A REPORT FROM ANZ RESEARCH

ANZ insight

Caged Tiger: The Transformation of the Asian Financial System

ISSUE 5, MARCH 2014

FOREWORD

ANZ insight is a series of client reports that explores the opportunities arising from Asia's economic growth and the increasingly interconnected nature of business and economic activity in the Asia Pacific region.

The series reflects the importance we attach to building common ground among business and a diverse range of stakeholders in order to advance economic relationships and growth in the region.

This reflects ANZ's outward-looking orientation as Australia and New Zealand's international bank. We believe this allows us to make a unique contribution to a conversation on issues relating to the region's future.

'Caged Tiger: The Transformation of the Asian Financial System' is the fifth report in the series and presents work undertaken by ANZ Research over the past 18 months.

While the 'Asian Century' is already with us, its ultimate scale and impact remain uncertain. The research presented in this report highlights that the continued development of financial markets in Asia will become increasingly important to support economic growth in the region. It outlines a scenario in which Asia's regional financial markets will converge to the size of those in North America or Europe. The implications for the region – and for established global markets in the west – are immense.

Every country within Asia stands to benefit whether due to the increased size of their own financial markets or diversification of their sources of funding.

China will play a leading role through its intended reforms in coming years as it liberalises its capital account and allows greater foreign and domestic investment. Across the region existing financial centres are likely to grow significantly while newer, niche financial centres will become more established.

The findings in this report are profound and demonstrate the need for policy makers and financial institutions to plan for the opportunities and risks of a rapidly growing financial sector. While this report is by its nature high level and serves to highlight the broad issues, the enormity of change is undeniable.

Michael Smith
Chief Executive Officer
ANZ
March 2014

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1.0 EXECUTIVE SUMMARY

1.1 THERE WILL BE NO ASIAN CENTURY WITHOUT AN ASIAN FINANCIAL TRANSFORMATION

The 'Asian Century' is upon us. Asia's economy already accounts for a quarter of global economic output, up from 17% two decades ago. ANZ expects Asia's share to rise to 35% in 2030 and to be over half the world economy by 2050. The United States (US) and Europe, which currently account for around half the world's economic output, could see their share fall to less than a quarter by mid-century. This is a tectonic shift in the global economic landscape.

Yet with the exception of Japan and the newly industrialised economies, Asia's rapid industrialisation of the past two decades has not been matched by an extensive development of its financial system. Many Asian countries have relatively closed and highly regulated financial systems, with a dominant bank sector and heavily managed exchange rates.

While this financial model may have helped some nations reach this point in their economic development, it will not be appropriate for the next stage of continued economic growth. The financial systems of many Asian economies must be reformed, deregulated and opened up to global markets.

To build out a consumer-based high-income economy, an efficient and transparent financial system is critical. Consumers, small businesses and large corporations need to have confidence in the system as well as improved access to capital and modern financial management products. Without further substantial development of the financial system many Asian countries risk being caught in what development economists call the 'middle income trap'.

Financial development is just one part of what is required to drive societies through middle income status. Other factors include improving legal and governance structures, rising political freedoms and ongoing economic reform in other sectors of the economy.

But fundamentally, an Asian Century now requires a profound transformation of the Asian financial system.

1.2 THE ASIAN FINANCIAL SYSTEM IS UNDER-DEVELOPED

The policy response to the Asian Financial Crisis (AFC) of 1997 left many economies in the region with tighter capital controls, more regulated domestic financial systems and managed (or fixed) exchange rates.

High savings rates across the region, combined with a strictly controlled financial system and managed exchange rates, resulted in the build-up of large foreign exchange (FX) reserve portfolios at many Asian central banks. This has meant that the Asian surplus of the past 15 years has been 'recycled' back into the international financial system via official portfolio flows rather than the investment decisions of private individuals and institutions. These portfolio flows have mostly been purchases of US and other developed nations' government bonds by central banks.

The 'trapping' of the Asian surplus in FX reserve portfolios has resulted in a much slower financial development than would have been the case if the private sector had played the primary role in allocating those savings. At the same time the financial systems of the US and Europe, swollen with external liquidity, became much larger than required by their underlying economies. This global financial imbalance was a significant, though not exclusive, cause of the Global Financial Crisis (GFC), and is only now beginning to slowly reverse.

Rebalancing the global economy, avoiding the middle-income trap in Asian economies and Asia's financial transformation will be among the most powerful forces in the global economy over the decades ahead. The Chinese Government has recognised the urgency of reform and is now fast tracking financial liberalisation and the opening up of the domestic financial system to international capital flows.

Asia's financial system will grow rapidly and the interaction of Asian capital with the rest of the international financial system will change radically. Instead of the benign flow of official capital into deep, liquid government bond markets, particularly US treasury bonds, Asia's private sector will have a much bigger role in allocating Asian savings around the world.

This will mean an explosion of Asian private portfolio capital flows (both into bonds and equities) and a much greater role for Asian direct investment in other countries. For example, the outstanding stock of Chinese Foreign Direct Investment (FDI) into other countries was around US$500 billion in 2012. This could rise towards US$10 trillion in 2030. Chinese private portfolio flows into global bond and equity markets could increase by US$1.3 trillion a year for the five years following the opening up of the Chinese financial system. But just as significantly, these flows will not go into existing asset classes like US treasuries to the same degree, with important implications for Europe and the US.

1.3 ASIA'S FINANCIAL SYSTEM WILL DOMINATE INTERNATIONAL MARKETS BY 2030

If Asian governments can continue to follow a path of economic reform, maintain strong growth rates and productivity and commit to further financial liberalisation, the total Asian financial system could account for around half of the global system by 2030 (up from around 22% now). While some of this is due to the growth in the underlying economy, a good proportion will be a result of financial deepening that will result from the financial reform process.

Banks will still dominate Asian financial services for the foreseeable future but there will be spectacular growth in capital market activity. Our modelling suggests:

- Asian (excluding Japan) bond markets will grow to be six times their current size over the next 15 years to match the size of US debt markets.
- The RMB market will dominate in Asia not only because of the size of the Chinese economy but also because it will be a regional funding currency.
- China's debt markets are forecast to grow from around US$4 trillion in 2013 to around US$27 trillion in 2030.
- The equity market capitalisation across the Asian (excluding Japan) region is also expected to explode, rising from US$9 trillion to almost US$55 trillion by 2030.
- The Chinese banking system is likely to overtake the size of the US system by 2020.
- The Asian financial system is on track to be bigger than the US and Europe combined by 2030.
- China will be the dominant market in Asia, accounting for around half of Asia's financial assets by mid-century.
- By 2030, China's financial system could be more than twice as big as that in the US.

1.4 IMPLICATIONS OF GROWING ASIAN CAPITAL MARKETS

The rise of the Renminbi (RMB) capital markets is a clear implication of this Asian financial transformation. The Chinese currency and capital markets will dominate regional financial markets within 15 years. And as we approach the middle of the Asian Century, the RMB will become a genuine rival to the US dollar as a global reserve currency.

While the US will retain its reserve currency status for decades to come, the US and European financial systems are likely to grow relatively more slowly than in recent history. Indeed, we believe there is the potential for these financial systems to contract in real terms over the next decade.

Price discovery in financial markets, in the sense of the most influential trading zones for price setting, will gradually shift towards Asia. At the very least, we will see financial asset price volatility increasingly occur through the Pacific time zone rather than the Atlantic time zone. No more sleepless nights for Asia's FX traders in the future! It will be traders in London having to get up at all hours to respond to unexpected economic data and policy events.

All of this will mean a rapid development of Asia's financial centres. Shanghai will rival New York as a financial centre for a large domestic economy as well as an international hub. Singapore is likely to increase its importance given its critical role in South-East Asia. Second-tier centres will emerge; Hong Kong and Tokyo will remain important while Seoul, Mumbai and Sydney will grow strongly.

Asia's financial institutions will become increasingly important in global finance. Chinese banks are already some of the largest in the world but their presence has only just started to be felt in global markets. This will change as they play a growing role in finding investment opportunities for Chinese savings in the world economy. The potential for wealth management institutions to grow, initially in North Asia but throughout the region is significant.

For the still emerging and demographically young nations of ASEAN,[1] this financial transformation offers increased access to long-term capital critical for funding the economic infrastructure required for the next stage of their development.

1.5 ASIA'S FINANCIAL TRANSFORMATION WILL HAPPEN AS PART OF A BROADER REFORM PROCESS

The opportunities are big and so are the risks. The international experience with financial system deregulation and capital account liberalisation is replete with examples of capital flow surges creating wide current account deficits, asset price bubbles and large banking system losses.

Government policy will therefore be crucial in mitigating any problems as Asia develops a large, open and sophisticated financial system. Policies will need to be developed across a wide range of areas, including developing strong institutions such as independent central banks, a strong regulatory and supervisory system, as well as the wider legal and cultural changes needed for a modern financial system.

As financial deepening occurs, the repercussions are broad and significant. For example, Initial Public Offerings (IPOs) remain the principal vehicle for transferring state ownership to private ownership and so a succession of the world's largest IPOs in Asia can be expected in coming years. IPOs are likely in financial services, energy, telecommunications and infrastructure, sectors currently dominated by large state-owned enterprises.

1 Association of Southeast Asian Nations.

The implications of much larger investment pools, particularly in China, are also dramatic as FDI into regional markets expands. The sheer scale of this investment wave will inevitably make it higher profile, raising regulatory and political implications. Foreign ownership in many economies, even developed ones like Australia, remains sensitive.

For example, in 2010, around 2.5% of the value of China's FDI was invested in Australia. Even if that percentage remains unchanged, the higher total level of Chinese FDI could lead to over A$200 billion FDI into Australia, or about 15% of our forecast Australian Gross Domestic Product (GDP), by 2030 – above the current levels of US direct investment.

The challenges are immense, not least in China, a powerhouse of the region. The good news is that China has already made steady progress on implementing a strong structure for its financial system. But the decisions Chinese policymakers make in coming years will be of great importance to the global financial system.

Warren Hogan
Chief Economist
ANZ
March 2014

2.0 THE ASIAN FINANCIAL REVOLUTION HAS BEGUN

KEY THEMES:

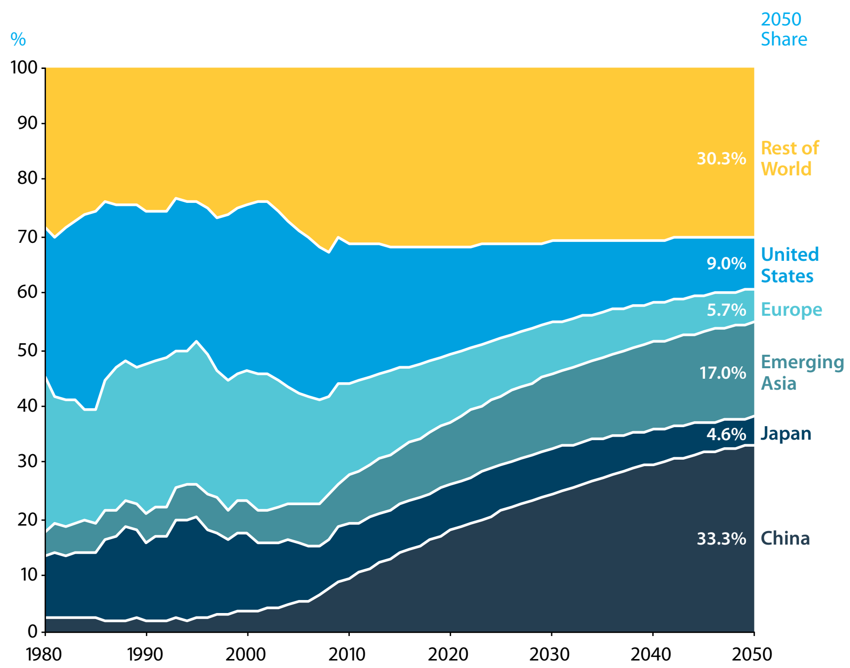
- *Asia already plays a major role in the global economy and it will only get bigger.*
- *Asia's increasing economic might is not matched by its financial-sector status.*
- *Without financial-sector deepening, Asia is unlikely to fulfil its economic potential.*
- *Assuming the appropriate reforms are made, the Asian financial system could be twice as large as that of the US by 2030.*

2.1 INTRODUCTION

This is the Asian Century. Economically at the very least. By 2050, on current trends, Asia will be the world's largest economic region. By mid-century it is expected to account for around half of the global economy (see Figure 2.1).[2] China, Asia's largest economy, will soon surpass the US and become the world's single largest economy.

Today Europe and the US account for just under half of the world economy while Asia[3] represents just 25%. The Asian Century will flip this relationship on its head. By 2050 the share of the global economy of the US and Europe could fall towards 20%. Dramatic, and indeed unimaginable to the established order as this is, it is actually not historically unprecedented. Asia has been the world's largest economic bloc throughout recorded history – other than the past 200 years.[4]

Figure 2.1
GLOBAL ECONOMY BY REGION: 1980 TO 2050



Source: CEIC and ANZ Projections.

2 OECD, Economic Department Policy Notes, 'Looking to 2060: A Global Vision of Long-Term Growth', November 2012. Commonwealth Government of Australia, White Paper, 'Australia in the Asian Century', October 2012.

3 Asia is defined as emerging Asia plus Japan. There will be other definitions, such as Asia 10 (the 10 largest Asian economies including Japan) throughout the report. On some occasions Asia will be defined as excluding Japan and China. Australia, New Zealand and the Pacific economies will not be included in definitions of Asia unless explicitly stated.

4 See A Maddisson, Angus. *Contours of the World Economy 1-2030 AD. Essays in Macro-Economic History*, Oxford University Press, 2007.

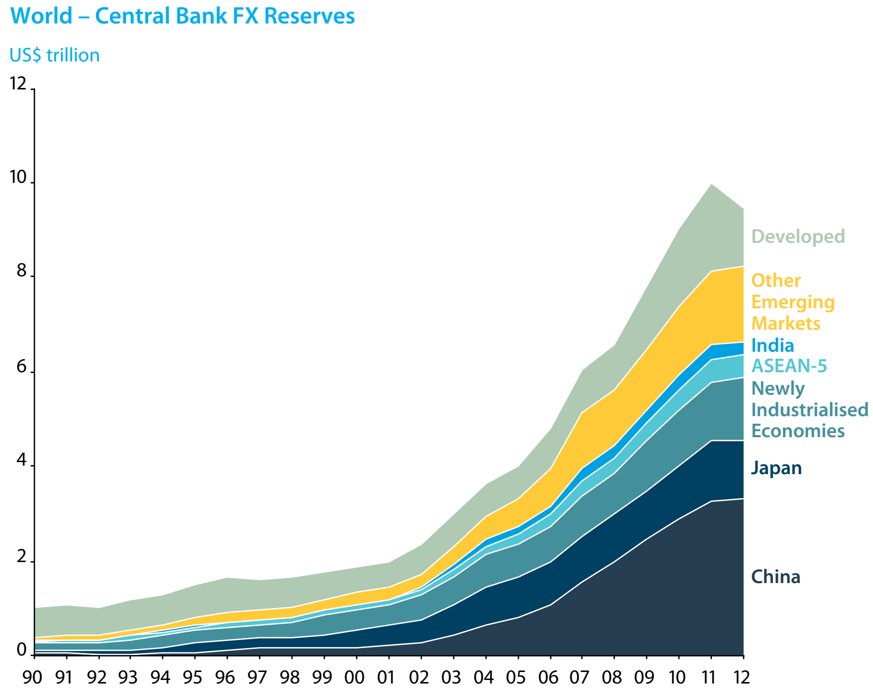
To some extent, the implications of this seismic shift in Asia's share of the global economy have gone unnoticed because much of the analysis on the rise of the Asian economies has focused on the spectacular development of manufacturing capacity, the build-out of massive urban infrastructure and the growth of trade in goods and services. Significantly though, Asia's financial system has developed much more slowly than the industrial economy.

Indeed, there will be no Asian Century unless we see a dramatic transformation of the Asian financial system. Over the past 15 years a gap has appeared between the development of Asia's underlying economy and its financial sector. Following the AFC of 1997, growth in many Asian nations was constrained by strict regulation, managed exchange rates and the accumulation of large FX reserves.

Despite a rapidly growing pool of domestic savings, Asia has relied heavily upon international financial markets to allocate these savings rather than developing its own capital markets.

As a result, Asia has accumulated huge FX reserve portfolios. These reserves have effectively trapped rapidly growing Asian savings in the official sector.[5] They have then been recycled into the international financial system through advanced economies and in particular the government bond markets in the US and Europe.

Figure 2.2
ASIA FX RESERVES



Source: CEIC and ANZ Projections.

In capital markets terms, Asia is punching well below its economic weight. The period between the AFC and the GFC saw Asia's financial system failing to keep pace with its rapid industrial development. Over the same period there was a corresponding over-deepening of markets in the US and Europe as Asia outsourced the allocation of its savings to those markets.

This divergence runs counter to the well-established relationship between income growth and financial market development.[6] Real incomes have been growing faster in emerging markets and slower in the developed world. In other words, Asia's incomes have been catching up with the developed world but its financial markets have been getting smaller by comparison.

These trends have started to change in the past few years. But we are only at the beginning of this global rebalancing and the beginning of the Asian financial revolution. To fully realise and capture the benefits of the Asian Century, indeed, to sustain a robust world economy, this will need to continue for many years to come. Without such deepening of financial markets, continuing high rates of growth in the real economies of the Asian region become almost impossible.

2.2 THE PROJECTIONS

The rapid industrialisation and rise of Asia over the past 50 years has been one of history's most profound economic events. Yet the economic ascension of China is far from complete and many ASEAN economies are only just beginning a rapid industrialisation and urbanisation.

Looking ahead, South Asia's most populous economies, India and Indonesia, remain relatively immature from a development profile and are well positioned demographically to move into high growth periods over the decade ahead.

Assuming the region remains on a high growth path and the necessary reforms are undertaken by governments, we estimate that the region's financial system could be as large as US$200 trillion by 2030. To put this in context this is:

- About four times the size of the Asian financial system now.
- More than twice as big as the US financial system in 2030.
- Around three times the size of the European financial system, including the United Kingdom (UK), in 2030.

China will be central to the development of the Asian financial system, coming to dominate it in the way it now dominates the real sector of the Asia region. Our projections suggest that China's financial system will overtake that of the US in the early 2020s and by 2030 the total size of China's financial sector is expected to be equal to that of the US and Europe combined.

Not only will Asia's capital markets grow rapidly but the composition of those markets will shift to a more balanced mix of bank lending, equity markets and debt securities. Asia is in the early stages of a financial revolution that could be as significant for the world economy as the Asian industrial revolution that commenced in the 1980s.

5 The official sector is defined as government institutions such as central banks and government departments and agencies as well as international institutions supported by the government sector such as the IMF, OECD and the World Bank.

6 There is a robust literature highlighting the strong correlation between living standards beyond low-income levels and the sophistication of the financial services sector.

The economic ascension of Asia will be dominated by 10 key Asian economies spanning high to low income, technologically advanced manufacturers to still largely agrarian economies, and mature to demographically young nations.

China, India, Indonesia, Japan, Republic of Korea, Malaysia, the Philippines, Singapore, Thailand and Vietnam are the 10 economies we see as dominating both Asia and the global economy and which we refer to as the Asia 10. Together, these 10 economies had a GDP of nearly US$17 trillion (87% of total Asia) and a total population of nearly 3.3 billion (70% of Asia's total) in 2012.

By 2050, these 10 economies are expected to account for over 90% of Asia's GDP and over 75% of Asia's population. These economies will not just dominate Asia. By themselves, they will account for over half of global GDP and account for nearly 50% of the global middle-class population.

However, although the momentum of Asia looks to be sure and firm, the economic ascension of Asia is certainly not preordained. Risks remain, political tensions could arise, trade and financial liberalisation may stall and opportunities may be squandered. History shows us many precedents for all of these risks.

In analysing the outlook for Asian growth, we have examined two alternative scenarios:

1. **The Asian Century scenario.** Asia continues to grow and fulfil its economic potential thereby rising to be the dominant financial and economic bloc by the middle of the 21st century. Living standards in most of Asia will approach, although not reach, the current levels of most OECD countries. Financial markets will deepen considerably and the regional architecture will be marked by greater integration as trade, FDI and portfolio flows become increasingly intra-Asian.
2. **The Middle Income Trap scenario.** Some of the high-growth economies fail to make the transition through middle-income status due to a loss of economic reform momentum and competitiveness. A failure to break through the middle-income trap would be associated with a lack of progress on financial liberalisation over the decade ahead. The Asian economies will still grow, albeit at a slower pace than the core scenario. Financial systems will also expand although financial deepening and integration will be lower than in the Asian Century scenario.

2.2.1 The Asian Century scenario

Under the Asian Century scenario, the Asia 10 will grow close to the full potential suggested by labour and capital inputs, total factor productivity and energy constraints. This will result in average annual growth of 4.4% over the next decade. China will lead the way in terms of both growth and size (Table 2.1).

In our projections China and India are on a multi-decade deceleration trend, although India's favourable demographic profile indicates that they can sustain strong growth for longer.

Japanese growth will recover on the back of a successful reflation with the recovery peaking before 2020. Longer term, Japan remains in the slow lane of Asian economic growth. The rest of the large Asian economies are projected to maintain real economic growth of around 3–4% over the decades ahead. Total Asian growth will average 3.9%, well above global economic growth.

Table 2.1

ECONOMIC GROWTH PROJECTIONS FOR THE ASIAN CENTURY SCENARIO

Project Base Scenario	**Average growth rate**						
US$ million, 2005 constant	**1981-1990**	**1991-2000**	**2001-2010**	**2011-2020**	**2021-2030**	**2031-2040**	**2041-2050**
China	7.4	10.5	10.1	7.0	4.5	3.5	3.0
India	6.0	5.5	7.7	6.6	5.9	5.3	4.6
Indonesia	5.0	4.4	5.2	4.3	3.5	3.1	2.7
Japan	6.1	1.3	0.9	1.5	1.5	1.2	0.9
South Korea	8.2	6.2	4.1	4.3	3.7	3.2	1.9
Malaysia	5.6	7.2	4.6	4.9	4.4	4.1	3.8
Thailand	9.0	4.6	4.4	3.7	3.2	2.9	2.7
Singapore	4.3	7.6	5.3	4.2	3.2	1.9	1.5
Philippines	4.6	3.1	4.8	6.3	6.7	6.1	5.5
Vietnam	4.3	7.6	7.3	6.2	5.3	4.6	3.8
Asia 10	**4.9**	**3.5**	**4.4**	**4.6**	**3.9**	**3.3**	**2.9**
Emerging Asia	**4.8**	**3.4**	**4.4**	**4.6**	**3.9**	**3.4**	**3.0**
World	**3.0**	**2.7**	**2.6**	**2.9**	**2.9**	**2.8**	**2.6**

Source: ANZ Projections.

The projections suggest that:

- Asia will be the dominant economic bloc in the world mid-century. Including Japan, the economic output of the countries in the Asian time zone will be approaching 60% of global output by 2050, up from 25% at present.
- China could account for 33% of the world economy in 2050, which would be much more than the US (9%), India (8%), the European Union (12%) and Japan (5%).
- China's economy would overtake the US in current dollar terms in 2021.[7]
- In terms of standards of living, measured through GDP per capita in purchasing power parity, China would still lag 10% behind the US in 2050.
- The majority of Asia will have grown in absolute terms throughout the Asian Century but will not achieve the living standards of advanced economies. As such, the potential remains for Asian economies to catch up to advanced economies in terms of GDP per capita.

7 In constant dollar terms this would not occur until 2042. The difference in the two timeframes is a result of economists adjusting for the effects of faster inflation in China and exchange rate appreciation against the US dollar. For instance, China's economy grew in real terms by 10.6% a year over the decade 2000–10. However, if we factor in exchange rate appreciation and inflation, China's nominal dollar GDP growth was 18% a year over the same period.

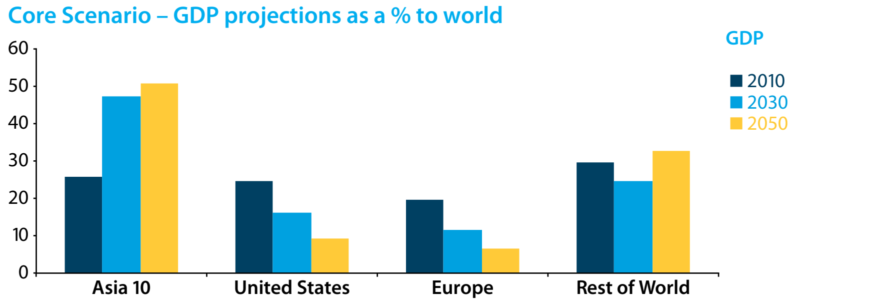
Financial System Growth in the Asian Century Scenario

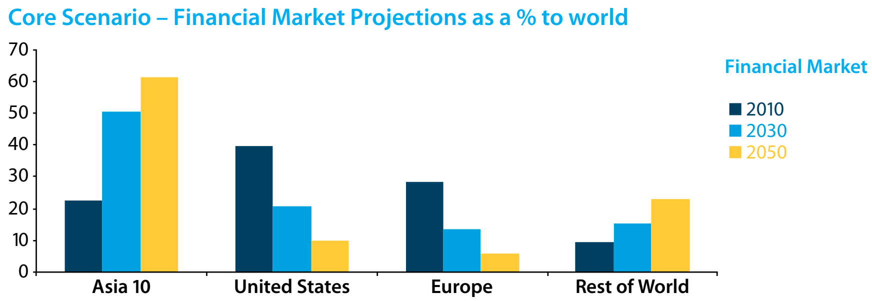
Under the Asian Century Scenario, Asia will be the dominant financial bloc by 2030, taking financial depth to 360% of GDP.[8] Asia's share of global financial assets rises towards 50% of the global total in 2030, comparable with current levels in the EU and the US and then to 60% by 2050.

The regional dynamic is marked by greater integration as trade, FDI and portfolio flows become increasingly intra-Asian. Asian markets will become more mature and exert greater weight in regional and global financial transactions. In our projections each country within Asia closes more than half of the financial gap between itself and the US.

As Figure 2.3 highlights, Asia's share of both economic and financial market activity will grow strongly over the decades ahead. Although the US and European share will shrink in both economic and financial terms, the largest relative decline will come in financial activity. Indeed, the US and European weight in the world financial system will not only decline in relative terms but also in absolute ones. That is, the US and European financial systems are unlikely to grow in real terms over the decades ahead under this Asian Century scenario based upon substantial financial deepening.

Figure 2.3
ASIAN CENTURY SCENARIO PROJECTIONS





8 See Chapter 3 and Appendix 1 for a full explanation of financial depth and how we utilise this measure to project the overall size of the Asian financial system. Financial depth in Asia under the Asian Century scenario is expected to rise to 550% by 2050.

2.2.2 *The Middle Income Trap[9] scenario*

The enormous promise of the Asian Century is premised on the demographic dividend in many countries with large, youthful populations, as well as significant technological catch-up. But this does not mean that the region is on auto-pilot and that the high-growth outcomes of the Asian Century will be realised.

Of the 101 countries classified as middle-income in 1960, only 13 managed the transition to high-income economies by 2008,[10] escaping the middle-income trap. It is therefore necessary to consider a scenario that allows for convergence on a smaller scale.

In this scenario the overall rate of Asian growth is around 3.4% for the decade ahead, compared with 4.4% in the Asian Century scenario. Some of the high-growth countries in Asia fail to effectively make the transition through the middle income trap. That is, they lose export competitiveness as a result of higher labour costs and their productivity growth stalls because their governments fail to move them towards services-oriented economies. As a result, Asia's share of global GDP stays at 31%.

Table 2.2
ECONOMIC GROWTH PROJECTIONS FOR THE MIDDLE INCOME TRAP SCENARIO

Project Risk Scenario	Average growth rate						
US$ million, 2005 constant	1981-1990	1991-2000	2001-2010	2011-2020	2021-2030	2031-2040	2041-2050
China	7.4	10.5	10.1	5.0	3.5	3.0	3.0
India	6.0	5.5	7.7	5.5	5.0	4.5	5.0
Indonesia	5.0	4.4	5.2	4.0	3.0	3.0	3.0
Japan	6.1	1.3	0.9	1.5	2.0	2.0	2.0
South Korea	8.2	6.2	4.1	4.0	3.5	3.0	2.0
Malaysia	5.6	7.2	4.6	4.0	2.9	2.6	2.3
Thailand	9.0	4.6	4.4	3.5	2.2	1.9	1.7
Singapore	4.3	7.6	5.3	4.2	2.7	1.4	1.0
Philippines	4.6	3.1	4.8	6.3	5.2	4.6	4.0
Vietnam	4.3	7.6	7.3	6.2	3.8	3.1	2.3
Asia 10	**4.9**	**3.5**	**4.4**	**3.6**	**3.2**	**2.9**	**3.0**
Emerging Asia	**4.8**	**3.4**	**4.4**	**3.7**	**3.3**	**3.0**	**3.1**
World	**3.0**	**2.7**	**2.6**	**2.9**	**2.4**	**2.3**	**2.1**

Source: ANZ Projections.

While China suffers most in this scenario, all the large Asian economies experience a slower growth trajectory over the next few decades. Japan is least affected by the Middle Income Trap scenario, partly because it benefited less in the upside Asian Century scenario and partly because it already has a well-developed financial system.

9 The Middle Income Trap is a state of economic development where growth stalls at middle-income levels usually due to a loss of competitiveness. This loss of competitiveness is typically associated with an inability of governments to support economic and social reforms, and the structural changes required to maintain productivity growth and rising living standards.

10 World Bank, China 2030: Building a Modern, Harmonious, and Creative High-Income Society, Washington, DC, 2012.

The projections suggest that:

- Asia will still be the major economic bloc in the world, accounting for around 40% of global output in 2030 and 45% in 2050.
- China could account for 33% of the world economy in 2050, which is still more than the US (22%), India (5%), the European Union (16%) and Japan (8%).
- In terms of standards of living, Asia will lag well behind the advanced economies, achieving income per capita of approximately 60% of the developed world in 2030 and around 75% of the developed world in 2050.
- The major ASEAN economies will suffer from a lack of access to long-term capital in the Middle Income Trap scenario. The ASEAN proportion of Asian GDP will fall from 10% in 2010 to 8% in 2050. By comparison, this share will rise to 11% in the Asia Century scenario.

Financial system growth under the Middle Income Trap scenario

Alongside a loss of economic momentum will be a slowing down or stalling of financial development. It is difficult to imagine economies being trapped at middle-income levels while continuing to significantly develop their financial systems.

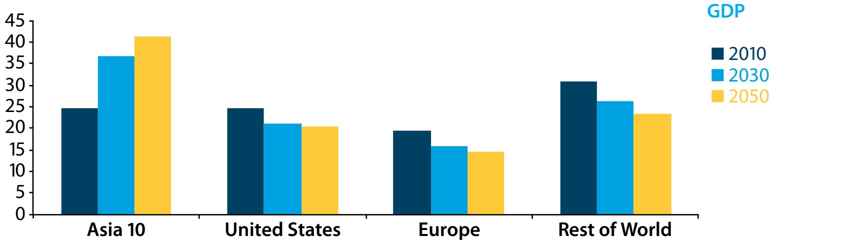
Financial depth in Asia is considerably lower in this scenario at 320% of GDP. Asia continues to exert less gravity in financial markets than its income levels would otherwise suggest. It will continue to rely to a large extent on international capital markets to allocate any economic surplus (savings) produced. While Asia's ratio of financial depth to GDP stays below what would be thought of as an ideal ratio, Asia's financial system still increases significantly, albeit mostly in the form of bank asset growth.

Figure 2.4 shows the projected growth in Asia's share of world GDP and Asia's share of world financial assets under this scenario.

Figure 2.4
MIDDLE INCOME TRAP SCENARIO PROJECTIONS

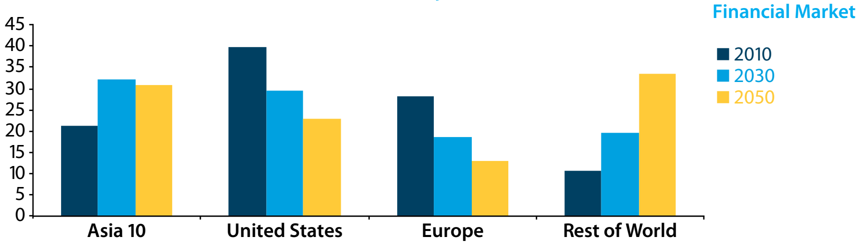
Economic Distribution

Downside Scenario – GDP Projections as a % to world



Financial Market Distribution

Downside Scenario – Financial Market Projections as a % to world



Source: CEIC and ANZ Projections.

Even applying these more pessimistic projections, Asia will still have some of the largest and deepest financial markets in the world by 2030. Essentially this is because the opening of the Chinese capital account will transform capital flows in the region and the world.

In addition, growing regional cooperation, seen in agreements like the Asian Bond Market Initiative and the Chiang Mai Initiatives,[11] is already establishing financial architecture in Asia that will facilitate greater financial integration.

We look at the breakdown of these financial system forecasts into bank, debt and equity markets in Chapter 4.

2.3 CHINA'S ROLE

The challenges Asia faces are potentially as profound as the opportunities. China must maintain social stability in a world that becomes increasingly more connected via informal channels. For Asia more generally, political reform, environmental constraints and geo-political stability are all major risks to rapid economic development.

Just as China's entry to the World Trade Organization in 2001 was a dramatic shift in real-sector supply for the global economy, the opening up of China's capital account will have a similar impact upon the global financial system and one that will require larger and more sophisticated financial markets in the region. Through this process of financial liberalisation we can expect a dramatic pick-up in intra-regional capital flows. In other words, Asia will increasingly finance Asia over the decades ahead.

We expect that by 2020, China will have the largest national banking system in the world, only just behind the total size of the Eurozone. By 2030, China's banking sector is projected to be almost twice the size of Europe's. At the same point, the non-China, non-Japan, Asian banking sector will be approaching the size of the US banking sector.

The opening up of the Chinese capital account will be a crucial step in the process of developing the broader Asian financial system. Currently China accounts for approximately 50% of the region's trade, approximately 50% of the region's GDP but a much smaller proportion of the region's cross-border capital flows. As China's markets liberalise and private investors begin directing China's pool of savings, we expect that imbalance to correct itself over an extended period of time. The huge amount of savings locked up within the economy will seek higher returns outside of China's borders, particularly in other Asian economies where investment opportunities are strong.

11 The *Chiang Mai Initiative* was launched in 2000, and was a funding arrangement between the ASEAN countries, the People's Republic of China, Japan and the Republic of Korea, with an aim to provide insurance against short-term liquidity problems in the region. In 2012, the fund was US$240 billion. The *Asian Bond Market Initiative* was endorsed by the ASEAN+3 in 2003 aimed at developing bond markets in Asia to assist in channelling Asian savings into Asian investments.

2.4 A CLEAR REFORM FOCUS IS REQUIRED FROM GOVERNMENTS AROUND THE REGION

Deeper capital markets will require significant policy reform in the region and there will be many challenges to overcome. Over time, Asia will need to move away from strong central government controls and bank-dominated financial systems if debt and equity markets are to flourish. This is a great challenge to macroeconomic stability.

The transition from an economy operating with a relatively rigid and closed financial system to one that allows capital to flow freely between asset markets and across borders is often associated with financial instability. China is facing these issues right now (see Chapter 5).

One of the key factors holding back financial development in the region is regulatory regimes that restrict inward and outward flows of capital. That is, in many Asian countries, foreigners are restricted in their ability to invest in a country's assets and many residents of Asian countries are restricted to buying their country's assets rather than foreign ones.

These restrictions have effectively locked up rich pools of savings accumulated over recent decades in each economy. In turn, this has hindered the development of both deeper domestic and more integrated regional capital markets.

If the emerging Asian nations can implement the necessary reforms, they will, over the decade ahead, become home to many of the world's financial centres and leading financial institutions. The opportunities are enormous and they span a number of sectors and regions.

Box 2.1: The Relative Decline of the US Financial System

One of the key conclusions of our research is that Asia must develop its financial system to more effectively allocate the vast pool of savings within the regional economy. Historically, Asia, as a net saver, has exported these savings to the advanced economies via the accumulation of FX reserve portfolios. While this has restricted the development of the Asian financial system, it has also led to an over-deepening of financial markets in the US and parts of Europe.

For the US, the outflow of Asia's savings pushed interest rates lower and led to over-consumption and excessive leverage in the US housing market in the decade leading up to the 2007 housing crisis. The crisis point has now passed. Households and financial institutions in the US have undertaken a mammoth deleveraging over the past six years. But the US still has a huge external deficit.

If Asia's role in funding the US external deficit is changing, what does this mean for the US economy and financial markets? The US is home to the world's deepest and most flexible financial markets. As such, market prices will continue to play the primary role in determining how the US markets and economy adjust to the new equilibrium.

In order to find a new funding equilibrium, the US will need to cheapen the relative price of its financial assets as excess savings in Asia are increasingly invested in Asia. This could come about via a US dollar depreciation to attract capital inflows, which will cheapen the price of all US dollar assets compared to the rest of the world. It is also likely to come about via low bond prices (higher term interest rates) to make these assets more attractive to both domestic and offshore investors.

A higher interest rate structure would assist in rebalancing the US economy. It would have the dual impact of encouraging more savings (less consumption) from US households and also a narrower government deficit. As the US fiscal deficit narrows and the stock of government debt is reduced, the amount of new public debt issuance should be in decline.

All of these forces would work to reduce the current account deficit and assist in moving the US economy towards its new stable funding equilibrium over the decade ahead.

A weaker currency, higher interest rates, higher domestic savings and lower consumption is a macroeconomic environment that will encourage a slower rate of credit growth and a relatively smaller financial system than the one seen during the boom years.

Longer term, the role of funding the world's economic activity will shift towards where that activity is happening and away from the traditional financing centres in the US and Europe. Even US corporations will increasingly issue debt and raise equity in Asia to fund their Asian operations.

3.0 ASIA'S FINANCIAL DEPTH

KEY THEMES:

- ***Up to the GFC the financial markets of the US and Europe were too deep and those of Asia too shallow.***
- ***The experience of the AFC led Asian governments to restrict the growth of their financial system via strict regulation.***
- ***A growing proportion of domestic Asian savings had been allocated by international financial markets rather than Asian capital markets.***
- ***The financial system restrictions are creating economic distortions, which are particularly noticeable in China.***

3.1 CURRENT FINANCIAL DEPTH

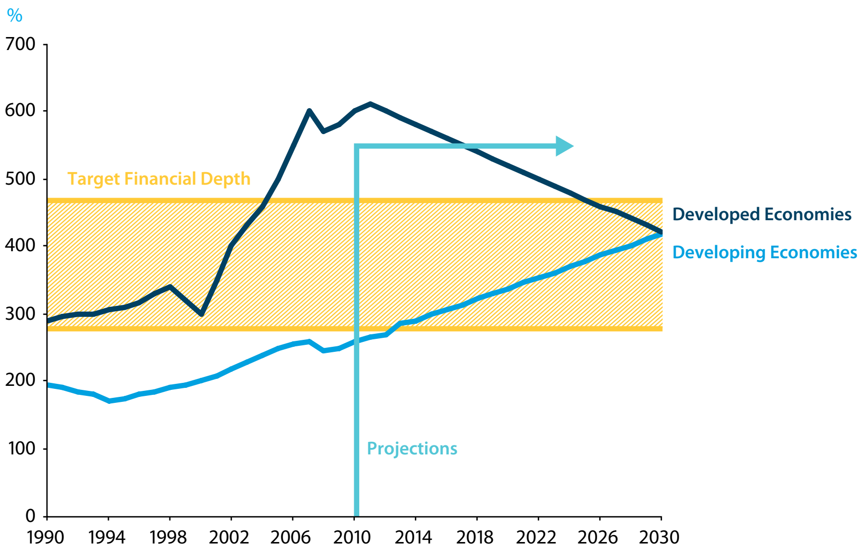
In 2010, the world's financial markets had once again exceeded their pre-GFC levels, and the total gross assets of the world's financial markets (excluding derivatives) reached approximately $240 trillion.[12] This was over four times global GDP at the time and in line with our ideal 4:1 financial system to GDP ratio (see Appendix 1). But breaking down that global figure, there were marked disparities between regions. In particular, the financial markets of the US and Europe were too deep and the financial markets of Asia too shallow despite the growing economic weight of the region. Such distortions increase the risk of financial market excesses in the former case and weaker than possible growth in the real economy in the latter.

At present, Asia accounts for around 25% of global GDP, yet only 20% of global financial assets. This lost financial depth equates to $15.4 trillion – more than the total output of the US economy – and means the region remains well short of our ideal ratio. Instead, as Figure 3.1 shows, the ratio of financial depth to GDP in the developing world has grown only gradually in the past 20 years and remains below 3:1. In contrast, the ratio in the developed world climbed to 6:1 just before the GFC.

Figure 3.1

FINANCIAL DEPTH: FINANCIAL SYSTEM TO GDP RATIO

Reaching the Ideal Range – Developed vs Developing Markets Target Financial Depth



Source: World Bank Global Financial Development Database (GFDD) and ANZ.

12 We use the World Bank Global Financial Database released in April 2013. Although the latest observation in this database is from 2011, we use 2010 as our base year for our long-term modelling and in the presentation of the data in charts and tables.

Financial markets continued to deepen at relatively the same pace in the advanced and emerging markets over the late 1980s and early 1990s, broadly tracking real economic growth pre-1997. But the Asia financial crisis delivered a structural break in Asia's financial development.

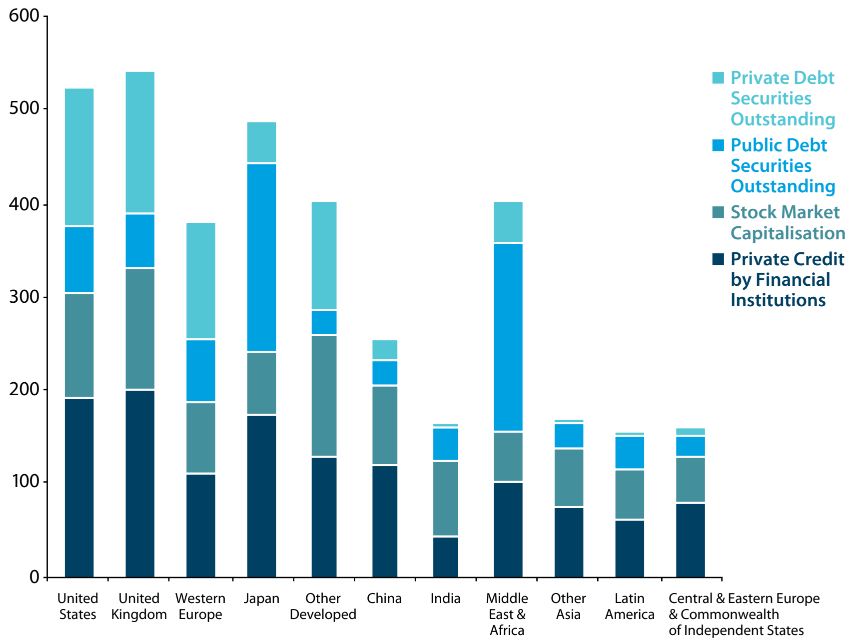
In the 10 years after the crisis there was only a gradual financial deepening in the emerging market economies yet a rapid, profound and sustained deepening of the advanced markets. This in effect represents the out-sourcing of financial intermediation from surplus Asian economies to deficit advanced economies over this period. It is a central element in the debate about global economic imbalances and only now appears to be gradually correcting.

One of the key assertions of this report is that divergence will now begin to narrow as Asia claws back lost financial market share from the developed economies as part of a broader global rebalancing.

This global imbalance is not just a simple differential between developed and developing markets. Rather, Asia appears to be unique among the developing economies in having such shallow financial depth given its rapid economic development in recent decades. Excluding China and India, Asia's financial markets are shallower than those of the Middle East and North Africa,[13] which is surprising for a region that has become the epicentre of global economic growth.

Figure 3.2

FINANCIAL DEPTH AS A % OF GDP – MAJOR ECONOMIES AND REGIONS 2010



Source: World Bank GFDD and ANZ.

13 When measured relative to the size of their economy.

3.2 WHY HASN'T ASIA DEVELOPED ITS FINANCIAL MARKETS FULLY?

It is first important to recognise why a process of financial deepening aligned to the economic ascension of China and industrialisation of other Asian economies has not occurred.

Over the past 15 years a gap has appeared between the development of Asia's underlying economy and its financial sector. Following the AFC in 1997,[14] Asia's financial system has been contained via strict regulation, managed exchange rates and the accumulation of large FX reserves. Despite a rapidly growing pool of domestic savings Asia has relied heavily upon the international financial markets to allocate these savings rather than develop its own capital markets.

3.2.1 A Short History of the Asian Financial Crisis

A major consequence of the AFC was a dislocation between savings and investment in Asia. At the time, Asia was running significant external deficits. That is, it was importing the necessary capital it required to undergo economic development. Capital that had generously flowed into Asia abruptly reversed out in 1997. When the AFC hit, many domestic Asian banks were hamstrung or even bankrupted by non-performing loans. The European and US financial institutions with a local presence were well positioned to grow their Asian operations.

A higher savings rate in Asia, together with capital outflows and tighter policy, produced current account surpluses in record time. This led to Asia, and China in particular, becoming the largest provider of surplus savings to the world economy for the past 15 years.

Asia's financial institutions then began the process of allocating the region's own savings into the international markets. As Figure 3.1 illustrated, a simple comparison of financial depth ratios for the developed and developing economies shows that a big shift in financial deepening occurred immediately after the AFC.

The pronounced deepening of the US and UK financial markets seen in this chart was not matched by underlying economic phenomena. Rather, it was a significant inflow of capital, both public and private, that helped drive the explosive growth in the US and European financial systems through this period.

The outsourcing of financial intermediation has been a feature of the post-AFC environment. The inability of the region to develop deeper and more liquid domestic capital markets has meant that Asia still has to rely on the financial markets of Europe and the US to intermediate its huge excess savings. This reliance increased after the AFC as funds were placed in the advanced markets to self-insure against financial shocks.

3.2.2 Capital Controls and FX Reserve Accumulation

Piecemeal and incomplete liberalisation of regional capital accounts since the AFC has also played a part. Restrictions on both inward and outward capital flows via managed exchange rate arrangements have trapped vast pools of Asia's savings in FX reserve portfolios, thwarting the development of regional capital markets. While these types of policies may be useful in protecting a country in the early stages of development from potentially destabilising surges in capital flows, they are unsatisfactory for Asia today.

14 In 2013, a significant capital outflow hit the emerging economies as the US economy improved and expectations of tighter US monetary policy impacted global investors. Unlike in 1997, the emerging markets and economies have largely weathered this capital outflow highlighting how much stronger their position is within the global economy and financial system.

The effect of capital account restrictions is most noticeable in the case of China. China has particularly high savings rates in all three sectors – corporate, household and government. It saves around half of its national income and these savings are effectively fire-walled from both the region and the rest of the world by a closed capital account.

What has made the economic ascension of China unique is that a major, sustained high-growth period has occurred without a significant financial revolution. China's high-growth period from 1990 to 2020 will perhaps be historically one of the greatest most sustained high-growth periods recorded. However, the strains and stresses its industrialisation and urbanisation have put on the banking system run the risk of leaving the banking sector stymied with bad debts, undermining the efficient allocation of capital within the economy into the future.

China is therefore useful in highlighting that not only is financial deepening necessary for successful industrialisation, broad-based financial deepening across debt and equity markets as complements to the banking system is essential.

Box 3.1: The Inefficient Allocation of Asia's Savings

Over the past 15 years Asian nations by and large have maintained competitive exchange rates, often fixed, to support export industries. This involves the central bank selling local currencies and buying US dollars.

The US dollar assets bought are typically US Treasury securities as well as other OECD government bonds, high-quality non-government securities and, to a lesser extent gold. The purchase of government bonds by foreign central banks lowers the cost of capital in the US and Europe and allows domestic savings in the advanced economies to search for yield in local and offshore markets.

Asian policymakers also restrict capital inflows and outflows into their markets as these can destabilise the steady exchange rates needed to support Asian exports curtailing the extent to which this Asian surplus can be directed back into Asian economies.

The resultant lack of financial depth and access to capital is particularly problematic for South-East Asian countries with high long-term capital needs.

Asia can borrow back the capital it needs to expand its infrastructure and physical capital stock from the developed world in US dollars. These products are generally priced off US government bonds – but a risk premium added for currency risk effectively raises the cost of capital for many in the Asian region.

The FX reserve funds invested in developed countries do not always return to Asia. The flow of official money from Asia may be used by developed nations to pursue FDI in other regions or be put to work in their own economies (probably a key driver of excessive financial depth in the US and Europe ahead of the GFC).

Asia's exchange rate policy and accumulation of sovereign foreign wealth support consumption and investment in the developed world, which only returns indirectly and incompletely to Asia, with a mark-up imposed by international capital markets attempting to price the various risks involved.

Ultimately the returns on Asia's savings or economic surplus are low, particularly in the post-GFC environment where government bond yields in the developed economies have fallen to multi-decade lows.[15]

- Asia's foreign exchange reserves are largely invested in US and European markets. Asian economies held more than $6.1 trillion or 71.5% of the world's FX reserves (excluding gold) at the end of 2009 but a relatively small proportion is invested in Asian financial assets.
- Institutional development in Asia's non-bank sector is weaker than that in Europe and the US. Innovative capital market and issuance skills are still tapped from London and New York.
- Although fund management skills are improving, the largest contractual savings institutions tend to be led by a public sector with conservative and domestic-oriented strategies. For example, the assets of contractual savings institutions in Malaysia and Singapore, two of the most developed sectors in Asia, amount to only 60–80% of GDP, compared with 160–180% in most of Europe and 100% in the US.

15 The US 10-Year Treasury Note hit a 100+ year low of 1.39% on 24 July 2012. Over the past 20 years (1994–2014) the US 10-Year Treasury Note has had an average yield of approximately 4.5% (constant maturity basis).

While China dominates Asia on the trade side, it remains underweight in its role of providing capital to the rest of the region. China's financial market development indicators are improving but they continue to lag behind the more mature economies in Asia and look particularly low by international comparison.

In addition to constraining financial depth in Asia, China's closed capital account has worked to disproportionately deepen markets in the developed world. The massive expansion of production in China and the fixed RMB exchange rate policy through this period produced FX reserves in China that were then ultimately invested into the assets of the developed world, prompting financial market deepening (and arguably excessive financial innovation) in those countries. This is the phenomenon that many argued effectively saw China lend for the West's acquisition of Chinese exports, a giant vendor finance scheme.

3.2.3 Banks Dominate the Financial System

The combination of risk aversion and tighter regulatory requirements, as a result of the AFC, provided an environment where banks became even more dominant in Asia at the expense of capital markets. Banks continue to hold a disproportionate share of financing activity in the region and operate as competitors to, rather than complements and agents of, debt and equity raisings.

Table 3.1
ASIA'S FINANCIAL MARKETS ARE RELATIVELY SMALL

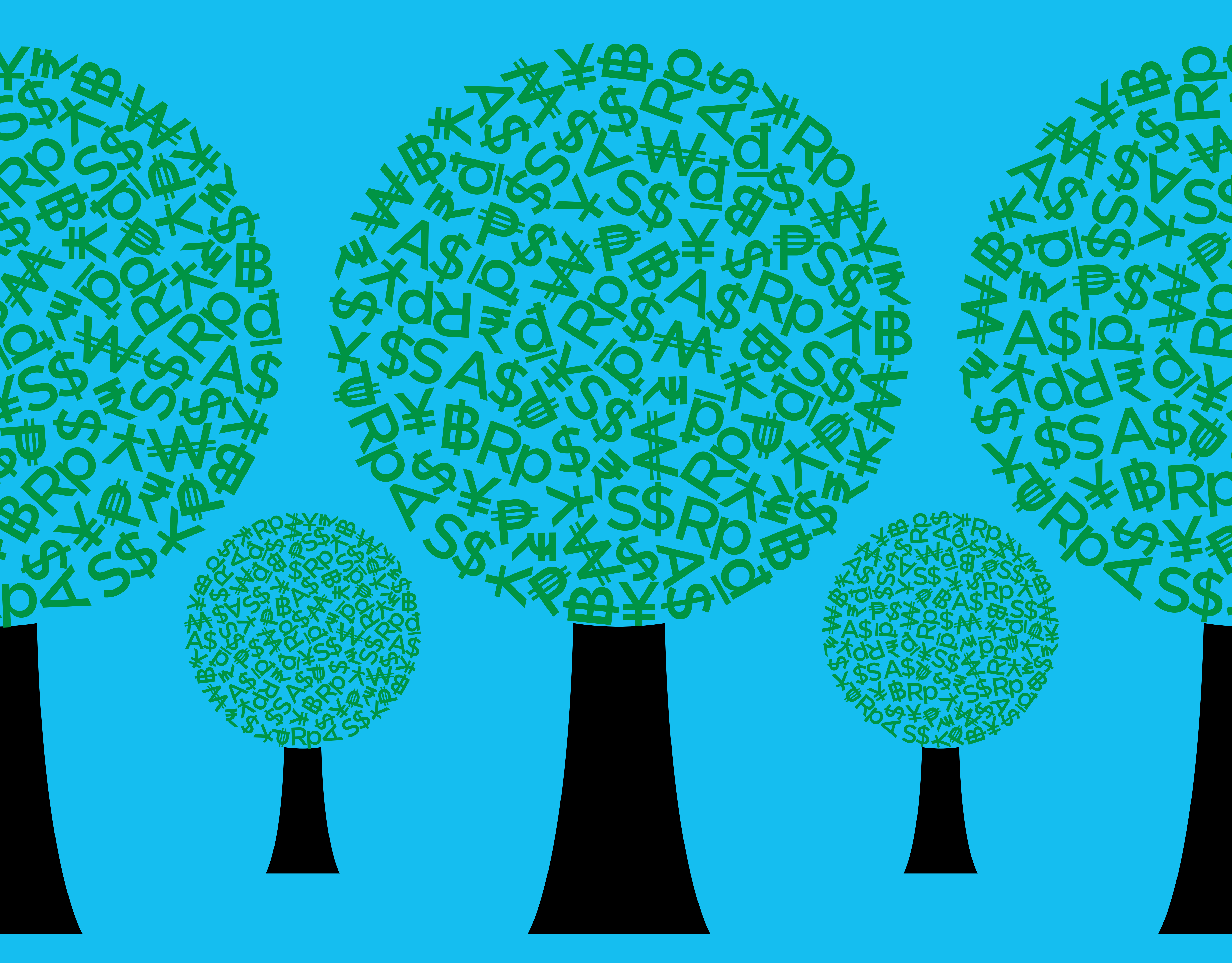
	Banking Sector Assets		Stock Market Cap		Debt Securities		Total Financial Depth	
	$tr	% of GDP	$tr	% of GDP	$tr	% of GDP	$tr	% of GDP	$tr
World	64.1	167	107.0	102	65.4	120	76.9	389	249.3
United States	18.1	230	41.6	118	21.4	280	50.7	628	113.7
Europe	16.2	160	25.9	52	8.4	350	56.7	562	91.0
Asia 10	15.9	135	21.5	88	14.0	120	19.1	343	54.5
China	5.9	250	14.8	77	4.5	52	3.1	379	22.4
Rest of World	16.9	75	12.7	70	11.8	40	6.8	185	31.3

Note: Asia 10 includes China. All figures are nominal USD, 2010.
Source: World Bank Global Financial Development Database and ANZ.

Traditionally, Asia has used banks to support industry and this has allowed the commercial banking sector to dominate the financial markets landscape. Even in the case of Japan, which has the most mature capital markets in Asia, its financial deepening beyond the core banking system did not really begin until the 1980s when deregulation began in earnest. By then, the emerging nations of Asia had already adopted the bank-dominated model typical of the early stages of economic development.

In 2010, Emerging Asia's finance sector had bank assets worth 135% of GDP, compared with stock market capitalisation of 88% and debt capitalisation of 120%. By contrast, debt market size in the EU was 350% of GDP.

For the Asian Century to achieve its economic potential, substantial changes need to occur in the structure of the financial system. Some of this will occur almost naturally, as risk and investment appetites seek returns and the risk aversion and cures of the 1997 financial crisis recede. However, significant elements of the imbalances and distortions of the economies in the region are political and regulatory. While we believe rebalancing and deepening will occur, it is these forces that add uncertainty.



KEY THEMES:

- *The financing of Asian economies needs to become better balanced between banks and debt and equity markets.*
- *Asia's growing importance will see Shanghai resemble New York and London as an international financial centre.*
- *Asian banking systems will benefit from stronger economic growth and the increased regulatory burden on the US and European banks.*
- *Growth is likely to be particularly strong in debt markets, the most under-developed financing channel.*
- *Significant growth is also likely in Asian equity markets, which could represent over 40% of global market capitalisation by 2030.*

4.1 INTRODUCTION

If Asia is to fully grasp the benefits of an Asian Century it needs to not only grow its financial system but also transform it. The banking sector has dominated the Asian financial scene in recent decades. Somewhat counter-intuitively, it has been the larger Asian economies that have failed to adequately develop their capital markets.

Banking systems will continue to grow in Asia over the coming decades but not as quickly as the capital markets. For banks, the kind of business undertaken will be more important than growth per se.

The provision of long-term capital to large corporations will increasingly be undertaken by investors directly within the capital markets. Banks will provide increasingly fewer loans to large corporations, favouring low and middle-income consumers and small to medium-sized enterprises instead – a landscape that is more typical of developed economies.

4.2 DETERMINING FUTURE FINANCIAL DEPTH[16]

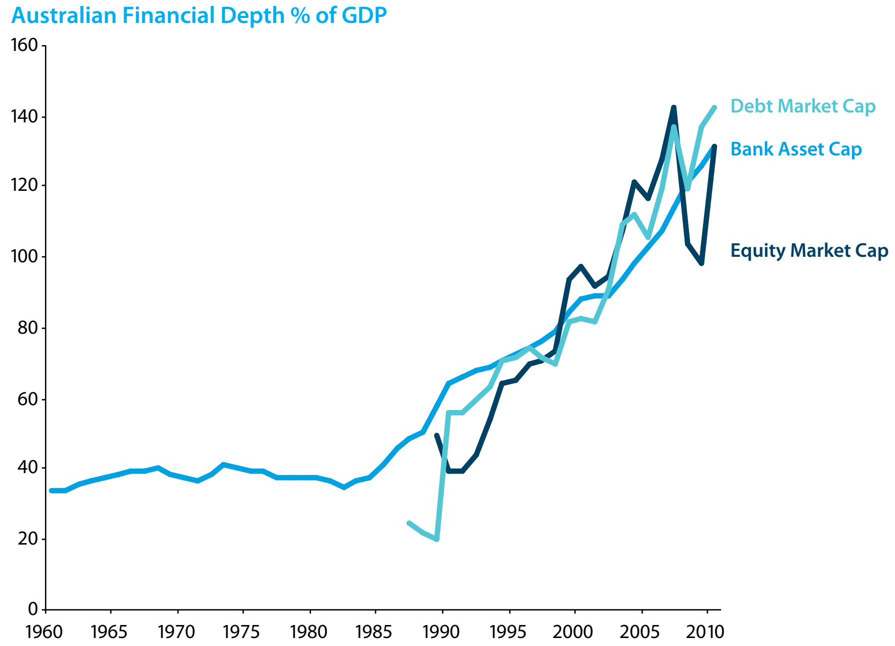
We would expect Asia's financial depth to be around 400% of GDP in 2030 and around 500% in 2050, based on an aggregate forecast of per-capita income growth, the most common methodology to predict financial deepening.

Having a more balanced financial sector is also important. The bulk of the financing of a modern economy comes through a combination of the banking sector and debt and equity capital markets. Having something of a balance between these different financing channels is important for diversification because if a problem develops in one financing channel (e.g. the banking sector) financing the economy can still take place through the other channels.

Australia and Canada are examples of balanced financial sectors for high-income developed economies. Australia in particular is remarkable for the uniform development of the banking sector, equity market and debt markets (see Figure 4.1). While it is not necessary to have uniform development of all the financing channels, we expect the middle-income economies of Asia to evolve towards a more balanced financial sector as they make the transition to becoming developed high-income countries.

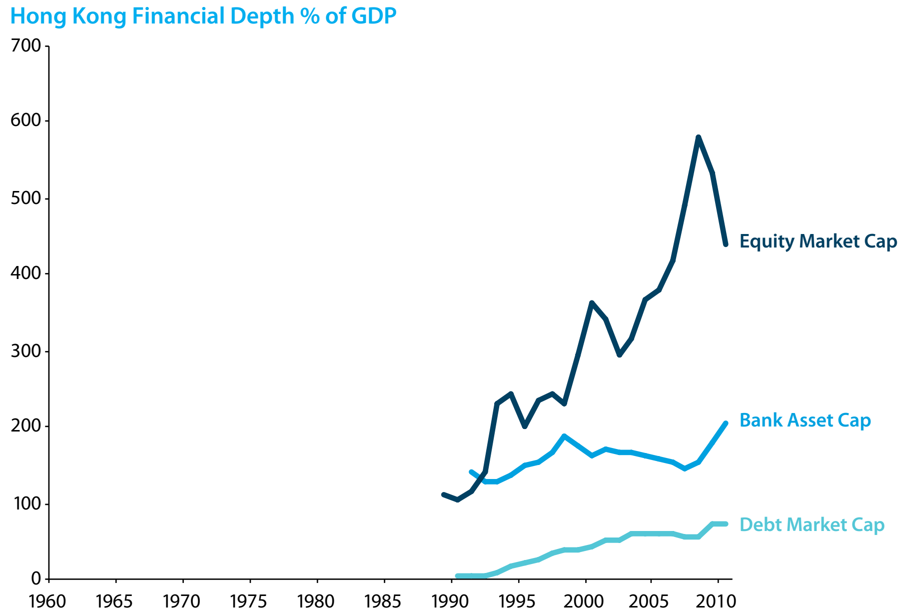
16 The analysis in this section is based upon the Asian Century scenario.

Figure 4.1
AN EXAMPLE OF A WELL-BALANCED ECONOMY



Source: World Bank, ANZ, CEPII, CEIC and Bloomberg.

Figure 4.2
AN EXAMPLE OF A FINANCIAL CENTRE



Source: World Bank, ANZ, CEPII, CEIC and Bloomberg.

But not all of Asia will converge to this norm. Asia will be home to a number of financial centres where financial depth is likely to be considerably larger. The UK and Hong Kong, with financial depth of 550% and 700% respectively, provide an indication of what a financial centre in the Asian Century could look like.

Over the course of the Asian Century, emerging centres like Shanghai are expected to claw back market share from Hong Kong. Shanghai will likely resemble New York, an international financial centre that also serves a large domestic economy. The UK provides an example of what a genuinely international capital market and banking centre in Asia could look like. Singapore and potentially Hong Kong could take this form.

At the same time many national financial centres will develop slowly and will lack critical mass for decades to come. We expect this to be particularly evident in South-East Asia where Singapore will be a major financial hub for these regional economies for many years.

Box 4.1: Sydney as a Regional Financial Centre in the Asian Century

The vast growth in financial markets and cross-border banking activity promised in the Asian Century provides Sydney with the opportunity to move from a national financial centre to a genuinely international (regional) financial centre. Sydney has a strong platform built upon more than three decades of experience with financial deregulation and open capital markets while fostering a world-leading retirement savings system.

The most important ingredient is human capital. Sydney has the skills and workforce to support a modern highly sophisticated financial services sector. The tertiary education sector in Sydney is impressively aligned to the financial services sector. Indeed, Sydney could well become a financial services education hub within the region.

Meanwhile, Australia's regulatory environment is world class and there is no question over the credibility and integrity of legal and governance structures.

An international financial centre is characterised by exporting financial services. To do that, foreign residents must feel comfortable having capital in Australia. A transparent government that maintains a sustainable financial position is a critical element. A diverse economy is also important as this underpins broader capital flows and a stable currency. A credible and effective central bank will also play a role. There are no questions on this front for Australia.

A unique feature of the Australian financial scene is the large pool of long-term savings that has been amassed due to compulsory superannuation. With almost US$1.5 trillion in assets under management, Australia has the fourth largest domestic funds management pool in the world. It should be a platform for exporting this expertise to the rest of Asia as the region's savings are increasingly managed by private institutions and individuals.

At present less than 20% of Australia's funds under management are sourced from offshore residents. This has grown rapidly in the past eight years.* It should continue to grow as Asia's financial transformation progresses. Funds management will certainly be a regional niche for Sydney but the question is whether we will see the internationalisation of capital market activities, commercial banking and insurance services.

A significant opportunity for Sydney will be to develop into one of the region's key RMB trading centres. Sydney is uniquely positioned to build a deep pool of RMB liquidity given the significant trade flows that exist between Australia and China. Australia's commodity exports are largely denominated in US dollars but China is actively seeking to invoice new trade flows in RMB.

Australian authorities should be considering the currency denomination of future commodity. Invoicing in RMB and growing a RMB deposit base in Sydney will be important developments in streamlining trade and reducing transaction costs between Australia and China as well as developing a more internationally oriented commercial banking system.

Governments have a role to play in providing the right tax, regulatory and policy framework to encourage these activities. If governments so choose, Sydney could well be a major regional financial centre, one tier below the potential giants in Singapore and Shanghai, in the Asian Century.

*Australian Financial Centre Forum (2009), 'Australia as a Financial Centre, Building on our Strengths.' Australian Government.

4.3 THE BANKING SECTOR

Asia's banking sector seems well placed to benefit from a unique set of factors. First, in some countries such as India and Indonesia the demographics point to a rapidly growing deposit base. Second, the conservative stewardship of the banking system since the AFC leaves the sector in a healthy position relative to global peers.

A range of regulatory reforms (such as Basel III and Dodd-Frank[17]) will act to constrain the growth of banks in many advanced economies. By contrast, the Asian banks are in an extremely strong position due to the high levels of local savings and conservative bank regulation.

Importantly, the Asian banking sectors are not facing the extended period of deleveraging and business-model adjustment that is currently confronting many North Atlantic banks.

We expect the next stage of financial development to be characterised by rapidly growing bank balance sheets which will see the Chinese banking system become the largest in the world, almost three times the size of the US banking system by 2030.

Based on our projections for per capita income growth, Table 4.1 below outlines our expectations for credit outstanding (a proxy for banking assets).

Table 4.1

THE EVOLUTION OF BANKING SECTORS

Total size of banks, US$ trillion (nominal)

	2000	2010	2020	2030
United States	6.2	8.7	11.9	15.9
Eurozone	7.0	16.7	23.9	22.2
United Kingdom	2.0	4.2	5.9	6.2
China	1.6	6.8	21.4	51.4
Hong Kong	0.3	0.4	0.6	0.7
India	0.2	0.9	2.8	6.1
Indonesia	0.1	0.2	0.4	0.7
Japan	12.4	9.1	12.1	19.1
South Korea	0.4	1.0	1.9	3.5
Malaysia	0.1	0.3	0.5	0.8
Philippines	0.0	0.1	0.2	0.5
Singapore	0.1	0.2	0.4	0.6
Thailand	0.2	0.3	0.5	0.8
Vietnam	0.0	0.1	0.2	0.5
Asia 10	**15.2**	**19.0**	**40.5**	**84.0**
Australia	0.4	1.3	2.5	4.2

Source: Data from World Bank. Forecasts and analysis by ANZ.

17 Regulations that contain a large array of measures aimed at reducing the risk of a GFC occurring again in the North Atlantic.

These projections highlight the potential for extraordinarily strong growth in bank assets within Asia over the next few decades. The bank assets of Emerging Asia (excluding Japan) are currently around US$12 trillion. This is expected to more than double by 2020 and rise to US$30 trillion by 2030. This growth reflects a number of factors:

- The central role banks will play in the next stage of Asia financial development.
- Rapidly growing low and middle-income consumer markets as well as strong SME growth in response to financial liberalisation and rising incomes across these economies.
- Less informal and shadow banking activities as financial systems liberalise and open up.

4.4 FIXED INCOME MARKETS

The fixed income market is under-developed in much of Asia, resulting in small regional bond markets compared with those of major trading partners such as the US. The bond markets of Europe, Australia and Japan are also significantly bigger relative to the size of their respective economies.

Although the domestic institutional investor bases in a number of countries are currently modest, they are growing rapidly. Asian pension systems, especially defined contribution schemes, are becoming more important. Insurance companies in the region forecast strong growth in demand for life, annuity and retirement savings products. All of these products require deep and liquid fixed income markets – particularly ones with a greater supply of longer-maturity instruments. Finally, global investors are keen to divest their portfolios away from the G3.

Asian domestic debt securities (excluding Japan) will grow strongly over the next two decades, and be worth around US$80 trillion by 2030 (of which China will account for over half). We expect that the growth in debt markets will be even stronger between 2030 and 2050. South Korea, India, China and Indonesia are expected to account for almost 75% of Asia's international debt securities by 2050.

Table 4.2

PROJECTIONS FOR THE FIXED INCOME MARKETS

Total size of fixed income markets, US$ trillion, nominal

	2000	2010	2020	2030
United States	28.4	37.5	41.3	35.5
Eurozone	6.2	20.4	22.7	19.4
United Kingdom	1.3	4.3	6.5	5.8
China	0.2	2.5	12.2	32.1
Hong Kong	0.0	0.2	0.2	0.4
India	0.1	0.6	1.6	5.1
Indonesia	0.1	0.1	0.3	0.7
Japan	7.1	12.4	16.4	20.7
South Korea	0.5	1.2	2.3	4.3
Malaysia	0.1	0.2	0.4	0.7
Philippines	0.0	0.1	0.3	0.7
Singapore	0.0	0.2	0.2	0.4
Thailand	0.0	0.2	0.3	0.5
Vietnam	0.0	0.0	0.0	0.1
Asia 10	**8.2**	**17.6**	**34.2**	**65.4**
Australia	0.3	1.0	2.5	4.5

Source: World Bank data. Forecasts and analysis by ANZ.

China's debt markets will not overtake those in the US before 2030 despite an expected increase in securities outstanding from US$3 trillion to US$27 trillion in 2030. Emerging Asia will, in total, be bigger than the US markets. Asian debt markets will be dominated by RMB issuance over the next 15 years for both Chinese and non-Chinese issuers.

Currently in a number of countries, a proportion of borrowers access funding from international debt markets. Some of these funds are used to fund international operations.

The need to access international debt markets reflects the lack of appetite for international investors to take on local market risk. That may reflect perceptions regarding currency risk, and the lack of hedging capability. It may also reflect concerns about local legal and corporate governance arrangements.

As Asian debt market institutional arrangements strengthen, and economic fundamentals remain strong, global investors will become increasingly comfortable investing directly into Asian markets. Indeed, this is already beginning to take place. A large domestic debt market will allow domestic corporates to issue in local currency, removing currency risk (or at least the need to hedge against the risk).

4.5 EQUITY MARKETS

By 2030, Asian equity markets will represent around 42% of global market capitalisation and by 2050 Asia could represent as much as 72% of global market capitalisation as countries such as India and Indonesia move into their demographic 'sweet spot', with large working-age, tax-paying populations.

Over the next two decades, emerging equity markets will increase substantially, and will overtake the mature developed markets in terms of capitalisation.

Table 4.3

PROJECTIONS FOR THE EQUITY MARKETS

Equity market capitalisation, US$ trillion, nominal

	2000	2010	2020	2030
United States	18.1	15.8	23.8	22.4
Eurozone	7.3	6.1	8.4	10.4
United Kingdom	3.0	2.7	3.8	5.8
China	0.5	4.3	18.4	48.2
Hong Kong	0.7	0.9	1.3	1.3
India	0.2	1.3	3.1	6.8
Indonesia	0.0	0.3	0.5	1.0
Japan	4.4	3.6	7.8	10.3
South Korea	0.3	0.9	1.8	3.4
Malaysia	0.1	0.3	0.5	0.8
Philippines	0.0	0.1	0.3	0.6
Singapore	0.2	0.3	0.6	0.9
Thailand	0.0	0.2	0.3	0.5
Vietnam	0.0	0.0	0.1	0.2
Asia 10	**5.9**	**11.3**	**33.3**	**72.8**
Australia	0.4	1.0	2.4	4.1

Source: World Bank data. Forecasts and analysis by ANZ.

China's market capitalisation may outstrip that of the US by 2030. China, which was just 1% of the global market capitalisation 10 years ago and 5–7% currently, could rise to 28% in the next two decades.

Institutional investors, such as pension funds, insurance companies and unit trusts (mutualised funds) will be powerful vehicles for growth in Asian equity markets. The massive growth of pension funds in Australia, and the impact that it has had on financial sectors, is a useful template for economies that do build a social security net of public-backed retirement systems.

IPOs remain the principal vehicle for transferring state ownership to private ownership, and so a succession of the world's largest IPOs in Asia can be expected in coming years. Financial services, energy, telecommunications and infrastructure remain key sectors dominated by large state-owned enterprises that are likely to be privatised in coming decades.

The development of large financial systems in Asia will have other implications. For example, there will be intense competition among countries and cities for positions as regional financial services hubs. The winners are likely to be the most populous cities (Shanghai and Mumbai) as well as those prepared to implement policies to support financial services (such as maintaining low corporate tax rates and removing withholding taxes on transactions, like Hong Kong and Singapore) to attract and nurture the new regional financial giants.

Indeed, it is entirely possible that Asia will be home to a multitude of financial centres. Financial deepening will evolve into much greater specialisation of financial centres in the region. When we look around the world we see Chicago is a centre for commodities, New York for equities. London is a centre for lending. Asia, with a financial depth eventually greater than those of the US and UK combined, can similarly be expected to have a multitude of financial centres.

Asia's potential financial centres will need to discover and develop their niche. Singapore will likely continue to dominate wealth management; Seoul, for instance, could look at shipping or project finance or become a hub for technology boards. Dalian in China already has its own commodity exchange. Hong Kong is a natural home for the institutions and markets required for financial deepening. The Shanghai Free Trade Zone (FTZ) has already exceeded the expectations of many and is clearly seen as a candidate for the major regional financial centre for Chinese flows.

Financial centres too will evolve. It seems likely China will on-shore a lot of the activities such as RMB debt issuance now being undertaken in Hong Kong as it opens up the capital account and financial flow volatility eases.

Financial deepening implies much greater sophistication of financial products and services in markets like derivatives, and these markets are opportunities for centres like Hong Kong – or Singapore and Sydney – which have robust and trusted legal and regulatory regimes. These are natural locations for mature financial services. There is scope for a multitude of financial capitals serving different needs in the Asian Century.

5.0 REFORMING CHINA

KEY THEMES:

- ***A number of Asian countries need to undertake reforms of their financial system.***
- ***This is most clear in China given it is becoming an increasingly sophisticated economy, one more reliant upon domestic demand.***
- ***The current regulatory structure of the Chinese financial system is creating strains, including a growing shadow banking sector.***
- ***The Chinese Government understands this, highlighted by its recent reaffirmation of the need for further financial liberalisation.***

China is central to the Asian Century and to the financial deepening crucial to optimal economic development. Because of its sheer size, the scale and scope of changes to the Chinese financial system will have significant global impacts. For this reason, the next two chapters concentrate on issues surrounding the evolution of the Chinese financial system.

5.1 LIBERALISING FINANCIAL SYSTEMS

Asia's financial deepening will require two fundamental behavioural changes.

1. Movement away from the bank-centric systems that have characterised much of Asia's financial development to date.
2. Embrace of capital account liberalisation and the risk of greater volatility in capital inflows and outflows that goes with that.

To complement these changes, the Asian economies must also strengthen risk management skills, upgrade their regulatory capacity and adopt a consistent monetary policy framework. A number of regulatory and market reforms will need to be undertaken at the domestic and regional levels if Asia is to realise its full promise this century.

Countries that have not already done so will have to move away from managed exchange rates, lift capital account restrictions, deregulate banking sectors and capital markets, grant more independence to central banks, maintain a prudent fiscal policy, improve corporate governance and upgrade prudential regulation.

A strategic and careful sequencing of policy will be essential in order to facilitate financial deepening. Once financial markets across the region become liberalised, a more integrated regional market would be a natural consequence.

These changes will be most clear outside of the most developed Asian financial systems such as Japan, Hong Kong and Singapore. Other Asian economies are at different stages of development. Some, such as Malaysia, have financial systems that are approaching those of the most developed countries in the region. Others, such as Indonesia, are at an earlier stage of development. None matches the significance of China.

5.2 CHINA'S FINANCIAL REVOLUTION: RENEWED URGENCY AS NEW RISKS EMERGE

Banking dominates the Chinese financial sector and is similar in size to many developed economies.[18] By contrast, the size of both the institutional asset management sector (pension and mutual funds, as well as the insurance sector) and the capital markets is modest.

The Chinese banking system has historically offered low returns to savers and has favoured lending to big firms and especially state owned enterprises (SOEs). The close connection with large firms reflects a number of factors.[19]

- Many SOEs have strong business positions.
- Large firms carry an implicit government guarantee.
- Significant government influence.

However, the current system creates inefficiencies that are well recognised by the Chinese Government. These include:

- **The need for the Chinese economy to be more reliant upon domestic demand.** As per-capita income rises, consumption becomes a more important and stable driver of growth. For domestic demand to play a larger role in the economy, it will require consumers and small to medium-size enterprises (SMEs) having greater access to more sophisticated financial services, enabling them to access credit or secure higher returns on their savings.
- **As economies move up the value-chain, the financing requirements of production will become more sophisticated.** Companies will have larger funding needs and will require more sophisticated financial instruments to help manage increasingly complex and internationalised financial arrangements.
- **Financial innovation typically comes from private markets.** The private sector will bring a range of innovations to financial services. Improved technology will increase the efficiency and availability of financial services.

The AFC highlighted the types of problems that arise if a financial system is not structured correctly. Currency and maturity mismatches were the major causes of the crisis because of rigid exchange rate systems and shallow capital markets.

Following the crisis, countries adopted a more flexible exchange rate system and overhauled a number of Asian financial sectors. They also recognised the need to develop capital markets as an alternative financing channel. To some extent, the requirement for a number of governments to fund bank bail-outs also prompted the development of sovereign bond markets.

While the Chinese banking system was spared much of the fallout from the Asian crisis thanks to its closed capital account, the country did take quick actions to address its large non-performing loan (NPL) problem (see Box 5.1). However, the ongoing need for major change has become obvious in recent years. Loan growth during the past several years has been a startling and unsustainable 25%, mostly due to the effect of the GFC, leaving the banking sector vulnerable to a cyclical economic downturn.

As China's banks are still majority owned by the state, the government will have to shoulder the fiscal responsibility of any future NPL write-offs. While this should be manageable as the Chinese Government has relatively low debt levels, it will require another round of privatisation and highlights the need to develop a liquid and sophisticated capital market to help diversify the risks in the financial system.

18 See Table 3.2.

19 D J Elliot and K Yan, 'The Chinese Financial System: An introduction and overview', Brookings Institute, July 2013.

Box 5.1: China's decisive financial reform of the late 1990s

At the end of 1990s, China's banking system had a NPL ratio of around 30–40% of total bank assets. This meant some Chinese banks were technically insolvent, supported by a government guarantee of bank deposits.

Prompted by the AFC, the government under then Premier Zhu Rongji implemented radical reforms. He allowed a sell-off of small and medium non-performing SOEs, and also set up four asset management companies affiliated with the four largest state-owned commercial banks, the Agriculture Bank of China, Bank of China, the Construction Bank of China, and the Industrial and Commercial Bank of China.

Once NPLs were carved out and the four banks recapitalised using the bonds injected by the Ministry of Finance, the four largest banks in China were then listed on both the Shanghai and Hong Kong Stock Exchanges. The funds raised from investors were used to pay off the state capital injection.

The policy was a huge success. Many global banks became equity owners of the Chinese big four banks and their ownership has helped enhance corporate governance. The healthy state of the banking system helped finance the RMB4 trillion (US$575 billion) of fiscal stimulus, allowing China to ride through the worst of the GFC.

5.2.1 A Growing Shadow Banking System

A major concern resulting from the current structure of the Chinese financial system has been the growth of a significant shadow banking sector.[20] The current size of the shadow banking system is around RMB15–17 trillion (US$2.4–2.8 trillion), which is about 12–13% of the formal banking system assets and one third of China's GDP.[21]

China's shadow banking largely consists of three activities.

- **Underground banking.** Private lending and borrowing activities among individuals and enterprises that are not subject to the regulations of the formal banking system.
- **Trust products.** Trust companies subject to the China Banking Regulatory Commission regulations but, as non-deposit taking financial institutions, not subject to interest rate controls. As a consequence, trust products sold to consumers usually offer much better interest rates than bank deposits, albeit with higher – and often unappreciated – credit risks.
- **Wealth Management Products (WMPs).** Products offered by banks and other financial institutions that have many similar characteristics to deposits. The products offer higher interest rates but have been devised primarily to circumvent interest rate controls on deposits. WMPs are typically riskier as the funds can be invested in high-yielding but less secure assets such as trust loans and credit bonds.

A shadow banking system does provide some economically useful services albeit with higher risks and rewards. A large amount of activity in the shadow banking sector could lead to a build-up of risks in the financial system, as well as reducing the effectiveness of government policy.

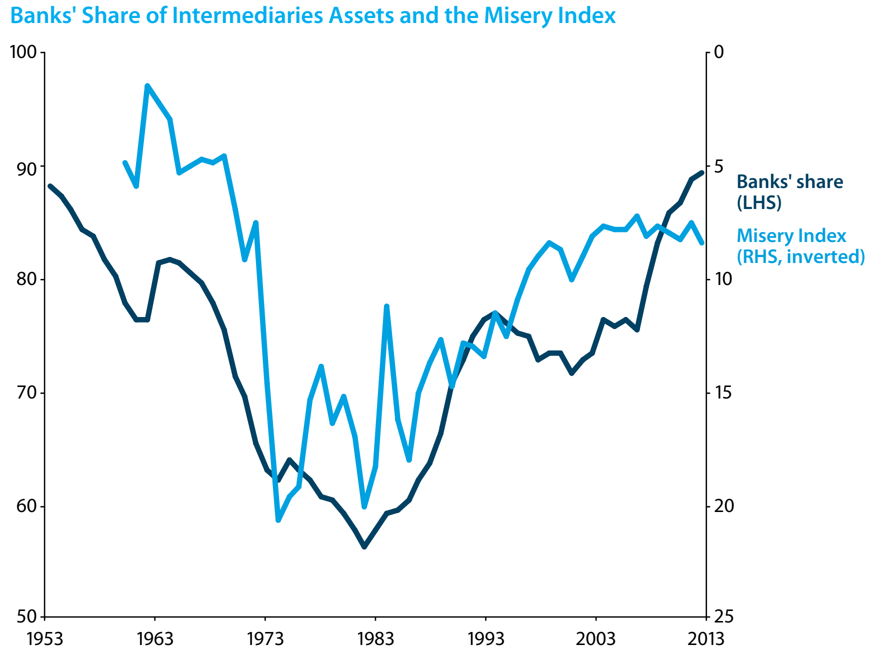
Strong growth in a shadow banking system during a period when the financial system is heavily regulated is not unusual. This was a characteristic of the Australian banking system in the years following 1945, when an increasing amount of intermediation took place outside the banking sector. After the financial sector was deregulated in 1983, the banking sector increased its share. Moreover, financial deregulation coincided with a dramatic reduction in the so-called misery index, the tally of unemployment and inflation,[22] in Australia.

20 The Bank for International Settlements describes shadow banking as 'credit intermediation involving entities and activities (fully or partially) outside the regular banking system or non-bank credit intermediation in short'.

21 ANZ estimates.

22 The misery index is the sum of a nation's unemployment and inflation rate. The higher the number, the greater the combination of unemployment and inflation, and therefore the greater the economic 'misery'.

Figure 5.1
FINANCIAL DEREGULATION HAS COINCIDED WITH THE ECONOMIC 'GOOD TIMES'



Source: RBA, APRA, ABS, ANZ calculations.

5.2.2 Local Government Indebtedness

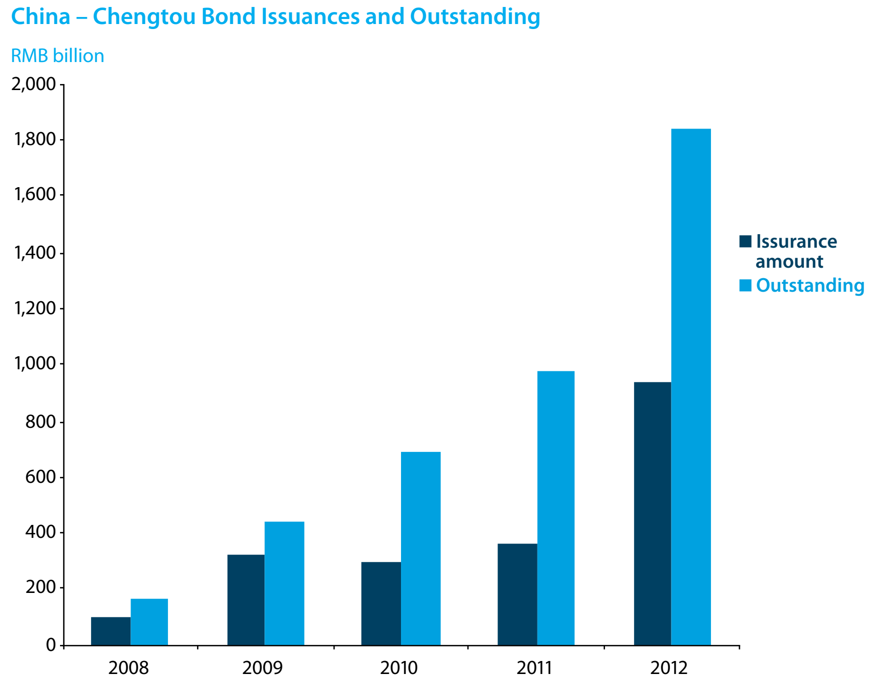
Another risk to the financial system in China has been the growing level of local government indebtedness. Local governments have had increasing spending responsibilities in recent years, including the provision of infrastructure. Their increased spending, however, has not been matched by a commensurate increase in revenue.

Higher borrowing requirements have been partly funded through the banking system. So-called Chengtou bonds, issued by local government financing vehicles, have also surged in recent years. These products are not fully accounted for as local government debt obligations and pose additional risks for investors. The second audit on the size of local government debt by the National Audit office reached RMB17.9 trillion, including RMB7 trillion in contingent liabilities.

We believe policy options are available to address the local government fiscal risks. Chinese local government debt is largely associated with infrastructure financing, privatisation of which would allow debt levels to be lowered substantially. Further, local governments own a significant amount of assets in the form of SOEs and City Commercial Banks that could similarly be privatised to reduce debt obligations. This means that the risk associated with local government debt is largely one of liquidity rather than solvency, assuming the right policy measures are implemented.

Local government financing arrangements could also be improved by allowing them to tap into the bond market directly, rather than relying on local government financial vehicles to issue debt. This would lower funding costs and make finances more transparent, providing the ability for both the market and the local National People's Congress to monitor local government financial health.

Figure 5.2
LOCAL GOVERNMENTS ARE HAVING A BIGGER INFLUENCE ON THE BOND MARKET



5.2.3 Culture to Develop a Strong Financial System

China's financial system remains at an early stage of development in many critical sectors. A report produced for the 2013 World Economic Forum ranked China 23rd (out of 62) on its Financial Development Index. While China did well on the provision of financial services, the report deemed China relatively weak on institutional and business environment grounds.

These findings were consistent with the World Bank in its Ease of Doing Business Report.[23] The World Bank report rated China low overall, although noted it has made substantial improvements in recent years. China will require further improvements in areas of institutional development and corporate governance in order to develop a world-class financial system.

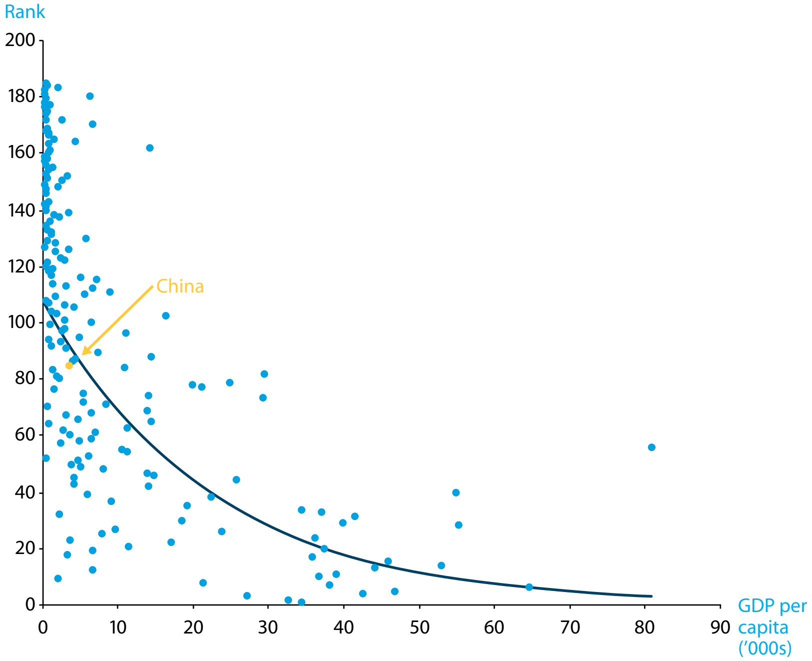
As China's per capita income increases, improvements in governance and quality of institutions can be expected (and are starting) to take place. Appropriate legal, governance and infrastructure arrangements are vital in developing a world-class financial system. The four major global financial centres (US, UK, Singapore and Hong Kong) all rate in the top seven on governance arrangements.

23 Report available at http://www.doingbusiness.org/reports/global-reports/doing-business-2013.

Figure 5.3

IMPROVEMENTS IN GOVERNANCE TYPICALLY OCCURS AS INCOME INCREASES

Ease of doing business ranking and GDP per capita ('000s)



Source: World Bank GFDD and Ease of Doing Business databases.

5.2.4 Risks to Bond Market Development

Work also needs to be done in particular segments of the financial sector. For example, some of the biggest issues affecting the development of a liquid Chinese bond market are supply-side ones. Relatively limited and infrequent government borrowing across the yield curve (which maps interest rates over time periods) means there is a lack of benchmark rates,[24] especially at the longer end of the yield curve (such as a 10-year bond rate). This further impedes the development of corporate debt markets, which are generally priced off government yield curves.

Regulatory segmentation and legal prohibitions have also limited the development of China's corporate and local government bond markets.

Other factors inhibiting the development of the fixed income market include legal and regulatory hurdles, the lack of a bond futures market and under-developed central bank repurchase markets. Repurchase or 'Repo' arrangements allow banks to source liquidity by selling assets to the central bank with an agreed, discounted buy-back guarantee. The lack of reputable ratings agencies coverage will need to be addressed, as will the reluctance on the part of issuers to disclose too much financial information.

Finally, the lack of a large domestic institutional investor base impedes the development of market liquidity and associated infrastructure. This is reinforced by regulations which constrict the influence of international investors in the Chinese financial markets.

24 A benchmark rate is one that is used for pricing interest rate products in financial markets. Government bonds are used most often in this role, although other products (such as swaps) are also used.

5.3 DIRECTION OF REFORM TO ACCELERATE AFTER THE THIRD PLENUM

The Chinese Government has recognised the need to reform the financial system and the wider economy. At the Third Plenum, three major directions for reform were announced:

- The government will continue to push for further market-based reforms. For the real economy, this may mean liberalisation of energy, water and land prices, as well as wages. There will also be an acceleration of financial reforms in a wide range of areas.
- The government has announced that both private and state-owned enterprises will be foundations of China's economic developments. This suggests China's private entrepreneurs, who have raised concerns that their operating environment has deteriorated sharply after the GFC in favour of the government sector, will be given greater scope to pursue opportunities.
- Finally, there will be an increase in judicial independence.

These principles will underpin reforms in many areas of the economy, significantly influencing the direction and growth of the financial system.

FISCAL POLICY AND TAXATION

- The government will establish a system whereby both central and local governments will have financial resources to meet their duties and responsibilities. Certain social security issues and cross-regional projects and maintenance will be shared.
- Reforms will include improving the local taxation system, gradually raising the share of direct tax, advancing value-added tax and simplifying the taxation system. There will also be an increase in property tax legislation.

BANKING AND FINANCE

- There will be an acceleration of the market-based exchange rate determination mechanism, interest rate liberalisation and improved treasury yield curves to reflect market demand and supply.
- Regulations will be altered to allow qualified private capital to set up small and medium-sized private banks.
- There will be a speeding up of the development of free trade zones and inland and border areas, with the Shanghai FTZ highlighted.

STATE-OWNED ENTERPRISES AND MARKET

- China will adopt standards of national treatment when regulating foreign investment, including the development of a 'negative' list.[25]
- Actions will be taken to promote market competition, including the breaking up of monopolies.
- Governance of state assets will be improved, including turning some SOEs into state-owned asset investment companies; transferring a proportion of state-owned capital to the National Social Security Fund; an expectation of a 30% dividend payment ratio by 2020 to help fund social welfare; clear separation between the state and SOEs to reduce SOEs' influence on policy; and government policy increasingly focused on improving regulatory arrangements.

25 National treatment means there will be no differential treatment between domestic and foreign entities. Negative listing is an approach in international trade where a government only lists areas not open for foreign participation, or participation is subject to limitations. The areas not mentioned will allow foreign entry and participation, thereby reducing the complexity involved for investors.

Box 5.2: Shanghai Free Trade Zone to lead financial reform and capital account liberalisation

The Shanghai FTZ initiative aims to develop an open geographical zone that allows not only a freer flow of goods but also capital and human resources. Aside from financial liberalisations, the FTZ will help China broaden and deepen the reforms of the service sector ranging from shipping to healthcare.

Against this backdrop, the opening of the zone is also expected to help China's case if it decides to enter negotiations to join the US-led Trans-Pacific Partnership trade agreement. One key plank of the FTZ program will be the opening up of the services sector to foreign capital, which could act as a bridge for China's services sector to integrate with international standards.

Meanwhile, the FTZ will also require further opening up of the capital account and may pose new challenges to the current capital account regime, foreign exchange and interest rate control mechanism. Banking regulations will also require a new financial regulation model.

The Shanghai FTZ will act as an onshore testing ground for China's interest rate and exchange rate liberalisation, RMB convertibility and management of domestic financial institutions' offshore business. The pilot will be gradually expanded to more areas if successful.

5.4 POLICY SEQUENCING IS IMPORTANT TO MITIGATE RISKS

Of all the domestic reform agenda, the liberalisation of China's capital markets is the most important. China saves around half of its GDP with its external surplus representing the single biggest provider of capital to the world economy. At present this capital outflow is dominated by central bank purchases of US Treasury securities.

As China's financial system is opened this surplus will increasingly be allocated by private individuals and institutions rather than by the official sector.[26] Given its size, China's capital account opening will be central to the financial integration of the region as its weight in the region's financial markets should eventually match its weight in GDP and trade.

The capital account cannot be liberalised in isolation. There must also be change to policy regimes covering capital flows, domestic monetary policy objectives and the exchange rate regime to maintain compatibility. If compatibility is not maintained there is a risk of surges in capital flows, typically associated with widening current account deficits, higher consumption growth financed by inflows and rising or sustained high inflation. Capital surges can suddenly reverse, causing severe disruption to the economy, particularly the banking sector.

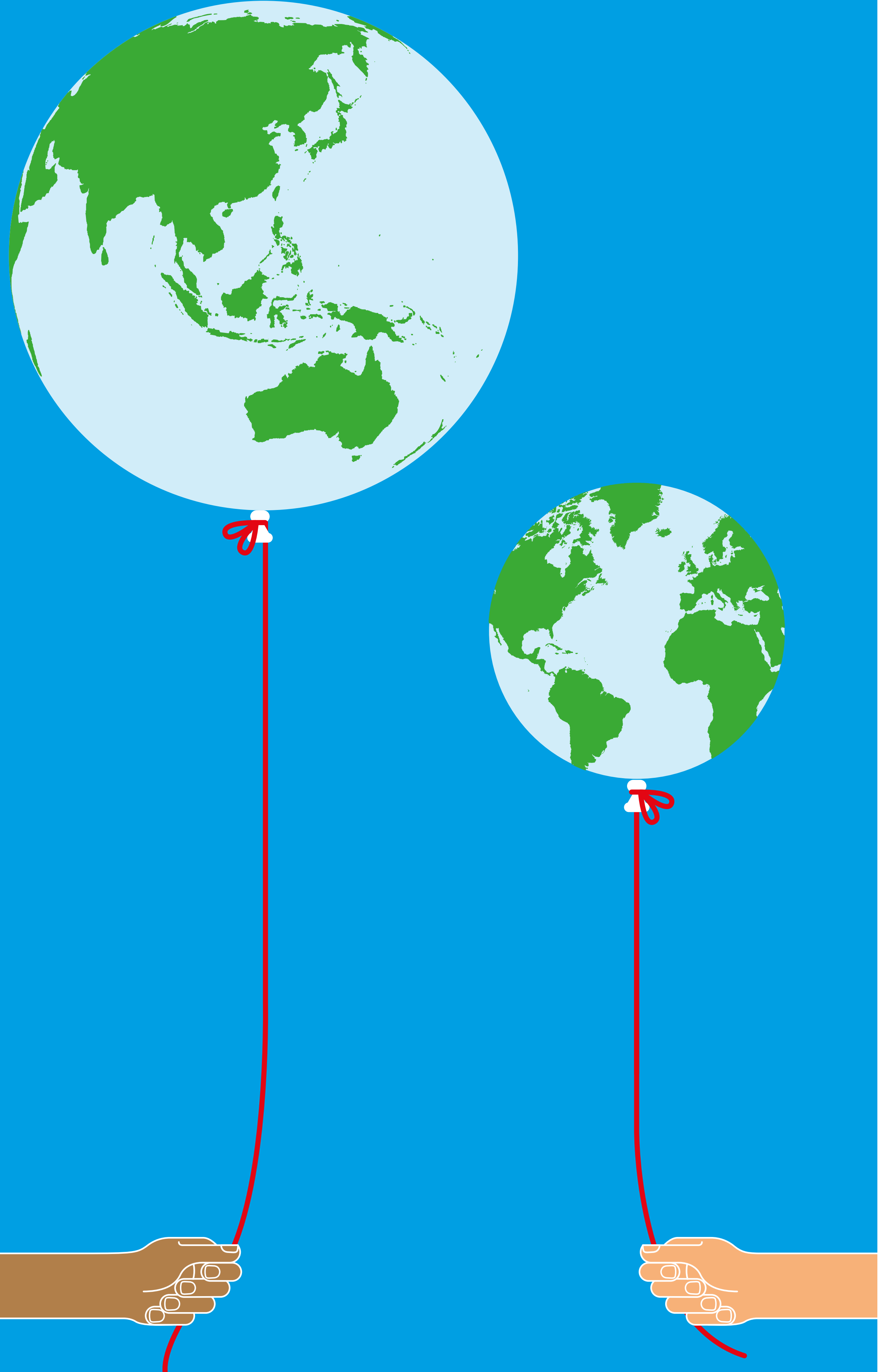
A number of institutional developments will be required to assist China to sustainably deal with capital flow surges.

- The maintenance of a sound fiscal policy, although this does not necessarily require a balanced budget.
- Central bank independence.
- A stronger financial system regulatory framework with the establishment of a rules-based approach to monitoring capital flow. Information disclosure, capacity of monitoring capital flows, and mechanisms to discourage excessive capital inflows and outflows also need to be in place before external financial liberalisation.
- A long-term domestic bond market. Such a market needs to exist prior to fully liberalising capital account flows.
- Pension reform, bond and capital market development and a stronger legal infrastructure will also help improve the resilience of the financial system.

26 As China's financial system is opened and consumption becomes an increasingly important part of the economy the size of the external surplus will shrink. We do not expect, however, China to run external deficits for many decades to come.

In terms of the sequence of capital account liberalisation, it is generally accepted that China will aim to pursue a best-practice approach to liberalisation – namely allowing capital inflows before outflows, long-term capital instruments before short-term ones, direct investment before indirect investment and institutional capital flows before retail capital flows.

China is central to the story of the Asian Century but it is a story in its own right. The number of moving parts in the Chinese economic machine is daunting and while the ultimate destination of the government is becoming clearer, the way it will reach this destination is open to question.



6.0 CHINA'S GROWING INFLUENCE ON GLOBAL MARKETS

KEY THEMES:

– As the Chinese capital account liberalises there will be a significant increase in capital flows into and out of China.

– The composition of Chinese capital flows will also change, with an expansion in private portfolio flows to come at the expense of foreign exchange reserves.

– The larger role played by the private sector is likely to see a smaller allocation of Chinese capital flowing to the US and Europe and more to the rest of the world.

– There is also likely to be a significant rise in portfolio investment into China, helping to underpin significant growth in the equity market.

6.1 OVERVIEW

As the Chinese capital account liberalises there will be a significant increase in capital flows into and out of China. This impact of this cannot be underestimated. The stock of Chinese portfolio assets and liabilities is currently well below the levels of developed and other Asian countries with more open capital accounts.

This has meant lower risk-adjusted returns for Chinese investors, stemming the development of Chinese financial markets. But it has also meant that the potential influence of Chinese capital flows is under appreciated.

The composition of Chinese capital flows will also change as liberalisation occurs. The restrictions on inward FDI have been less onerous than those on outward FDI, allowing China to become the world's largest recipient of FDI.

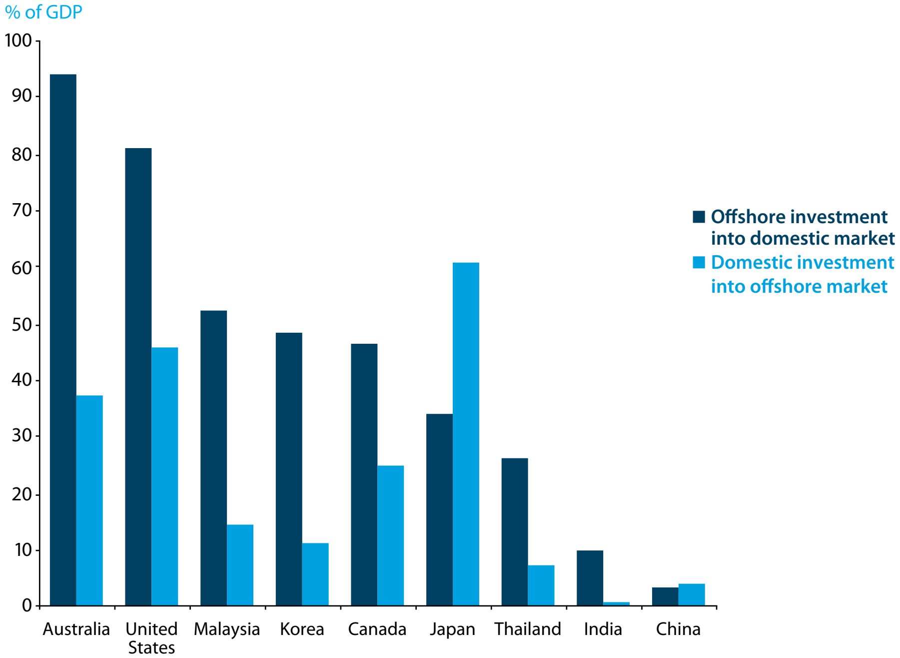
Furthermore, Chinese firms until relatively recently have been essentially internally focused, further lowering outward FDI. This will change as China becomes more integrated into the global financial system.

More importantly, the need to defend a fixed exchange rate created a substantial fund of foreign exchange reserves. As capital account regulations are eased, the expansion in private portfolio flows is likely to come at the expense of growth in foreign exchange reserves – with potentially dramatic implications for the assets in which those reserves are currently invested, such as US Treasuries.

Figure 6.1

CHINESE INVESTORS CURRENTLY PLAY A SMALL ROLE IN GLOBAL CAPITAL MARKETS

Stock of portfolio investment (end 2010)



Source: World Bank GFDD.

6.2 PORTFOLIO OUTFLOWS

Historical experience suggests that once the capital account is fully liberalised, Chinese investors can be expected to divert substantial funds into international markets to improve their risk-adjusted returns. An IMF study suggested that the value of Chinese offshore assets could increase by 15 to 25% of GDP following capital account liberalisation, with the majority of the adjustment taking place relatively quickly.[27] Some work by the Hong Kong Institute of Monetary Research (HKIMR) came up with a similar answer: the stock of Chinese portfolio assets could increase by around 25% of GDP over a 10-year period.[28] Indeed, the groupings of capital account openness used in the HKIMR analysis suggested that the additional worth of China's offshore portfolio assets could in time increase by as much as 50% of GDP.[29]

Box 6.1 Modelling the impact of potential Chinese portfolio flows on global markets

A wide range of choices will influence the size, composition and direction of Chinese portfolio flows, including investor risk preference, investment objectives and expected asset returns. Australian pension funds, for example, have a substantial weighting towards equity within their offshore asset holdings, while Japanese institutional fund managers have a higher weighting towards fixed income.

An analysis examining a range of portfolio flows and investment suggests that the value of Chinese portfolio investments into international equity markets could be worth between US$760 billion and US$4.1 trillion following liberalisation, the huge range due to a variety of possible allocations, with the international debt market worth between US$150 billion and US$2.3 trillion.

International experience suggests that most of the adjustment will be done within five years following liberalisation. It is possible therefore that Chinese portfolio flows into international equity markets for each of the five years following liberalisation could be up to US$800 billion (or about twice the size of the current value of the Singapore Stock Market), and about US$460 billion (or nearly three times the size of total debt outstanding in Hong Kong) into global bond markets.

6.2.1 US and Europe to Receive Less of China's Outward Investment

The liberalisation of the capital account is likely to coincide with the floating of the Chinese currency. Assuming a free float of the currency, one consequence is that as private international flows increase, growth in Chinese foreign exchange reserves will moderate. Strategies on asset allocation are likely to be different between private portfolio investors and those managing China's foreign exchange reserves, and these differences could also have significant financial market implications.

China does not release information on the currency composition of its foreign exchange reserves. A paper by the European Commission[30] suggested that market consensus was that 60–70% of the reserves are invested in US dollars, 20–30% in euros, with the remaining 10% in other currencies such as the British pound, Japanese yen, Australian dollar and Swiss franc.

China also releases minimal information on the asset composition of its foreign exchange reserves. However, the US Treasury provides information on the country breakdown of international investors into the US market. While there are no details on the public/private split on the ownership of assets, it is reasonable to assume that most of the capital flowing from China into the US is from its foreign exchange reserves.

The data indicates that 10 years ago a large proportion of foreign exchange reserves were allocated into long-dated government-backed bonds. In recent years China has shifted away from agency debt as concerns increased about credit risk. There has also been a trend increase in allocation towards equities, probably in an effort to boost returns.

27 T Bayoumi and F Ohnsorage, 'Do inflows or outflows dominate? Global implications of Capital Account Liberalization in China', IMF WP/13/89, 2013.

28 D He, L Cheung, W Zhang and T Wu, 'How would capital account liberalisation affect China's capital flows and the Renminbi exchange rates?', HKIMR Working Paper 09/2012, April 2012.

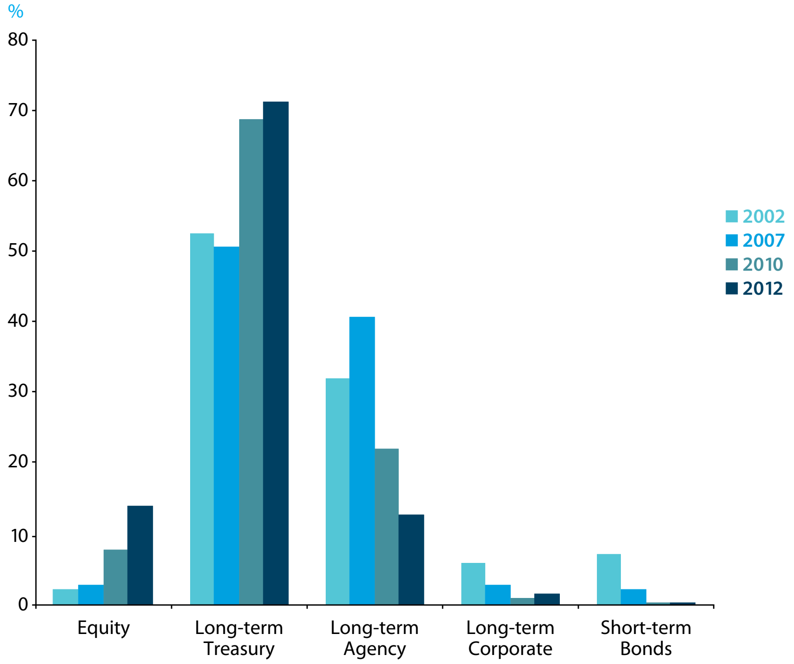
29 *ibid*.

30 Hu, Yu-Wei, 'Management of China's foreign exchange reserves: a case study on the state administration of foreign exchange (SAFE)', Economic papers 421, European Commission, July 2010.

Figure 6.2

CHINESE RESERVE ASSETS ARE MAINLY INTO HIGH-RATED FIXED INCOME

Allocation of China's investment into US securities



Source: US Treasury.

But this asset allocation is unlikely to be replicated by private investors. As an exercise, we allocated offshore Chinese private portfolio assets in line with projections for non-China global equity index weightings in 2030,[31] with investments equally split between debt and equity markets.[32] We assumed that both the level and composition of foreign exchange reserves in 2030 remain similar to those in 2010.

In this analysis, Chinese portfolio allocations (the sum of private and public allocations) to US dollar assets could decline from around two-thirds in 2010 to a little over 30%, and European assets from around one-quarter to just under 20%. The allocation into other countries could increase from 10% to nearly 50%.

Research has shown that a country's international investments tend to favour markets that are very liquid, as well as those that have either a close trading or cultural connection. In the case of China, that means flows might favour other liquid markets (such as Japan, the UK and Australia). But Chinese portfolio flows are also likely to favour other Asian equity and bond markets, particularly if they develop in line with our forecasts.

This does not necessarily mean there will be selling of US dollar – and euro-denominated assets. Indeed, it is entirely likely that the absolute level of US dollar and euro-denominated assets held by Chinese investors will increase despite the lower portfolio allocation. But it does mean that other markets may be increasingly favoured by the weight of new Chinese funds.

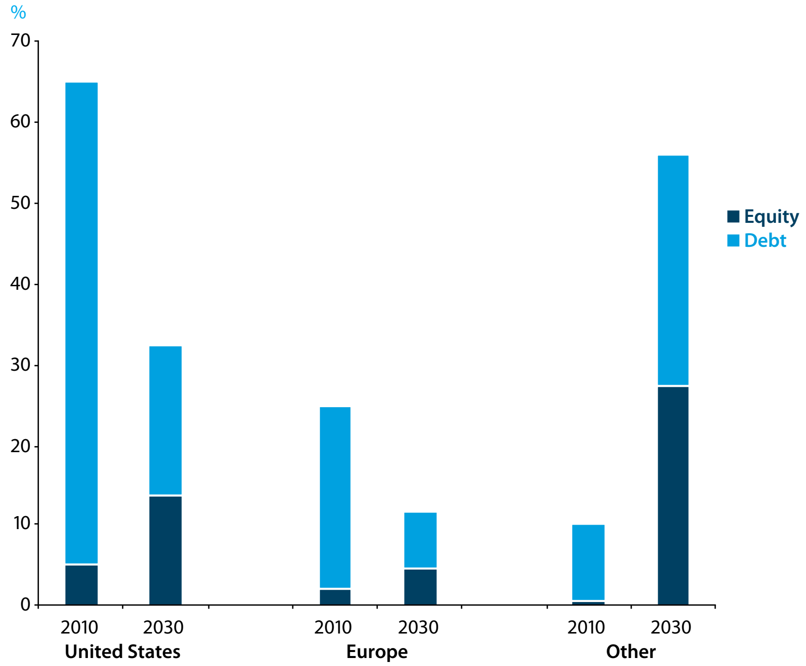
31 The weightings are based on our projection for relative size of country equity markets.

32 Country debt market allocations are assumed to be the same as for equity markets.

Figure 6.3

THE US AND EUROPE ARE LIKELY TO GET A SMALLER SLICE OF CHINESE OUTWARD INVESTMENT

Changing Chinese international portfolio allocations



Source: ANZ calculations.

Some other observations include:

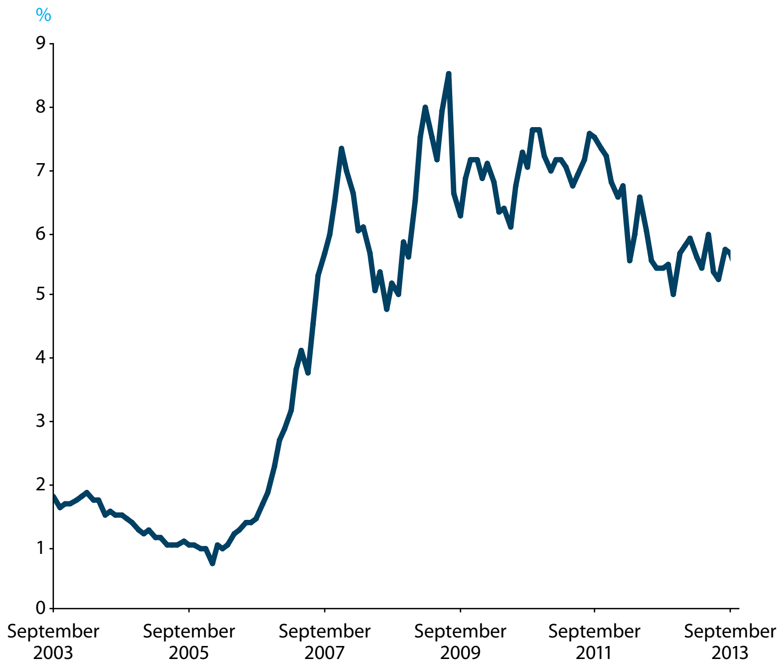
- The major switch will be a reduction in Chinese flows into the US and European government bond markets, with an increase into other markets.
- The cost of capital in markets outside of the US and Europe is likely to fall as they benefit from increased portfolio flows.
- Reduced portfolio flows into US and European bond markets will create pressure for higher interest rates. Higher US interest rates could also impact markets that are historically correlated with treasuries (for example, Canada, Australia).
- The impact upon equity valuations in the US and Europe is uncertain. Higher portfolio flows would act to increase equity prices. Offsetting this is the fact that higher interest rates would have a negative valuation impact, as well as dampening economic growth.

6.3 INFLOWS

The removal of capital account restrictions will eventually result in substantial portfolio inflows into the Chinese financial markets. Chinese financial markets are already relatively large. According to Bloomberg data, the Chinese equity market has typically been around 5–7% of global market capitalisation in recent years. But the IMF estimates that if China were as open as Brazil then global capital flows into the Chinese equity market would be about 30% higher.[33] The Chinese bond market is already the fourth largest in the world, although its size is only moderate relative to the size of its economy.

Figure 6.4
THE GROWING LURE OF THE CHINESE FINANCIAL MARKETS

China equity market as proportion of World's



Source: Bloomberg.

Box 6.2 Chinese equity market impacting global capital flows[34]

Mainland Chinese shares are set to join global equity benchmarks in as early as three years' time according to FTSE's chief executive, Mark Makepeace: "If they continue with the current policies at the current pace... I would expect China to be eligible over the next three to five years. Investors need to start thinking about the issue now, and draw up plans in the next 18 months."

Mainland equities are largely excluded from global indices because of restrictions on access for international funds under China's qualified foreign institutional investor quota system. Just 1.3% of mainland equities – known as A-shares – are owned by non-Chinese investors.

Based on FTSE's market projections, China would account for roughly 7% of its Global All-Cap index, making it the second biggest market in the benchmark behind the US. Chinese equities listed offshore in Hong Kong and New York, in addition to the small foreign-owned portion of A-shares, currently make up about 2%.

33 People's Republic of China, 'IMF Spillover Report', 2011.

34 *The Financial Times*, 7 March 2013.

Institutional fund manager allocations to Chinese securities will mainly come from switching funds out of other markets. Which markets will be most affected will depend upon the relative expected returns on offer at the time. Nonetheless, the size of the likely portfolio changes means that a substantial proportion of the flows are likely to come from other large liquid markets such as the US and Europe.

How important international investors become to the Chinese financial markets will depend upon a range of factors. For example, in highly integrated financial markets such as Europe there is a very high level of cross-border ownership of financial assets.

Cross-border ownership of assets is lower, but still at a high level, in places with open, liquid financial markets such as the UK, the US and Australia (for example, international investors, including central banks, own around 70% of Australian Government bonds). By contrast, the low returns available in Japan, as well as the high level of domestic savings, mean that international investors play a smaller role in Japanese capital markets.

6.4 IMPACT OF INCREASED OUTWARD FOREIGN DIRECT INVESTMENT

The other capital flow likely to increase substantially following capital account liberalisation is outward FDI. China has increasingly become a major player in FDI flows, although they are still small relative to the size of its economy. The stock of FDI for China could rise from around 6% of GDP in 2012 to 15–35% of GPD to 2030.[35] In dollar terms, this means that the value of Chinese FDI might be as high as US$9.5 trillion by 2030, up from around US$500 billion in 2012.

Table 6.1
TOP 10 COUNTRIES' FDI OUTFLOWS (% OF WORLD FLOWS)

Aggregate 2000–02		Aggregate 2010–12	
US	15.9	US	22.5
UK	13.8	China/Hong Kong	11.1
France	12.4	Japan	6.3
Belgium/Luxembourg	7.4	Germany	5.3
Netherlands	6.3	UK	4.8
Spain	4.9	Switzerland	3.7
China/Hong Kong	4.6	Russia	3.7
Germany	4.6	France	3.5
Canada	4.3	British Virgin Islands	3.4
Japan	4.0	Belgium	3.1

Source: UNCTAD 2011.

Over a quarter of global FDI flows between 2010 and 2012 were cross-border mergers and acquisitions. In that time, just five countries accounted for over 70% of merger and acquisition (M&A) activity (the US, China/Hong Kong, Japan, Canada and the UK). It is hard to be definitive as to which sectors will be most involved in future M&A activity. Over the past 15 years the finance sector has been the most active sector for cross-border M&A. That may remain the case as the Chinese finance sector looks to expand internationally.

35 D He, L Cheung, W Zhang and T Wu, 'How would capital account liberalisation affect China's capital flows and the Renminbi exchange rates?,' HKIMR Working Paper 09/2012, April 2012.

Box 6.3: Chinese Foreign Direct Investment into Australia

In the year to September 2013, the stock of foreign direct investment in Australia was around A$650 billion, just over 40% of GDP. This has increased strongly since 1950 when the stock of FDI was around 13% of GDP. Australian FDI abroad, that is Australian investment in offshore assets, has also increased sharply over the same time from around 1% of GDP for most of the 1950s to be around one-third of GDP by 2013.

An increase in FDI has been a feature of most countries over the past few decades, a result of a variety of factors including the deregulation of the financial system, globalisation, improvements in technology and reductions in transportation costs.

FDI has always played an important role in helping to fund Australia's domestic investment needs. FDI accounted for around one-third of all capital formation in Australia since 2000 and almost half in the mining sector.[36] Despite this, its importance has declined over time. In the 1960s, FDI was responsible for over 60% of all foreign investment (FDI plus portfolio and official flows) into Australia but has declined to just over 25% by 2013 reflecting the increasing prominence of portfolio flows.

In 1990, the value of FDI from Japan was approaching the levels of the US and the UK reflecting both the then strength of the Japanese economy and its importance as Australia's largest trading partner. Although still important, Japan's contribution to Australia's FDI has declined over the past 20 years.

China is becoming an increasingly important source of FDI for the Australian economy, being the third largest country by approvals in 2011–12 (behind the US and the UK). It is entirely possible that China will become the principal source of FDI into Australia over the next couple of decades. In 2010, around 2.5% of the value of China's FDI was invested in Australia. If that percentage remains unchanged, the stock of Chinese FDI into Australia could be worth up to A$200 billion by 2030 (potentially a tenfold increase from 2012 levels).

Around 90% of Chinese FDI approvals in 2011–12 was for investment into the resources sector (which accounted for around two-thirds of Chinese FDI approved) and real estate markets. The nature of Australia's economy and the Australia–China relationship will mean that the mining sector will always be an attractive destination for investment and will continue to require significant funding. However, the composition of Chinese investment is likely to change.

China will increasingly favour investment in manufacturing, finance and services as its economy becomes more domestically orientated and sophisticated in terms of its financial sector.

The flow-on implications of Chinese growth and capital market liberalisation are perhaps the least recognised dimension of China's role in the Asian Century. The sheer numbers involved will create waves rather than ripples in the region. From complex impacts on equity market valuations to more political uncertain responses to large nominal increases in Chinese investment, this dimension is perhaps the most significant and the most difficult to model. We know it will happen, we know it will be large; what is very difficult to predict is exactly how it will play out.

36 P Drysdale and C Findlay, 'Chinese foreign direct investment in the Australian resource sector' in R Garnaut, L Song and WT Wood (eds), *China's New Place in a World Crisis*, 2009.

7.0 CONCLUSION

KEY THEMES:

- ***Asia, and particularly China, is on track to dominate the global financial system but the extent of this dominance is by no means pre-ordained.***
- ***Government policy will be important to both allow market evolution and minimise transition costs.***
- ***China will be the epicentre of this seismic change but the shock waves will be significant and potentially volatile.***
- ***The changes will occur at a time of widespread change in the region, perhaps amplifying the effects.***

Asia is on track to become the world's largest economic region, accounting for around half of the global economy by 2050. We project the Asian financial system could be four times its current size by 2030, and more than twice as big as the US financial system. As with the real economy, developments in China will take centre stage. However, the transformation of economies as diverse as Indonesia and India will be just as profound if not as significant for the region.

The opportunities from a dramatically expanded Chinese financial system and financial deepening of emerging economies in the region are immense. But so are the risks. International experiences with financial system deregulation are replete with examples of capital flow surges creating wide current account deficits, asset price bubbles and large banking system losses.

To an extent, given the disparities between countries in the region, both culturally and economically, periods of volatility and even crisis are almost a given. China is very aware of these risks, explaining why its progress towards deregulation has been appropriately cautious. China may have the wherewithal to cope with such transitory crises but smaller economies such as Vietnam or even Thailand are more exposed.

Each economy in the region has its own challenges but how the Chinese Government structures its financial system will be crucial. China is the axis around which neighbouring economies will spin. That said, China confronts a demographic challenge as its working population ages while other large nations including India and Indonesia enter what is a demographic 'sweet spot' of growing working-age individuals.

In this report we have examined the developments that will need to take place across a wide variety of areas. They are fundamental and include:

- Cultures that allow for the development of a robust financial sector (including legal and governance changes, improved transparency and data disclosure).
- Strong institutions such as an independent central bank and strong financial system supervisors.
- Supporting infrastructure such as payments systems and hedging instruments.

China, importantly, has made progress on each of these fronts. The recent Third Plenum underlined the government's determination to continue its pursuit of market-based reforms. To a degree, development in regional economies will depend on how they respond to and assimilate what China is doing.

The biggest challenge for most countries in the region will be the creation of a robust risk management culture by domestic financial institutions and regulators. This is almost impossible to develop in a heavily regulated environment and is an area where experience from successful international financial systems (such as Australia and Canada) may come in useful.

Nonetheless, cultural and legal differences mean that only so much can be learnt from international experience. This may mean that a successful transition to a deregulated and sophisticated financial system will mean minimising, not eliminating, losses in the financial sector.

An early test will come in the form of Chinese regulators dealing with the large shadow banking system. Other focal points include foreign ownership of financial institutions in markets like Indonesia or Malaysia.

For China, the projections in this report are predicated on the Chinese Government remaining on its current reformist path. This is the most likely course, although not certain. Sustained high volatility in the global economy and financial sector over the next decade could lead the government to maintain a more interventionist approach. Rising concerns about inequality in the domestic economy could create a similar outcome.

But the best case is that a large Chinese financial system will develop that will have a significant influence not just on its neighbours but on the global economy. This view has profound implications. They include:

- The significant opportunities surrounding the growth of the Chinese financial sector, such as the development of a massive funds management industry and an enlarged domestic financial market.
- The development of Shanghai as a global financial centre and the implications for other major financial centres (notably London, New York, Singapore and Hong Kong).
- The relative (and potentially absolute) decline in importance of the US and Europe in the global financial system.
- The increasing international role of Chinese banks.
- The regional implications of the development of a large Chinese financial system.

For the region, including Australia and New Zealand, the uncaging of the Asian tiger will see much higher levels of cross-border investment, a growing supply of both equity and debt assets, the emergence of a new investor base and almost certainly periods of capital flow volatility. There is a financial revolution taking place in Asia. As with all revolutions, it is not clear how events will evolve. What is clear is these developments will reshape the world and cannot be ignored.

APPENDIX 1

A.1 FINANCIAL DEPTH

A.1.1 Measuring Financial Depth

In order to compare the size of different financial systems and to assess whether a particular market is too big or small, an appropriate way to measure them is required. This will be critical for our projections of the potential size of the Asian financial system, referred to as 'financial depth' throughout the report.

Financial depth means the total stock of financial assets in an economy compared with the annual output of that economy. Financial assets are defined as the outstanding value of private and public bonds, equity market capitalisation and bank loans. History shows that there is a relationship between economic development and financial depth.[37]

Measuring and forecasting the size and composition of the global financial system is an extraordinarily complex task. However, the more complex the forecasting framework, the less useful it often is.

If we think of the physical capital stock of an economy as the total value of its infrastructure, factories, offices and machinery and equipment, then typically the physical capital stock in an economy is about three times larger than its GDP. That is, a well-developed economy requires a physical capital stock that is worth about three times its annual output.[38] Hence the total capital stock of an economy is worth four to five times its annual output.

Table A.1
ESTIMATING THE CAPITAL STOCK OF DEVELOPED ECONOMIES

Ratio to GDP	US	France	Germany	Netherlands	UK	Japan
Machinery & Equipment	1.0	0.8	0.8	0.9	0.8	1.3
Non-residential Structures	1.8	1.6	1.8	1.8	1.3	2.1
Capital–Output Ratio	**2.8**	**2.5**	**2.6**	**2.7**	**2.0**	**3.3**
Residential Structures	1.7	2.3	2.5	1.4	2.5	3.0
Estimate of Total	**4.5**	**4.8**	**5.1**	**4.1**	**4.6**	**6.4**

Source: Angus Maddison, various National Statistical Agencies, CEIC and ANZ. Not all figures add due to rounding.

Over the past two decades, most developed economies have had a capital and residential stock of between four to five times output. Japan is the developed economy with the highest capital and residential stock at nearly six times output. We refer to the sum of the capital and residential stock as the long-term financing requirement of the economy.

37 There is significant empirical literature on this relationship. A good study that summarises previous work and looks at 67 case studies is P Valickova, T Havranek and R Horwath, 'Financial development and economic growth: A meta-analysis,' Working Papers IES 2013/04, Charles University Prague, Faculty of Social Sciences, Institute of Economic Studies, revised May 2013.

38 We also need to consider housing, even though it is not typically part of the formal capital stock, given the importance of housing finance in a modern financial system. Hence the residential stock is defined as the total value of residential housing in an economy. Although the value of housing as a percentage of GDP varies greatly both over time and across economies, the general condition seems to be that the residential stock is around two to three times the value of GDP.

A.1.2 *Why is Financial Depth Important?*

Financial depth is important for several reasons.

- Asia can only continue its economic progress with deep and liquid financial markets that allocate capital efficiently and support real economic growth.
- Financial deepening in Asia is important for the global economy as some of the most destabilising events and shocks of the past decade have, in part, been caused by the imbalances of global financial depth described in this report.
- Financial depth allows flexible financial markets, including exchange rates, which can buffer the economy from international economic shocks, making an economy more stable over the medium term.

A.1.3 *How Quickly Will Financial Deepening Occur?*

There are structural determinants of financial deepening that move at their own pace and tend to be tipping points for more generalised financial deepening.

GDP per capita is the most critical determinant of financial deepening across all economies, developing and developed, and the strength of this relationship has been consistent over time. Working-age population and rates of urbanisation are also powerful determinants. This is especially true where the State is actively involved in the development process and a tight nexus has existed between the government, the banks and major industrial conglomerates. This was the case in Japan and South Korea during their rapid industrialisation periods.

However, the tipping point, in terms of GDP per capita, at which financial deepening has been occurring has been falling and the pace of that decline appears to have accelerated over the past decade.

To ensure consistency, 2005 US$ GDP per capita is used for all the economies that we study. The deepening of the US financial markets appears to have taken off at income levels of around $40,000 a year. A decade later, Japan's financial markets deepened with income levels around $35,000 per capita. A decade later still, South Korean financial deepening occurred with income levels of $30,000 per capita. Over the course of the 2000s, China's markets deepened when income levels reached $15,000 per capita and most recently Indian and Indonesian financial market deepening appears to be occurring at income levels below $10,000 per capita.

A.1.4 *The Sequence for Financial Deepening*

The first stage of financial deepening is usually the emergence of banks. One of the key roles of banks is to match savings to borrowers. In less developed economies high economic volatility and low rates of government spending typically result in households needing to hold 'excess' saving. The existence of a comprehensive retirement income system is typically patchy. The result is an under-developed wealth management and financial market sectors, and a lack of diversification in household wealth portfolios.

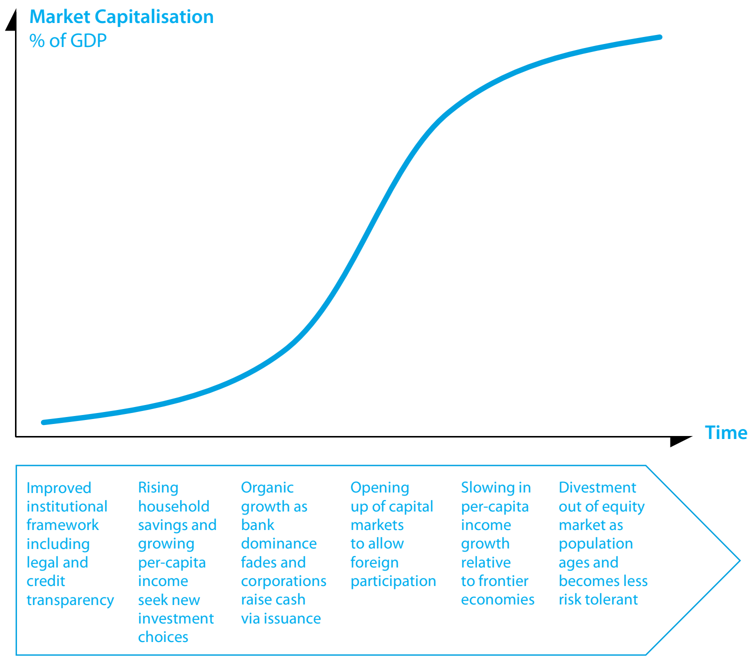
In these economies, households will typically have most of their wealth in bank deposits as they are seen as safe, liquid investments. With banks having control of most of the savings pool, they are in a position to intermediate investment flows.

The second stage of financial deepening usually involves the development of fixed income markets, led by government bond or notes markets. These are the markets of choice for fundraising by governments and in many countries, large financial institutions and corporations. The bond markets provide good investment instruments for long-term investors such as pension funds and insurance companies.

The third stage of financial deepening usually involves the development of stock markets. This typically comes later in the financial development process as a large, sophisticated investor base develops.

The development of a deep financial system is a result of a number of factors, including the development of key institutions, strong corporate governance and legal culture. In the absence of these measures, banks will continue to hold a disproportionate share of financial market activity.

Figure A.1.1
THE S-CURVE OF FINANCIAL DEEPENING



Given the highly varied income, demographic and regulatory profile of the region, each economy in Asia is positioned at a different place on the S-curve, with Japan and South Korea most advanced and India and Indonesia the least.

A.1.5 *Assumptions Used for Modelling Financial Depth Projections*

- **Over the long run, financial mass = economic mass.** The simplest method is to simply estimate the size of the global economy, Asia's share in the global economy, and then assume that Asia's share of financial assets as a proportion of total global assets will have risen to match its global share of GDP.
- **Eastern financial depth and breadth converge to western norms.** Over the Asian Century, financial depth deepens and breadth broadens as economies follow varying convergence profiles towards the average capitalisation levels of the frontier financial markets. China equity market capitalisation is expected to reach 100% of GDP by 2030 while India's will reach 80%.
- **Asia's financial markets will develop individual characteristics given varying factor endowments and demographic profiles.** The size of the non-monetised banking sector, equity market and bond market will be estimated for each economy given structural endowments and a simple selection of real and financial variables. Clusters of economies that will be market leaders or financial centres and those that are less developed are identified.

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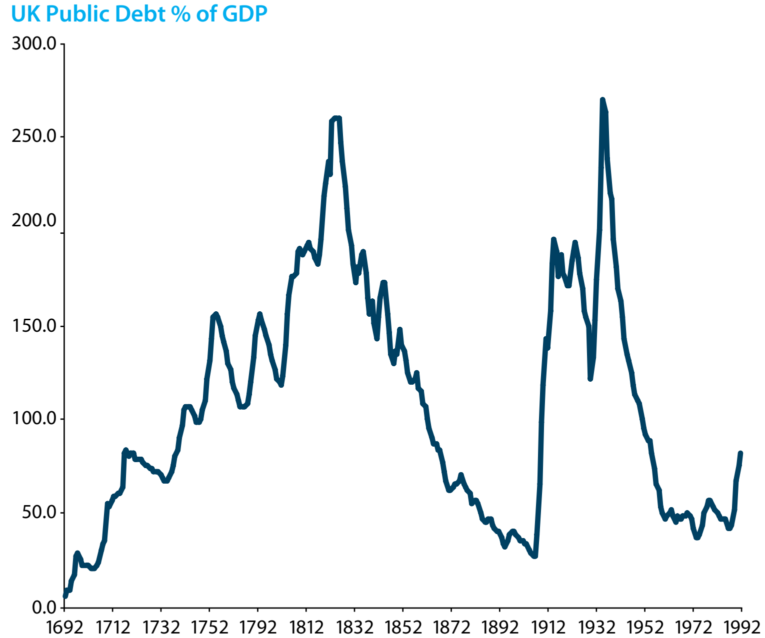
A.2 INDUSTRIAL REVOLUTIONS REQUIRE FINANCIAL REVOLUTIONS

It is unusual for significant economic expansion to occur independently of financial deepening – typically, industrial revolutions have gone hand-in-hand with financial revolutions.

There are many examples of industrial or real-sector revolutions where countries experience sustained high growth. The UK and the US as well as Germany and Japan all had rapid growth periods. In each case, those growth periods were accompanied by financial innovation and/or financial deepening (using public debt as a proxy for the figures below). And while those countries may have experienced periods where their real and financial sectors were mismatched (just as Asia's is now), those mismatches were resolved.

Figure A.2.1
UK INDUSTRIAL REVOLUTION



Source: IMF Historical Public Debt Database.

The UK experienced a lesser known financial revolution from 1690 to 1720 that preceded the industrial revolution that commenced around 1740.

This financial revolution involved the foundation of the Bank of England, adoption of prudent government finances and the development of the London Stock Exchange.

Many of the real products produced and considered synonymous with the industrial revolution were actually invented well before 1740 but the lack of liquidity and long-term finance delayed their manufacture.

Major innovations in the banking system saw a significant expansion in finance in the form of overdrafts. These were often rolled over so they became medium to long-term financing instruments.

Figure A.2.2

US INDUSTRIAL REVOLUTION

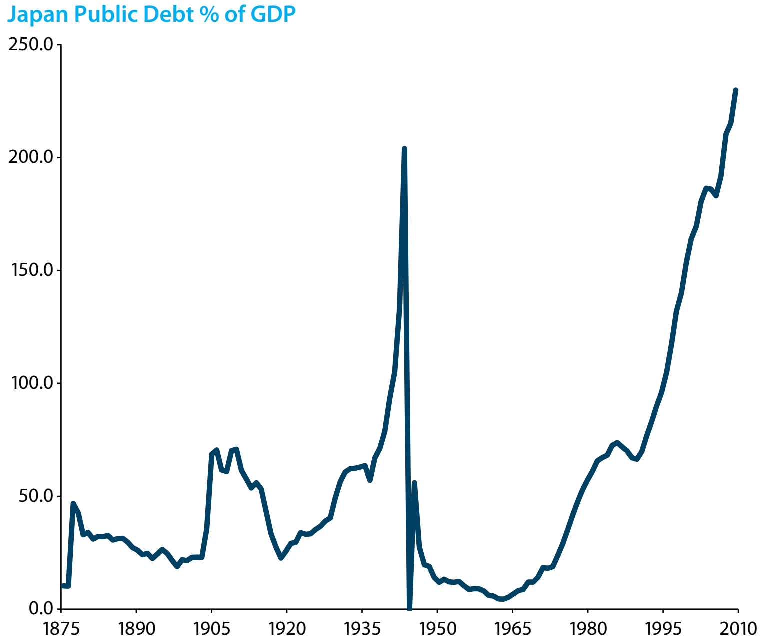
Source: IMF Historical Public Debt Database.

Alexander Hamilton, Treasury Secretary from 1789 to 1795, modernised the financial system creating the First Bank of the United States, helping the banking system to develop. The bank acted as the government's fiscal agent but also undertook normal commercial lending and became the model for other banks to follow.

Hamilton also reformed the government's finances and issuance of sound public debt. This helped the foundation of securities markets and stock exchanges to trade these and other securities. By 1790, the US had all the elements of a modern, sound financial system, and by 1914, the US banking system held a third of total world deposits.

Figure A.2.3

JAPAN INDUSTRIAL REVOLUTION



Source: IMF Historical Public Debt Database.

Not only did Japan's financial and industrial revolutions occur much later than the other two countries, the whole process was much more compressed.

Between 1902 and 1915 the Bank of Japan was founded, networks of commercial banks were created and stock exchanges set up.

Japan saw a specialisation in finance by sector over the period 1914–40 with SMEs borrowing from banks, utilities raising money by bond issuance and large corporations raising money by equity markets. The heavy use of equity finance (nearly 60% of financing) occurred despite little formal investor protection.

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No one questions that the world's economic center of gravity is gradually shifting toward Asia. The sheer weight of numbers – population numbers – conjoined with successful economic development make this shift all but inevitable. The more interesting question is whether this economic shift will be accompanied by a financial shift. In other words, what will Asia's rise mean for the structure and operation of the global financial system?

This *ANZ insight* report, 'Caged Tiger: The Transformation of the Asian Financial System', written under the direction of Warren Hogan, provides a useful point of departure for thinking about the issue. It reminds us that these financial developments will turn on how rapidly the region grows between now and, say, 2050 – whether Asian economies succeed in completing the transition to high-income status or instead fall prey to the so-called middle income trap.

But financial trends in the region will depend also on how successfully governments manage the feedback from financial development to economic development. No economy has succeeded in completing the transition to high-income status without harnessing finance for growth. Asia will need financial markets capable not just of mobilising savings for investment, their traditional role in the region, but also for funding high-risk projects close to the technological frontier and providing corporate governance services. Finally, outcomes will depend critically on developments in China, the region's largest economy, where financial development is especially rapid and, at the same time, challenging.

An historical perspective underscores how rapidly events in the region are moving. Fifteen years ago, in the wake of the financial crisis of 1997-98, Asian financial markets were highly under-developed. Observers pointed to the bank-centered nature of Asian financial systems and the stunted nature of securities markets as a source of weakness. Subsequently, Asian countries have made considerable progress in developing bond, equity and derivatives markets to complement their already relatively well-developed banking systems. But while those markets are now bigger and more efficient than 15 years ago, they remain relatively small and illiquid by advanced country standards. The challenge remains how to develop their depth, liquidity and resilience further.

This *ANZ insight* report points to some answers. Let me point to three more.

First, transparent regulation of markets overseen by an independent regulator insulated from politics is critical for creating confidence on the part of investors that the playing field is level.

Second, financial deepening and development and capital account liberalisation need to go hand in hand. But, if anything, policy makers should err in the direction of strengthening markets and their regulation before opening the capital account. History is littered with examples of countries that succumbed to crises as a result of opening the capital account prematurely. It is worth watching China closely, in particular, to see that it gets this sequencing right.

Third, financial development and capital account liberalisation have important implications for economic policy, including exchange rate policy. The need to target price stability and financial stability means that central banks and regulators, with a limited number of instruments at their disposal, will not also be able to target exchange rate stability. In other words, a more flexible exchange rate is part and parcel with the overarching goal of fostering economic and financial development. Again, it is worth watching China, in particular, to see whether policy makers take this implication to heart.

Barry Eichengreen is George C. Pardee and Helen N. Pardee Professor of Economics and Political Science at the University of California, Berkeley.

ABOUT ANZ RESEARCH

ANZ Research undertakes economic, financial market and commodities research across the Asian region. The team focuses on forecasting and the analysis of economic conditions as well as generating investment ideas and strategies for clients.

REPORT CONTRIBUTORS

This report was authored by Warren Hogan, Chief Economist at ANZ; Glenn Maguire, Chief Economist Asia Pacific; Dr Liu Li-Gang, Chief Economist Greater China and Peter Munckton, Consultant.

This report was edited by Paul Edwards, Andrew Cornell, Toby Roberts and Nicole Franklin.

The illustrations in this report are the work of illustrator James Joyce.

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For further information contact: corpcomms@anz.com

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ABN 11 005 357 522