Asia
Development, Financial Markets, Infrastructure and Consumption, China
“In recent years Asia has rapidly transformed from a developing region to the engine of global economic growth. As Asian growth becomes increasingly self-reliant, Asian financial markets offer an extraordinary opportunity for long-term investors.”

Dennis Essrich, MSc, the author of this study, is a portfolio manager in the Fixed Income Asia team at Credit Suisse. His work focuses on portfolio construction and analysis, as well as management of global government and corporate bond portfolios, inflation-linked funds and currency overlays.
As Western economies such as the USA and European countries struggle to rebuild their economies after a decade of excess, the world is turning to aspiring economies as a source of sustainable growth. Asia, in particular, has attracted the attention of investors and economists. Its position as the new growth engine of the world economy is one of the most-discussed macroeconomic trends of our times. Asian economies are experiencing sustainable growth supported by better resources, stronger balance sheets and younger workforces. In addition, the rise of an Asian middle class has brought about a new generation of consumers hunting for opportunities for spending their new-found wealth. The Asian consumer may be the megatrend of the next decade as Asian economies reshape themselves from export-led, low-cost producers to self-sustaining, consumer-led markets. At the same time, increasing urbanization and industrialization have led to rising demand for infrastructure development.

Economic forecasts leave little doubt that China will surpass the United States as the world’s largest economy over the next ten to fifteen years. Its pace of growth has been all the more remarkable for its consistency and longevity. However, China also has demonstrated why global investors have concerns about the sustainability of Asian economic growth: the main challenges will be further capital-market liberalization and whether consumer growth can develop to replace export dependency. There is also a question about how investors can capture the enormous growth potential of Asian economies. After all, capital-market developments in Asia have been divergent, both regionally and in different asset classes. Well-functioning, liquid financial markets are a key prerequisite for future sustainable growth in Asia. Recent developments across asset classes have been promising in that respect. As Asian economies grow and become more sophisticated, their financial markets are broadening, opening up more opportunities for investors. This is not just confined to conventional equity markets. Property, infrastructure and corporate-bond markets may present new investment options for domestic and foreign investors.

There are challenges and risks, as with any economic restructuring. However, Asian economies are coming from a position of considerable strength, with little debt and strong growth. There are plenty of reasons to be excited about the prospects for Asia.

The aim of this study is to examine Asia’s growth potential and the risks to that growth. At the same time, the study examines to what extent Asian capital markets are able to provide investors with appropriate instruments for tapping future economic growth in the region.

Credit Suisse has built up a substantial presence in Asia in order to provide investors with the best possible solutions for capturing Asia’s impressive future growth potential.

We hope you find this study informative.

Francesco de Ferrari  Michel Degen
Head of Private Banking Asia Pacific  Co-Head of Fixed Income

Foreword
Collection of colorful baskets for sale at market in Ubud, Bali, Indonesia.
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Long rows of Chinese statues in Chinese Temple in Georgetown, Penang, Malaysia. In Chinese tradition, a statue is believed to attract positive, supportive energy.
Executive Summary

This study is divided into four sections. The first two sections describe (1) the rapid economic development of Asian economies over the past decade and (2) how financial-market development has kept pace and enabled investors to participate in Asia’s remarkable growth story so far. Section 2 additionally analyzes the past performance and future potential of various asset classes that offer investors access to Asia. Section 3 highlights the importance of infrastructure development and the impact of Asia’s emerging middle class on regional consumption. Section 4 sheds some light on China in particular, its position as Asia’s economic engine and market access for investors.

Asia – the Path of Growth
Over the past decade, global economic growth has been increasingly reliant on emerging economies. Having outpaced Western economies’ growth for many years, Asia’s rapid development in particular has garnered attention from economists and investors alike as the continent plays an increasingly important role on the world economic stage. This section highlights the foundations of Asian economic growth at a time when Western economies are struggling and points out challenges that have to be tackled by Asian economies – such as capital-market liberalization, inflation and intraregional trade – to achieve their full potential.

Financial Markets – the Past and Future
The Asian financial crisis at the end of the 1990s was an instructive lesson for Asian economies. It exposed the pitfalls of participation in global capital markets. Wiser for this experience, prudent capital-market development is set to be the key foundation for sustainable growth among Asian economies. Fully functioning capital markets are not only crucial as a source of funding for governments and corporations, but also for creating new opportunities for external investors to tap Asian economic growth. This section also looks at the development and past performance of real estate, equity and fixed-income markets across Asia. It also assesses the future potential for those asset classes, aiming to highlight opportunities. Finally, it highlights the role of Asian currencies in the opportunity set for investors.

Focus: Infrastructure and Consumption
Expanding domestic demand is a major policy goal for Asian governments and forms part of China’s most recent set of five-year plans. Many Asian countries need to make the transition from export-based economic growth reliant on global growth to economic growth fostered by domestic consumption and investment spending. Underdeveloped infrastructure in many Asian countries necessitates significant additional spending in order to match the pace of urbanization and to support growth. The second part of the section examines the megatrend of the rise of the Asian consumer. Asia has a vast population with an increasing propensity to spend. In particular, the enormous growth of Asia’s middle class brings with it expanding consumption. We highlight the luxury goods and gambling sectors as two of the most promising consumer markets in Asia.

Focus: China
China is vital to Asia’s future economic development. China is expected to surpass the USA as the world’s largest economy within the next ten to fifteen years. The first part of this section looks at the drivers fueling China’s economic rise and the challenges faced by the “Middle Kingdom”. The second part of the section sheds light on the progress of capital-market liberalization in China and the implications for investors.
Colorful paper lanterns hung in Taoist temple in Taipei, Taiwan. In Taiwanese culture, lanterns symbolize hope for a bright future and good fortune.
Asia – the Path of Growth

In the Fast Lane – Asia Taking Over the Wheel
Asian economies have been on the rise for a decade. Their resilience to global economic shocks has left their success story largely uninterrupted by the global financial crisis. Nevertheless, structural challenges remain, such as the transition from export-driven to domestically driven growth.

Foundations for Asia’s Rise
As economic growth in the region continues at near-double-digit rates, Asian economies have some strong tailwinds:
- sound fiscal and monetary policies that result in responsible debt levels, particularly compared to those of the troubled Western economies;
- positive demographic trends with an expanding working-age population with higher wages that help to drive domestic demand;
- advanced legal frameworks that are improving the credibility and transparency of political and economic infrastructure;
- capital flows from investors around the world who are disillusioned with the poor growth rates and low investment returns in Western financial markets.

The Way Forward – Potential and Pitfalls
- The region will soon account for the largest share of global output, assuming that Asia is able to maintain its comparative advantage.
- Asian economies are well prepared to deal with challenges such as inflation and demographic headwinds.
- By strengthening intraregional links, Asia will be able to become less reliant on Western economies and thus less sensitive to further turmoil in the Western world.
In the Fast Lane – Asia Taking Over the Wheel

Asia on the Rise

In recent decades the world has been increasingly driven by emerging economies, which have become the new engine of the world economy and one of the most talked-about macroeconomic trends of recent times. Figure 1 shows that Latin America, Eastern Europe and, first and foremost, Asia have started to grow at rates that by far outpace those in developed countries.

![Nominal average GDP growth across regions](source: HSBC (November 2011))

While developing Asia’s share of global gross domestic product (GDP) growth was a mere 11% in 1992, according to International Monetary Fund (IMF) data, Figure 2 shows that it increased to 24% in 2010, whereas developed markets’ share decreased from 64% to 52% over the same period.

![Developed markets’ share of world output is declining (shares based on purchasing power parity). (Data as of April 2011)](source: International Monetary Fund, World Economic Outlook database, BlackRock (October 2011))

Emerging economies have outperformed the developed world not only in terms of share of global GDP, but are also growing more quickly. In the 1980s, developed and emerging markets grew at the same pace, but since the turn of the millennium, average growth in the emerging world has surged to rates that are three times higher than in developed economies. This growth has largely been driven by Asian economies. A flourishing Asia has captured an increasing share of global GDP at the expense of the developed world. According to IMF estimates, developed countries will see their share of global GDP decline by 17% between 1992 and 2015, an unprecedented deterioration. At the same time, developing Asia’s share of global output is expected to increase by 18%.

Today, while Western economies struggle with rebuilding their financial systems and repairing government balance sheets, Asian economies such as China, India and the countries of the Association of Southeast Asian Nations (ASEAN)1 are experiencing sustainable growth supported by better resources, stronger balance sheets and younger workforces, unburdened by excessive debt. The rise of the middle class has produced a new generation of consumers with a healthy appetite for consumer goods.2

In addition, increasing urbanization has led to rising demand for infrastructure development. Increasing domestic demand and rising production have both caused trade volumes to surge. According to the World Shipping Council,3 as of 2010, eight of the ten largest ports in terms of container traffic4 were located in Asia, six of them in China alone.

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1 The Association of Southeast Asian Nations comprises Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam
2 BlackRock Investment Institute, Are Emerging Markets the Next Developed Markets?, August 2011
4 Measured by twenty-foot equivalent units (TEUs) handled
Increasing Resilience to Global Shocks

External shocks such as the financial crisis, the euro-zone debt crisis and lackluster growth in the USA may have slowed Asian growth, but have not derailed the structural growth story in the region. Capital outflows to safe-haven assets were seen in the climate of greater risk aversion during the crisis in 2008/2009, which spilled over to Asia’s real economy, causing trade and GDP growth to decline. However, those outflows have proven temporary.

Equipped with significant cash reserves and policy flexibility, Asian economies were able to steer through the choppy waters without sinking and have subsequently resumed their growth trajectory. Moreover, the legacy of the late-1990s Asian crisis has led companies and governments alike to focus on balance-sheet discipline. Comprehensive reform of the macroeconomic framework and the financial sector has considerably reduced the region’s vulnerability to external shocks. Debt levels for Asian economies are expected to decline further, while the creditworthiness of Western markets is increasingly in question.

Against the Odds of Structural Changes

This resilience is all the more remarkable considering the pace of structural change that Asia is undergoing and its transformation from a region heavily reliant on the Western world as a trading partner to one that is focusing more and more on intraregional trade. The countries of Asia are transforming from an export-oriented region into one where their growth is powered by domestic consumption.

While there is no doubt that China and India are Asia’s titanic economies, Asia’s smaller economies have proven particularly agile and resilient to the recent chaos in the euro zone. As China’s and India’s growth is slowed by domestic challenges, Asia’s smaller economies have reported gains in industrial production, exports and local spending. According to research by HSBC, the ASEAN countries, Hong Kong, Korea and Taiwan are less challenged by fundamental imbalances, e.g. rising inflation and bubbly property markets. Those countries have embraced foreign capital and may benefit the most from global funds looking for a home in Asia.

Figure 3 shows that in the recent past, economies in developing Asia have established themselves as major players in the world economy when it comes to GDP growth.

As highlighted by Figure 4, Asia has already become a promising region for investors. Economic forecasts suggest a continuation of this trend in the foreseeable future. As a result, trade liberalization and new economic reforms have become increasingly important as they open the door for Western investors to participate in Asia’s rapid growth.

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5 Aberdeen, Asian Bonds: A misunderstood opportunity, 2012
6 HSBC Global Research, Asian Economics Comment: Little Asia vs. Big Asia, 19 March 2012
Foundations for Asia’s Rise

Many of today’s emerging economies will eventually ascend to developed-market status. Asian countries in particular are regularly reviewed for potential upgrades, a validation of their sustainable solid growth.

The stellar rise of emerging economies and Asian countries in particular is attributable to a number of factors and developments. In one of the Bank for International Settlements (BIS) central bankers’ speeches,7 Bank of Japan Governor Masaaki Shirakawa cited rich human resources, rapid urbanization and a competitive technological base as the foundations of Asia’s growth. In addition, after the Asian financial crisis in the late 1990s, ambitious reforms were enacted such as fiscal consolidation, monetary policy management aimed at price stability, prudent financial supervision, and the development of financial markets in the region.

Sustainable Growth through Responsible Budgeting

Sovereign-debt levels increased dramatically in the aftermath of the 2008/2009 financial crisis as many countries sought to avoid a full-blown collapse of the economy. This has mostly been a phenomenon among Western economies, as Figure 5 highlights.

In Asia, prudent budget management following the 1997 Asian financial crisis resulted in strong corporate balance sheets and low public-sector debt (with the exceptions of Japan and Singapore).

Supportive Demographics

Positive demographic trends have been a key component of emerging economies’ growth. While Western economies struggle with aging populations and higher dependency ratios, the number of people of working age in emerging economies has grown rapidly thanks to rapid population growth. The expansion of the working population in turn has enlarged the consumer base, thus bolstering personal consumption, which is key for economies to master the transformation from an economy reliant on external demand to one powered by domestic demand (see footnote 2).

Advanced Legal Framework Fosters Credibility

It must be noted that more than just strictly economic factors such as low sovereign-debt levels and relatively favorable demographics have enabled Asian economies to narrow the gap with global economic giants such as Germany and the USA. There have also been considerable improvements in political and legal institutions as well. In recent years, the credibility and transparency of fiscal, financial and central-bank structures have improved considerably as authorities have recognized the importance of areas such as property rights in fostering global confidence in Asian economies.

Capital Flows Supportive for Asian Growth

The improving credibility of political institutions’ ability to maintain stability in the economy and financial markets has increasingly attracted foreign direct investment (FDI). According to the United Nations Conference on Trade and Development (UNCTAD), FDI flows into developing Asia increased from USD 854 million in 1970 to USD 423 billion in 2011, an annual compound growth rate of over 16%.

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7 Bank for International Settlements, keynote address by Mr. Masaaki Shirakawa, Governor of the Bank of Japan, at the dinner reception hosted by the Japan Securities Dealers Association preceding the International Conference, Tokyo, February 9, 2012; Finance in Asia – Banking Business and Capital Markets, 2012

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Fig. 5. Asian government-debt levels look attractive relative to G7 levels (data as of April 2012)
Source: International Monetary Fund, World Economic Outlook database, Credit Suisse

Fig. 6. Emerging-market consumption has surpassed US consumption (data as of January 2011)
Source: JP Morgan, BlackRock (August 2011)
In general, strong capital flows to the region are an important foundation of Asia’s growth and stability. Western central banks are flooding capital markets with liquidity, which is creating inflationary pressure and weighing on the value of the euro and the US dollar. Although Asian central banks have started to ease monetary conditions lately as well, interest rates in Asia still range considerably higher than in Europe and the USA. Hence, currency diversification and the yield pickup versus US Treasurys and German Bunds are attracting foreign capital, and this forms the basis of a trend that is not expected to reverse anytime soon.

The Way Forward – Potential and Pitfalls

When looking at the impressive rise of Asian economies in recent years, the biggest question for investors is whether they can continue their current pace of growth. Future success will require a different type of growth and will depend on resolving a broad array of economic, social and political issues.

A Glowing Future in Sight…

Assuming that Asia will be able to maintain its comparative advantages and will be capable of adjusting to the changing global economic and technological landscape and continuing on its recent trajectory, the Asian Development Bank (ADB) estimates that its per capita GDP could rise sixfold in purchasing power parity (PPP) terms by 2050. That would be equivalent to Europe’s level today. As highlighted in Figure 7, Asia’s share of global GDP is set to increase to over 50% by that time, which would restore Asia to the dominant economic position it once held more than three centuries ago before Western industrialization.

Most importantly, Asia’s future development will be increasingly less reliant on its role as a manufacturer of goods. Instead, its expanding role in the world’s consumer market will allow Asia to reduce its dependence on exports to the developed world and enable the development of closer intraregional economic ties. According to the ADB, Asia’s engine during its “march to prosperity” will be mainly powered by seven countries that in 2010 accounted for 87% of Asian GDP: China, India, Indonesia, Japan, the Republic of Korea, Thailand and Malaysia. In the scenario highlighted above, by 2050 those countries would not only increase their share of Asian GDP to 91%, but would also account for about 50% of global GDP, making them the drivers of the global economy.

…If Challenges are Mastered

Inflation

Assuming that economic growth in Asia remains stable, inflation may become one of the main policy challenges. Economic protectionist countries are vulnerable to imported monetary policy from the West (see footnote 2) in view of the flood of liquidity from Western central-bank money that is flowing to emerging economies. Combined with global trade imbalances and close-to-zero output gaps, the risk of overheating in emerging economies is present. Sharp increases in global food and fuel prices have led to higher headline inflation, as Figure 8 shows. Also, core inflation has been edging up of late. Even though the weak economic environment in Western economies has caused inflation to level off, Asian central banks find themselves in a dilemma. By applying the appropriate policy response of raising interest rates to ease inflationary pressure, they will attract more yield-seeking investors from Europe and the USA, where interest rates are close to zero. Equally, Asian central banks have generally been reluctant to hike rates because their focus has been on growth rather than on keeping inflation low.

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Fig. 7. Asia’s share of global GDP between 1700 and 2050

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[9] Headline inflation describes the rate of change in the consumer price index (CPI), which measures the average price of a standard “basket” of goods and services consumed by an average family. It aims to capture the changes in the cost of living based on the movements of the prices of items in the basket of commodities and services consumed by the typical household.
An interesting phenomenon analyzed by HSBC\(^\text{10}\) is that headline inflation has become stickier in Asia. This means that every uptick in growth leads to a sharper rise in inflation. HSBC attributes this finding in part to rising inflation expectations in general, but also to structural factors such as tightening labor markets, environmental degradation of farmland, demographic challenges and a shift in demand away from exports toward services and construction. Therefore, although cyclical inflation has decelerated over recent months, structural inflationary effects remain elevated.

Demographic Headwinds Ahead

Demographic trends are going to be a crucial issue for Asia. Demographics have been favorable for Asian economies for quite a while and laid the groundwork for economic growth in the region. However, growth in the 15- to 64-year-old working population is likely to slow considerably across Asia in the coming years. According to data from the United Nations (UN), China’s working-age population will start to shrink in 2017 (see Figure 9). The economies of Singapore, Korea and Taiwan will follow. As Figure 9 also shows, growth in Japan’s working-age population turned negative almost 20 years ago, and the subsequent weakness in the economy is no coincidence.

As mentioned above, China may act to counter the decline in working-age population by mobilizing workers from rural areas, according to research from HSBC. Nevertheless, China will ultimately have to increase productivity in order to sustain economic growth in the future. India faces a similar problem, though its debt load has not yet reached the levels seen in Japan or China.

The Middle-Income Trap

As many Asian economies evolve into “middle-income” countries,\(^\text{11}\) a phenomenon known as the “middle-income trap” could threaten their future growth. Countries that are not able to maintain steady per capita GDP growth often see themselves trapped in a situation of on-and-off growth and stagnation caused by their inability to compete with low-income, low-wage countries on the one hand and with advanced economies with highly skilled workers and capable of innovation on the other. As the ADB (see footnote 8) explains, such countries are not able to make the transition from resource-driven growth or low-cost labor-driven growth to high productivity. As Figure 10 shows, Brazil and South Africa are examples of countries caught in this trap. Korea, in contrast, has been able to increase its per capita output continuously.
Asia’s Link to the Western World and its Troubles

Asia has become much less economically reliant on Europe and the USA as trading partners, but cannot completely decouple from the economic developments that lie ahead for the ailing giants. Asian economies are still tightly linked to Western economies via trade and financial channels. Despite the strong balance sheets of Asian governments and corporations, there is a systemic risk to Asian growth from slowing global growth and from the increased macroeconomic volatility caused by the European debt crisis. If the euro zone or the USA suffers a severe recession, this will most certainly have an effect on Asian growth as well. External disruptions will mostly affect countries like Hong Kong, Singapore and Taiwan that are still heavily reliant on exports. Ultimately, Asia’s future economic growth path will largely be determined by its ability to foster domestic demand and expand trade ties with other growing economies.

For the past couple of years, there has been a tremendous flow of capital into Asia. Quantitative easing by Western central banks in response to faltering economic growth has driven cheap capital toward more productive investments in emerging markets. Investors were seeking exposure to Asian growth and, for example, to profit from the appreciation of Asian currencies. These flows provided strong stimulus for the Asian economy by funding governments and private-sector corporations.

At the same time, the prospect of further turmoil in Europe or the USA may see funds flee to safe-haven markets. A study by PricewaterhouseCoopers (PwC)\(^{12}\) highlights that Asian markets may not yet have the depth to digest these flows, which can have a destabilizing effect on the economy. Rapid swings in risk appetite can cause capital-flow volatility that not only feeds through to volatile prices on bond, equity and FX markets, but also hurts the real economy.

Potential Outweighs Pitfalls

The good news is that all Asian economies have sufficient foreign-exchange reserves to fund governments. For the past couple of years, there has been a tremendous flow of capital into Asia. Quantitative easing by Western central banks in response to faltering economic growth has driven cheap capital toward more productive investments in emerging markets. Investors were seeking exposure to Asian growth and, for example, to profit from the appreciation of Asian currencies. These flows provided strong stimulus for the Asian economy by funding governments and private-sector corporations.

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Further Challenges to Be Met

Asian growth is also dependent on how the countries deal with obstacles such as natural-resource constraints, troubles that might arise within the region, and particularly the development of financial markets. That third obstacle is addressed in more detail later on in this paper. How Asian economies manage to improve both market access and secondary market liquidity and to remove certain legal constraints will be crucial in allowing investors to participate in Asian economic growth.

It is worth bearing in mind that Asia is not a homogenous region and that countries across Asia differ substantially and thus have different challenges to deal with going forward.

Steps to Be Taken

Policymakers across Asia may need to take certain steps to ensure that growth is not derailed. Asia’s future depends heavily on developing new growth sources and drivers for the economy, which, according to the ADB\(^{13}\), means that policymakers need to focus on boosting productivity growth and addressing key areas such as human capital, infrastructure and financial development. Additionally, with demand from the euro zone and the USA expected to weaken in the near future, the ADB finds that Asia must continue to foster intraregional trade and expand its links with other emerging economies to win its independence from Europe and the USA. For this expansion to be effective, trade barriers and poor trade-related infrastructure and logistics need to be addressed. The ADB (see footnote 8) sees Asia’s future determined by (1) its ability to promote entrepreneurship, innovation and technological development; (2) its competence in providing the necessary infrastructure to keep up with massive urbanization; (3) its regional cooperation; (4) its capacity to reduce the intensity of energy and natural resource use and thus limit climate change; (5) whether highly developed Asian economies such as Japan, Korea and Singapore will be able to lead the rest of Asia and; (6) the developing countries’ ability to avoid the “middle-income trap”. As for Japan, Asia’s once-mighty but now limping ailing giants. Asian economies are still tightly linked to Western economies via trade and financial channels. Despite the strong balance sheets of Asian governments and corporations, there is a systemic risk to Asian growth from slowing global growth and from the increased macroeconomic volatility caused by the European debt crisis. If the euro zone or the USA suffers a severe recession, this will most certainly have an effect on Asian growth as well. External disruptions will mostly affect countries like Hong Kong, Singapore and Taiwan that are still heavily reliant on exports. Ultimately, Asia’s future economic growth path will largely be determined by its ability to foster domestic demand and expand trade ties with other growing economies.

Fig. 11. Foreign-exchange reserves of selected Asian countries, 2007 and 2011. (data as of 30 March 2012) Latest data for India refer to 2010; imports refer to goods and services.


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\(^{12}\) PricewaterhouseCoopers, Emerging Trends in Real Estate Asia Pacific 2012, November 2011

\(^{13}\) Asian Development Bank, Asia Economic Monitor 12/2011, December 2011

\(^{14}\) The 21st Century Public Policy Institute, Asian Bond Markets Development and Regional Financial Cooperation, February 2011
The drum finds application in almost every aspect of Asian social life, including sacrificial and worshiping ceremonies, farming and warfare, and throughout the centuries it has been imbued with profound cultural implications.
Liquid financial markets are the foundation for future sustainable economic growth in Asia. After the Asian crisis in the 1990s, Asian policymakers reacted and started to address inefficiencies, for example, by slowly but surely decreasing reliance on foreign bank financing in favor of funding via capital markets. The lagging development of capital markets compared to the developed world requires further measures to ensure reliable funding sources for governments and corporations. It is also of particular importance for investors across the world when investing in Asia. The following sections describe the development, performance and future potential of different Asian asset classes in light of Asia’s bright economic future ahead.

Equities – Capture Asian Growth
- Stock markets still make up the largest source of capital in Asia. Asian equity markets have broadly followed the economic boom in the region. However, the correlation between stock-market performance and economic growth remains imperfect, and good sector and securities selection is essential.
- As two of Credit Suisse’s equity experts explain in an interview, investors need to be selective and to identify those sectors and themes with the greatest performance and growth potential.

Fixed Income – the Driver of Further Capital Market Liberalization
- The development of Asian bond markets has come a long way, and in retrospect the Asian financial crisis marked the start of their emergence. Asia’s dynamic economic growth, the accompanying infrastructure investment needs, corporate funding requirements and the advancement of Asia’s pension system should encourage the development of a well-functioning bond market.
- This section will point out regional divergences in terms of bond-market development across Asia. It will also outline the corporate bond market’s significant development potential, highlight how the improving risk profile of Asian bond markets is broadening the investor base, and draw attention to risk factors that need to be taken into account as bond markets develop.
- Access to local-currency bond markets is limited for investors, mainly in the case of the Indian and Chinese markets. Different schemes that regulate foreign institutional and private investor’s access to these markets have been implemented.

Currencies – Long-Term Appreciation Despite Short-Term Setbacks
- Investors’ desire to take on exposure to Asian currencies has been one of the driving factors behind the development of local-currency bond markets in Asia.
- Structural changes in Asia’s economies are likely to imply further appreciation potential.

Real Estate – Structural Demand for Asian Property
- Asian real estate markets have attracted increasing volumes of investor money in recent years from within the region, but also from Western investors.
- Long-term investors are likely to be increasingly attracted by the return and diversification potential of Asia’s property market.
As the Bank for International Settlements emphasizes, the importance of liquid and deep financial markets cannot be overstated. Capital markets are essential for economic growth. They help to mobilize an economy’s savings and allocate them to productive investments, such as the corporate sector. On top of that, capital markets allow governments to implement their fiscal and monetary policies, which is why governments and central banks have a particular interest in developing liquid and efficient financial markets based on a strong regulatory and legal framework. If a government’s policy supports financial markets for funding, that fosters the development of financial markets and is likely to attract other issuers such as private-sector corporations. In addition, it allows for a government-bond market and yield curve to develop, which may then act as a benchmark for the credit market.

For Asia, the globalization of financial markets is a double-edged sword. In the 1990s, Asia profited from an increasing inflow of funds, better corporate governance and, with it, financial institutions that started to meet international standards. In addition, the technological and managerial competencies of corporations improved significantly. On the other hand, the Asian financial crisis in the late 1990s proved that opening up capital markets to the rest of the world leaves an economy exposed to external financial shocks. However, the crisis did not cause Asian economies to turn away from capital markets. Rather, it led Asian economies to develop domestic sources of funding in order to decrease their reliance on foreign bank financing. Built on the foundation of a broader and more solid financial base, domestic capital markets would consequently become a more important cornerstone for economic development of the region.

Despite the progress that has been made so far in terms of financial-market development, the Asian Development Bank emphasizes that the region’s financial sector will continue to face significant developmental challenges in the coming years as it needs to keep up with the regional economic growth potential.

Third, authorities have to understand that a sound legal and regulatory framework is key to the development of financial markets and essential to credibility among investors. At the same time, Asia’s capital markets are heavily dependent on the advancement of financial infrastructure across the region. Finally, for Asia to grow as a region, intraregional links between national capital markets need to be strengthened in order to guarantee an efficient allocation of the region’s savings to the most productive investments.

Asian economies have realized that in order to continue to grow at near double-digit rates, they need to promote capital-market development in step. China’s efforts to internationalize the renminbi (RMB) shows that Asian policymakers are well aware of the challenge. In fact, the financial sector has indeed grown since the turn of the millennium, and it can be expected that Asian financial markets will play an increasingly important role globally commensurate with the rise in GDP.

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Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

15 Bank for International Settlements, The international financial crisis and policy challenges in Asia and the Pacific, July 2010
16 Tokyo Club Foundation for Global Studies, Capital Markets in Asia: Changing Roles of Economic Development, edited by Donna Vandenbrink and Denis How, 2005
Equities – Capture Asian Growth

Asian Equity Market Development – Stellar Growth, But Still Further Potential

Stock markets still account for the largest source of capital in Asia. Figure 12 shows that in a global comparison, equity financing accounted for the largest part of financial-market depth for Asian countries in 2010 (next to loan financing for China).

For example, Glencore, one of the world’s largest commodities traders, and Prada, one of the most prestigious names in luxury goods, are listed in Hong Kong. According to McKinsey, in 2010 emerging markets accounted for more than half of the global volume of initial public offerings (IPOs), 44% of which were in China alone (see Figure 13). 20

In terms of revenues, Chinese companies have flourished and have joined the ranks of the global leaders. As of 23 July 2012, three of the world’s ten largest companies by revenue were Chinese, according to the Fortune 500 global ranking. 21 As recently as 2008, none of the top ten companies by revenue were Chinese.

Moreover, in 2012 China surpassed Japan as the country with the second-most companies listed among the 500 top revenue-generating corporations, behind the USA. In fact, as of 2012, 73 of those 500 companies are Chinese (132 are US and 68 are Japanese). The 500 also include thirteen South Korean, eight Indian and six Taiwanese companies. The Asia ex-Japan region was home to 20% of the world’s 500 largest corporations by revenue in 2012.

At the same time, Asian stock markets still hold tremendous development potential. Market capitalization as a percentage of GDP stands at just 66% in Asia compared to 104% for the USA. When only developing economies in Asia and the Pacific are taken into account, the percentage is even lower, at 50%. China’s ratio of market capitalization to GDP stands at just 46%. 22 For the development potential to unfold, however, there must be reforms, starting with loosening of restrictions that institutional investors such as pension funds and insurance companies face.

Asian equity markets have grown substantially in size over the past two decades. While the Asia-Pacific region’s share of global stock-market capitalization was 21% in 2003, it increased by 10 percentage points to 31% by the end of 2011. 18 This increase was mainly driven by growing investment from international investors seeking diversification, coupled with deepening regional financial integration, a growing domestic institutional investor base and structural improvements to market infrastructure. 19

At the same time, the ongoing capital-account liberalization has led to improved liquidity and market depth. Liquidity and trading volumes have therefore strengthened in Asian stock markets. These developments are now also attracting regional and foreign firms interested in tapping the stock markets in Asia.

1 Central and Eastern Europe and Commonwealth of Independent States

Fig. 12. Financial depth (end of 2010, % of regional GDP). Calculated as total regional debt and equity outstanding divided by regional GDP.

Source: BIS, Dealogic, SIFMA, Standard & Poor’s, McKinsey & Company (August 2011)

Fig. 13. Deal volume in different stock-exchange locations (USD billions, numbers may not add up due to rounding).

Source: Dealogic, McKinsey & Company (August 2011)
Recent Flows

Capital flows into Asian equity markets have been volatile. Asia firmly remains a “risk-on” market. As Figure 14 shows, capital outflows in 2008 and 2011 were offset by capital inflows in the following years. On the one hand, investor money flows into Asian stock markets when bullish sentiment prevails. On the other hand, investor confidence tends to be affected as global economic confidence worsens. When there are significant global economic shocks such as the downgrade of the USA’s sovereign debt rating in August 2011, investors start to withdraw their money from Asian equities and shift it into “safe-haven” assets such as US Treasurys. When the euro-zone crisis was in full swing, Asian stock markets started to see significant inflows again. In the first two-and-a-half months of 2012, equity inflows into Asia ex-Japan were already almost double the amount of the 2011 outflows. More than half of those inflows went to investments in Taiwan and Korea, as Figure 14 shows.

<table>
<thead>
<tr>
<th>(USD bn)</th>
<th>Taiwan</th>
<th>Korea</th>
<th>Thailand</th>
<th>Indonesia</th>
<th>Philippines</th>
<th>India</th>
<th>Asia ex-Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>22.2</td>
<td>-4.0</td>
<td>2.9</td>
<td>2.3</td>
<td>0.4</td>
<td>10.8</td>
<td>34.7</td>
</tr>
<tr>
<td>2006</td>
<td>17.4</td>
<td>-12.1</td>
<td>2.1</td>
<td>1.9</td>
<td>0.9</td>
<td>8.1</td>
<td>18.3</td>
</tr>
<tr>
<td>2007</td>
<td>2.1</td>
<td>-29.4</td>
<td>1.6</td>
<td>3.2</td>
<td>1.4</td>
<td>17.8</td>
<td>-3.4</td>
</tr>
<tr>
<td>2008</td>
<td>-14.7</td>
<td>-33.3</td>
<td>-4.8</td>
<td>1.7</td>
<td>-1.1</td>
<td>-12.9</td>
<td>-65.1</td>
</tr>
<tr>
<td>2009</td>
<td>14.8</td>
<td>24.8</td>
<td>1.1</td>
<td>1.4</td>
<td>0.4</td>
<td>17.6</td>
<td>60.1</td>
</tr>
<tr>
<td>2010</td>
<td>9.2</td>
<td>19.0</td>
<td>2.7</td>
<td>2.3</td>
<td>1.2</td>
<td>29.3</td>
<td>63.8</td>
</tr>
<tr>
<td>2011</td>
<td>-9.6</td>
<td>-7.2</td>
<td>-0.2</td>
<td>2.9</td>
<td>1.3</td>
<td>-0.7</td>
<td>-13.4</td>
</tr>
<tr>
<td>2012</td>
<td>4.7</td>
<td>9.2</td>
<td>2.0</td>
<td>0.5</td>
<td>0.6</td>
<td>8.2</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Can Asian Equities Capture Economic Growth?

Asian equity markets have followed the economic boom in the region. Between 1992 and 2012, the return on an investment in the broad Asian stock market would have more or less matched GDP growth across the region (Figure 15). Over the past decade, the Asian equity market has rewarded investors with higher returns than they would have earned by investing their money in the developed world (Figure 16) even though they had to accept more volatility in times of economic weakness.

China is a special case. Although China’s economy has grown tremendously since the 1980s, Chinese equity performance has only started to match GDP growth in the last decade. Between 1992 and 2002, China’s GDP grew by 244% in current USD terms23 while the MSCI China index lost 85.9%. The Chinese stock market significantly underperformed economic growth during that period, which supports a theory widely discussed in empirical studies in recent years: there is often little correlation between economic growth and stock-market performance.

However, China’s equity market in the 1990s was nowhere near as developed as its Western counterparts. China did not have a liquid, efficient and diversified stock market where investors could easily trade shares of companies that were exposed to its economic growth potential. Before 2000, only a fraction of Chinese entities were listed and an even smaller portion of the listed entities were available to foreign investors.

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

23 Which corresponds to annualized GDP growth of 13.1% (data from the World Bank)
At the end of 2000, the MSCI China index was composed of only 30 stocks with very limited diversification. For example, China Mobile, the largest telecommunication operator in China, accounted for more than 60% of the index weight at that time since none of the state-owned Chinese banks were listed.

When looking at the equity performance since the turn of the millennium, the picture looks different. Figure 17 shows that since Chinese equity markets have become more liquid and deeper, China’s stock-market performance has been able to keep pace with China’s GDP growth. At the same time, market capitalization has surged, as Figure 18 illustrates.

With the continuing liberalization of capital markets, one can expect to see more and more Chinese companies listed, providing equity investors with more investment opportunities. Equally, as the management of listed companies becomes more sophisticated, investors can also reasonably expect better management quality and greater emphasis on shareholder value.

In summary, the correlation between stock-market performance and economic growth remains imperfect, and good sector and securities selection are essential. Investors need to identify those sectors and themes that have the greatest potential.

Where to Invest in the Future to Get Exposure to the Asian “Miracle”

Finding the appropriate strategy and sector with which to tap Asian economic growth is not easy, and investors need to ask themselves a number of questions. Juan Manuel Mendoza and Isis Ma, who manage Asian equity mutual funds for Credit Suisse, answer some key questions.

Where do you see markets going from here?

Juan Manuel Mendoza: Asian equity markets have traded up despite the very mixed news flow coming from Europe’s crisis as well as from China, where this year we have a change of leadership. Although markets have advanced, we have seen increasing volatility in the region, and it is true that we saw some deceleration in Hong Kong retail sales this summer, which is an important barometer. But recent numbers for August are encouraging and actually pointing to a bottoming out of retail sales.

Isis Ma: Confidence is definitely coming back. We are monitoring the earnings season very closely. Although we see a mixed picture across sectors and countries, valuations have not been this attractive for a long time. Some of the names are trading at historically low price-to-earnings ratios, which we think offers a great entry opportunity for investors who do not have any exposure to Asia at this point in time.

What are clients actually looking for right now when they invest in Asian equities?

Juan Manuel Mendoza: Given the current volatility, we see investors focusing on yield — also in the Asian equity markets. Remember, not only do Asian equities offer an opportunity to benefit from high earnings growth, but in addition, many companies pay consistent and sustainable high dividends. In Singapore, for example, we see clients currently searching for high-yielding securities. In fact, the average fund in Singapore’s USD 38 billion REIT market has achieved a double-digit return so far this year.
Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

In what areas do you see high growth in the future?

**Juan Manuel Mendoza:** We continue to see strong growth coming from the emergence of Asia’s new middle class. Areas that are benefiting from the rising middle class in Asia continue to generate double-digit sales growth. The Organization for Economic Cooperation and Development (OECD) estimates that the Asian middle class will grow from 325 million in 2009 to 1.7 billion in 2020. That would outnumber today’s established middle class in Europe and North America.

Juan, you have been investing in the luxury-goods industry for a long time. How did Asian consumers and especially Chinese consumers change the industry?

**Juan Manuel Mendoza:** I always tell investors the same thing. The Asian luxury market will be as large as today’s global luxury market by 2020. For a lot of the leading luxury brands, ethnic Chinese consumers are already the largest consumer group globally. Companies such as the Italian luxury fashion brand Prada have even decided to come to the market in Hong Kong rather than in Italy because the revenues coming from Asian consumers make up more than half of their sales today. In addition, the market is so large that there is enough space for Louis Vuitton to be joined by new emerging Asian luxury brands. Especially in segments such as luxury cosmetics, luxury hotels and luxury high-heeled shoes, we expect Asian brands to emerge and compete with the Western brands.

Isis, where do you see other exciting opportunities in Asia?

**Isis Ma:** We have been investing in casino operators in Asia for a long time because we believe that the gaming industry in Macau offers investors one of the best consumer stories in the world. Today, the Macau market in revenue terms is already four times larger than Las Vegas. Still, Macau can only capture a fraction of the mainland’s total gaming potential. Tourists from first-tier cities like Beijing and Shanghai account for only 5% of the total mainland tourist arrivals in Macau today. With the continuous expansion of a nationwide transportation network connecting to Macau, which can significantly shorten traveling times, we expect that Macau gaming will be a USD 100 billion market by 2020.

**Juan Manuel Mendoza:** Investing in Macau’s casino operators is also very appealing in terms of dividend yield; the gaming industry already ranks as one of the highest-yielding sectors in Asia. In fact, Macau’s casino operators paid a combined USD 2.9 billion of dividends to their shareholders in 2011, and we expect them to increase the total dividend payout to USD 3.3 billion by 2013 (cumulative average growth rate (CAGR) of 6.7%). Any other areas where you are tapping into the growth of the Asian middle class?

**Isis Ma:** We believe that the increasing smartphone penetration in emerging Asia will be a long-term structural growth story. In these developing countries, mobile phones remain the easiest way to access the Internet. And yet even today, two of the most populated countries in Asia, namely China and Indonesia, have a smartphone penetration rate below 10%. With the rollout of all ranges of smartphone models from low-cost to high-end, smartphone penetration will definitely increase. We expect the number of smartphone users to increase by fivefold between now and 2015, becoming a market with 1 billion users. Besides the manufacturers, who will benefit from the increase in sales volume and operating leverage, the telecom groups are best positioned to monetize this structural growth story.

**Juan Manuel Mendoza:** We are also investing in travel and leisure stocks in the region. We have experienced tremendous growth in the local tourism industry driven by Chinese tourists traveling around the world. On top of that, they also buy luxury goods outside mainland China given the very high import costs. Last year, 42 million tourists arrived in Hong Kong alone, two-thirds of whom from mainland China.

**Fixed Income – the Driver of Further Capital Market Liberalization**

**Bond Market Development in Asia**

Asian bond markets have come a long way since their early days. It wasn’t until the Asian financial crisis in the late 1990s that Asia’s policymakers and market participants realized the importance of having a well-functioning, developed bond market. Previously, developing Asian economies had primarily relied on foreign-currency-denominated loans to fund their long-term investments, which left bond markets lagging behind in terms of development. This led to a currency and maturity mismatch, which caused the market to collapse and Asian currencies to plunge in value when foreign loans could not be rolled over. After realizing the full effect of the crisis, Asian policymakers started to recognize the need for better diversified financial markets that would enhance financial stability and reduce the concentration of credit and maturity risks in banks. This required developing a market for Asian bonds denominated in local currencies, which would enable the tremendous amount of savings available to be channeled into long-term investments while avoiding the double mismatch (currency and maturity) that had aggravated the 1997/1998 crisis.
The Importance of Having a Well-Functioning Bond Market for Asia

According to the 21st Century Public Policy Institute (21PPI; see footnote 14), there are four other major reasons why Asian bond markets have recently become increasingly important.

First, the dynamic growth of Asian economies will create growing funding needs, thus increasing the relevance of having a well-developed bond market.

Second, Asian economies are expected to face significant infrastructure development needs and at the same time will have to address environmental preservation, energy conservation and climate change mitigation issues. According to joint research by the Asian Development Bank and the Asian Development Bank Institute\(^{25}\), Asia’s demand for infrastructure investment will exceed USD 8 trillion between 2010 and 2020. This will include energy, transportation, telecommunications, water, and sanitary systems. In order to meet those tremendous funding needs, the Asian Infrastructure Fund (AIF) was launched with the aim of raising international funds, both public and private, to finance appropriate infrastructure projects across the region. While funding from Asian governments and other public institutions will be essential, the sheer size of the funds needed will make fundraising from the private sector indispensable. This means that bond markets will play a key role as a funding instrument.

Third, for multinational corporations that want to set up operations in the region, bond markets will provide an opportunity to raise long-term local-currency funds. Finally, the increasing prosperity across Asia, which is reflected in the rise of the Asian middle class, will increase demand for social security. This, in turn, necessitates the development of pension systems and will ultimately lead to growing demand for secure long-term investments from pension funds and insurance companies.

Authorities have recognized the importance of these developments and have supported the advancement of Asian bond markets via measures such as the Asian Bond Markets Initiative (ABMI) and the Asian Bond Fund (ABF) project. These policy efforts have made a meaningful contribution to the expansion of the primary market for government and quasi-sovereign bonds and at the same time have thus allowed a benchmark yield curve to develop.

Bond Market Growth Mainly on Government Bond Side, But Corporate Bonds Hold Significant Future Potential

Boosted by increasing spending needs and the enormous growth of Asian economies, the size of Asia’s local-currency bond market doubled between 2006 and 2011 and now amounts to around USD 6.5 trillion, according to data from the Asian Development Bank.

As Figure 19 shows, the market has been dominated by government bonds, with sovereign issues accounting for 70% of bonds outstanding in 2011 compared to 30% for corporate bonds.

Emerging Asia’s local-currency bond market today is by far the largest in the emerging-market space. Emerging Asia’s local-currency debt market today accounts for almost 65% of the overall emerging-market local-currency debt market.

Figure 19 also shows that corporate credit’s share of total bonds outstanding increased from 27% in 2006 to 30% in 2011. Although lagging behind in development compared to government bonds, corporate-bond markets have tremendous future growth potential.\(^{26}\) In the case of China, for example, the corporate sector has caught up significantly in terms of issuance volumes, as pictured in Figure 20. Nevertheless, it is still only one-third the size of the US corporate-bond market as a percentage of GDP.

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

\(^{25}\) Asian Development Bank and Asian Development Bank Institute, Infrastructure for a Seamless Asia, 2009

\(^{26}\) Globally, corporate bonds account for 40% of total domestic debt securities outstanding, according to data from the Bank for International Settlements.
A look a little farther back in time reveals that between 1997 and 2009, the balance of issues in Asian bond markets, increased by a multiple of 11. While government bonds increased by a factor of 17, corporate bonds (including financial bonds) increased by a factor of eight. This highlights that growth in corporate-bond markets is a recent development. Bank borrowing has long been the major funding source for Asian corporations. In fact, between 1997 and 2009, corporate-bond markets were not able to outpace domestic credit in terms of market growth. Once the relative importance of corporate-bond markets compared to bank funding increases, its development will most likely no longer trail that of government-bond markets.

The increasing number of issues, especially during and after the 2007/2008 financial crisis, can be attributed to four main factors, according to a study by Pacific Business and Industries (see footnote 28). First, in general, government bond issues increased in step with the economic performance of the countries in Asia. Second, in order to sterilize capital inflows and to prevent local currency appreciation, central banks increased the issuance of bonds. Third, governments and corporations that had turned to international capital markets to meet their funding needs returned to domestic markets. Finally, as already touched upon before, the economic rise of Asian countries brought with it enormous demand for infrastructure investment, which needed to be funded partly via bond markets.

Regional Divergences in the Development of Bond Markets
While the importance of bond markets as a funding source for Asian corporations has been a development in all Asian economies, there have been divergences in the growth in individual markets. The same is true for the development of equity markets. While both markets have increased significantly in terms of size, the magnitude of the growth has varied considerably across markets, as Figure 21 shows.

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>Bonds outstanding</td>
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</tr>
<tr>
<td>Korea</td>
<td>42.5%</td>
<td>89.4%</td>
<td>106.9%</td>
<td>117.5%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>65.3%</td>
<td>88.4%</td>
<td>90.4%</td>
<td>96.7%</td>
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<tr>
<td>Philippines</td>
<td>27.2%</td>
<td>33.9%</td>
<td>34.6%</td>
<td>30.1%</td>
</tr>
<tr>
<td>Thailand</td>
<td>9.6%</td>
<td>32.7%</td>
<td>50.7%</td>
<td>63.1%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.6%</td>
<td>27.6%</td>
<td>18.9%</td>
<td>21.1%</td>
</tr>
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<td>Private-sector financing</td>
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</tr>
<tr>
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<td>84.3%</td>
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<td>116.0%</td>
</tr>
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<td>97.1%</td>
<td>82.7%</td>
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<td>22.7%</td>
<td>23.0%</td>
</tr>
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<td></td>
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<td>101.5%</td>
<td>138.9%</td>
</tr>
<tr>
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<tr>
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<td>52.8%</td>
<td>59.8%</td>
<td>98.6%</td>
</tr>
<tr>
<td>Thailand</td>
<td>41.2%</td>
<td>32.7%</td>
<td>68.9%</td>
<td>78.6%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>28.1%</td>
<td>13.6%</td>
<td>40.7%</td>
<td>74.1%</td>
</tr>
</tbody>
</table>

Fig. 21. Bonds outstanding, private-sector financing and equity market size as a % of GDP in various Asian countries, 1997–2009
Source: World Bank, Financial Development and Structure Dataset, 21PPI (February 2011)

The Korean, Malaysian and Thai bond markets experienced particularly strong growth between 1997 and 2009, whereas the bond market in the Philippines barely grew at all. Altogether, the role of private-sector financing decreased markedly in the countries’ funding mixes.
A mature government-bond market is a prerequisite for the growth of a corporate-bond market. It facilitates the introduction of new financial products, improves market liquidity in secondary markets and builds a foundation for market infrastructure (see footnote 28). Now that government-bond markets are providing a yield curve benchmark, the Asian bond market is ready to shift from a phase of growth driven by government bonds to one driven by corporate bonds. As Figure 23 confirms, the volume of corporate bonds and the volume of government bonds outstanding have both increased significantly over the past decade.

Moreover, as highlighted by the Bank for International Settlements, emerging corporate bond markets in emerging Asia continued to grow at a faster pace than those in other emerging markets between 2005 and 2011 (see Figure 24).

Emergence of the Corporate Bond Market

As described above, government bonds tend to drive the early stages of bond-market development. So it is not surprising that the growth rate of Asia's government-bond markets has outpaced that of the corporate-bond market. In addition, as pointed out before, the corporate-bond market in Asia has always had to compete in a system heavily focused in the past on bank loans as a funding tool. This, too, has certainly held back corporate-bond-market growth.

Looking at more recent developments, Figure 22 provides an illustrative overview of the differences in size between Asian bond markets in terms of percentage of GDP between the end of 2006 and the end of 2011.
When comparing the size of Asian corporate-bond markets in 2001 to their size in 2009, China serves as a good example of how fast the corporate-bond market can grow once market participants start to realize its enormous potential. As Figure 26 shows, the size of the Chinese corporate-bond market increased by a factor of 22 between 2001 and 2009, relegating the Indian corporate-bond market to second place with growth of a mere four times the size of 2001. It would not be surprising to see similar figures for other Asian countries when looking at bond-market developments a couple of years from now.

At the same time, though, Figure 25 shows that there have been wide divergences with respect to bond-market size among Asian nations.

While Japan, China and Korea are the three largest markets in terms of the absolute amount of corporate bonds outstanding, the three largest markets as a percentage of GDP are Malaysia, Korea and Thailand. In fact, as of 2010, their corporate-bond markets were even larger as a percentage of GDP than those in many developed countries like the USA. Furthermore, financial institutions have been using the bond market more extensively for funding. Here again, mainly the more advanced bond markets in Malaysia and Korea have a financial-institution bond market of a size comparable to those in the developed world.

One reason for the slow advancement of the corporate-bond sector has already been explained above. Compared to the government sector, which usually raises funds by issuing government bonds, Asian corporations have predominantly relied on bank loans instead of capital markets. Only recently have funding needs for infrastructure projects required the bond market to step in to raise the necessary funds.

Government Bonds Will Pave the Way for Corporate-Bond Market Growth

Bond-market growth at this stage will most probably continue to be driven mainly by the government-bond market, though there is undoubtedly tremendous growth potential in the corporate-bond market.
Improved Credit Quality Secured by Local Rating Agencies

In terms of credit quality, the Asian credit market has improved over the past fifteen years, as Figure 29 shows. Except during the Asian financial crisis and the subprime crisis in the USA, upgrades have consistently exceeded downgrades in recent years, according to S&P.

In addition to the global top-tier rating agencies, local rating agencies helped to reinforce the credit quality of corporate issues and have become an important keystone for the development of Asia’s corporate-bond markets.

Forecasts by Barclays\(^30\) suggest that the net supply of Asian credit should continue to grow. This would confirm the trend that we have seen in recent years and which is highlighted in Figure 28, namely that gross issuance consistently exceeded redemptions.

The increasing importance of the corporate-bond market in Asia is also visible when considering the development of Asian corporate-bond benchmarks. Since their implementation, which indicated that Asian credit was about to be established as an asset class, their market capitalization has surged. The JP Morgan Asia Credit Index (JACI), for example, grew from USD 50 billion around 10 years ago to almost USD 350 billion in July 2012. It encompasses sovereign, quasi-sovereign\(^31\) and corporate credit and has expanded progressively in the past couple of years, now covering 14 Asian countries with a wide range of credit quality.

Conclusion: Asia’s Credit Market Holds Significant Growth Potential

In summary, as Figure 30 outlines, the Asian credit market is still small compared to its counterparts in developed markets.

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\(^30\) Barclays Research, Asia Credit Alpha: Navigating the Ratings Cliff, 13 July 2012

\(^31\) Entities majority state-owned
Figure 31 shows that spread levels for Asian corporate bonds have narrowed considerably since the 2008/2009 financial crisis. This implies that funding costs for corporations in the corporate-bond market have decreased. This increases the temptation for corporations in Asia to add leverage, especially considering the fact that the corporate cost of equity often exceeds 10%.

At the same time, Figure 31 shows that Asian corporate bonds still offer an attractive spread pickup for investors compared to global corporate bonds.

Among the different Asian markets, local-currency bond markets have exploded since the turn of the millennium, particularly in China. Figure 33 highlights the growth of the bond markets in Indonesia, Korea, Malaysia, the Philippines and Thailand in comparison to the Chinese market. It shows that the already stellar growth in the rest of Asia can hardly compare with the massive growth in China’s local-currency bond market.

Local-Currency Bond Markets
When looking at Asian bond markets, it is important to distinguish between local- and hard-currency bonds. The term “hard currency” usually refers to bonds denominated in major currencies such as the US dollar, the euro or the Japanese yen. In the past, foreign investors focused on hard-currency bonds in order to achieve diversification in terms of issuer risk while at the same time avoiding currency risk from a European or American perspective. With the appreciation potential of emerging-market currencies rising, getting exposure to those currencies has become increasingly appealing to investors, which is why local-currency bonds have become more and more attractive as an asset class.

As Figure 32 shows, the size of Asia’s local-currency bond market has increased more than sixfold since the beginning of the 21st century.

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.
Foreign investor demand has played a key role with regard to the growth in the market size of local-currency bonds. In fact, as highlighted by Figure 34, foreign ownership of local-currency bonds has surged since 2010 as investors have been looking for yield and currency appreciation in Asia.

The escalation of the European debt crisis shifted attention back toward risk aversion and triggered outflows. However, in countries such as Indonesia and Malaysia, foreign ownership of local-currency bonds is still above 25%.

Investor demand, among other factors, has caused issuance levels to multiply. This is in part due to issuance coming from China, Hong Kong and Korea, which together accounted for 67% of Asia ex-Japan bond issuance as of March 2012.\(^3^2\)

**Limited Access to India’s and China’s Bond Markets**

Figure 34 shows that foreign ownership of local-currency bonds has increased quite significantly in recent years, especially in the Indian bond market. This observation is far from self-evident when the stringent restrictions on investors’ market access are taken into consideration. Among Asian local-currency bond markets, the Indian and Chinese bond markets in particular are characterized by strict access limitations.

In India, only certain investors are permitted to invest in Indian debt securities, stocks and mutual funds. These investments are limited in terms of volume and type of security. Foreign institutional investors (FIIs) have to be registered with the Securities and Exchange Board of India (SEBI). According to the SEBI and the Reserve Bank of India, current quotas regulating investment volumes range from USD 10 billion for government debt to USD 20 billion for corporate debt securities. Recently, the Qualified Foreign Investor (QFI) scheme was added, which also allows individuals, groups or associations to invest in corporate debt securities and infrastructure debt mutual funds up to an overall limit of USD 1 billion and USD 3 billion, respectively.

Especially in the case of China, accessing the growth potential means that certain barriers need to be overcome. China has been protecting itself from outside capital for a long time in order to avoid appreciation of the renminbi and to prevent poorly controlled capital inflows and outflows. China has only recently started to gradually allow its financial market to open the door to outside investors.

For bond investors, the most significant step was taken with the implementation of the Qualified Foreign Institutional Investor (QFII) scheme, which since 2007 has enabled foreign institutional investors that have been granted QFII status to trade A-shares, government bonds, corporate bonds, convertible bonds and other financial instruments approved by the China Securities Regulatory Commission (CSRC). Since then, access prerequisites for QFIIs have been lowered, the application procedure has been simplified, and foreign investors are now also able to access the interbank market, where most of the bond trading takes place. This has resulted in increasing demand for the quotas. In April 2012, the CSRC raised the total quota to USD 80 billion, leaving plenty of room for further demand, which has been accelerating since the start of 2012. The raised quotas can be viewed as a sign that Chinese regulators are willing to move forward with opening the domestic securities market to international investors.\(^3^3\)

**Onshore vs. Offshore Bond Markets**

As emphasized by the Bank for International Settlements (see footnote 15), bond markets in nearly all currencies are becoming increasingly internationalized. This implies that financing options are increasing for borrowers and that the range of investment opportunities is expanding for investors. The offshore bond market is a key instrument supporting development. It allows governments and corporations to issue bonds in offshore financial centers\(^3^4\) and brings together investors and borrowers that, for different reasons, would otherwise not have a chance to connect, matching funding supply and demand in international capital markets.

Further motivations for issuing bonds offshore, according to the BIS, include (1) the benefits of accessing offshore markets with different characteristics in terms of liquidity, diversity and risk; (2) accessing non-resident investors; (3) regulatory barriers to foreign investment in the domestic market and; (4) funding diversification. Often issuers seem to benefit from larger, more liquid, diverse and complete offshore markets. Furthermore, competition from the offshore market may also lead to improvements in domestic markets by revealing their weaknesses and thus enabling improvements to domestic market infrastructure, enhancing investor protection and removing tax distortions that might prevent domestic markets from advancing.

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\(^{3^2}\) According to data from AsiaBondsOnline

\(^{3^3}\) The question of how investors can access China’s enormous economic growth potential will be discussed later on in more detail in the chapter titled “Focus: China”.

\(^{3^4}\) According to the International Monetary Fund, an offshore financial center can be thought of as “a country or jurisdiction that provides financial services to non-residents on a scale that is incommensurate with the size and the financing of its domestic economy.”
Accordingly, many firms in Asia have access to both domestic and offshore markets, which essentially offers them the choice of currency denomination and investor base when tapping the bond market for funding. In the end, their choice is influenced by funding costs in both markets and by their ability to hedge and manage currency risk (see footnote 29).

In addition to the benefits of tapping the offshore markets, there are a number of risks to be highlighted as well. The increasing financial openness of bond and currency markets in the course of capital-market internationalization exposes the market to abrupt changes in capital flows and to the risk of offshore markets drawing liquidity away from the domestic market. In addition, there is the risk of unhedged foreign-currency borrowing, which aggravated the Asian financial crisis in the late 1990s. Having learned from their experiences in the past, most issuers manage to avoid a currency mismatch by either swapping the bulk of their offshore currency borrowings into local currencies straightaway by matching them to foreign-currency income or by holding reserves to guarantee liquidity.

According to the Bank for International Settlements, Australia, Hong Kong, New Zealand, the Philippines and Singapore are countries where a significant proportion of bonds are issued offshore. China, Indonesia, India, Japan, Korea, Malaysia and Thailand are countries where offshore bond issuance only accounts for a small percentage of overall issuance.

In the end, it is the responsibility of the respective countries to find a balance between on- and offshore market issuance, and the decision criteria differ significantly across Asian countries and corporations.

China’s “Dim-Sum” Bond Market as an Example

The new offshore renminbi fixed-income market in Hong Kong, also known as the CNH market, was established in 2007. It symbolized China’s decision to relax its stance on foreign-investor flows and its desire to further internationalize its currency in order to ultimately establish the RMB as one of the world’s major reserve currencies. The creation of the so-called “Dim-Sum” bond market is the cornerstone of China’s development toward an open market economy and is key to the process of gradual RMB internationalization and interest-rate liberalization.

While the internationalization of the RMB will be discussed in more detail later on in this study, we will now take a brief look at China’s bond market.

Figure 35 shows that China’s onshore bond market has increased at a tremendous pace in the past decade and today is the largest bond market in Asia ex-Japan with an outstanding amount of almost USD 3.5 trillion.

The market is divided into three main markets: the interbank bond market, which accounts for 90% of the transactions and total volume outstanding, the exchange market and the commercial over-the-counter market. This market structure is the main reason why China’s offshore bond market in Hong Kong has recently attracted enormous attention. The dominant interbank market is very restricted in terms of market access and limited to a small number of professional investors. Because of that, the “Dim-Sum” market has turned out to be the ultimate choice for investors to gain exposure to Chinese growth and the accompanying appreciation of the RMB. While the first “Dim-Sum” bond was issued in 2007, it was one of a number of liberalization measures implemented in 2010 that rapidly accelerated the growth of the market. Issuance volumes have been increasing ever since and are likely to continue to do so in the future.

Issuer Perspective...

Compared to the onshore market, the “Dim-Sum” market is usually characterized by shorter duration, lower yields and thin liquidity. Figure 36 shows the maturity profile of the market.

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Historical performance indications and financial-market scenarios are no guarantee for current or future performance.
The short maturity allows Chinese borrowers to refinance via low-cost structures, acknowledging that investors are mainly looking for currency gains instead of high yields.\textsuperscript{35} According to Deutsche Bank research,\textsuperscript{36} as of 31 March 2012 a Chinese borrower would have to pay 5.99% on an onshore loan, compared with a 3.69% average yield on bonds rated BBB and better.

Another reason why an increasing number of international corporations have been trying to issue in the “Dim-Sum” market is that more and more corporations are now manufacturing on mainland China. They are thus interested in funding their RMB investments in the matching currency.\textsuperscript{37} In general, the RMB offers a natural hedge for companies that buy and sell goods in China.

Air Liquide, Tesco, Volkswagen and BP are just a few examples of companies that have issued on the CNH market recently. Figure 37 breaks down the distribution of different issuers in the “Dim-Sum” market.

Investor Perspective...

Besides the potential for RMB appreciation and their limited access to the onshore market, investors are attracted by the diversification potential that these bonds provide in a global bond portfolio. Furthermore, as Figure 38 shows, the average yield offered for RMB bonds has increased lately, reflecting the increasing supply of new bonds.

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Moreover, as Figure 40 shows, Asian bonds delivered a considerable excess return of 17 percentage points over global core-market bonds\(^\text{40}\) between September 2005 and July 2012. On an annualized basis, this amounts to an excess return of over 1.6%.

Apart from the performance potential and higher yields compared to core markets, there is another factor that makes Asian bonds appealing to investors. As is true for emerging-market local-currency bonds in general, Asian local-currency bonds often show a low correlation to core government bonds. In addition, despite being considered risky assets, they tend to show a low correlation to other risky assets as well. Hence, in a portfolio context, they offer significant diversification benefits.

**The Investor Base is Broadening**

As outlined above, there are a number of reasons why investors are attracted by Asian bond markets. As a result, we have seen increasing foreign ownership of Asian local-currency bonds. The investor base is expanding regionally and structurally.

90 80 70 60 50 40 30 20 10 0 2005 2006 2007 2008 2009 2010 2011

Barclays GlobalAgg Total Return
Barclays GlobalAgg Treasuries – Unhedged
HSBC Asian Local Bond Index

Fig. 40. Asian bond performance compared to global bonds (30 September 2005 = 100)
Last data point 31 July 2012
Source: Bloomberg, Credit Suisse

The breakdown of returns across Asian bond markets varies. As it turns out, in contrast to the general market perception, the stellar bond performance in 2011 was not fueled just by currency gains.\(^\text{41}\) As return volatility has decreased, risk profiles for Asian bonds have improved (see Figure 41).

Historically, banks have acted as the main institutional investors. However, their share of the Asian cash-rich investor base has been declining. As highlighted by the IMF\(^\text{42}\), supported by demographic changes and pension reforms, the emergence of domestic institutional investors such as pension funds and insurance companies has given rise to an investor group with huge amounts of capital to invest in fixed-income markets. Across emerging markets, these investors tend to invest a sizable amount of their funds in safe securities such as government bonds. While banks are unlikely to invest their funds for the long term due to their short-term liabilities, pension funds show a stronger need for investments in bonds with longer maturities.

At the same time, Asian bonds remain attractive when their absolute yield levels are compared to those on other bond markets, as Figure 42 shows.
This means that demand for post-retirement income security is likely to surge. HSBC\(^{44}\) expects the accompanying growth in pension-fund assets to be a continuing source of demand for local bond markets. Regulatory reasons such as the asset-liability matching\(^{45}\) needs of insurers and pension funds will lead to demand for long-term nominal issues on the part of both local and foreign pension funds and insurance companies.

HSBC also points out that in the process of shifting demand from exports toward domestic consumption, pensions will play an essential role in encouraging consumption and improving social welfare. They can help bring down savings rates, which as Figure 45 shows, rank among the highest globally in China and India. This would further support the rebalancing toward domestic consumption.

### Risks

The higher returns of local-currency bonds of course come at a price. The risks start with interest-rate and default risks and extend to currency and liquidity risks.

**Liquidity**

Liquidity is a particularly important factor for investors in developing markets. Liquidity is also a cornerstone for the future development of Asian bond markets. Bond-market liquidity in Asia is generally lower than in developed nations. The lack of secondary-market liquidity leads to difficulties in absorbing supply and can therefore become a potential impediment to bond trading in the short term and to bond market growth in the long term (see footnote 14). While corporate-bond market liquidity still lags behind, according to 21PPI, government-bond liquidity has improved.

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Historical performance indications and financial-market scenarios are no guarantee for current or future performance.  
\(^{43}\) HSBC Global Research, Inflation-Linked Bonds: Blossoming Markets, November 2011  
\(^{44}\) HSBC Global Research, Asia-Pacific Rates Guide 2012, December 2011  
\(^{45}\) Investors such as pension funds and insurance companies need to hold long-term assets to match future liabilities.
As analyzed in a recent Credit Suisse study, government bond turnover has increased across major Asian bond markets, as Figure 46 shows.

Corporate-bond liquidity has fallen short of government-bond market liquidity historically. This is partly because corporate bond issues in the past have often been too small to attract large real-money investors. But as more issuance comes to the market, liquidity is likely to improve. In addition, the increasing openness toward foreign investors will attract more capital from abroad.

**Capital Flows Cause Volatility to Remain High**

Capital flows pose a major challenge to Asian bond markets. Local-currency bonds are still considered a risky asset class. This implies that during periods of heightened risk aversion, local-currency bonds will fall victim to capital flight. The sensitivity to these flows is heightened by the currency exposure, which creates additional volatility.

While foreign investors still tend to try to get out of the market as soon as risk aversion around the world increases, local-currency bond markets can increasingly rely on the support of domestic capital. As highlighted by the aforementioned Credit Suisse study, even during times of market stress, the growing pool of domestic capital has shown a home bias and has helped to stabilize capital outflows triggered by foreign investors.

**Intraregional Integration as the Major Development Objective**

We have highlighted plenty of reasons why Asian bond markets are appealing for investors. However, to maintain the attractiveness of Asian bonds as an asset class, the Asian bond market has to move forward in its development.

Apart from the pitfalls, such as limited liquidity and capital flow volatility, this involves, for example, enhancing cross-border transactions within Asia. Despite experiencing remarkable growth of 176% between 2001 and 2009 (see footnote 14), Asian cross-border transactions are still extremely low. According to the Asian Development Bank, East Asian cross-border investments at the end of 2009 accounted for just 15.9% of total outstanding investments in Asia. 21PPI (see footnote 14) highlights that in 2008, 53% of investor capital in cross-border transactions flowed into US and European bond markets. In Europe, in contrast, as much as 73% of cross-border investment is made in European bonds, highlighting the intraregional links in bond markets. Japan, the largest investor in the region, bears a share of responsibility for that. According to the ADB, at the end of 2009 the total outstanding investments in East Asian bonds held by Japanese investors amounted to USD 21.2 billion, or only 1% of their foreign-bond portfolios.

The Japanese reluctance is largely a result of the conservative investment stance of institutional investors and strict investment criteria set by authorities. In the future, Japan will have a big responsibility in intraregional integration. It will have to find a balance between competition and cooperation. In general, for Asian bond markets’ future development it is essential that intraregional links are improved and expanded; especially when developed economies are struggling, Asian economies have to be able to rely on regional demand. Having broadly integrated Asian financial markets would also help to keep Asian capital within the region instead of leaving for developed markets and then returning to the region, often as hot investor money. As a result, volatile capital flows could be avoided, providing the system with more stability, which it needs to tackle further development.

Authorities have acknowledged this issue and have come up with interesting ideas. In early 2012, for example, the finance ministers of the ASEAN+3 nations (i.e. the 10 members of the Association of Southeast Asian Nations plus China, Japan and South Korea) met to discuss a potential Pan-Asian bond market with the aim of promoting the allocation of regional resources to appropriate investments within the region and thereby fostering sustained economic growth.

It goes without saying that an improvement of the regional integration of Asian bond markets requires the liberalization of cross-border capital flows, i.e. the relaxation of capital flow regulations and foreign-exchange controls.
Asian Bond Markets – Investors’ Safe Haven for the Future?
Ultimately, the fiscal improvement associated with a deeper bond market will help to improve macroeconomic stability. This has already led to local rates trading more like their Western counterparts – as a defensive asset. We expect Asia to be able to cope with differences of market scale and development in its bond markets and to be able to foster growth in the corporate-bond market, improve market liquidity and transparency, and mitigate the number of risk factors highlighted above. Then Asian bond markets will have the potential to offer an interesting investment opportunity for carry and currency appreciation reasons, and to serve as a new alternative reserve asset for investors.

Currencies – Long-Term Appreciation Despite Short-Term Setbacks
Investor demand for Asian local-currency bonds has surged in recent years. We identified a number of factors that are responsible for their appeal, one of which was the opportunity for investors to gain exposure to local-currency appreciation. Looking at the performance of Asian currencies versus the US dollar, it is possible to gain a better picture of why investors want to hold this exposure in their portfolios. Figure 47 shows that while some Asian currencies depreciated versus the US dollar between 2000 and 2009, they have appreciated significantly since then.\(^{48}\)

This is confirmed by the HSBC Pan-Asian FX index,\(^{49}\) which tracks the South Korean won, the Chinese renminbi, the Taiwan dollar, the Singapore dollar and the Indian rupee.

According to the index, Asian currencies appreciated versus the US dollar by 5.6% between September 2006 and August 2012.\(^{50}\)

Comparing the appreciation of Asian currencies since 2009 to the increasing outstanding volumes in Asian bond markets reveals that investors were clearly looking for a way to tap currency-appreciation potential in the region and found it in local-currency bond markets. Across Asia, there is evidence of a positive relationship between foreign-exchange (FX) gains and local-currency bond returns; during periods of currency appreciation, capital gains on local-currency bonds as measured by the HSBC Asia Local Bond Index appear to track currency gains, as Figure 48 shows.

According to JP Morgan research, the appreciation of emerging-market currencies has accounted for 40% of the JP Morgan GBI-EM Index total return over the past decade despite the fact that country-specific contributions can vary considerably. When investing in local-currency bond markets, investors tend to look increasingly for currency returns because most emerging bond markets are short duration and therefore often only provide little carry return. While some investors are eager to bear the currency risks in the hopes of Asian currencies appreciating, for others hedging is simply too expensive.

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Footnotes:

\(^{48}\) Except for the Indian rupee

\(^{49}\) The HSBC Pan-Asian FX index is an equally weighted index composed of the South Korean won, the Chinese renminbi, the Taiwan dollar, the Singapore dollar and the Indian rupee.

\(^{50}\) It needs to be remarked that the above graphs also show that Asian currencies tumbled significantly during the market turmoil surrounding the 2008/2009 financial crisis, clearly indicating their sensitivity to investor sentiment.
Have Asian Currencies Run Out of Ammunition, or Are They Reloading?

Admittedly there has been some concern lately about a possible depreciation of Asian currencies as economic momentum has slowed across the region. And as Figure 47 shows, Asian currencies weakened slightly against the US dollar. In the future, however, Asia’s economies, thanks to their healthy fiscal and monetary positions, should be able to absorb any shocks that may spill over from the developed countries. Furthermore, as long as the US Federal Reserve is committed to holding rates close to zero for the foreseeable future and other major central banks in developed nations are forced to do so as well due to recessionary pressures, the need to seek higher-yielding currencies is likely to continue.

With this outlook in mind, Asian authorities are likely to allow further nominal appreciation of their currencies given their primary intention of controlling inflation.

Real Estate – Structural Demand for Asian Property

Real estate has established itself as a core investment opportunity for investors around the world. It offers investors long-term capital appreciation on the one hand and attractive cash flows on the other, appealing to investors seeking regular distributions from their investments (e.g. pension funds) and those interested in long-term wealth preservation (e.g. sovereign wealth funds). 52

As highlighted by the European Public Real Estate Association, compared to other investments, real estate investment distinguishes itself in terms of how income is sourced, generated and secured. Income return on real estate investments is mainly derived from rental income. Contractually agreed tenant obligations such as a minimum rental period and termination penalties guarantee a high level of visibility and predictability of investment returns.

The Asian Real Estate Market is Attracting Attention

According to Jones Lang LaSalle, in 2011 five of the world’s top ten most-traded real estate markets in terms of transaction volumes were Asian cities. As Figure 50 shows, Asian real estate markets have become increasingly interesting for global investors over the course of the past decade.

This view is supported by a Credit Suisse study that claims that based on real effective exchange rates, the bulk of Asian countries appear to have undervalued currencies, as Figure 49 shows.

Continued appreciation of Asian currencies seems likely. China and other Asian countries have realized that they need to rebalance their economies from exports toward domestic consumption in order to maintain their current pace of economic growth. This may create inflationary pressures. In order to cope with those pressures, many central banks have allowed their currency exchange rates to appreciate. Some have shifted away from monetary policies that tie their currencies to the US dollar and have adopted a float or quasi-float. At the time of the 1998 financial crisis in Asia, 70% of the developing countries pegged their currencies to the US dollar, whereas today more than 80% of all emerging-market countries allow their currencies to float, albeit sometimes with a certain degree of control (see footnote 51).

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.


52 European Public Real Estate Association (EPRA), News (Issue 40) – Sustainability reporting in the real estate sector, November/December 2011
Western institutional investors have increased their allocation to real estate markets in the Asia-Pacific region, aiming to tap the region’s growth. Diversification potential also plays a major role. Large Asian sovereign wealth funds and national pension funds have mainly been attracted to this asset class because of the higher yields compared to equity or fixed-income investments. Especially those institutions that have to pay a defined minimum return on the products they offer have been forced to rethink their investment strategies and to replace low-yielding fixed-income investments with higher-yielding real estate ventures in order to generate sufficient cash flows.

In fact, rental yield gaps53 in the Asia-Pacific region currently range between 179 basis points in Mumbai and 380 basis points in Sydney, according to Jones Lang LaSalle.54 This trend has caused Asian real estate to advance considerably, making it a major growth engine for the region. Established markets such as Japan, Hong Kong and Singapore are the building blocks of the market, which also has a lot of development potential through countries such as China, India and Vietnam.

Financing of Real Estate Across the Region
Private debt and equity funding, i.e. bank loans and private equity real estate funds, outnumber public funding instruments such as securitized financing and Real Estate Investment Trusts (REITs) as the key sources of capital for real estate in Asia. In fact, real estate funds55 remain the dominant source of real estate financing in Asia. According to Towers Watson, the majority of the “top 30 real estate funds” are present in the region.

Figure 51 shows the different forms of financing that are common in Asian real estate markets. Although real estate financing largely remains privately driven fostered by the globalization of real estate, public financing instruments such as REITs have attracted increasing attention in the market.56

The Development of REITs as an Example of the Growing Appeal of Asian Real Estate
REITs are investment structures that collect money from investors and invest it in real estate. They have certain tax advantages and usually distribute high payouts to investors, which makes them an attractive vehicle both for property managers and investors.

While REITs have been around for some time in the USA and Australia, it was not until recently that they became a financing alternative to the long-established private financing channels in Asia. REITs allow investors to achieve a large degree of diversification and high liquidity due to low transaction and holding costs (especially compared to direct investments in real estate).

As Figure 52 shows, real estate acquisitions by REITs have increased in the past two years. In fact, they grew from less than USD 8 billion in 2005 to almost USD 16 billion in 2011.57

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Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

53 The rental yield gap describes the number of basis points that prime office yields are above or below 10-year government bond yields. Data as of Q2 2012.
54 Jones Lang LaSalle, Global Market Perspective – Third Quarter 2012
55 These funds usually differ by investment approach. Opportunistic funds typically look for high capital growth while long-term funds usually aim for steady, long-term returns from rental properties.
56 KPMG, The Risks of Investing in APAC Real Estate – Migrating Capital, May 2008
57 CBRE Asia REIT View Point, Asian REITs return to acquisition mode, but 2012 brings new challenges, February 2012

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Transaction Volume Increasing Again

Global real estate transactions rose 14% in 2011 to USD 727 billion, an 83% increase compared to the 2009 lows.\(^58\) Asia was the largest investment region overall, with a share of about 50% of global transactions in 2011. Commercial properties accounted for more than 70% of those transactions in 2011 and volumes have been increasing after having collapsed in light of the US real estate crisis in 2008/2009.

As Figure 54 shows, Japan, China and Australia accounted for almost 50% of all commercial real estate transactions in the Asia-Pacific region between 2003 and 2011.

Domestic capital remains the main driver in the market. After taking an enormous hit in 2008 and 2009, cross-border investments have been increasing again to over 30% of total transaction volume. This implies that after suffering significantly during the financial crisis (cross-border transactions fell by about 20 percentage points), investments by international investors have picked up again. It should be noted that a large share of the cross-border transactions is actually coming from within the region. Among the non-APAC (non-Asia Pacific) investors, Australia remained the preferred destination, accounting for 94% of transactions.\(^59\)

### Table: Listed REITs in Asia as of end-2011

<table>
<thead>
<tr>
<th>Market</th>
<th>No. of listed REITs</th>
<th>Average dividend yield(^*)</th>
<th>10-year government-bond yield</th>
<th>REIT market capitalization (USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>34</td>
<td>6.33%</td>
<td>0.99%</td>
<td>38,239</td>
</tr>
<tr>
<td>Singapore</td>
<td>26</td>
<td>7.10%</td>
<td>1.62%</td>
<td>27,535</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>9</td>
<td>5.68%</td>
<td>1.47%</td>
<td>14,923</td>
</tr>
<tr>
<td>Malaysia</td>
<td>15</td>
<td>6.45%</td>
<td>3.71%</td>
<td>5,134</td>
</tr>
<tr>
<td>Thailand</td>
<td>35</td>
<td>6.71%</td>
<td>3.32%</td>
<td>3,091</td>
</tr>
<tr>
<td>Taiwan</td>
<td>8</td>
<td>3.06%</td>
<td>1.28%</td>
<td>2,426</td>
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<tr>
<td>South Korea</td>
<td>7</td>
<td>8.79%</td>
<td>3.78%</td>
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</tr>
<tr>
<td>Total</td>
<td>134</td>
<td><strong>6.37%</strong></td>
<td>N/A</td>
<td><strong>91,543</strong></td>
</tr>
</tbody>
</table>

\(^*\) Weighted by market capitalization

Fig. 53. Listed REITs in Asia as of end-2011

Source: Bloomberg, CBRE (February 2012)

Figure 53 indicates that Asian REITs invested mainly in Japan and Singapore, which can be seen by their market capitalization. By comparing the average dividend yield of Asian REITs to government bond yields, Figure 53 also explains why Asian REITs have become increasingly appealing for investors around the world and why the number of Asian REITs has been surging in recent years.

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

\(^58\) According to Cushman & Wakefield, International Investment Atlas Summary, 2012

\(^59\) According to CBRE Market View, Asia Pacific Capital Markets, Q1 2012
Is There a Risk of a Property Price Correction in China?

Some of the world’s finest economists are occupied with the question of whether China is in the midst of a property price correction. We will analyze in more detail whether a property price correction could potentially destabilize the banking system and the economy overall later on in this study when we focus on China.

Outlook

In an uncertain economic environment, many investors will focus on low-risk markets and will be very picky about the assets they choose. At the same time, they expect medium-term growth potential, which, considering the current low interest-rate environment, will ultimately require them to accept more risk.

With real yields slipping into negative territory in markets such as Hong Kong and Singapore, Asia’s property sector will continue to benefit from strong demand backed by a banking sector that is carrying far less bad real estate debt than most other regions (see footnote 58).

Since residential markets are still stagnating in some countries (e.g., China), it will most likely be commercial real estate that will balance this out and ultimately bring real estate markets back on track. Demand from a range of international investors is increasing, as is intraregional and domestic buying. The institutional market is sitting on high liquidity backed by high economic growth and savings levels, which, thanks to changing regulations, can now be increasingly invested in real estate.

Investment volumes are likely to increase, and CBRE (see footnote 59) expects to see renewed interest from foreign buyers for real estate in Japan, while China and Australia should be able to maintain their status as preferred destinations for investors wanting to tap the market. Domestic capital is expected to account for most of the transactions while, with interest rates at or even below zero in Europe and the USA, international investors could be increasingly attracted by the return potential of Asia’s property market in the future.

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.
In the course of the preparations for the Chinese Year of the Dragon, the streets of Hong Kong were decorated with big wooden dragons. In ancient times the dragon was a symbol reserved for the Chinese emperor and is considered to be an extremely auspicious sign.
Focus: Infrastructure and Consumption

Asia’s future path of economic growth is going to be determined by how well the region can manage the transition from export-based growth to growth that is powered by internal forces such as increased domestic demand. Domestic demand expansion can be achieved when consumption and investment increase and the savings surplus is reduced. This section highlights the importance of infrastructure investments for further economic growth in Asia and explains how it will integrate with the development of the Asian consumer.

Rapid Urbanization Raises Demand for Further Investment

- In spite of Asia’s bright economic prospects, most emerging Asian countries have an underdeveloped infrastructure. In view of the fast pace of urbanization, significant infrastructure spending will be required in order to fund projects targeting clean-energy technologies, transportation, housing, communications and water facilities, and to ensure that the region achieves its full growth potential.
- China, Asia’s economic powerhouse, is a good example of a country that has been experiencing increasing investment expenditures over the past decade, which have laid the groundwork for rapid industrialization and urbanization. China’s economy is far from facing overinvestment, and investment spending as a percentage of GDP is still at sustainable levels given the high savings ratio.
- We believe that Asia’s economic future will largely depend on infrastructure buildouts in the big urban centers and that the accompanying funding needs bring opportunities for investors.

Appetite for Consumption – Asia Grows, Asia Spends

- Investment has historically outpaced consumption as the main driver of growth in Asia, but the rise of the Asian consumer could turn out to be the next megatrend in the global economy and is likely to create a new engine of growth, not only for Asian economies, but globally.
- Asia’s new middle class will play the key role in this transition. It is growing at impressive rates and experiencing increasing prosperity. Consumers are moving up the value chain, from branded goods to luxury goods and beyond.
- Since discretionary consumption is experiencing a boost, higher-end product markets along with healthcare will be potential outperformers in the future.
Asia’s future growth is likely to be determined by how well Asia can manage the transition from export-based growth to self-generated growth such as increased domestic demand. Domestic demand expansion can be achieved when consumption and investment increase and the savings surplus is reduced. To achieve this expansion, policymakers need to encourage investment, reduce barriers to consumption growth and introduce supportive measures. The improvement of the investment environment, the allocation of government expenditures to infrastructure development and the development of social safety nets such as health, education and pension systems will encourage consumption and reduce the savings ratio.

Rapid Urbanization Raises Demand for Further Investment

In one of its recent studies, McKinsey\(^{60}\) claims that despite Asia’s bright economic prospects, most emerging Asian countries have an underdeveloped infrastructure. The study estimates that due to underinvestment and poor maintenance in India, electricity generation there is up to 20% short of what is needed to meet peak demand. In Indonesia, infrastructure investment declined from about 6% of GDP in the 1990s to only 3% of GDP during the past 10 years. The resulting deterioration in energy, transportation, housing, communications and water facilities has reduced economic growth by three to four percentage points.

Further Infrastructure Investment Needed to Support Urbanization

However, Figure 57 shows that this is likely to change in the future. McKinsey estimates that about USD 8 trillion will be allocated to infrastructure projects over the next 10 years to make up for the underinvestment; and investments particularly in clean-energy projects are expected to surge, growing by almost 19% annually until 2018.

To cite another number on this, the World Bank\(^{61}\) estimates that over the next decade, 7.5% GDP growth in South Asia would require increased demand for infrastructure investment amounting to about 5% of GDP in order to meet the needs of the regional economy.

According to the ADB,\(^{62}\) cities generate more than 80% of GDP in many countries in Asia and are the dominant engine of economic growth. Asian cities will grow rapidly and will be home to another 1.1 billion people in the next two decades as people move to urban areas in search of economic opportunities. It will be of utmost importance to Asia’s future how the countries will be able to provide the infrastructure needed to manage such migration to the cities.

1 Fig. 57. Investment needs for Asian infrastructure projects (2010–2020; in USD trillion)

2 When an economy tries to expand domestic demand and boost economic growth, infrastructure investment is one of the key factors for success. McKinsey underscores that, on the one hand, infrastructure investment sustains economic growth momentum and, on the other hand, allows the benefits of growth to be shared across the population, reducing income inequalities and improving economic competitiveness.

In Asia, the majority of those expenditures will be required for energy and transportation. While the former aims at the adoption of clean-energy technologies from developed economies, the latter mainly implies an enlargement of the road network.

How Is Further Infrastructure Spending Going to Be Financed?

Figure 58 shows that countries such as China and Malaysia are well equipped to fund their infrastructure projects with private capital.

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\(^{60}\) McKinsey & Company, Asia’s USD 1 trillion infrastructure opportunity, March 2011

\(^{61}\) The World Bank, Estimation of Infrastructure Investment Needs in the South Asia Region

\(^{62}\) See http://www.adb.org/themes/urban-development/overview
Countries such as India, Thailand, Indonesia and the Philippines, on the other hand, require external capital because their financial markets have less capacity.

Traditionally, the bulk of infrastructure projects have been financed by governments or domestic banks. Regulatory restrictions, political interference and capital controls have historically scared away foreign investment. There are signs that restrictions on foreign investment are being relaxed and that foreign capital is increasingly welcome. For global investors, this means there is an opportunity to plug the gap. Project bonds issued by infrastructure developers, for example, offer an opportunity for developers to diversify their funding sources and for investors to diversify their investments. In the end, the development of the corporate bond market will especially play an essential role, enabling long-term funds to be channeled into infrastructure investment and at the same time allowing investment risk to be spread across capital markets.

China as a Benchmark

Infrastructure development is important for the region as a whole. Outside China, it is believed that China’s growth is almost entirely driven by its export industry. This is not true. As pictured in Figure 59, the main growth driver for China has been the high level of investment, which has far exceeded the levels of previous growth exemplars such as Japan and Korea.

China’s investment contribution to GDP growth exploded from below 35% in the 1990s to over 45% in 2011.\(^{63}\)

The astonishing growth in investment spending has laid the groundwork for rapid industrialization and urbanization. This is mirrored in the development of the country’s highway system (which quadrupled in length between 1980 and 2010) and railway network (which almost doubled in length between 1980 and 2010), as shown in Figure 60.

On the same note, Figure 61 reveals that China’s automobile market has recently overtaken the USA as the world’s largest, and the trend still has momentum.

Overinvestment vs. Further Investment Needs

Is there room for further investment without stretching government finances? China plans to shift its economy to prioritize domestic consumption. Is a hike in investment consistent with this goal?

While personal consumption will certainly be of greater importance for China’s growth story in the future, HSBC (see footnote 63) argues that China’s economy is far from experiencing overinvestment. Compared to its savings-to-GDP ratio, its investment-to-GDP ratio of 46% (which by itself might be considered high in other countries) is still low. China’s high savings ratio, driven by a tradition of saving in response to inadequate social security and a lack of investment channels, implies that there is still enough capital locked up in savings accounts.
In spite of these challenges, Asia’s infrastructure investment needs over the coming decade will offer interesting opportunities to global investors who, thanks to relaxed entry barriers and capital controls, will enjoy easier access to these opportunities than in the past. The challenge for investors is to identify the opportunities, mitigate the risks and develop an appropriate entry strategy.

Appetite for Consumption – Asia Grows, Asia Spends

In the past decade, fixed-asset investments have outpaced consumption as the main driver of growth in Asia. But this has now come to a turning point. Long-term observers of Asian economies believe that the rise of the Asian consumer is going to be the next megatrend in the global economy. Experts compare the impact that this will have on the world to the rise of the American consumer in the 1950s post-World War era and expect it to have considerable implications for companies, investors and governments across Asia and the rest of the world.

Focus Shifting to Domestic Demand

The rise of Asian economies that started in Japan half a century ago has heretofore been a story of production. Led by China, Asia became the world’s biggest factory for electronic goods, toys and automobiles. So far it has mainly been the USA that has purchased Asian products, causing Asian countries to run permanent trade and current-account surpluses. The USA, on the other hand, has had to deal with ever-increasing current-account deficits. Almost half of the US deficit (which averaged out at about USD 700 billion, or around 5% of GDP, between 2003 and 2008)66 has been with Asian countries.

In other words, the US consumption engine was the main driver for Asia’s production engine. In the past decade, rising wealth particularly in China has created a new consumer for the region’s goods. This has made China’s economy increasingly less reliant on exports; low wages and cheap currencies are no longer the primary focus.

In terms of capital stock per worker, China lags far behind the USA and Korea (see Figure 62). China’s capital stock per worker is only about 8% of that of the USA and 15% of that of Korea, which can be interpreted as a sign that China’s capital accumulation is far from leveling off. According to HSBC, China should even invest more money rather than less.

Infrastructure Investments Continue to Rise

Although demand is strong, global investors have to be aware of the pitfalls and challenges of infrastructure investment. McKinsey (see footnote 60) notes that due to political interests and environmental considerations, for example, infrastructure projects usually involve large amounts of capital, have long periods of time or delays between planning and final approval, and may require investors to lock up their capital for long periods of time. There are also political, legal and regulatory uncertainties.

In spite of these challenges, Asia’s infrastructure investment needs over the coming decade will offer interesting opportunities to global investors who, thanks to relaxed entry barriers and capital controls, will enjoy easier access to these opportunities than in the past. The challenge for investors is to identify the opportunities, mitigate the risks and develop an appropriate entry strategy.

**Fig. 62. China’s capital stock per capita**

Source: CEIC, BEA, Japan’s Cabinet Office, HSBC (February 2012)

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
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<td>140</td>
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<td>Japan</td>
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<td>110</td>
<td>100</td>
<td>90</td>
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<td>S. Korea</td>
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<td>90</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>China</td>
<td>80</td>
<td>70</td>
<td>60</td>
<td>50</td>
</tr>
</tbody>
</table>

**Infrastructure Investments Continue to Rise**

Although demand is strong, global investors have to be aware of the pitfalls and challenges of infrastructure investment. McKinsey (see footnote 60) notes that due to political interests and environmental considerations, for example, infrastructure projects usually involve large amounts of capital, have long periods of time or delays between planning and final approval, and may require investors to lock up their capital for long periods of time. There are also political, legal and regulatory uncertainties.

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65 We must not forget, however, that while only representing about 6% of the global railway network, it accounts for almost a quarter of cargo carried.
66 Asian Conversations, Size counts: China and India flex their consumer muscle, 2011
The Rise of the Asian Consumer

Today, US consumers have to deal with high unemployment and have seen their capital evaporate due to collapsing house prices. European consumers are in no position to fill this gap because they are struggling with the consequences of over-indebted countries that require fiscal and monetary support measures to avoid a breakdown of the European monetary union. This leaves three-and-a-half billion consumers in developing Asia. The Asian consumer has tremendous development potential. While accounting for half of the world’s population, developing Asia only produces 30% of global GDP. Chinese consumption only accounts for 36% of the country’s GDP, compared to 65% in the USA. In 2008, Asia’s population of 3.5 billion people spent less than USD 7 trillion while the USA’s population of only 0.3 billion people spent USD 10 trillion.67

Previously held back by high savings rates, there are signs of a cultural shift among Asian consumers. China is already the world’s largest market for many household products such as TVs, refrigerators and air conditioners. China has surpassed the USA as the world’s largest automobile market. Companies like Volkswagen and GM as well as premium brands such as BMW and Mercedes Benz are earning an increasing portion of their revenues in the Chinese market. Although lagging behind a couple of years, India’s consumer market is already seeing similar signs of development. India is already the world’s fastest-growing cellphone market.

Asia’s Middle Class to Become the Centerpiece of Asia’s Economic Future

A large part of consumption growth in Asia is expected to come from Asia’s new middle class.68 Today, Asia accounts for 28% of the global middle class in terms of number of people (see footnote 67). This share could double by 2020. By that time, China’s middle class alone would be bigger than the entire residential population of the European Union. By 2030, two billion people are expected to belong to this bracket.69 The growing affluence goes hand in hand with rapid urbanization. Middle-class consumers mostly live in urban areas, which is why Asian cities have been the fastest-growing cities since the turn of the millennium. Consequently, the urban Asian-Pacific population will grow by over 21% over the next decade.70

<table>
<thead>
<tr>
<th>Region</th>
<th>2009 Millions</th>
<th>2020 Share</th>
<th>2020 Millions</th>
<th>2020 Share</th>
<th>2030 Millions</th>
<th>2030 Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>338</td>
<td>18%</td>
<td>333</td>
<td>10%</td>
<td>322</td>
<td>7%</td>
</tr>
<tr>
<td>Europe</td>
<td>664</td>
<td>36%</td>
<td>703</td>
<td>22%</td>
<td>680</td>
<td>14%</td>
</tr>
<tr>
<td>Central and South America</td>
<td>181</td>
<td>10%</td>
<td>261</td>
<td>8%</td>
<td>313</td>
<td>6%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>525</td>
<td>28%</td>
<td>1,740</td>
<td>54%</td>
<td>3,228</td>
<td>66%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>32</td>
<td>2%</td>
<td>57</td>
<td>2%</td>
<td>107</td>
<td>2%</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>105</td>
<td>6%</td>
<td>165</td>
<td>5%</td>
<td>234</td>
<td>5%</td>
</tr>
<tr>
<td>World</td>
<td>1,845</td>
<td>100%</td>
<td>3,249</td>
<td>100%</td>
<td>4,884</td>
<td>100%</td>
</tr>
</tbody>
</table>

Fig. 63. Projections of the global middle class

Source: OECD, Deutsche Bank (23 July 2012)

The OECD71 estimates that Asia’s middle class accounts for 23% of today’s total consumer spending. As Figure 63 shows, it will be 54% by 2020 and could easily reach 66% by 2030.

Eighty percent of global middle-class spending growth will come from Asia and is expected to reach USD 56 trillion by 2030. According to the Economist Intelligence Unit, by 2030 more than eight out of ten cellphones will be owned by people living in emerging-market countries.

A Different Hierarchy of Needs

The era when investors believed that emerging markets would be a key source of demand for almost any consumer product is largely over. Today, investors need to be far more discriminating in selecting consumer niches that could hold particular investment potential.

According to Credit Suisse research,72 particularly APAC’s rapid progression through income brackets73 as well as significant improvements in the quality of both infrastructure and human capital will ultimately alter its pattern of consumption. As a result, demand for most of the basic products is declining and holds only limited medium-term growth potential. Experience from developed economies shows that as income increases, people tend to spend proportionally less of it on necessities such as food. On the other hand, consumption of higher-end products is experiencing a boost, making those markets potential outperformers in the future. Figure 64 illustrates the assessed opportunity of different consumer goods across Asia in terms of future growth potential.

67 McKinsey Quarterly, Think regionally, act globally – Four steps to reaching the Asian consumer, 2009
68 It is difficult to accurately define the middle class. Homi Kharas, in a study published by the OECD in 2010, defines middle class households as those that live with daily per capita incomes between USD 10 and USD 100 in purchasing power parity terms. The Chinese Academy of Social Sciences, a state research institution, sets the yardstick at around USD 7,300 in annual income (as of 2009). Other international market researchers set the threshold at USD 10,000 or more.
69 According to Goldman Sachs
71 OECD, The Emerging Middle Class in Developing Countries, 2010
72 Credit Suisse, Asia Pacific Equity Research – APAC: Consumption S curve, 2012
73 The region is expected to reach a PPP-adjusted per capita GDP of USD 12,000 by 2030, compared to less than USD 2,500 in 2000.
As shown in Figure 65, the greatest acceleration in personal consumption takes place in the per capita GDP bracket between USD 5,000 and USD 15,000. Beyond that level, growth rates tend to slow and consumer demand tends to shift from more basic products toward higher-value-added services.

### Basics: Food and Beverages

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>India</th>
<th>Korea</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Thailand</th>
<th>The Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Rice</td>
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<td>low</td>
<td>low</td>
<td>medium</td>
<td>low</td>
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<tr>
<td>Sugar</td>
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<td>Fruits</td>
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<td>medium</td>
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<td>low</td>
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<tr>
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<td>low</td>
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<tr>
<td>Wine</td>
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<td>Beer</td>
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<td>high</td>
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<tr>
<td>Stimulants</td>
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<td>low</td>
<td>medium</td>
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<td>Red Meat</td>
<td>medium</td>
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<td>medium</td>
<td>high</td>
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<tr>
<td>White Meat</td>
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### Discretionary Spending

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<thead>
<tr>
<th></th>
<th>Apparel</th>
<th>Appliances</th>
<th>Auto</th>
<th>Two Wheelers</th>
<th>Consumer Loans</th>
<th>Education</th>
<th>Healthcare</th>
<th>PC/Laptop</th>
<th>Tourism/Travel</th>
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<tbody>
<tr>
<td>high</td>
<td>medium</td>
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<td>high</td>
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<td>high</td>
<td>low</td>
<td>medium</td>
<td>high</td>
<td>high</td>
<td>high</td>
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</tbody>
</table>

APAC over the past ten years has recorded not just higher-than-average income growth rates, but has also experienced higher levels of education compared to the emerging-market average. Moreover, it has benefited from the widespread availability of modern infrastructure. As a result, APAC countries are rapidly moving along the S-curve74 (see footnote 72). Some products are already approaching saturation levels while others still have considerable growth potential. For some products, there are both growth and significant “catch-up” opportunities.75

![Fig. 64. APAC Industry Heat map](Source: Credit Suisse (6 August 2012))

![Fig. 65. Typical product S-curve showing product spending vs. per capita GDP (USD)](Source: Credit Suisse (6 August 2012))

As shown in Figure 65, the greatest acceleration in personal consumption takes place in the per capita GDP bracket between USD 5,000 and USD 15,000. Beyond that level, growth rates tend to slow and consumer demand tends to shift from more basic products toward higher-value-added services.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>11,778</td>
<td>11,346</td>
<td>17,550</td>
<td>20,764</td>
<td>33,000</td>
</tr>
<tr>
<td>Taiwan</td>
<td>12,865</td>
<td>14,641</td>
<td>16,022</td>
<td>18,572</td>
<td>29,000</td>
</tr>
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<td>Malaysia</td>
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<td>4,030</td>
<td>5,210</td>
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<td>China</td>
<td>600</td>
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<td>1,729</td>
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<td>9,152</td>
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<td>390</td>
<td>465</td>
<td>729</td>
<td>1,342</td>
<td>2,040</td>
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</tbody>
</table>

**Notes:**
74 The S-curve attempts to capture the fact that at early stages of evolution, growth and consumption of certain products tend to have a very steep slope (or in other words, an accelerated surge in consumption after a certain level of income has been reached). Subsequently, the pace of expansion slows and is replaced by other sets of products and services as the economy matures.
75 A more detailed analysis can be found in Credit Suisse’s publication titled Consumption Patterns and Emerging Markets (2010) by Mary Curtis and Richard Kersley.
Differing Consumer Priorities and Increasing Prosperity Raise Demand for Luxury

In general, it is important to recognize that consumer priorities differ in Asia. Interpersonal relationships, social interactions and, most importantly, status are much more highly valued than in the Western world (see footnote 70). This leads to a widespread obsession for international brand-name goods, electronic gadgets, beauty products and, last but particularly noteworthy, luxury goods such as jewelry and fashion apparel. Displaying success is much more common in Asia than it is in Europe or the USA, and wealthy consumers of luxury goods brands are often much younger than in the “old” world. Moreover, due to the one-child policy in mainland China, this wealth is often concentrated in a single individual.

Luxury goods in particular have experienced astonishing growth in Asia in recent years. Figure 67 displays the tremendous growth of the segment and shows how well it recovered from the 2008/2009 financial crisis. Global luxury-goods sales are growing at a double-digit annual rate, and this long-term structural trend is well established.

In fact, the luxury industry is growing at three times the GDP growth rate on average, as highlighted by Figure 68.

By 2020, Asia’s luxury market alone will be as large as the global luxury market is today.

China is a receptive market for luxury goods, with a lot of millionaires and a prospering middle class. It is emerging to become the world’s leading market for luxury goods. According to Capgemini,76 the Asia-Pacific region is now home to slightly more millionaires than any other region. As shown in Figure 69, the number of Asia-Pacific high-net-worth individuals (HNWIs)77 hit 3.37 million in 2011, compared to 3.35 million in North America and 3.17 million in Europe.

Fig. 67. Worldwide personal luxury-goods market trend (1995–2011, EUR billions)

Fig. 68. Global luxury sales growth vs. GDP growth. Data for 2012 and 2013 are analyst consensus estimates.
Source: Company data, Bloomberg

Fig. 69. Global breakdown of high-net-worth individuals, 2007–2011
Source: Capgemini (2012)

Luxury goods organic sales growth as a multiple of sector-weighted real GDP growth
Long Term Average +/- SDT

1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014

China is a receptive market for luxury goods, with a lot of millionaires and a prospering middle class. It is emerging to become the world’s leading market for luxury goods. According to Capgemini,76 the Asia-Pacific region is now home to slightly more millionaires than any other region. As shown in Figure 69, the number of Asia-Pacific high-net-worth individuals (HNWIs)77 hit 3.37 million in 2011, compared to 3.35 million in North America and 3.17 million in Europe.

Note: Chart numbers and quoted percentages may not add up due to rounding.

Fig. 69. Global breakdown of high-net-worth individuals, 2007–2011
Source: Capgemini (2012)

76 Capgemini, 16th Annual World Wealth Report, 2012
77 Those with USD 1 million or more at their disposal for investing.
Besides Japan and China, countries such as South Korea, Taiwan, Thailand, Indonesia, Malaysia, the Philippines and Vietnam have growing numbers of people with high purchasing power. Figure 70 shows the expected shift in the wealth distribution of China’s population between 2010 and 2020.

<table>
<thead>
<tr>
<th>2010 distribution</th>
<th>2020 distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household annual income (RMB 1000s)</td>
<td># Household in mn</td>
</tr>
<tr>
<td>1 Upper Affluent: &gt;200</td>
<td>0%</td>
</tr>
<tr>
<td>13 Lower Affluent: 100–200</td>
<td>6%</td>
</tr>
<tr>
<td>34 Middle Class: 60–100</td>
<td>17%</td>
</tr>
<tr>
<td>61 Emerging Middle: 40–60</td>
<td>30%</td>
</tr>
<tr>
<td>57 Aspirant: 25–40</td>
<td>28%</td>
</tr>
<tr>
<td>36 Poor: &lt;25</td>
<td>18%</td>
</tr>
</tbody>
</table>

Fig. 70. Significant expected increase in the affluent and middle classes in China
Source: Capgemini (2012)

Many European manufacturers of luxury goods have dispatched teams to Asia to gain a better understanding of Asian consumers’ tastes with the aim of incorporating these in their product designs. The increasing demand for luxury goods has also brought forth Asian manufacturers of such goods. Particularly in areas such as luxury resorts, fashion and cosmetics, Asian names can now compete on a level playing field with top international brands. This development will ultimately force European and American luxury brands to increase their presence onsite by opening additional stores in the booming urban centers. In the future these brands will compete to meet clients’ main demands, which are exemplary quality, high standards of craftsmanship, timelessness and genuine tradition. With the Asian middle class continuously growing and the number of Asian millionaires on the rise, the demand for handbags, shoes, watches and cosmetics will certainly not abate. This outlook should put the luxury-goods segment in a solid position for future success.

In the end, along with consumer preferences, investment strategies need to evolve away from basic needs toward categories that will attract more attention from Asia’s population, such as education, travel, healthcare, apparel and retail financial services.

Macau – the City of Dreams
A 100-Billion-Dollar Market by 2020
Rooted in a strong belief in luck and a passion for the excitement of winning, Chinese’s love of gambling has made the Macau gaming sector one of the most exciting consumption-growth stories in Asia.

Since the granting of new casino operator licenses in 2002, Macau has emerged as one of the world’s largest gaming markets in less than a decade. In 2011, Macau’s gaming revenue was already more than half of that of Las Vegas, with gross gaming revenue amounting to over USD 34 billion. When looking at the gaming revenue forecasts shown in Figure 71, it is not surprising that observers estimate that it will not be long before Macau surpasses Las Vegas.

Nevertheless, per capita casino spending in China is still seven times lower than in the United States. Coming from such a low penetration level, we are convinced that spending on destination gaming and leisure activities will enjoy a long-term structural growth trend. Our conviction is supported by the continuing infrastructure buildout giving Macau greater accessibility and by the increasing penetration of gaming and leisure activities among the mass market.

Fig. 71. Macau gaming revenue projection through 2020
Source: DICJ (Gaming Inspection and Coordination Bureau) Macau, CLSA Asia-Pacific Markets, Credit Suisse estimates, July 2012

78 According to the State Gaming Control Board and CLSA Asia-Pacific Markets, July 2012

Focus: Infrastructure and Consumption
All Roads Lead to Macau

Although Macau has gained popularity as “the” gaming destination of China, its popularity mainly remains based in the Guangdong area for the moment. Visitors from Guangdong province can reach Macau in a few hours by road transportation and now account for half of the total mainland Chinese tourist arrivals. Yet Guangdong province, with a population of 104 million, is only 10% of the total population in China. Visitors from the first-tier cities of Beijing and Shanghai only account for around 5% of the mainland tourist arrivals. Together with the tight supply of hotel rooms, with the occupancy rates of integrated resorts standing at nearly 90% all year round, Macau can only serve a limited portion of mainland Chinese tourists.

In view of this, a number of transportation infrastructure projects are now under construction. All aim to shorten the travel distance between Macau, Hong Kong, Guangzhou and the rest of mainland China. The completion of the Hong Kong-Zhuhai-Macau Bridge by 2015 will allow visitors to travel from Guangdong to Macau in less than an hour. The extension of the Guangzhou-Shenzhen-Hong Kong Express Rail Link connecting to the national high-speed train network will greatly enhance the accessibility of Macau and Hong Kong. With the improved transportation network, non-Guangdong visitors can reach Macau much more comfortably and quickly. Furthermore, the USD 13 billion that the Macau casino operators have invested in new hotel properties and casinos in the past five years is now bearing fruit, as evidenced by the aforementioned hotel occupancy rate.

In summary, the Macau gaming sector finds itself in a sweet spot of having high earnings growth and very strong cash-flow generation in this decade. It will thus be one of the sectors that are likely to capture the Asia consumption growth story especially well and offer an attractive investment return in the long run.
The fish is considered to be a lucky Chinese New Year symbol and is the most popular dish served during the occasion.
When assessing Asia’s future development, it is almost impossible to overstate the importance of China. In fact, China has been the most important engine of global economic growth over the past decade.

**China as the Leader of the World Economy**
- Looking forward, China will not only be the powerhouse of Asia’s future, but is also expected to soon attain global economic leadership and become the world’s largest economy. On its path, China can rely on the following:
  - Ample liquidity: China's currency reserves amount to over USD 3 trillion.
  - Prudent budgeting: The government’s balance sheet remains solid. In terms of sovereign debt levels, China ranks far behind the highly indebted developed economies in Europe, the USA and Japan.
  - Rapid urbanization: Migration to urban areas and increasing workforce productivity support economic growth.
  - Capital-market liberalization: China has increasingly opened up to the rest of the world, which particularly allows capital to flow to where it can be best used.
- At the same time, China has to cope with challenges such as increasing inflation and worsening demographics. A topic widely discussed recently has been whether or not China is in the midst of a property price correction. This section weighs up the arguments.

**Investors’ Perspective: Access Is Key**
- China has long been prudent with regard to outside capital in order to protect the renminbi (RMB). However, in order to stay on its current growth path, China might change its stance and open up its capital markets to outside investors.
- With the onshore market largely closed to international investors, the offshore market for RMB can play a pivotal role in enabling investors to gain exposure to the renminbi and at the same time ensuring that the liberalization of China’s capital account does not lag behind other developments.
- While offshore deposits are still surging, investors are slowly but surely aiming to access the mainland, i.e. the onshore market. China has implemented different schemes that allow certain investors to tap the onshore market.
- Just recently, quotas regulating foreign-capital access to the onshore market have been raised again. This shows that China is discovering more and more opportunities in granting foreign investors access to the local capital markets. Accordingly, China seems to be willing to open up its capital account more rapidly than just a couple of years ago.
China as the Leader of the World Economy

Life in the Fast Lane
China has been the most important engine of global and intra-Asian economic growth over the past decade. In 2007, China’s per capita GDP in current USD terms reached the USA’s 1960 level of per capita GDP. In 2011, it was roughly the same as US per capita GDP in 1972. China thus experienced the equivalent of almost 12 years of US growth in just four years.79 In 2010, China’s GDP grew by 10.3%, compared to a developed-market average of around 2.6%. Looking ahead, China will therefore not only be the powerhouse of Asia’s future, but will also soon assume global economic leadership.

Figure 72 shows that according to Credit Suisse forecasts, China’s share of global GDP will soon be larger than that of the euro zone.

Several economic analyses suggest that China will overtake the USA as the world’s largest economy within the next fifteen years (see Figure 73).

It vividly illustrates in which areas China has already overtaken the USA and how long it is likely to take China to catch up and overtake the USA in areas where the USA is still in the lead. The chart also shows that it is not a question of whether China will be able to outrun the USA. It is just a question of when!

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79 According to data from the World Bank.
Today China’s population is already double that of the United States and the European Union combined. Although a large part of its population is still rural as we have discussed earlier in this paper, China has tremendous development potential when it comes to infrastructure projects that will ultimately encourage urbanization and industrialization of the “Middle Kingdom”. On top of that, China’s rapidly growing middle class will soon become larger than that of Europe, the USA and Japan combined.

Ample Liquidity Fosters Independence
With more than USD 3 trillion of foreign-exchange reserves held by the Chinese government, a cash-rich corporate sector and a significant household savings rate, China finds itself in a situation where it should be able to steer through a global economic growth slowdown without suffering a hard landing. Figure 75 shows that China’s FX reserves are now about three times larger than those of Japan. Overall they account for about a third of global FX reserves.

Solid Budgeting as a Foundation
Besides having access to ample liquidity, the government’s balance sheet remains solid. Outstanding debt amounts to only 19% of GDP,81 which ranks China far behind the highly indebted developed economies in Europe, the USA and Japan. As Figure 77 shows, even after adding contingent liabilities such as local government debt, Barclays finds that China’s overall contingent liabilities would range somewhere between 80% and 90% of GDP, which is still low compared to its global competitors. Taking into consideration the rapid growth of government revenues and the value of assets owned by the government,82 the risk that these contingent liabilities pose to China’s future path toward becoming the global economic superpower seems to be manageable.

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82 According to data from the International Monetary Fund (IMF), China’s net foreign asset position (converted into current USD) was USD 3.839 trillion in 2011. At the same time, the USA ran a net foreign debt position of USD 96 billion.
For many experts, the imbalance between investment and consumption makes China’s economic situation look precarious. However, the increasing wealth of China’s rising middle class is likely to give consumption a tremendous boost in the future. In addition, the government’s aim of shifting the economy’s focus from exports toward internal demand should also be positive for consumption. Rising consumption will most likely go hand in hand with an appreciation of the renminbi after capital markets are further internationalized.

At the same time, though, a slowdown in investment spending is nowhere near, especially when taking into account the considerable infrastructure spending that will be required to match the pace of urbanization.

Risks on the Way
What’s true for the Asian economies in general also applies to China: double-digit economic growth does not come without risks and challenges. The path to becoming the world’s preeminent economy is unlikely to be smooth.

Investment versus Consumption, or Rather Investment and Consumption Joining Forces
As highlighted earlier in this paper, it wasn’t exports but rather mostly investments in infrastructure in response to rapid urbanization that boosted economic growth to these levels. Spending on plant, buildings and other infrastructure projects has accounted for almost 50% of GDP of late. Figure 78 indicates that due to a high savings rate, household consumption’s contribution to GDP growth has been decreasing over recent decades.

Rapid Urbanization as a Main Driving Force
The rapid urbanization over the past two decades has certainly been a major success factor. People leaving their rural homes and moving into the urban centers caused China’s workforce to grow by about 145 million people between 1990 and 2008.\(^{83}\) At the same time, workforce productivity increased by an annual rate of 9%, meaning that output that required 100 people’s work in 1990 was done by 20 in 2008.\(^{84}\)

The Development of Capital Markets and Decreasing Reticence toward Outside Influence
The reforms and liberalization that were initiated in the 1970s have laid the groundwork for China’s evolution from a centrally-planned to a more market-oriented economy. As highlighted by the CSRC,\(^{85}\) the increasing sophistication of the Chinese economy together with the reform of state-owned enterprises has encouraged the development of accommodative financial systems. Capital markets have become one of the animating spirits behind a number of economic and social reforms, and their contribution to economic development is increasing steadily.

China has increasingly opened up to the rest of the world and has become part of the international community. Its growing receptiveness to new ideas and its willingness to start allowing foreign capital to access local markets have led to improved know-how and massive capital flows that, when coupled with low labor costs, have caused economic growth to surge.

Fig. 78. Household consumption’s contribution to GDP growth (last data point: February 2012) Source: CEIC, Credit Suisse

Inflation
First and foremost, as discussed earlier in this study, inflation will be a factor to watch out for in the future. Although currently depressed by restrained Chinese growth due to the global economic slowdown, once growth picks up again, inflation will become an issue once more, especially if there is rapid and undisciplined credit growth. As Figure 79 shows, this will most likely cause the inflation rate to remain volatile in the future.

Fig. 79. China’s inflation levels have been volatile Source: CEIC, HSBC (Q2 2012)
New Sources of Growth Needed
To date, China’s growth has been powered by investment spending, which has made it the most investment-intensive country in the world. We have seen that this growth has been matched by a decrease in household spending, an overall trend that may need to be reversed if economic growth is to be sustained in the long term. We have also highlighted why consumption should gain importance as a driver of future economic growth in China. To avoid a “growth trap”, however, Chinese authorities may need to further promote domestic demand over the next few decades.

Shifting Demographics
Unfavorable demographic trends have also already been highlighted as one of the major challenges facing many Asian countries. China added more than 100 million people to its workforce over the past decade, but is projected to add only another 20 million over the next one.86 Labor force growth, as pictured in Figure 80, is clearly turning less favorable in the future.

Property Price Bubble?
An often-discussed risk to China’s growth story is a sharp correction of property prices. This is a highly controversial topic. As BCA Research87 highlights, there is clear evidence of speculative excess in specific regions and certain segments of the housing market. However, it sees little evidence of a nationwide housing bubble. When looking at house-price increases, many observers focus on the large urban centers where property prices have indeed increased, as Figure 81 shows. Viewed in isolation, this could indeed lead some to conclude that overheating is a risk.

Last but not least, the ongoing correction in China’s property market due to a slowing Chinese economy in recent months is likely to cool the market.

As PricewaterhouseCoopers (see footnote 12) emphasizes, the commercial sector should remain strong once the economy picks up pace. Backed by increasing investment from insurance companies and developers who, due to government restrictions, are forced to invest more and more in commercial property rather than residential projects, there is significant potential in this segment. China’s emerging corporate giants want trophy office sites. This will drive capital into those projects and will help to support the Chinese property market in the future.

In summary, the prevailing housing-construction boom in China needs to be put in proper context. One cannot rule out misallocations and excesses in certain areas. But the overall picture argues against an unsustainable house-price correction.

Internationalization as the Key to the Future
In order to stay on its current growth path, China is likely to decide to continue to open up its capital markets to outside investors. This will provide the necessary funds to support urbanization and at the same time improve market efficiency, liquidity and transparency. With the internationalization of the renminbi and the interest-rate liberalization in progress, China appears to have recognized the ultimate benefits of these developments.

In the end, for China and its huge and growing population, creating employment and avoiding social unrest might turn out to become a key goal for the future. If this can be achieved and growth momentum can be sustained, particularly in the emerging regions, on balance China should be able to sustain a high level of growth.

Investor’s Perspective: Access Is Key
Investors around the globe are currently facing a difficult situation. Europe is experiencing a full-blown sovereign debt crisis, and the USA is close to reaching its debt ceiling with no definitive plans to drive down the budget deficit. Naturally, when thinking about where to put their money, investors look at places where there is economic growth potential and where they see sound economic and monetary policies in place to promote growth. Asia looks strong on those metrics. We have highlighted a number of reasons why much of the world’s future economic growth will take place in Asia. For investors, this raises the question of how to capture this growth.

Especially in the case of China, accessing the growth potential means that certain barriers need to be overcome. China has long protected itself from outside capital in order to avoid appreciation of the renminbi and to prevent poorly controlled capital in- and outflows.

The Internationalization of the Renminbi
Recently, China has started to allow its financial market to open the door to outside investors. The internationalization of the RMB and the simultaneous opening of the capital account could be the most important cornerstones of China’s financial development.

More precisely, China has started to internationalize the RMB before completely liberalizing its capital account. In fact, the RMB is already crossing Chinese borders via the offshore market while in China’s banking system the net interest margin is still regulated and foreign banks are still limited to playing a minor role.

The Role of the Offshore Market
The offshore market for RMB can play a pivotal role in ensuring that the capital-account liberalization does not lag behind going forward. RMB reserves accumulate offshore when RMB payments for Chinese imports exceed RMB receipts for Chinese exports or when Hong Kong residents acquire a certain amount of RMB against, for example, US dollars. With these funds, banks essentially create offshore foreign exchange, money and bond markets. Since Chinese authorities only permit limited transfer of these funds back onshore, offshore price signals start to deviate from those onshore. Chinese authorities are well aware that price signals from offshore markets will sooner or later put pressure on onshore markets and on the still regulated banking system and ultimately force prices to adjust. Thus, within limits, Chinese authorities welcome the pressure that it puts on domestic currency, money and bond markets because this serves to promote future capital-account liberalization.

The offshore market was explicitly built to allow RMB to begin to develop international characteristics while at the same time guarding domestic markets from the influence of global markets. Allowing further development of the offshore RMB market thus provides China with a perfect opportunity to gradually open up its capital markets to the outside world.

At the same time, due to limited access to onshore markets, the offshore market enables large and long-term investors to gain exposure to RMB and benefit from the country’s vast trade links and significant economic weight in the global economy.
The Arduous Path to Interest Rate Liberalization

There are further reasons for China to reconsider its reluctance toward an open capital account. China’s rise has predominantly been financed by using cheap money raised from depositors, which has been channeled into investments. Here, the controlled net interest-rate margin basically represents a tax on depositors that may lead to a suppression of consumption, services and private business in order to subsidize investments, industry and the state.91

With strict capital controls in place, savers have no way to shift their capital abroad where it could earn sound returns. Instead, foreign-currency reserves have piled higher, most of which have been placed in US Treasury bonds and now expose China to significant exchange-rate risk. While China, in contrast to other emerging economies, does not depend on foreign capital, loosening capital controls would encourage more productive investments for onshore capital and at the same time enable China to diversify its funding mix. In order to keep Chinese savers from shifting all their money abroad and thus causing a huge capital flight, it may become essential for China to first liberalize interest rates within the country to provide savers with interesting investment opportunities onshore.

Last but not least, having a dominant, internationalized currency is a standard attribute of a growing global power.92 However, unless China opens up its borders to allow foreigners to buy and sell Chinese assets, the RMB is unlikely to become the long-desired international reserve currency and a powerful geopolitical tool.

The Implications of Capital Controls for Currency, Bond and Stock Markets

The imposition of capital controls has implications not only for the value of the RMB, but also for prices of Chinese stocks and government bonds, which deviate between the offshore and onshore markets.

On the currency side, the internationalization of the RMB has brought a second exchange rate for the RMB offshore, called the CNH. The CNH is traded outside mainland China (to a large extent in Hong Kong) and determines the delivery of RMB against USD. Due to capital controls limiting the flow of RMB back to the mainland, the CNH exchange rate differs from the RMB exchange rate traded onshore in Shanghai (called CNY). After being implemented in July 2010, the CNH traded at an average premium of 0.2% over the CNY until late 2011, as pictured in Figure 83 (see footnote 90).

Barred from gaining direct exposure to the CNY, investors tried to get their hands on CNH, driving up the relative exchange rate of CNH versus CNY. As investors moved back into “risk-off” mode at the end of 2011 and Asian currencies started to weaken, the RMB then traded much more cheaply in Hong Kong than onshore.

Before the implementation of the CNH in 2010, the RMB was first traded offshore via “non-deliverable forwards” (NDFs)93 for almost 10 years. After the RMB was unpegged94 from the USD in 2005, an onshore deliverable forward began to trade. From then onward, both traded simultaneously, but at noticeably different rates. The implementation of the CNH created further arbitrage opportunities, but stringent capital controls caused price differences across these markets to remain.

The implementation of the offshore bond market has provided further evidence of the segmentation of onshore and offshore markets. When China issued government bonds in Hong Kong for the first time in 2007, they paid a higher yield than onshore. However, when the government came back to the market in 2010 and 2011, yields ranged way below those offered on domestic issues. This reflects investors’ lack of access to the mainland bond market. To get exposure to the RMB, investors are willing to pay a premium in the offshore market by accepting lower yields.

The discrepancy in Chinese share prices between the mainland and the offshore market in Hong Kong reveals again that Chinese capital controls remain effective. As Figure 84 shows, prices of so-called A-shares (shares that are listed onshore) and those of H-shares (shares that trade offshore) have deviated considerably, with the price of mainland shares rising to almost twice the price of offshore shares back in 2007.

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93 Non-deliverable forwards (NDFs) are forward transactions used to hedge non-convertible currencies. Under an NDF, a currency that is not freely convertible is specified against a freely convertible currency (typically the USD). The contract is for a fixed amount (of the non-convertible currency) on a specific due date and at an agreed forward rate. At maturity, the daily rate (reference rate) is compared with the NDF rate. The difference must be paid in the convertible currency on the value date.
94 The renminbi today is still closely linked to the USD. However, instead of a direct currency peg, China is steering the RMB’s value indirectly via capital controls.
In 2007, authorities allowed the offshore sale of RMB-denominated bonds. Investors were now provided with an investment alternative offering higher yields than deposits. The first RMB-denominated bond issued outside mainland China was the CNY 5 billion issue by the China Development Bank followed by the Export-Import Bank of China (CNY 2 billion), the Bank of China (CNY 3 billion) and the Bank of Communications (CNY 5 billion). According to HSBC, Baosteel Group was the first non-financial state-owned enterprise to tap the CNH market in Hong Kong after obtaining approval in October 2011.

In 2009, China’s government started to encourage Chinese companies to invoice and settle international exports and imports in RMB. These developments have led to tremendous growth of the offshore market in Hong Kong. Since then, RMB trade settlements rose from RMB 3 billion in 2009 to RMB 535 billion in 2010 and are expected to reach RMB 2.1 trillion in 2015. A large majority of those transactions have involved Chinese imports. Apparently, more than 10% of Chinese imports are now settled offshore, giving foreign investors an excellent opportunity to get their hands on RMB and thus boosting RMB-denominated deposits in Hong Kong.

RMB Deposits Rising Further

On the back of an increasing volume of RMB cross-border trade and the growing use of bank deposits for RMB lending and bond purchases, CNH deposits are expected to reach CNH 1.25 billion by 2012. As displayed in Figure 85, deposit volumes have surged ever since, reaching CNH 576 billion as of January 2012. Simultaneously, this caused an increase in net foreign-currency assets in the Chinese banking system and led to a surge in foreign-exchange reserves.

As Figure 86 shows, in the coming years these levels are expected to surge further and eventually reach more than CNH 4 billion in 2015, according to Deutsche Bank and the Hong Kong Monetary Authority (HKMA).

![Graph](image-url)

Fig. 85. CNH deposits and cross-border trade on the rise
Source: HKMA, Deutsche Bank (April 2012)

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

95 Bank for International Settlements, The internationalization of the RMB, 2011
96 Deutsche Bank, Global Economic Perspectives: China’s Financial Revolution, 20 April 2012
Investors Aiming for Access to the Mainland
Today, investors are reaching out for more: they want to gain access to China’s onshore market, i.e. they want to bring their CNH onshore and convert them into onshore CNY. Introducing convertibility of CNH and CNY would essentially imply opening China’s capital account, which Chinese authorities are still trying to avoid or at least defer. Nevertheless, over time Chinese authorities seem to be weighing the opportunities of foreign capital against its pitfalls more than they did until just recently. Although foreign direct investment flows were already allowed into mainland China in the 1970s, securities flows are still tightly restricted. In 1991, the Shanghai and Shenzhen Stock Exchanges started offering so-called B-shares to foreign investors for the purpose of attracting foreign capital to the securities market. These shares are domestically listed and denominated in RMB, but are traded in USD or Hong Kong dollars by overseas investors.

Several other measures that opened opportunities to tap the Chinese equity market followed, but the most significant step was taken in 2002 with the implementation of the Qualified Foreign Institutional Investor (QFII) scheme. According to the China Securities Regulatory Commission (CSRC; see footnote 85), the goal of the QFII scheme was to allow licensed foreign institutional investors to trade Chinese A-shares on the secondary market. At the same time, this would allow domestic institutions to benefit from international financial institutions’ experience in a global financial market. By the end of 2007, 52 foreign institutional investors had been granted QFII status97 to trade A-shares, government bonds, corporate bonds, convertible bonds and other financial instruments approved by the CSRC. The QFII scheme was an important step in the process of internationalizing China’s capital market and had tremendous implications for the fund industry, which was competing for quotas to invest in the onshore market.

Since 2007, the additional implementation of the Qualified Domestic Institutional Investor (QDII) scheme has also allowed domestic institutional investors to transfer their money out of mainland China and invest it in global capital markets. According to the Bank for International Settlements (see footnote 95), the QDII scheme was a reaction to large foreign-exchange reserves that had accumulated and needed to be allocated across capital markets.

The Renminbi Qualified Foreign Institutional Investor (RQFII) scheme enacted in 2011 is a new Chinese policy initiative that allows RQFIIs to channel RMB funds raised in Hong Kong to investments in the mainland securities markets. The major difference between the RQFII scheme and the QFII scheme of 2007 is that within the 2007 QFII framework, foreign investors were only allowed to participate in the exchange-traded market while under the RQFII regulation, they are also able to access the interbank market, where most of the bond trading takes place (see footnote 44). Certainly the most significant limitation of the RQFII scheme is that under the current pilot program, only Hong Kong subsidiaries of onshore fund managers and securities firms are allowed to participate.

China Keeping Things Firmly in Hand
Via these quotas, mainland China is hoping to be able to control foreign capital in- and outflows and limit the impact of capital-flow volatility on, for example, the value of the RMB. The State Administration of Foreign Exchange (SAFE), China’s foreign-exchange regulator, has particularly restricted financial institutions’ short-term overseas borrowing quotas as well as the trading of foreign-exchange derivatives in order to control hot money flows attracted by RMB appreciation (see footnote 44). Nevertheless, since China is discovering that there are more and more opportunities in granting foreign investors access to the local capital markets, it seems to be willing to open up its capital account more rapidly than it did just a couple of years ago.

Recent Developments
On July 27, 2012, the CSRC announced official new rules governing the QFII scheme that came into effect immediately. The amendments enlarge the investment opportunities because, most importantly, they include the interbank bond market.98 China’s interbank bond market is the world’s fourth-largest today after the USA, Japan and France, with a volume outstanding of CNY 21.2 trillion.99 At the same time, access prerequisites for QFIIs have been lowered and the application procedure has been simplified substantially.

By allowing investors to tap the interbank bond market, the new scheme removes major pitfalls of the old QFII program, which was mainly focused on equities and only allowed fixed-income investments in listed securities.100 As Figure 87 shows, the total QFII quota approved as of July 20, 2012, amounted to USD 28.5 billion and was allocated to 149 institutions.101

Historical performance indications and financial-market scenarios are no guarantees for current or future performance.

97 Forty-nine of the 52 had been allocated a total of almost USD 10 trillion to invest onshore, according to the China Securities Regulatory Commission.
98 Which until then had only been accessible to a very limited number of investors under the RQFII scheme.
99 Forty-nine of the 52 had been allocated a total of almost USD 10 billion to invest onshore, according to the China Securities Regulatory Commission.
100 According to Bank of America Merrill Lynch research, fixed-income products traded on exchanges only account for 2% of total fixed-income securities outstanding.
101 Bank of America Merrill Lynch, Asia Strategy Watch – China: Interbank bond market officially opened to QFIIs, 30 July 2012
In April 2012, the CSRC raised the total quota to USD 80 billion, leaving plenty of room for further demand, which has been accelerating since the beginning of 2012. The amendments to the QFII program highlighted above are a clear indication that Chinese regulators are willing to move forward with opening the domestic securities market to international investors.

In response to offshore RMB deposits dropping by CNH 35 billion to CNH 554 billion in the first five months of 2012, in July 2012 Hong Kong started to allow non-residents to purchase an unlimited amount of RMB. Apparently it was Hong Kong’s big banks that had witnessed subdued appetite for RMB deposits in light of a faltering appreciation of the RMB, and that had prompted Chinese authorities to expand regulations from 2004 that allowed only Hong Kong residents to hold RMB deposits offshore. Authorities want to defend Hong Kong’s position as the global center for international RMB trade.

Potential and Pitfalls of Further Internationalization

Ultimately, the development of the RMB offshore market is crucial to China’s broader plans of turning the RMB into a recognized reserve currency. On the way there, China will have to overcome two major hurdles.

Significant Exposure to Potential Selloff of the USD

First and foremost, the internationalization of the RMB has already resulted in a dramatic surge in official foreign-exchange reserves. China is holding a huge long position in foreign-exchange reserves, which exposes it to valuation risks. A substantial selloff of the USD could potentially hit China’s FX position hard. In addition, any funds that flow back to China’s mainland from the offshore market in Hong Kong have to be sterilized by the PBoC in order to control the amount of money that is available in the system.

Offshore Bond Market Gaining International Attention from Investors and Issuers

An integral role in the internationalization of the RMB will be played by the offshore bond market. Having a deep and liquid bond market is closely linked to the overall supply of currency in the market and is thus a prerequisite for having an internationalized reserve currency (see footnote 44). One can therefore expect the CNH offshore market to grow in lock-step with the underlying currency market. While the offshore bond market is attractive to China as an issuer as well as for international investors, it also presents China with a challenge that needs to be taken seriously. Since Chinese companies have the opportunity to fund themselves offshore by selling "Dim-Sum" bonds in Hong Kong, the importance of domestic bond market access may decrease and cause large Chinese firms to leave the local banking system. Chinese companies may borrow from non-Chinese banks outside mainland China, which could not only challenge China’s monetary and credit control, but also the dominance of Chinese banks.

Another interesting development that China may have to deal with is that the offshore bond market is diversifying away from Chinese issuers to issuers from all around the world. Today, almost 80% of RMB issuers in the offshore market are of Chinese nationality, compared to 30%–60% in other offshore markets (see footnote 90). The majority of the Chinese issuers of RMB bonds offshore intend to use the funds raised on the mainland to benefit from the lower interest rates offshore. As it turns out, though, RMB bonds issued by non-Chinese companies have increased substantially and a number of leading global conglomerates such as Air Liquide, British Petroleum, Volkswagen and Tesco have tapped the RMB market.

The attractiveness of issuing RMB-denominated bonds had been limited in the past by the widespread appreciation expectations for the RMB. On top of that, until recently, global companies that are now tapping the market did not produce within China. Recently, however, the situation has changed. Many large corporations now have factories in China (e.g. BMW), which makes refinancing in RMB a viable means of funding foreign direct investments. Furthermore, the recent weakness of the RMB has caused issuers to become less risk averse when it comes to raising money in RMB.

The increasing appeal of the RMB market for issuers around the world poses the risk that weak credits might also be attracted, harming the market’s overall credit quality. On the other hand, one of the payoffs of internationalization that China could cash in on is that, with more non-Chinese issuers participating in the offshore market, China would be able to share its foreign-exchange rate risk.

Historical performance indications and financial-market scenarios are no guarantee for current or future performance.

According to Bloomberg data
In addition, besides reducing foreign-exchange risk by invoicing and settling trade in the same currency, progressive internationalization of the RMB would improve the funding efficiency of Chinese financial institutions and boost cross-border transactions.

Internationalization Expected to Be Supported by Authorities, but at a Pace Determined Mainly by China

Looking ahead, the Chinese banking system may have to face competition from offshore. Today, RMB held at Hong Kong banks can only flow back to the mainland via trade channels (i.e. as payments for exports from onshore) or via capital account channels (i.e. when a mainland issuer redeems an offshore “Dim-Sum” bond). As internationalization of the RMB progresses, though, cross-border markets are likely to reinforce the links between on- and offshore banks. As soon as offshore banks are able to bypass domestic banks and provide credit directly to onshore companies, Chinese authorities are likely to face the decision of whether to pull back on internationalization or to follow through on it. At this point, though, regulatory restrictions regarding RMB internationalization are likely to be just a means of keeping the pace of opening up the capital market in check rather than reversing the market development.
Hongan-ji temple pagoda in Japan. Hongan-ji is the collective name of the largest school of Jodo Shinshu Buddhism.
Bibliography

Aberdeen Asset Management, Asian Bonds: A misunderstood opportunity, March 2012


Asian Development Bank and Asian Development Bank Institute, Infrastructure for a Seamless Asia, 2009


Asian Development Bank, Asia 2050 – Realizing the Asian Century, August 2011

Asian Development Bank, Asia Economic Monitor December 2011

Bank for International Settlements, Keynote address by Mr Masaaki Shirakawa, Governor of the Bank of Japan, at the dinner reception hosted by the Japan Securities Dealers Association preceding the International Conference, Tokyo, 09 February 2012 Finance in Asia – banking business and capital markets

Bank for International Settlements, Paper No. 52, The international financial crisis and policy challenges in Asia and the Pacific, July 2010


Bank for International Settlements, RMB internationalization and China’s financial development, December 2011

Bank of America Merrill Lynch, Asia Strategy Watch – China: Interbank bond market officially opened to QFIIIs, 30 July 2012.


Barclays Research, Asia Credit Alpha: Navigating the Ratings Cliff, 13 July 2012.

Barclays Research, Asia Credit Alpha: Primary Optimism: Raising Supply Forecast, 22 June 2012


BlackRock Investment Institute, Are Emerging Markets the Next Developed Markets?, August 2011


CBRE Asia REIT View Point, Asian REITs return to acquisition mode, but 2012 brings new challenges, February 2012

CBRE Market View, Asia-Pacific Capital Markets, Q1 2012


Credit Suisse Asset Management, White Paper, Going native with emerging-market local-currency bonds, July 2012
Credit Suisse Asset Management, White Paper, 
The Way Forward: Measuring the Impact of Short-Term and Structural Growth Drivers on Emerging Market Investing, September 2011

Credit Suisse, Asia-Pacific Equity Research – APAC: 
Consumption S-curve, 06 August 2012

Credit Suisse, Consumption Patterns and Emerging Markets, 17 February 2010


Deutsche Bank, At the center of RMB internationalization, April 2012

Deutsche Bank, Global Economic Perspectives: China’s Financial Revolution, 20 April 2012


The Economist, China in your hand, 25 May 2012


The Economist, China’s capital controls: Set the money free, 03 March 2012, http://www.economist.com/node/21548943 (accessed 05 September 2012)


European Public Real Estate Association (EPRA), News (Issue 40) – Sustainability reporting in the real estate sector, November/December 2011

HSBC Global Research, Asia Equity Insights, 26 March 2012

HSBC Global Research, Asian Economics Comment: Little Asia vs. Big Asia, 19 March 2012

HSBC Global Research, Asian Economics: When you least expect it, Q2 2012


HSBC Global Research, Chart of the Week – Asia’s shifting demographics, 24 February 2012

HSBC Global Research, China Inside-Out – What over-investment?, February 2012


JP Morgan, Asia Local Markets Research – Investing in Chinese interbank bond market will soon be reality for foreign investors, 02 August 2012


OECD, *The Emerging Middle Class in Developing Countries*, January 2010


PIMCO, *Why Invest in Asian Credit?*, May 2012

PricewaterhouseCoopers, *Emerging Trends in Real Estate Asia Pacific 2012*, November 2011

RREEF Real Estate, Asia Pacific Real Estate Strategic Outlook, March 2012


The World Bank, *Estimation of Infrastructure Investment Needs in the South Asia Region*
Credit Suisse
Investment Professionals Asia

Juan Manuel Mendoza, Head of Equities Asia
Juan Manuel Mendoza, Director, started his career in 1997 as an equity broker in the Institutional Equity Division of Salomon Smith Barney, Zurich and New York. Thereafter, he worked at Bank Julius Bar in Zurich. During 2006, he joined Credit Suisse (formerly Clariden Leu) and has been the fund manager of the Credit Suisse SICAV (Lux) Equity Luxury Goods Fund from 2008 onwards. He won three Lipper Fund Awards in France, Germany and Austria in 2011. Since 2011, Juan has been the co-manager of the Credit Suisse SICAV (Lux) Equity Asia Consumer. Juan holds an MBA in Corporate Finance from the Goizueta Business School at Emory University in Atlanta (US).

Isis Ma, Senior Equity Portfolio Manager
Isis Ma, Vice President, joined Credit Suisse (formerly Clariden Leu) in June 2010. Isis is an equity specialist in the consumer, real estate and financial sectors. Since joining Credit Suisse, Isis has been the co-manager of the Credit Suisse SICAV (Lux) Equity Asia Consumer and the deputy manager of the Credit Suisse SICAV (Lux) Equity Luxury Goods Fund. Prior to that, Isis worked in the investment banking division at Macquarie International Capital Markets in Hong Kong, as well as in the Capital Markets division at Jones Lang LaSalle MENA in Dubai. Isis graduated from the Chinese University of Hong Kong with a major in accountancy. She is a Chartered Accountant.

Alexandre Bouchardy, Head of Fixed Income Asia
Alexandre Bouchardy, Director, manages Global Fixed Income IG portfolios for European and Swiss pension funds as well as Asian Central Banks for which he is responsible. From 2005 to 2012, he was responsible for inflation-linked solutions and won several Lipper Fund Awards in various European countries. Before joining Credit Suisse in 2002, Alexandre worked for Pictet & Cie Banquiers and JP Morgan in Geneva, Switzerland, and Paris, France. Alexandre has more than 12 years of investment experience in fixed income. He is a CFA charter-holder and holds a Master in Economics from the University of Lausanne (HEC), Switzerland.

Adrian Chee, Head of Credit Asia
Adrian Chee, Director, manages Emerging Market and Asian corporate portfolios and funds. Before joining Credit Suisse, Adrian worked for Western Asset Management in Singapore, managing Asian hard and local currency IG and non-IG corporates. Prior, he worked for Standard & Poor’s Infrastructure and Financial Services Ratings unit as a credit analyst for corporates and financial institutions in South East Asia and South Asia. Before, Adrian was risk manager at Standard Chartered Bank, Singapore. Adrian has more than 20 years of investment experience in Asian fixed-income and credit markets. He holds a Bachelor of Economics from La Trobe University, Australia, where he focused on banking and finance.
Zhu Lei, Senior Fixed Income Portfolio Manager
Zhu Lei, Vice President, manages emerging market and Asian fixed-income portfolios and funds with a focus on China CNH and CNY. Before joining Credit Suisse, Lei worked for DBS Bank in Singapore, managing fixed-income portfolios of Asian sovereigns and corporates, specializing in Asian IG and high-yield issuers. In particular, she used to manage CNH bond investment portfolios and USD global credit funds. Lei has more than eight years of investment experience in Asian fixed-income and credit markets. She is a CFA charter-holder and holds a Master of Science in Business Administration from the University of British Columbia in Vancouver, Canada.

Stuart Goh, Senior Fixed Income Portfolio Manager
Stuart Goh, Director, manages global multi-asset class mandates with a focus on fixed-income and currency strategies. He has over 15 years of experience in investment banking and asset management and looks back on a 10-year career as an Investment Manager for Asian fixed-income and currencies products for Pacific Asset Management. Besides his experience as a PM, Stuart also worked as a Senior Dealer for various institutions for over four years. Stuart holds a Bachelor of Science (Economics) from the National University of Singapore and is a Chartered Financial Analyst (CFA Institute).

Warren Hastings, Head of Multi-Asset Class Solutions Asia
Warren Hastings, Director, manages Asia multi-asset class mandates with a focus on equities. He started his career in 1995 in London at Schroder Investment Management Ltd to become an Asian equity portfolio manager. Warren relocated to Singapore with Schroders in 2006, where he concurrently joined the regionally based Institutional Pacific Ex-Japan Equity Team as an SE Asian equity market specialist and also managed the Schroder Pan-Asia Fund. He departed Schroders in 2009 to join Standard Chartered Bank as Head of Portfolio Management. Warren has more than 16 years of investment management experience. He holds a BA in Accountancy and Finance and is a Chartered Financial Analyst (CFA Institute).

Ong Seow Beng, Senior Portfolio Manager
Ong Seow Beng, Director, manages global multi-asset class mandates with a focus on equities. He has over 25 years of experience, of which 20 years have been with the Government of Singapore Investment Corp., specializing in equities. At the GIC, Seow Beng was Head of North American Equities and the Global Financial Sector. In addition, he also managed Global Equity portfolios. He was the CIO of Fortis Private Bank from 2005 to 2007. Seow Beng holds a master’s degree from the University of Georgia (US), a BA in Estate Management from the National University of Singapore and is a Chartered Financial Analyst (CFA Institute).
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