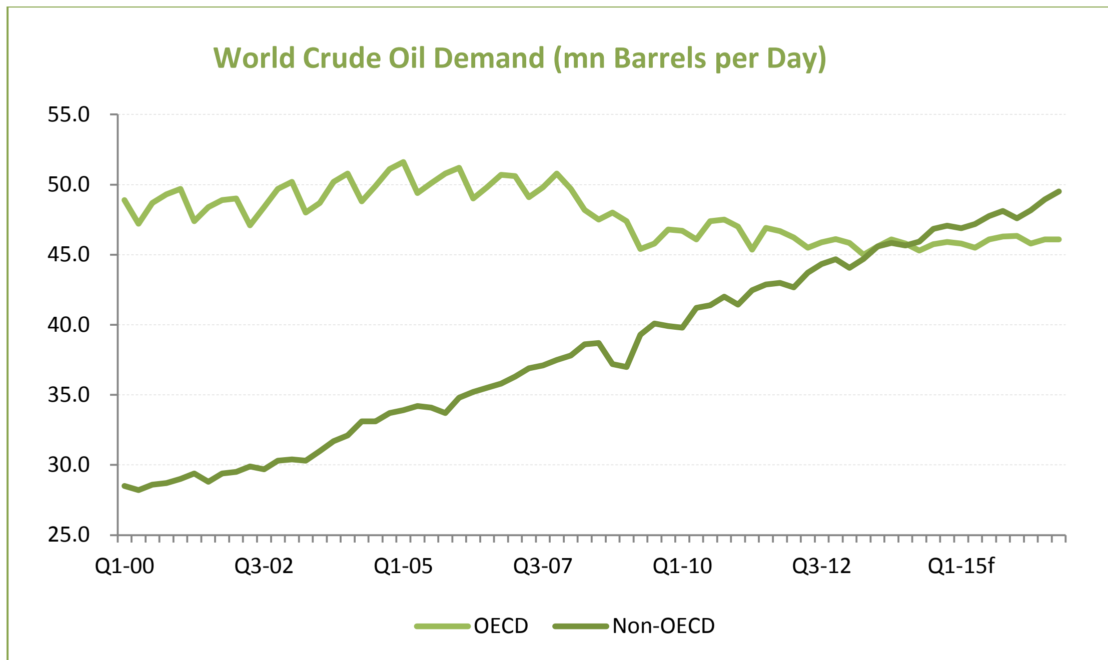
Asia accounts for more than half the world's consumption flows in most commodities traded today, but the region's futures markets generally do not reflect this reality.



SOURCE: Standard Chartered/Bloomberg

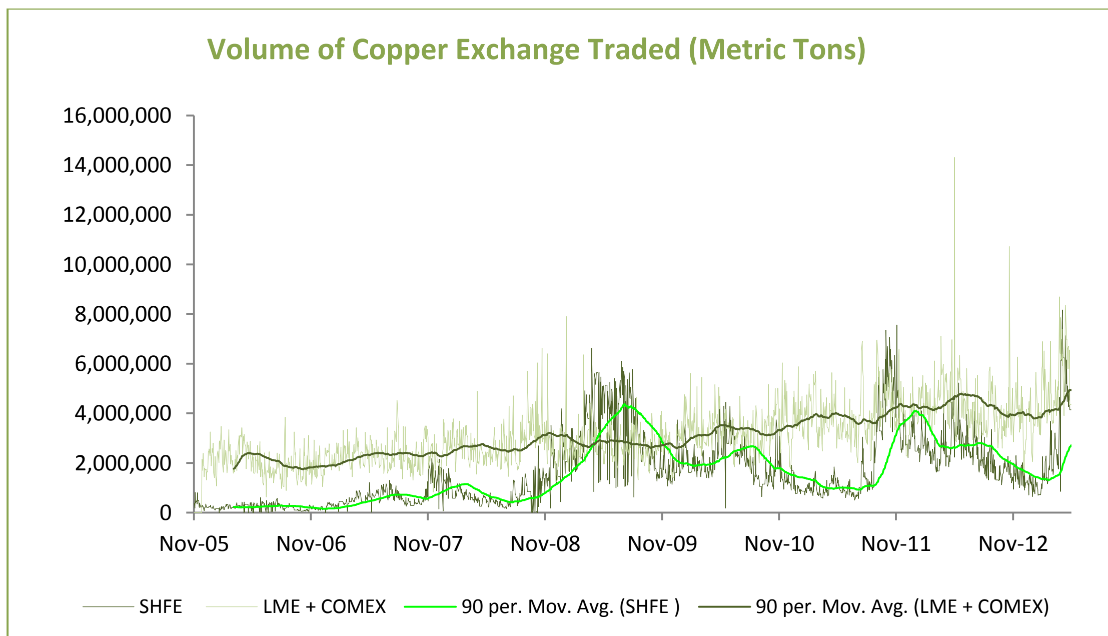
[25] Standard Chartered, Barclays and Deutsche Bank

Energy demand – The rise of non-OECD crude oil demand (million barrels per day) will soon overtake OECD demand, largely reflecting Asia's growing oil consumption.

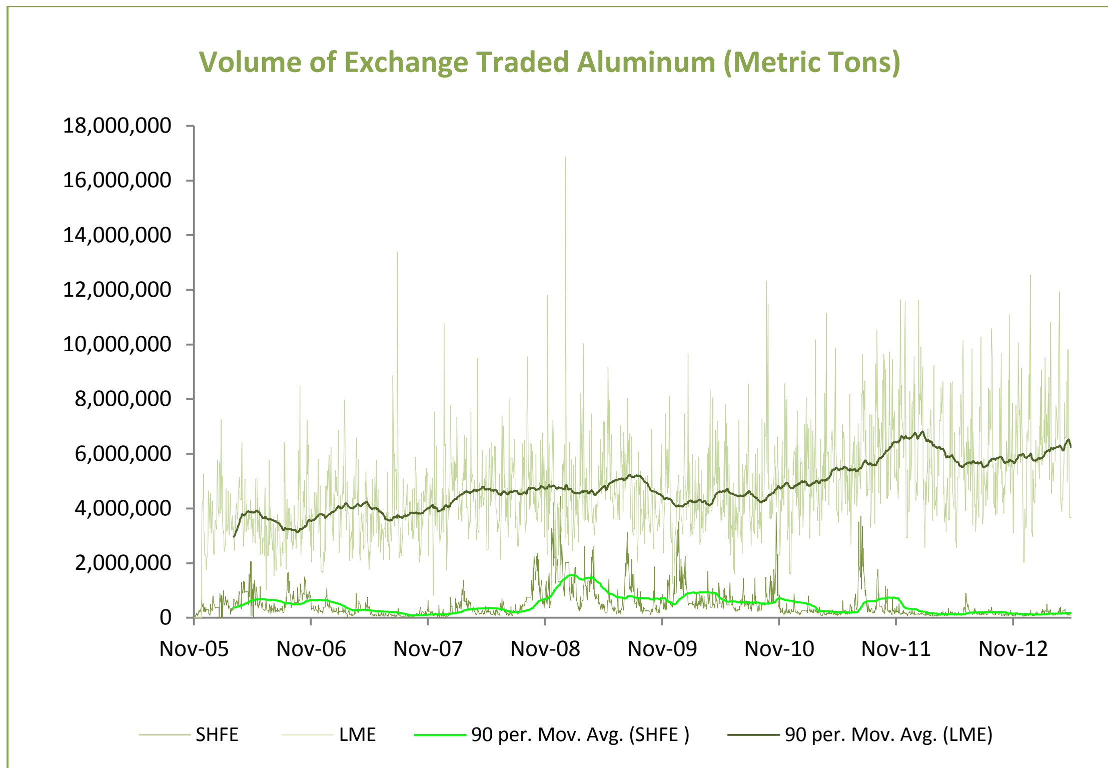


SOURCE: Standard Chartered/Bloomberg

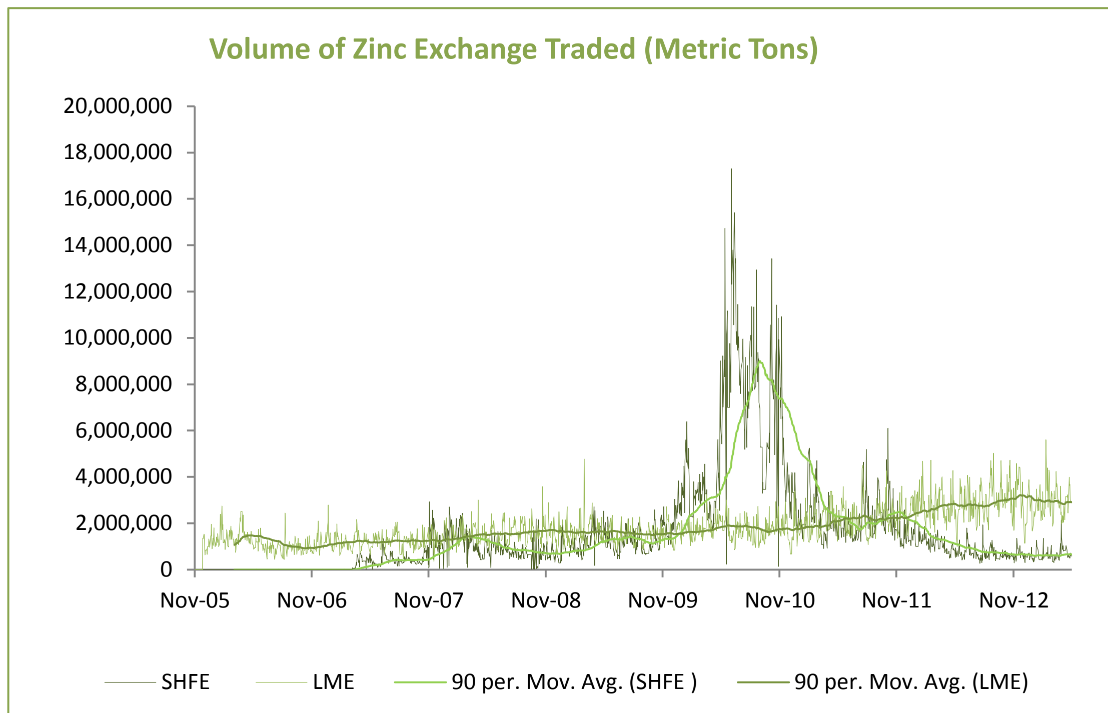
Despite the above, volumes at the largest Asian exchanges lag behind their western counterparts across virtually all commodities and exchanges. Volumes at the Shanghai Futures Exchange (SHFE) are probably closest to those of comparable Western exchanges, given China's dominance as a base metals consumer. On the other hand, the closed nature of China's commodity markets provides a captive market for their trading venues.



SOURCE: Standard Chartered/Bloomberg

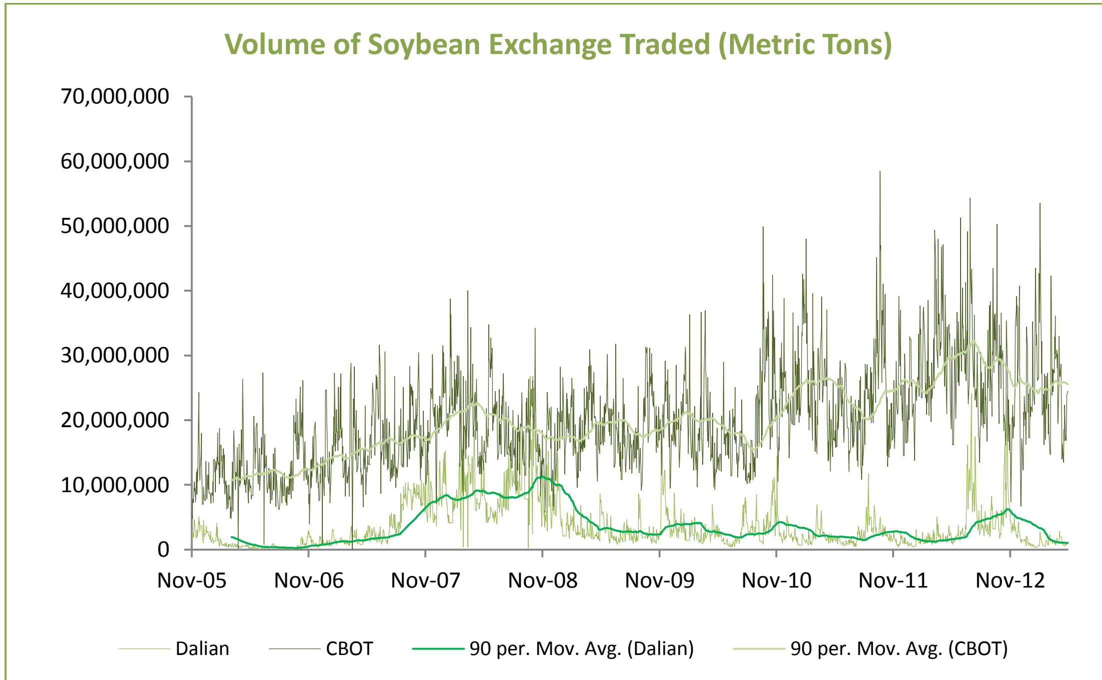


SOURCE: Standard Chartered/Bloomberg



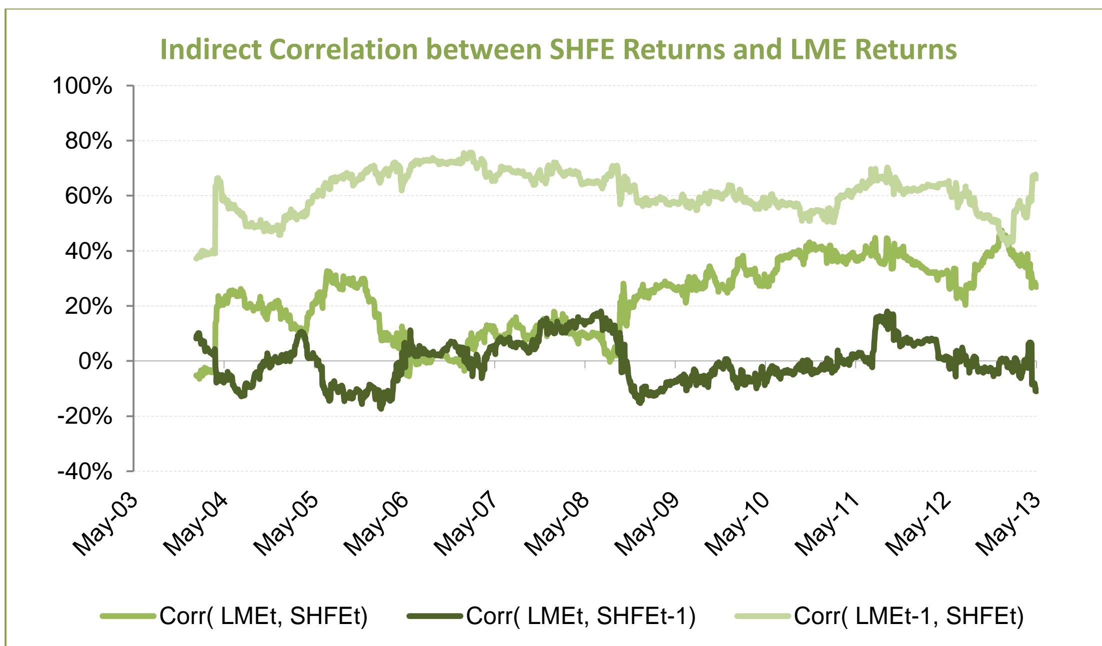
SOURCE: Standard Chartered/Bloomberg

In contrast to base metals, volumes for agricultural commodities in the region (where China is also a large consumer) are only a small fraction of those of primary Western markets.



SOURCE: Standard Chartered/Bloomberg

Today, Asian markets tend to be driven by Western markets. The chart below shows how SHFE returns for a given time period are highly correlated with the LME returns for the previous time period, but not vice versa.



SOURCE: Standard Chartered/Bloomberg

Key Ingredients for Asian Market Development

A few key factors have a dominating impact on the development of successful commodity futures markets:

Market Participation Factors

Trading volume is important to a market's success because in futures markets, volume begets liquidity, which in turn attracts more participation. However, volume is also typically sensitive to the currency denomination of contracts. The *contract currency* needs to be associated with a major commodity country with a free and liquid currency used widely in global trade. Conversely, limiting contracts to local currency hinders market development and volume, largely due to the liquidity spillover from the more liquid currency to the futures product.

Infrastructure Development and Standardization

All tiers of government and industry should work together to ensure consistent infrastructure relating to the production, export and import of commodities, including:

Product Standardization – Encouraging market participation by ensuring each futures contract has the same quality specifications as the products in the cash market that are traded in that commodity. This is to ensure that the relevance of the futures contract remains high, that genuine users have cause to generate sufficient liquidity in the contract, and that there is price convergence between the financial and physical markets.

Transportation – Investment in air, port, road and rail networks. There needs to be interaction and collaboration between futures and physical markets, which rely on the smooth functioning of storage and delivery systems.

Warehousing – Common infrastructure for deliverable locations, including the standardization and classification of storage facilities.

Participant Diversity – Attracting a large and diversified population of participants, both consumers and producers, helps to ensure a balanced trading environment, improve price discovery and avoid circumstances that can lead to manipulation. The dominance of local players and a lack of international participation that typifies Asia's physical commodity markets can lead to reduced liquidity, higher volatility and lower volumes, which further discourage trading in the region's cash and futures markets.

A key challenge in Asia is the importance of individual/small investors and market makers. Commodity futures markets need both individual/small investors and market makers to provide liquidity and enable full price discovery. Although large market makers have built an increasing presence in Asian commodities markets over the last few years, government attitudes and regulations restricting their participation remains a serious obstacle to building liquidity.

Legal Environment

A market based in a jurisdiction with a robust and well understood legal structure that provides a strong dispute resolution process will be inherently more attractive than a jurisdiction with less clear or certain legal arrangements, especially in contractual certainty and consistent application of the legal process. Some jurisdictions in Asia, notably Hong Kong and Singapore, have successfully built their positions as

commodity trading centers by offering a legal and regulatory structure that provides these assurances, attracting trading from other areas with less robust or transparent legal and regulatory regimes.

Taxation

Transaction taxes restrict market development, undermine effective price discovery and reduce hedging effectiveness. In Asia today, high and complex tax environments in Korea and China have had a significant and negative impact on market development while Hong Kong and Singapore have clearly benefitted from a very different approach. Asia may be facing a unique opportunity to capture additional future business if its various jurisdictions can provide a tax neutral environment for market participants.

Trading Environments

The trading environment includes the actual exchange or electronic platform, the ways in which they interface and integrate with the payment system and many other variables that together form the market ecosystem. Commodity markets require strong and well regulated clearing and settlement structures as part of their ecosystem, as well as clear and supportive regulation in areas requiring bilateral transactions where standardized futures contracts are unable to respond to trading needs. Open access to markets is another key component for long term development. The trading ecosystem is a package of mutually supportive components that can represent an important factor in market growth and success.

Benchmarks

Asia based benchmarks make sense where there is a strong link between production and demand centers in the region. This suggests that benchmarks for base metals could be developed given the uniform standards that already exist but where the HKEx-owned LME dominates trade. Although more complicated, new benchmarks for iron ore or energy might be more realistic. In these cases, consumer-usage-based standards would need to be established, especially in China, as qualities for ore or crude oil vary substantially depending on production source. Close integration with production centers would be essential where warehousing and risk management issues represent significant hurdles.

Market Support

While most of the observations up to this point are “hard” concepts – relatively clear and definable, the ideas associated with market support are somewhat more conceptual. For example, governments wishing to develop markets as a national policy priority might consider programs to attract attention and volume to new markets. Government-to-government agreements that link producers and consumers have a potentially powerful impact on market development, and policy changes that permit the participation of day traders would facilitate volume growth and price discovery.

Apart from government-led plans, the industry itself should work to improve the overall level of market knowledge and sophistication amongst all participants. Highly uneven levels of market knowledge have an undesirable impact on the price discovery process that can also impact volatility.

Key Recommendations by Product

Energy

As a massive and growing consumer of energy, Asia has the potential to develop significantly larger futures markets in energy commodities. While the region’s energy production is modest relative to

its consumption, there are substantial new sources of supply currently being developed in Indonesia and various parts of the South China Sea. This may stimulate a more natural balance of interest in the region if producers begin to use local markets for hedging. As in all markets, restrictions on day traders reduces market attractiveness, which is particularly a problem in India.

1. *Develop exchange traded benchmarks to discourage market manipulation* – benchmarks should be based on the usage and production of a region's major consumers and producers

2. *Further develop infrastructure* – build, organize and coordinate liquefaction, storage and transport facilities

3. *Enhance market support* – improve market sophistication to encourage foreign participation, and improve the collection of and distribution of trade data across Asia

Agricultural Commodities

There is strong potential for development of agricultural commodity futures markets, as significant production and consumption exists in the region. However, improvement is still needed in tax treatment, regulations regarding market participants (e.g. positions limits), and the currency denomination of futures contracts to allow for meaningful market development.

1. *Improve infrastructure* – enhance organization and interaction between futures and physical markets which rely on the smooth functioning of storage and delivery systems

2. *Further market support* – more sophisticated markets will attract foreign participation and improve the collection of and distribution of trade data across Asia

3. *Consistent taxation* – implement a consistent or tax neutral environment to mitigate the price dislocation accentuated by taxes on imports and exports and encourage market participation

Metals

The Shanghai Futures Exchange is a significant presence in the global base metals market; however, its dominance relies purely on Chinese domestic participation. Volumes in Shanghai remain below potential, while prices lag the LME exchange and its global network. Increased participation is required from producers and consumers outside of China, but this is an uncertain prospect for the time being.

1. *Implement a consistent regulatory framework* – Allow direct foreign participation in futures (without the need for a domestic entity), as well as in physical metal (including ownership of LME warehouses in China).

2. *Improve infrastructure* – enhance interconnectivity between cash and futures at the physical delivery point, quality and grade of the products.

3. *Consistent taxation* – implement consistent or tax neutral environment to improve price dislocation accentuated by taxes on imports and exports and encourage market participation.

ASIAN DERIVATIVES MARKETS

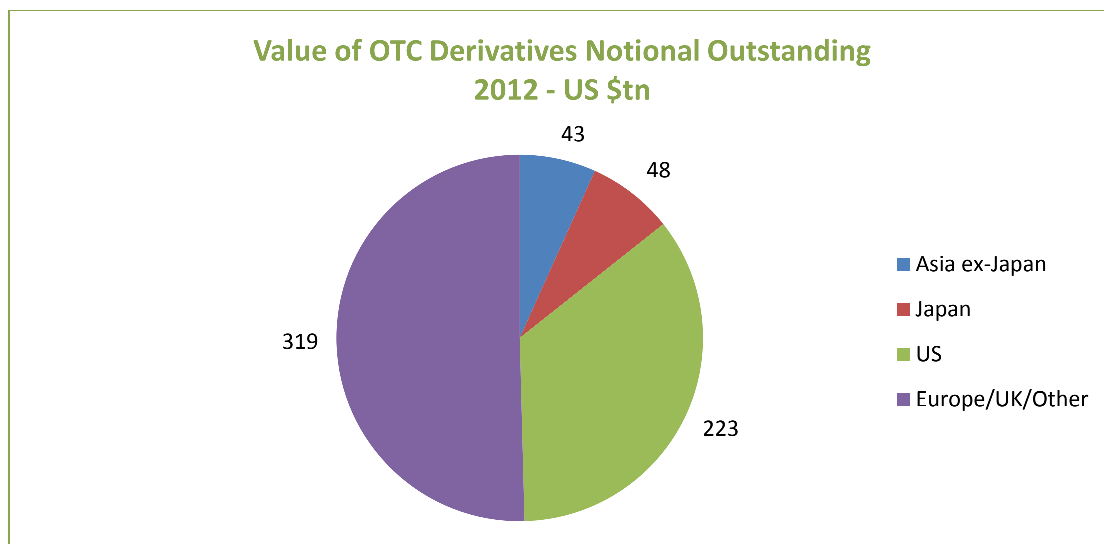
Importance of Derivatives Markets

Derivatives markets create a number of economic benefits. Not only do they provide investors with an indication of future prices, but they also allow for effective hedging of risk – which in turn attracts more market participants, higher transaction volumes and greater liquidity. Over-the-counter (OTC) derivatives products, specifically, enable industrial companies and governments to effectively finance and manage risk in their operations and activities, and help pension funds meet their obligations to retirees. They also support economic growth by enabling banks to lend to corporate and individual customers. These products play a vital role in virtually every industry – from financial services to international trade to home mortgages.

The Asian Derivatives Market Today

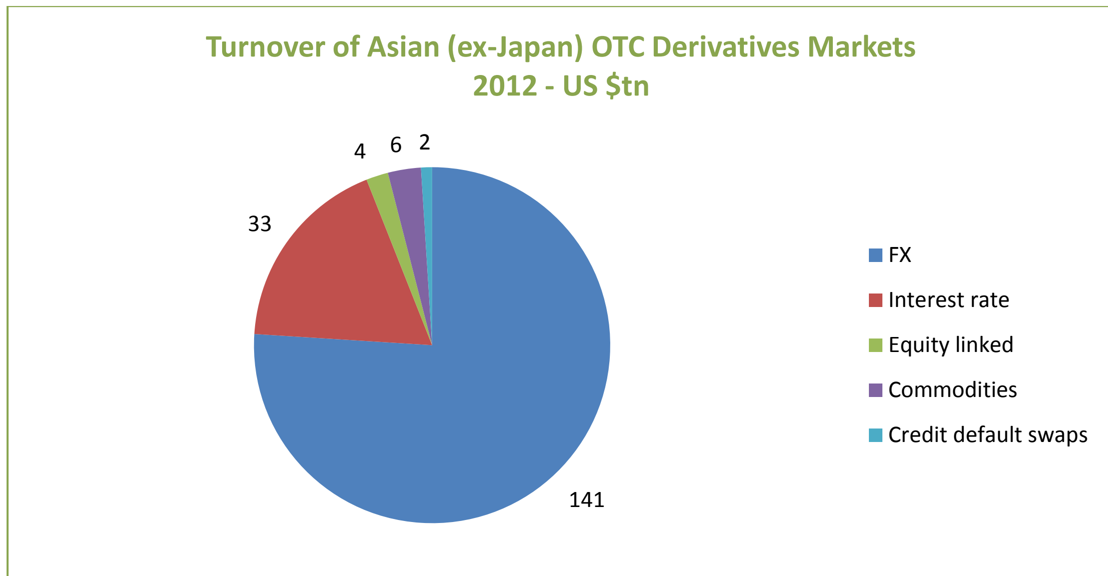
Derivatives markets in Asia are small and relatively underdeveloped, especially compared to those of the US and Europe. OTC derivatives are the largest component of the derivatives sector in Asia (ex Japan) capital markets: however they still account for only about 7% of the global total. At the end of 2012, there was USD42.6 trillion of OTC derivatives in notional outstanding in the Asian financial markets (Australia, China, Hong Kong, India, Indonesia, Malaysia, New Zealand, Singapore, South Korea, and Taiwan)[26], compared to approximately USD633 trillion globally.[27]

Although exchange traded derivatives are present in various forms (options, warrants, futures) in several markets, those markets are also fairly small. In 2012, annual turnover of exchange traded derivatives across Asia [28] amounted to approximately USD30 trillion[29] compared to USD186 trillion in turnover for OTC derivatives.[30]



SOURCE: BIS, ISDA, Bank of Japan, Office of the Comptroller of the Currency

[26] The Asian OTC Derivatives Markets published by ISDA in April 2013
[27] See the Asian OTC Derivatives Markets published by ISDA in April 2013, BIS, Deutsche Bank
[28] excluding Japan
[29] Bank for International Settlements, World Federation of Exchanges
[30] The Asian OTC Derivatives Markets published by ISDA in April 2013



SOURCE: Celent, The Asian OTC Derivatives Markets published by ISDA in April 2013

Like all Asian financial markets, the Asian OTC derivatives market is highly fragmented, with different groups of countries having their own characteristics and levels of maturity. Dealers account for 57% of OTC derivatives turnover in Asia[31]. Outside of dealers, financial institutions (including banks and securities firms) dominate OTC derivatives trading, and the contribution of corporates (i.e. the real sector) is low. [32] This may be attributed to regulatory barriers related to OTC derivatives trading, as well as a lack of trading infrastructure in the large economies (e.g. China, India, and Indonesia), particularly in the commodity segment. Amongst the corporate sector, knowledge about derivatives and exchange traded instruments is not well developed outside the local markets.

The primary driver of growth in Asian market turnover is OTC foreign exchange (FX) derivatives. [33] In 2012, FX OTC derivatives accounted for a significant 76% of turnover in Asia[34], with interest rate derivatives a distant second (18% of turnover), followed by commodities (3%), equities (2%) and credit (1%).[35]

In the aftermath of the global financial crisis, the G-20 focused considerable attention on the role of the OTC derivatives market in the spread of systemic instability. The FSB was tasked with developing a new framework that would drive users towards exchange traded derivatives and the use of more standardised OTC instruments that could be centrally cleared. Non-centrally-cleared OTC derivatives transactions would be subject to higher margin and capital requirements under the BCBS/IOSCO proposal and Basel III.

Asian countries have responded differently to the proposed changes, ranging from Hong Kong, Singapore, Japan and Australia (which have decided to implement most of the G-20 proposals) to China, India and Korea

[31] excluding Japan
[32] The Asian OTC Derivatives Markets published by ISDA in April 2013
[33] excluding Japan
[34] excluding Japan
[35] The Asian OTC Derivatives Markets published by ISDA in April 2013Id.

(which are mostly focusing on central clearing) and Indonesia, Malaysia and Thailand (which have not made proposals with respect to central clearing, which is sensible given the size of their OTC derivatives markets). Several countries have finalized, or are in the process of finalizing, new rules to govern OTC derivatives transactions, including requiring the establishment of new central clearing arrangements and the creation of trade repositories. These changes will have implications for different market participants. Some participants may choose to scale down or even withdraw from some markets if new regulatory hurdles, capital charges, reporting requirements and rising costs make their businesses untenable.

Issues and Challenges

Significant Legal Uncertainties and Weak Contractual Enforceability

Not all Asian countries have the same level of maturity when it comes to the development of derivatives for financial markets. Australia, Singapore, and Hong Kong (the three jurisdictions with well developed financial markets) are the leaders in Asia's OTC derivatives development; whereas China, India, Indonesia, Malaysia, the Philippines, Taiwan and Thailand lag behind. The primary reason for the lack of development of this second group is that it has had a conservative regulatory environment, which is often coupled with significant legal uncertainties and weak contractual enforceability. Market growth has also been stunted by issues surrounding collateral.

Extraterritoriality of US and EU Regulations

OTC derivatives market volumes are primarily in the US and Europe (London); and as a result, those two jurisdictions have a disproportionate impact on the Asian markets. US and Europe-based global dealers are also the major liquidity providers for the Asian markets. The extraterritorial aspects of the new US and EU OTC derivatives rules have created a number of issues for the Asian markets: notably third country CCP recognition criteria being imposed by the US (CEA 5b) and EMIR (article 25), as well as regulatory conflicts between the US and EU trade reporting requirements and the local privacy laws in various Asian jurisdictions.

Some Asian regulators have been understandably vocal in voicing concerns to their US and EU counterparts, whereas China and India have only recently begun to engage in dialogue with EU and US regulators.

Fragmentation of Asian CCPs

To a large extent, proposed reforms to OTC derivatives market are more relevant to markets in the EU and US than in Asia – where there is significantly less OTC derivatives activity. However, the proliferation of Asian CCPs is a concern given the relatively small size of the clearable market. Mandatory clearing in different locations throughout Asia threatens to break up netting sets, fragment collateral and lead to higher clearing charges in CCPs that are unable to achieve scale. Moreover, too many CCPs in the region may create operational issues for participants dealing in multiple countries, as each CCP will have its own (and most likely different) requirements.

Negative Impact of Margin Requirements on Non-Centrally-Cleared OTC Derivatives

Regulatory proposals regarding margin requirements for non-centrally-cleared OTC derivatives pose significant threats to the continued functioning of this market segment. While the carve-out for physically settled FX forwards and swaps was welcome news for Asia, there

remains a number of other currently unclearable products that will not benefit from the same carve-outs and this will impact Asian markets, namely: interest rate options, commonly used by banks and mortgage guarantors to hedge prepayment risk; inflation swaps used by pension funds; plain vanilla local currency interest rate swaps (e.g. THB, MYR, CNY/CNH fixed versus floating swaps); swaptions and Delta One access products.

Underdeveloped Credit Derivatives Markets

Credit derivatives provide many investment and hedging opportunities that are not available in the cash market. Given the difficulty in shorting bonds due to underdeveloped repo markets in some Asian countries, hedging through credit derivatives is especially attractive for emerging markets investors.[36] The Asian (ex-Japan) credit derivatives market is tiny, with Singapore enjoying a dominant 56% market share, followed by Hong Kong (24%) and Australia (20%).[37] Both China and India have made efforts to promote credit derivatives trading in the past few years, with limited success. Restrictions on permissible market makers (for example, insurance companies are not allowed to trade CDS in either country) and a lack of sellers have been cited as key reasons why local markets have not developed as regulators initially hoped. In China, lack of historical data on bond recovery ratio in bankruptcies – as well as a lack of capital relief for banks buying CDS – contributed to the failure of the onshore credit derivatives market.

Recommendations

1. *Address legal uncertainties and strengthen contractual enforceability (e.g. closeout netting, collateral rights).*
   Recognizing that legal enforceability of closeout netting is the cornerstone of counterparty risk management, it would be greatly beneficial for the derivatives industry to see netting enforceability uncertainty issues in China, India, Indonesia, Malaysia and Vietnam resolved satisfactorily. Netting enforceability is also a key criterion in judging whether or not central counterparties (CCPs) are CPSS-IOSCO compliant. Allowing counterparts to deal with each other on a net – rather than gross – basis would also allow for expanded trading in deeper and more liquid markets. Enforcement of collateral rights remains problematic in many jurisdictions in Asia, which threatens to make any BCBS/IOSCO mandatory margining requirements unenforceable in certain jurisdictions.

   - Counterparties should be able to net their exposure and deal with each other on a net versus gross basis

   - Develop a robust legal / regulatory framework for enforcing collateral rights

[36] A Survey on Hedging Markets in Asia by BIS, at page 278-279

[37] The Asian OTC Derivatives Markets published by ISDA in April 2013

2. *Manage extraterritoriality of US and EU regulations (including third country CCP recognition criteria and conflicts between US/EU imposed trade reporting requirements and local privacy laws).*

   There is a strong case for a global standard setting agreement, and for greater international co-ordination amongst various regulators in order to maintain market efficiency and eliminate regulatory conflicts brought by extraterritorial rules. If the regulatory conflicts are not resolved, it is likely some participants will have no choice but to cease operations in certain jurisdictions – which will impinge upon the development of the much needed derivatives markets in Asia.

   - Encourage a global standard setting agreement

   - Facilitate greater international coordination among regulators

3. *Prevent fragmentation of Asian CCPs*

   Market growth would be best served if clear and natural centers of liquidity are allowed to develop.

   Though geopolitically unrealistic at the moment, a Pan Asian clearing solution would bring regional harmonization and lower the overall cost of trading in the region, facilitating growth in transaction volumes while attracting investors and liquidity.

   A global standards body should be established to independently judge CPSS-IOSCO compliance, which could serve as a basis for levying all related capital charges. This would address mutual recognition issues amongst Asian CCPs and regulators, making the question of whether or not to join the CCP a purely economic decision.

   - Avoid imposition of mandatory local clearing regulations

   - Develop a Pan Asian clearing solution

   - Establish a global standards body to independently judge CPSS-IOSCO compliance

4. *Refrain from imposing initial margin in the region.*

   The best outcome would be a combination of robust capital structure and CVA charges under Basel III, mandatory variation margining and clearing of standardized, liquid OTC derivatives.

   Imposing initial margin for non-centrally-cleared derivatives transactions is both pro-cyclical and fails any rational cost-benefit analysis. In addition, mandatory initial margin could potentially drive pricing high enough to dissuade end users from making prudent risk management decisions. If Asian regulators choose to implement initial margin, a carve-out (i.e. beyond the one contemplated in the BCBS/IOSCO final report issued in September 2013) would minimize the negative impact on Asian end users' hedging needs.

   - Refrain from imposing initial margin for non-centrally-cleared OTC derivatives trades

   - If initial margin is required, there should be a wider carve-out (i.e. beyond the one contemplated in the BCBS/IOSCO final policy framework)

5. *Accelerate development of credit derivatives markets, especially in China and India.*

   If regulators want to see a more robust credit derivatives market, they should address the issues of (i) permissible market-makers, (ii) lack of sellers, (iii) unavailability of historical data on bond recovery ratios in bankruptcies and (iv) the lack of capital relief for banks hedging with credit derivatives. More developed credit derivatives markets can help promote the efficiency of the financial system and assist in the development of local bond markets throughout Asia.

   - Introduce a less restrictive regulatory framework for approving market-makers

   - Develop a more active universe of sellers

   - China specific: make capital relief available for banks hedging with credit derivatives