

INVESTING IN CHINA: DANCING WITH THE DRAGON



ABOUT OXFORD METRICA

Oxford Metrica is a strategic advisory firm, offering informed counsel to boards.

Our advisory services are anchored on evidence-based research in risk and financial performance.

Our work includes statistical analysis and index construction for banks and insurers, risk and performance analytics for asset managers, due diligence support in mergers and highly customised services for corporate boards.

ABOUT VALUE PARTNERS GROUP

Established in 1993, Value Partners is one of Asia's largest independent asset management firms offering world-class investment services and products for institutional and individual clients globally. In addition to the Hong Kong headquarter, they operate in Beijing, Shanghai, Shenzhen, Kuala Lumpur, Singapore, London and Boston.

Value Partners was the first and only asset management firm listed on the Main Board of the Hong Kong Stock Exchange (stock code: 806 HK) after it went public in 2007. Value Partners offer a diversified asset management portfolio for both institutional and individual clients in Asia Pacific, Europe and North America. It includes: Equities, Fixed Income, Alternatives, Multi Asset and ETFs.



INVESTING IN CHINA;
DANCING WITH
THE DRAGON

CONTENTS

FOREWORD	4
PREFACE	5
FIVE MYTHS ABOUT CHINA'S ECONOMY	6
THE RETURNS ROLLER-COASTER	14
A NEW GAME OF GO?	16
INVESTMENT OPPORTUNITIES	18
NAVIGATING THE MAZE	22

FOREWORD

Dr Rory Knight, is Chairman of Oxford Metrica and a member of the Board of the Templeton Foundations. He was formerly Dean of Templeton, Oxford University's business college. Prior to that Dr Knight was the vize-direktor at the Schweizerische Nationalbank (SNB) the Swiss central bank.

I am delighted to present this whitepaper in partnership Value Partners. Against the current geopolitical backdrop we hope the paper provides a helpful prognosis for investing in China that will be of interest to potential investors.

China is traditionally seen as an ancient civilization, but among the world's top nations it is the youngest, its current government and society dating only from 1949. It is a country that has endured traumatic experiences in the past. For that reason, Chinese people look back not with nostalgia, but dread. They only look ahead and welcome change. Since 1979 they have lifted half a billion people out of poverty and are rightly proud of this achievement.

It has been predicted that by 2027 China will be the world's largest economy. Every four years it is growing by an amount equal to the GDP of the UK - a new UK every four years!

The report is organised as five sections.

Firstly, it dispels the five myths about China; (1) Chinese debt is dangerously high; (2) Chinese shadow banking is a lurking threat; (3) China's property bubble is close to bursting; (4) China's economy will be damaged by trade wars, and (5) Chinese economic growth has stalled. Secondly, a performance review highlights the recent volatility and recovery. Thirdly, an analysis of recent developments in the IPO market is presented. IPO numbers, though falling on the mainland, have risen in Hong Kong. Fourthly, key investment opportunities are identified. Looking ahead, the wider narrative is the growth of domestic consumption in China as China's affluent middle class expands. Specific opportunities lie in healthcare, education and information technology. The report concludes with a clear, detailed analysis of China's three major stock exchanges and their plethora of share classes.

We are entering, I am convinced, a time of golden possibility, one offering the greatest opportunities ever seen. Old-style financial repression is dying in China and giving way to a new flexibility and openness - a region bristling with opportunity where investing will at times feel like dancing with the dragon.



Dr Rory Knight
Chairman
Oxford Metrica

PREFACE

As a practitioner of value investing in the Greater China region for more than three decades, I retain a high conviction in the China story, although we can expect occasional setbacks along the way.

In the next ten to fifteen years, we believe China will make continuing progress to become the world's largest economy. The growth engines are changing. Whereas China used to be an export-driven economy, in recent years, its growth has been increasingly driven by domestic consumption. In 2018, consumption contributed a hefty 76% of China's GDP growth. In other words, China has developed a 'demand chain' to support its own growth.

China's 'demand chain' has made it more resilient to external frictions such as the ongoing Sino-US trade dispute. It has also paved the way for higher quality economic growth. And despite the slowdown in the pace of China's GDP growth, China's economy is creating more value than ever.

Supporting growth remains at the core of China's policy agenda. At the recent National People's Congress, China unveiled sweeping cuts to value-added taxes and social pension contributions that are designed to not only promote consumption, but also help to reinvigorate the country's private sector which has suffered from a government campaign in recent years to curb leverage. This provides a clear signal that the Chinese government remains committed to a pro-business policy stance.

China's continued growth and transformation presents huge opportunities for investors globally. MSCI's inclusion of domestic Chinese A-shares in its influential Emerging Markets Index last year and its subsequent quadrupling of the inclusion factor has elevated China's stature in the international capital markets. The A-share market is already second only to New York in terms of trading volume and value. There is much room for growth with foreign ownership at less than 4% of the domestic A-share market compared to the 25% to 35% typically seen in emerging markets.

China-related stocks are emerging as an important and separate asset class in their own right. I hope this report will provide a useful compass for navigating this vibrant market.

Cheah Cheng-Hye
Chairman
Value Partners Group

Dato' Seri CHEAH Cheng-Hye is Chairman and Co-Chief Investment Officer of Value Partners Group. He is in charge of the Group's fund management and investment research and he sets the Group's overall business and portfolio strategy. In 2007, he led Value Partners to a successful listing in Hong Kong, making it the first asset management company listed in the city. He has over 30 years of investment experience and is considered a leading practitioner of value investing in Asia. Prior to founding Value Partners, he worked at Morgan Grenfell Group in Hong Kong and had a stint as a financial journalist.

Dato' Seri CHEAH currently serves as an Independent Non-executive Director of Hong Kong Exchanges and Clearing Limited since April 2017. He has been a member of the Hong Kong SAR Government's Financial Services Development Council ("FSDC") since 2015, following a two-year term as a member of the New Business Committee of FSDC since 2013. In addition, he has been a member of The Hong Kong University of Science and Technology ("HKUST") Business School Advisory Council since June 2011. He is also Deputy Chairman of The Malaysian Chamber of Commerce (Hong Kong and Macau).

In August 2016, Dato' Seri CHEAH was conferred Darjah Gemilang Pangkuan Negeri ("DGPN"), one of the highest civil honours granted by the state of Penang in Malaysia to recognize exceptional individuals. The DGPN award comes with the title of "Dato' Seri". In 2013, he was conferred Darjah Setia Pangkuan Negeri ("DSPN") with the title of "Dato'" and was named an Honorary Fellow of the Hong Kong University of Science and Technology.

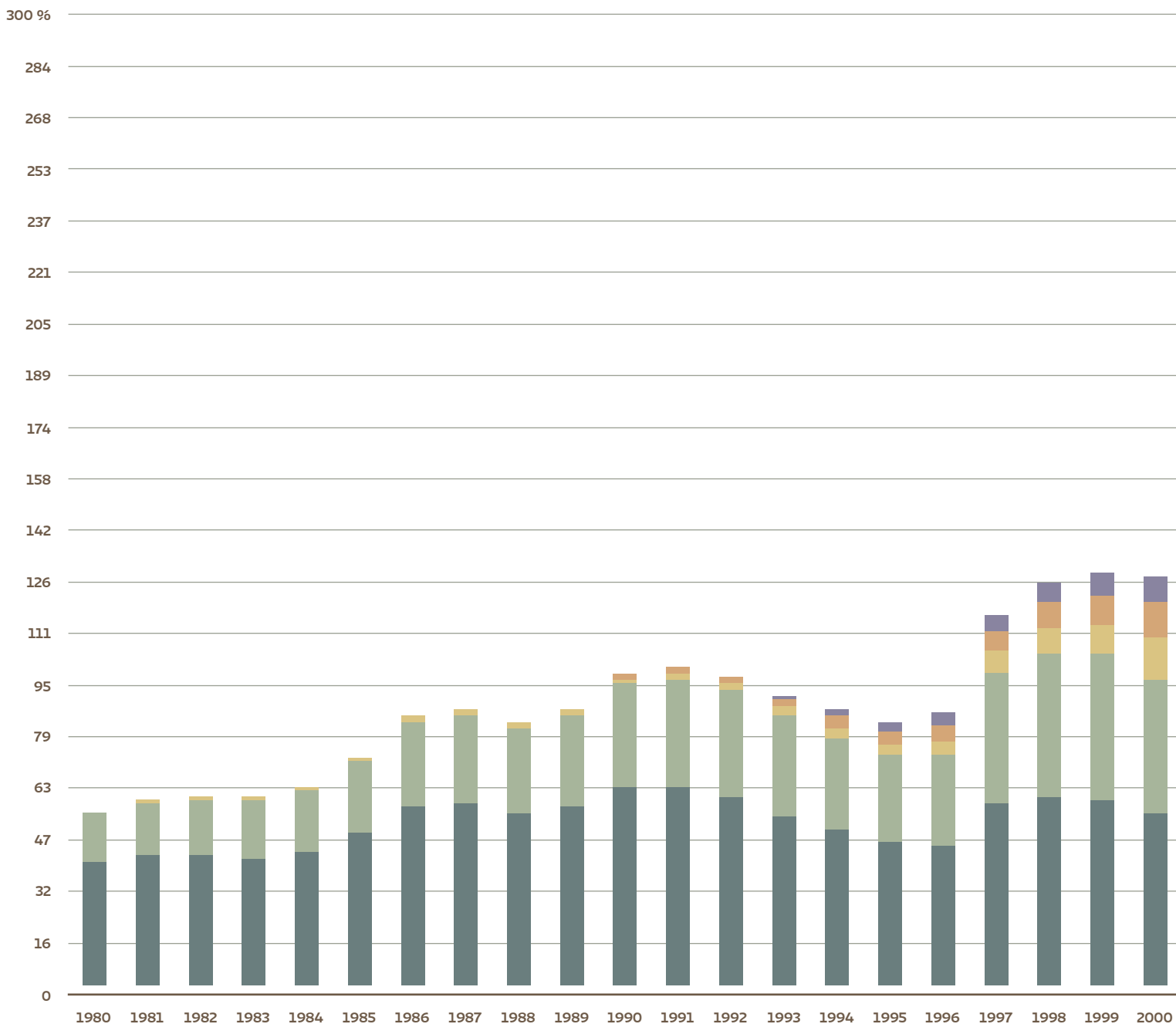
FIVE MYTHS ABOUT CHINA'S ECONOMY

1. SOURCE: Deutsche Bank, March 2019

2. SOURCE: World Bank, March 2019

MYTH 1: CHINA HAS A DANGEROUS OVERHANG OF DEBT

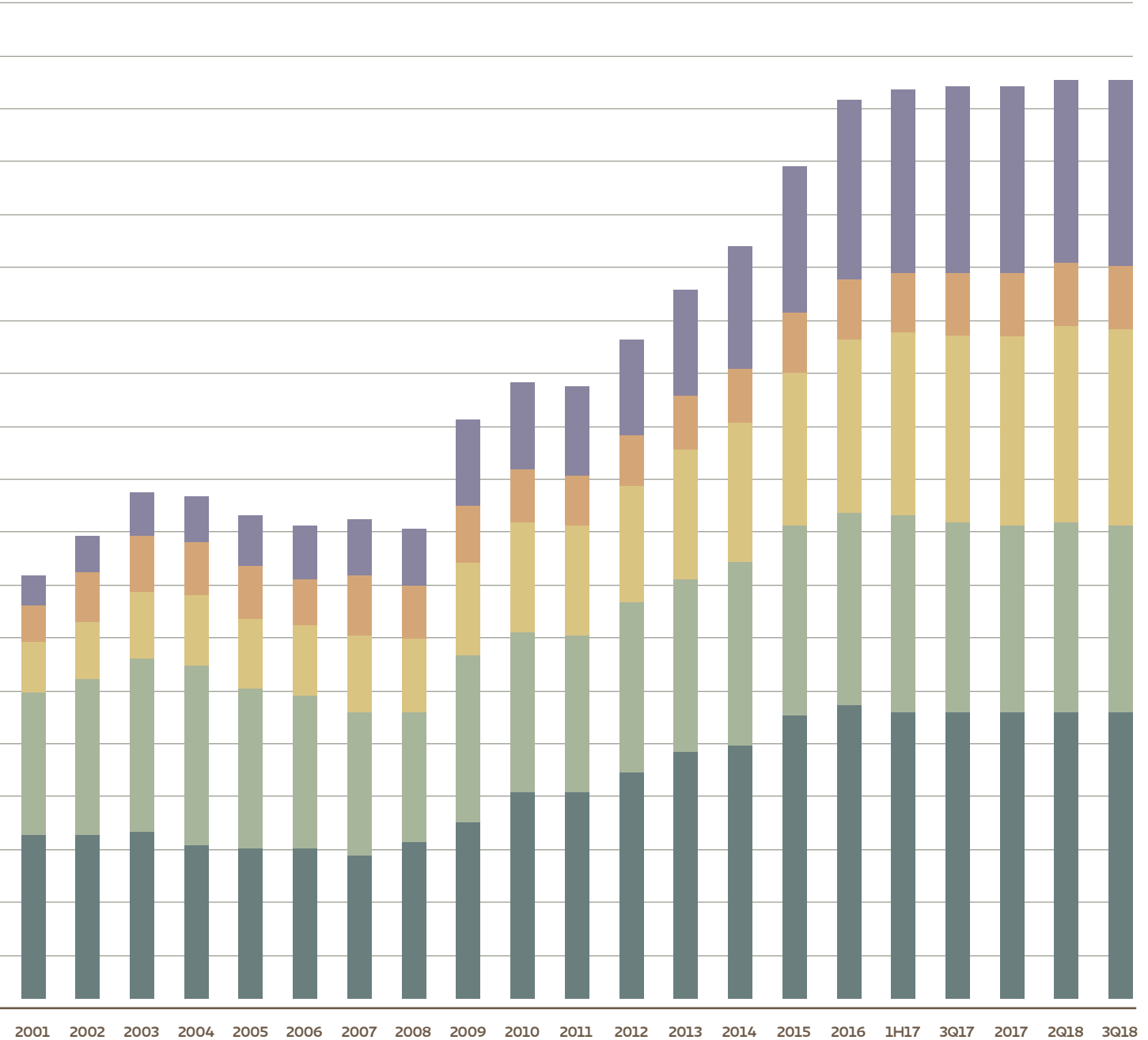
Debt levels in China appear to have climbed to dizzying heights over the past two decades. As of the third quarter of 2018, China's debt-to-GDP ratio stood at a staggering 274%¹, which is more than triple its level of 84% in 1996. The generous availability of credit has been a key factor driving China's stunning economic expansion which saw the country average a GDP growth rate of 10% per annum between 1980 and 2011². However, as China's economic growth falls, there are concerns that China's highly leveraged economy could collapse like a house of cards. But other factors suggest investors should not be overly concerned.



- LOCAL GOVERNMENTS
- CENTRAL GOVERNMENT
- HOUSEHOLDS
- PRIVATE ENTERPRISES
- SOEs

FIGURE 1: China's credit to GDP ratio

SOURCE: Deutsche Bank, PBOC, CBRC, CIRC, SAFE, NBS, MOF, CEIC, Wind, Chinabond.com.cn, Trustee Association of China, SAC, HKMA, media reports, March 2019.



Importantly, China's debt is for the most part domestically funded. China's high national savings rate - equal to 45% of GDP³ - has provided a generous pool of loan financing for companies and local governments. While there has been record buying of Chinese government bonds by foreign investors, the percentage of Chinese government bonds held by foreign investors remains at a very low 8%⁴. This minimal reliance on external funding means Chinese debt is exposed to a much lower risk of default and is much less likely to encounter the vulnerabilities that the likes of South Korea and Thailand (which relied heavily on external debt) experienced during the Asian Financial Crisis.

Also, China's recent debt levels have not been the highest among major economies. China's credit-to-GDP ratio as of the fourth quarter of 2017 was lower than that of Japan, Canada, Singapore, the United Kingdom and the Eurozone while being at a level similar to the United States, Australia and South Korea.

● GOVERNMENT
● HOUSEHOLD
● NON FINANCIAL CORP

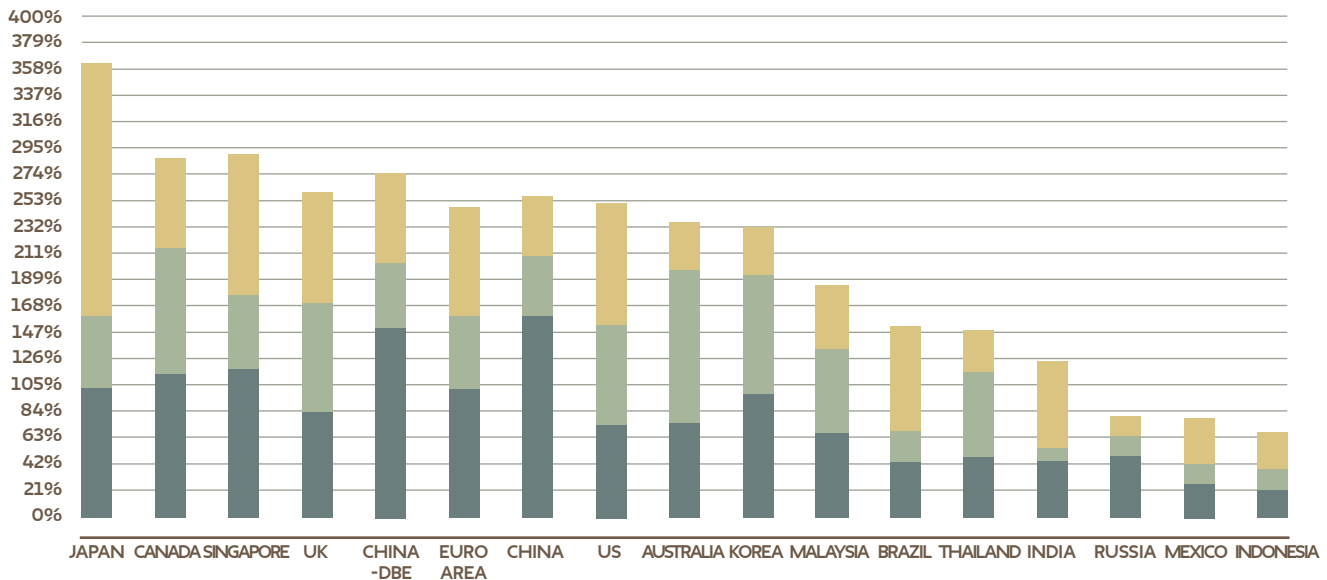


FIGURE 2: China's credit leverage

SOURCE: Deutsche Bank, BIS, March 2019

3. SOURCE: CEIC, March 2019

4. SOURCE: CEIC, Morgan Stanley, December 2018

Furthermore, China's debt is no longer increasing. Although China has stepped back from recent efforts to deleverage its economy, its previous efforts to maintain debt at existing levels were effective. The growth of debt has decelerated in recent years, even though the debt-to-GDP ratio has risen.

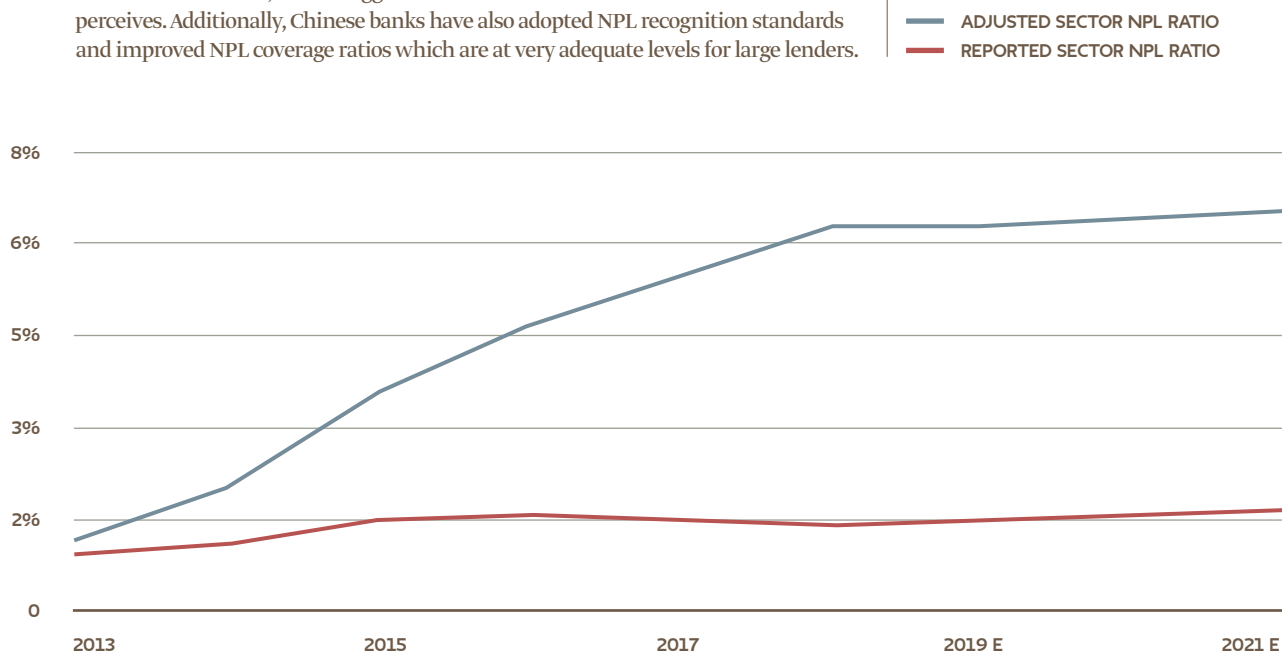
Foreign investors have long viewed the non-performing loans (NPL) levels of Chinese banks as a hidden problem. While China's commercial banks reported an average NPL ratio of 1.83%⁵ as of the end of 2018, sceptical foreign investors have held the view that reported ratios grossly understate the actual situation. As a result, the Hong Kong-listed shares of China's four largest lenders have traded at a steep discount in recent years.

MYTH 2: CHINESE SHADOW BANKING IS A LATENT LURKING THREAT

The market views the Chinese banking sector's NPL ratio as in reality more likely to be around 7%⁵. As such, investors expect a spike in NPL recognition by Chinese banks down the road, which could weigh heavily on earnings. However, Chinese banks have been aggressively disposing of and writing off bad debt over the past few years. In fact, China has established a quartet of 'asset management companies' designed to offload and restructure the bad debt of China's big four banks. Adding back disposals

and write-offs of bad debt could increase the Chinese banking sector's NPL ratio to a level of around 6%⁵, which suggests there is less hidden bad debt than the market perceives. Additionally, Chinese banks have also adopted NPL recognition standards and improved NPL coverage ratios which are at very adequate levels for large lenders.

5. SOURCE: JP Morgan, January 2019



A shift in loan mix bodes well for the asset quality of Chinese banks. China's big four banks have been extending more credit to areas of lower risk such as mortgages and infrastructure loans while avoiding lending to higher risk sectors such as manufacturing and retail. Around 51%⁵ of the new credit extended by the big four banks was to the manufacturing and retail sectors. Chinese households appear to be in good credit health with average household debt at just 75% of disposable income¹, which is much lower than that of South Korea, Australia and the United States. Shadow banking financing has also been contracting since early 2018.

FIGURE 3: Reported and implied NPL

SOURCE: Company data, JP Morgan, January 2019

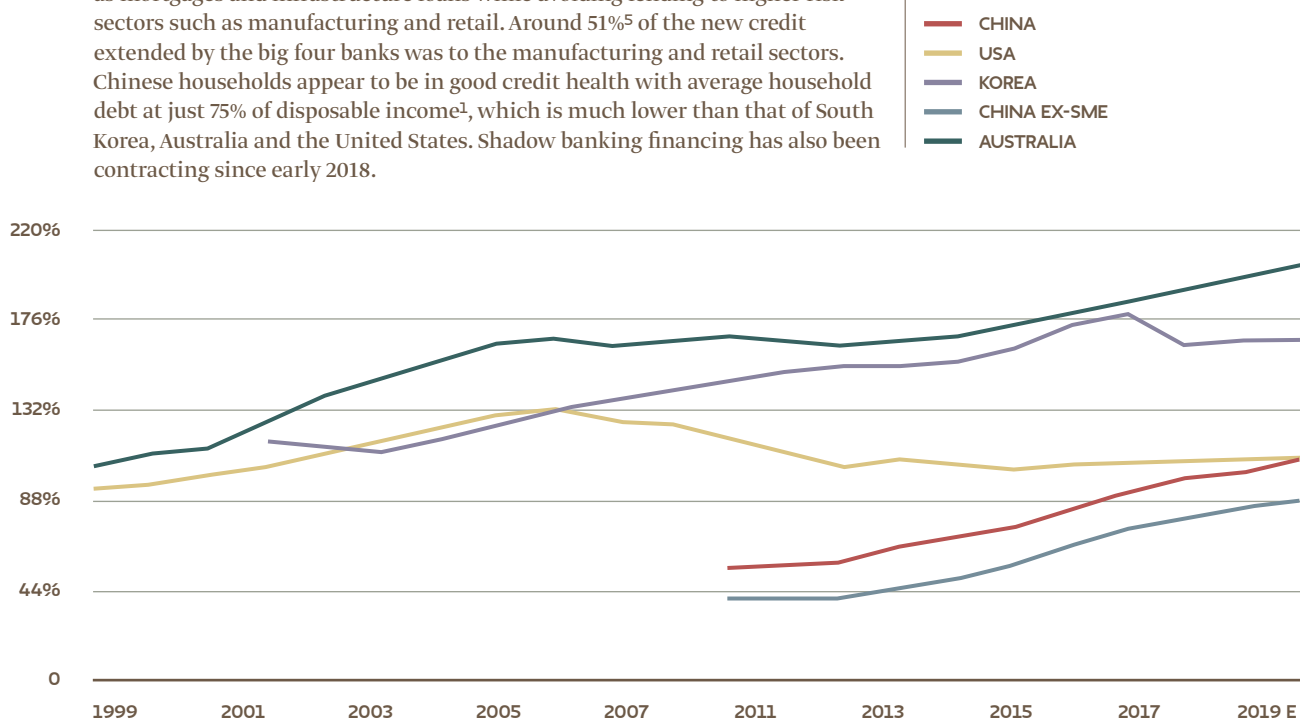


FIGURE 4: Household debt balance as % disposable income

SOURCE: Deutsche Bank, PBOC, CEIC, BIS, NBS, March 2019

INVESTMENT IMPLICATION

We nevertheless recommend focusing on major banks with high quality balance sheets and conservative lending practices which entail lower exposure to shadow banking. We also recommend focusing on banks with high exposure to the retail market. Retail loans have been growing at a substantially faster pace than corporate loans and borrowers also generally tend to have better and more diversified credit quality. On the basis of site visits to speak with loan officers about the pace of lending, identification of borrower types and interest rate trends, we remain positive overall about Chinese banks whose valuations remain attractive and dividend yields high.

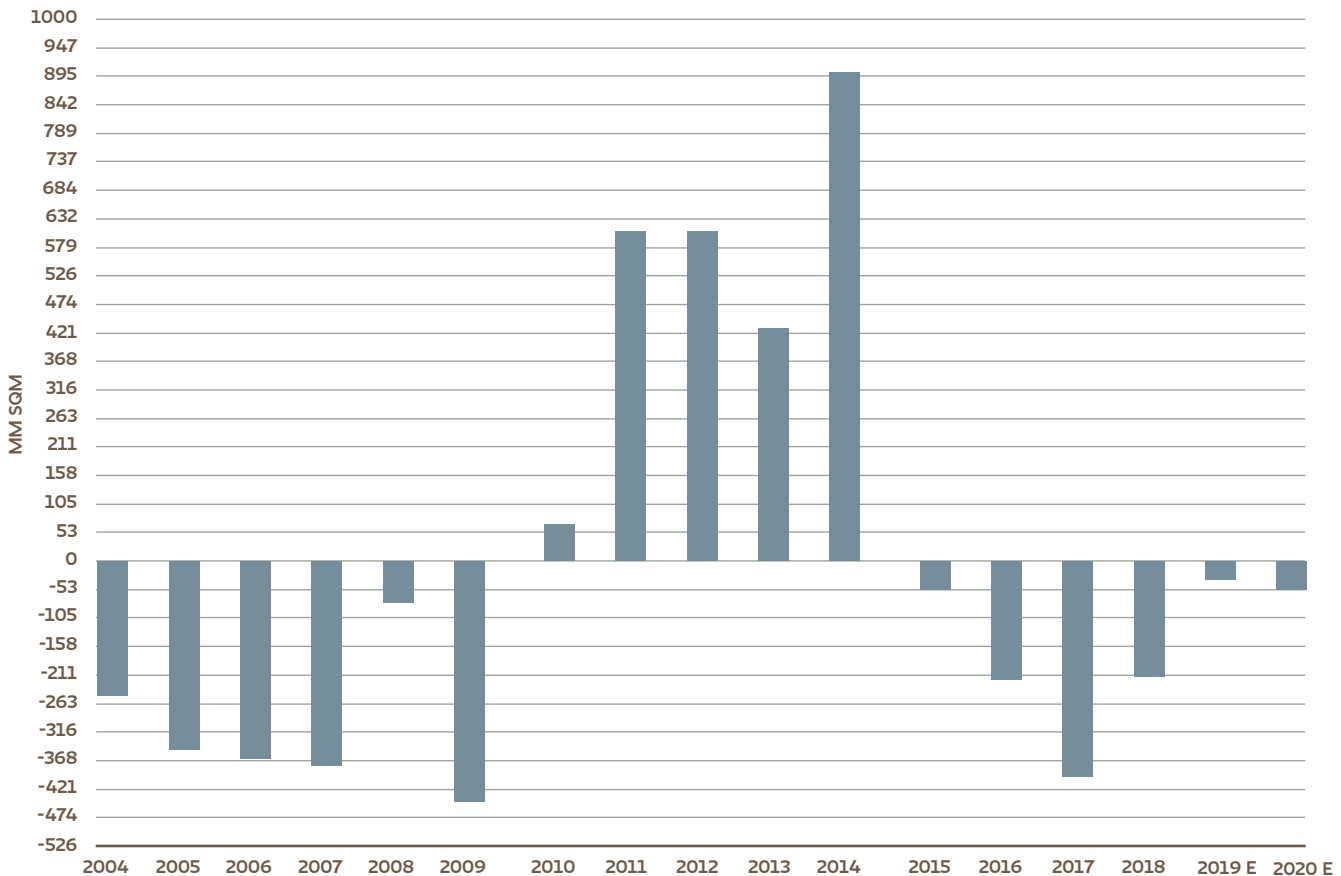
MYTH 3: CHINA HAS A PROPERTY BUBBLE CLOSE TO BURSTING

Ordos is a name with which many global investors are familiar. A coal mining boom in the early 2000s paved the way for aggressive development of residential property in this inner Mongolian city. But as coal prices fell as a result of Beijing's campaign against air pollution block, after block of apartments remained vacant and Ordos became infamous as China's number one ghost city.

The existence of ghost cities is often cited by economists as an indicator of the poor health of China's property market and its problems of oversupply. There have been concerns that China's ballooning inventory problem will not only create ghost cities like Ordos, but also trigger a slump in housing prices. However, a closer look at the supply and demand dynamics of China's property market indicates that such concerns are overblown. In fact, the residential property market in China was undersupplied by 400 million square metres in 2017 and 200 million square metres in 2018⁵.

FIGURE 5: Property supply in China

SOURCE: JP Morgan, April 2019



In previous years a strong supply of residential property in China was mandated in order to meet the high growth targets set by local governments. Property development was seen as an important way of achieving these targets. However, Beijing has recently relaxed these targets which in turn has reduced the pressure on local governments to drive growth through construction. At the same time however, on the demand side consumers are developing an appetite for higher quality housing. It is estimated that approximately ten billion square metres of residential property in China were constructed before 1998⁶. Its poor construction quality means that many residents of these older properties are now looking to upgrade as their income levels rise. Additionally, the government's shanty town redevelopment programme whereby the government gives cash to shanty town residents to purchase private property, is further driving demand for improved property.

Investors need to bear in mind that China's property market is very much a two-speed phenomenon. Oversupply is far less of a concern in tier 1 and 2 cities than in lower tier ones. However demand from migrants pursuing better economic opportunities and infrastructure in tier 1 cities such as Shanghai and Beijing have actually created an undersupply problem. This in turn has led to aggressive cooling measures by local governments to control skyrocketing housing prices. So while housing prices in tier 1 and 2 cities, when set against average national income levels, may appear eye-wateringly high following their meteoric rise in recent years, special measures are in place to control them.

INVESTMENT IMPLICATION

We recommend focusing on real estate developers working mainly in tiers 1 and 2 who have consistently delivered strong sales growth. At an industry level, leading real estate developers have been gaining larger market share as a result of consolidation. These developers tend to have better capabilities in terms of research and development and land acquisition, greater flexibility in identifying areas where demand and supply are evenly matched as well as more diversified funding sources and lower financing costs. In assessing developers, therefore, it is important to conduct ground-level research involving frequent site visits to build detailed financial models, to identify sales volumes according to types of development and to benchmark sale prices against transactions in similar regions.

MYTH 4: THE SINO-U.S. TRADE DISPUTE, IF UNRESOLVED, WILL HAVE A CRIPPLING EFFECT ON CHINA'S ECONOMY

In recent months, stock markets on both sides of the Pacific have been rejoicing at any sign of a potential resolution to the Sino-U.S. trade dispute. It is now looking more likely than not that the two largest economies in the world will ultimately ink a deal after almost a year of back-and-forth negotiations. But what if no resolution is reached?

The economic impact of a continued stalemate is unlikely to be significant for the Chinese economy. The Chinese economy of today is vastly different to what it was 20 years ago. It is no longer dependent on exports as a source of growth.

In fact, exports accounted for only around 18% of China's GDP in 2018, compared to 34% in 2007. The U.S.'s role as a trading partner for China is not as significant as is perceived. Exports to the U.S. accounted for just 3.6% of China's GDP in 2018 which is substantially lower than the 30% for Mexico⁷.

Now that China has shifted to a consumption-driven economy with its own domestic demand chain, annual credit origination and fiscal policy are two factors that are poised to have more of an impact on the health of the Chinese economy than the Sino-U.S. trade war. The Chinese government has underscored its pro-

6. SOURCE: Citi, July 2014

7. SOURCE: BCA Research, March 2019

8. SOURCE: National Bureau of Statistics of China, March 2019

growth policy stance at the recent National People’s Congress this year with the unveiling of generous cuts to value-added taxes and social pension contributions. If the Chinese government’s stimulus efforts prove to be as effective as they have been historically then the Chinese economy should be sufficiently resilient to absorb a continuation, or even escalation, of the Sino-U.S. trade war.

Another myth at the center of the Sino-U.S. trade war that’s often cited by President Donald Trump is the argument that China has been deliberately depreciating its currency to gain an unfair advantage in the international trade arena. This hasn’t been the case. The CNY/USD exchange rate has moved in close correlation with the interest rate differential between the two currencies for several years. This relationship appears as somewhat surprising given that China maintains capital controls which prevent the interest rate arbitrage mechanism from playing out. What could be happening is that Chinese policymakers may have been using the interest rate differential as a guide for setting the exchange rate so that they can mimic a market-based exchange rate as China strives to progressively liberalise and internationalise its currency. Although China has full control over the CNY/USD exchange rate it has chosen to allow the interest rate differential to govern the currency. Paradoxically, if the Chinese and US negotiators agree a “Yuan stability pact” as reported in the press, a trade deal may see the currency uncouple from the interest rate differential.

MYTH 5: THE SLOWDOWN IN CHINA’S ECONOMIC GROWTH IS SOMETHING TO LOSE SLEEP OVER
 China recorded GDP growth of 6.6% in 2018, the slowest pace that the world’s second largest economy has seen since 1990⁸. In 2019, China is targeting GDP growth of between 6% and 6.5%. The slowdown in China’s GDP growth rate from its recent peak of 14.2% in 2007 has been underpinning a gamut of concerns about the future growth trajectory and health of the Chinese economy. We believe some of these concerns may have been overblown.

— HEADLINE GDP
 — GDP SECONDARY INDUSTRY
 — GDP TERTIARY INDUSTRY

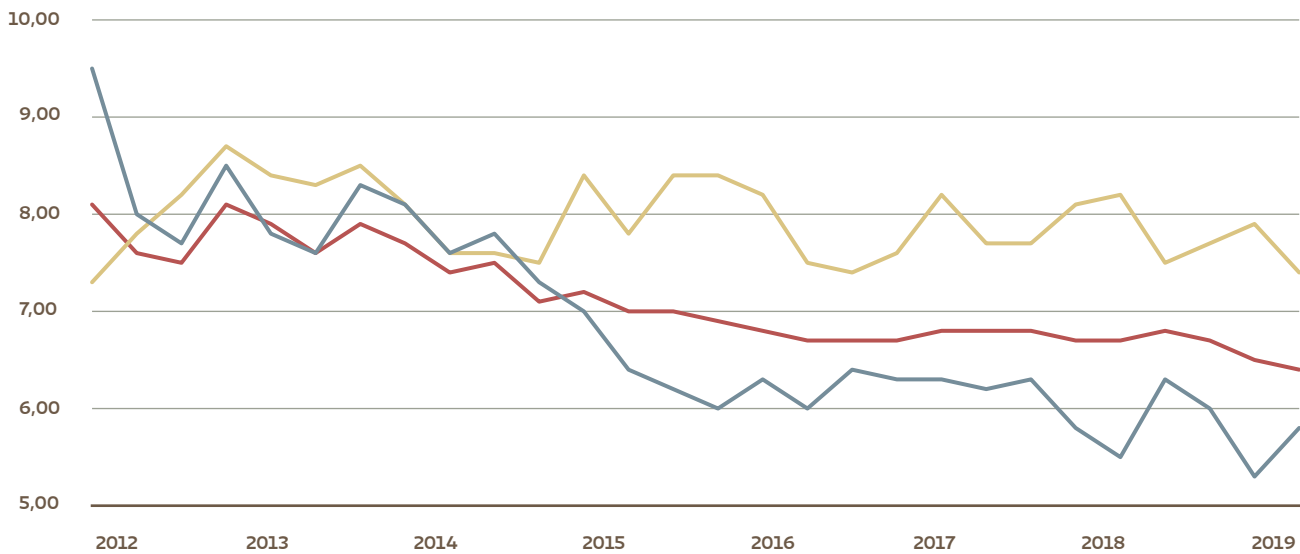


FIGURE 6: China’s Real GDP Growth by industry

SOURCE: NBS, JP Morgan, April 2019

We expect China's GDP growth to stabilise in the range of 5.5% to 6.5% over the next few years. Importantly, this growth will be of higher quality. The overarching objective of the Chinese government has shifted from pursuing a high pace of growth to high quality, stable growth as it transforms the composition of its economy from one driven by investments and exports to one driven by consumption. It's a departure from the previous approach of doing "whatever it takes" to stimulate economic growth in response to any slowdowns.

While the Chinese government's new policy stance is unlikely to produce the kind of rapid V-shaped rebound in growth that was seen in the past, it leaves China's economy better off in the long run. Instead of extending huge bursts of loans to state-owned enterprises to bolster growth, policymakers are now focusing on fiscal easing centered on tax cuts for households, small businesses and consumers to offset weak credit growth and its resulting drag on economic activity. Policymakers also seem to be focusing on "frontloading" rather than "expanding" the amount of new local government bonds that is allowed to be issued.

THE RETURNS ROLLER-COASTER: RECENT MARKET PERFORMANCE IN CHINA

In the decade since the financial crisis the Chinese economy has experienced tremendous GDP growth, with annual growth rates of over 10% in 2010. However, since then GDP growth rates have fallen, as have mainland Chinese equity markets and Hong Kong exchange returns. Figure 7, which shows the returns over five years for all three China exchanges to the start of 2019 in USD, illustrates that returns from the mainland exchanges were lower than those of Hong Kong, with the Shenzhen Component falling over 21%.

— SSE COMP
— SZSE COMP
— HANG SENG

FIGURE 7: Performance in USD, 2013 to 2019



Much of the fall in returns occurred in 2018 when geopolitical risks adversely affected markets globally. US-China trade wars which resulted in USD 250 billion of sanctions imposed on China by the US also contributed to the fall given that China has traditionally been seen as an export-driven economy. The mainland exchanges which have a greater reliance on exports than Hong Kong, suffered commensurately. However, a large proportion of the losses suffered during 2018 has been recouped in the first two months of 2019 thanks to recent strong market performance. Figure 8 shows returns for all three exchanges since the start of January 2018 until the start of March 2019.

— SSE COMP
— SZSE COMP
— HANG SENG

FIGURE 8: Performance in USD, January 2018 to March 2019



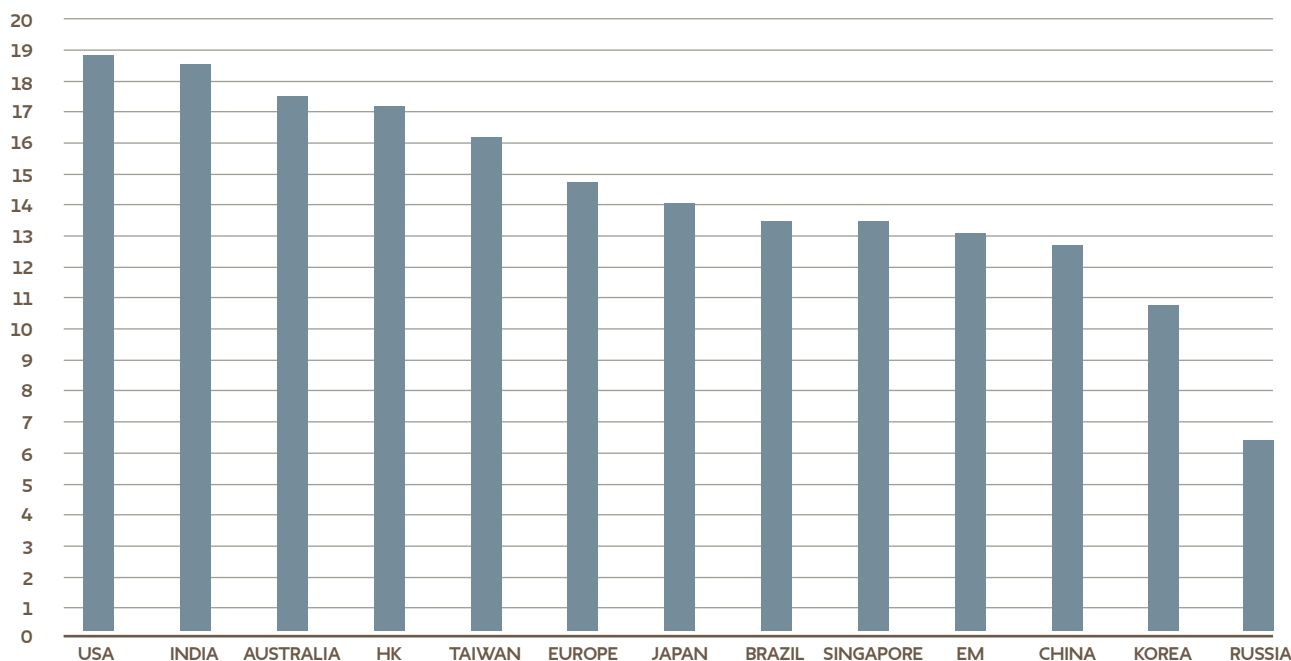
Table 1 presents a breakdown of annual returns from all three exchanges over the past five years, in addition to the 2019 year-to-date return.

TABLE 1: Annual returns in USD

RETURN (USD)	SHANGHAI COMPOSITE	SHENZHEN COMPONENT	HANG SENG
RETURN YTD	16%	23%	14%
RETURN 2018	-29%	-38%	-15%
RETURN 2017	14%	16%	35%
RETURN 2016	-18%	-25%	0%
RETURN 2015	5%	10%	-7%
RETURN 2014	49%	32%	1%
5 YEAR RETURN END 2018	4%	-22%	8%

With the 2018 sell-off and resultant lower prices, the mainland Chinese markets are now attractively priced relative to their peers on a 12-month forward basis. Figure 9 below presents the 12-month forward P/E ratio of China set against its peers, as of February 2019. Overall, China has a forward price-to-earnings (P/E) ratio of 11.2. Specifically, Shanghai has a more attractive valuation than Shenzhen with P/E ratios of 10.9 and 15.7 respectively.

FIGURE 9: 12-month forward price to earnings ratios
SOURCE: JPM Morgan, February 2019



Furthermore, the valuation of the A-share market has fluctuated markedly in recent years. At the peak of the liquidity-fueled rally of mid-2015 A-shares fetched a hefty sixteen times earnings⁹. Following a crash and a subsequent slump lasting several years the A-share market traded as low as ten times earnings. Despite a strong rally this year its valuation, at twelve times earnings, still remains below its 10-year historical average of thirteen times earnings and appears attractive when set against expected 2019 earnings growth of 14.6%.

9. SOURCE: Goldman Sachs, March 2019

A NEW GAME OF GO? RECENT CHINESE LISTINGS

10. SOURCE: KPMG 2018 Review: IPOs and other
Market trends, November 2018

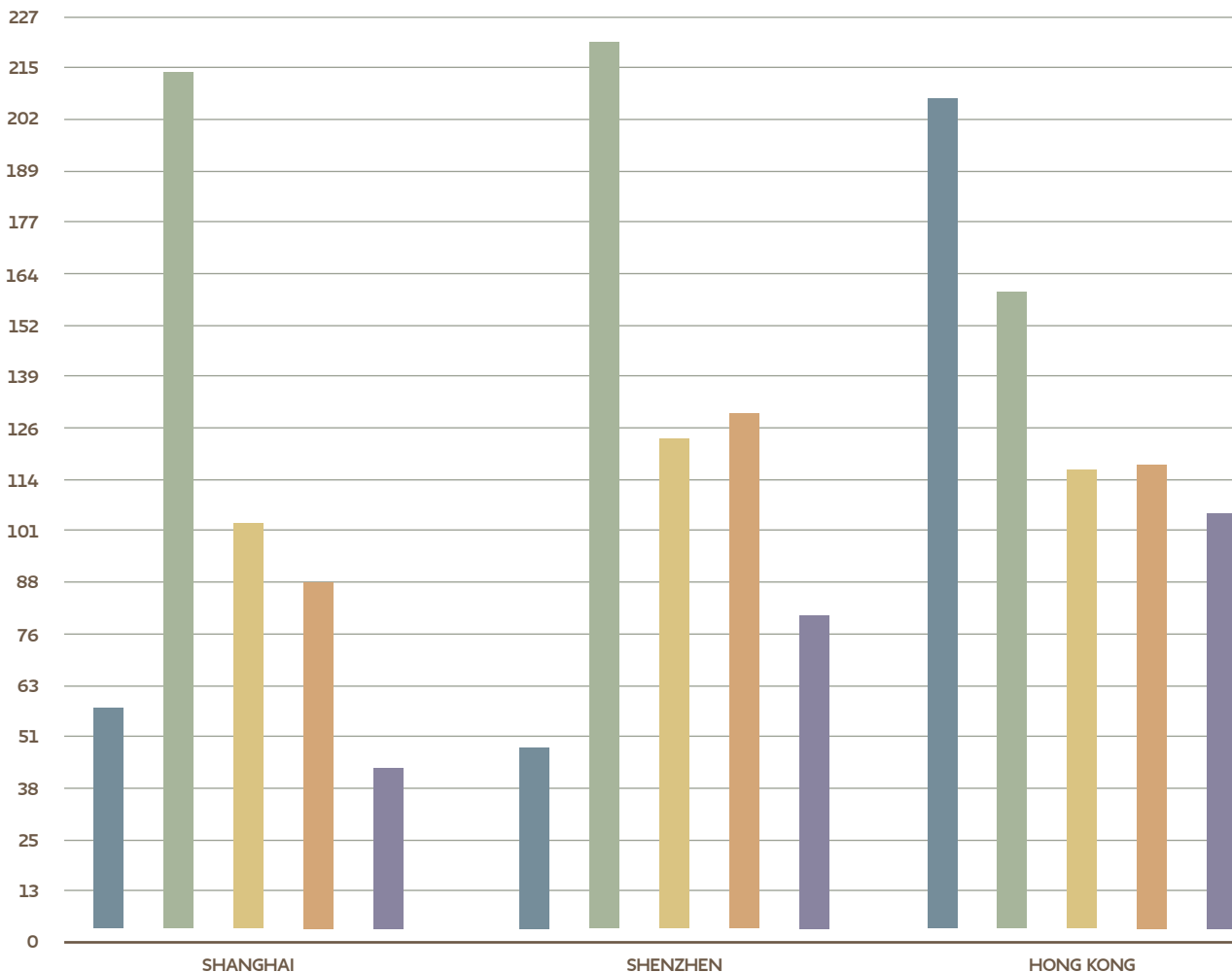
According to a recent KPMG study¹⁰ growth in A-share IPOs from the Shanghai and Shenzhen stock exchanges slowed for the first time in five years in 2018.

The number of firms raising capital for the first time fell from 511 in 2017 to 270 in 2018. A combination of increased regulatory emphasis on the quality of firms applying for a capital raise and a drop in new IPO applications lay behind this reduction. In 2018 the industrial sector was the largest area for new listings, accounting for 35% of IPOs in Shenzhen and Shanghai. However, there was also significant growth in the technology, media and telecom (TMT) sector which was the leader in terms of capital raised. With a 27.1 billion RMB raise in capital, the TMT firm Foxconn accounted for a fifth of the total funds raised across both A-share exchanges.

FIGURE 10: IPOs by exchange

SOURCE: KPMG 2018 Review: IPOs and other
Market trends, November 2018

Figure 10 shows the number of IPOs by year for the Shanghai, Shenzhen and Hong Kong exchanges:



- 2018
- 2017
- 2016
- 2015
- 2014

Although as Figure 10 shows a significant slowdown occurred in IPOs in the A-share markets, IPOs in Hong Kong continued to experience significant growth. The Hong Kong Stock Exchange was ranked number one among global exchanges in 2018 in terms of IPO proceeds, generating US \$33.7 billion in proceeds compared to NYSE and NASDAQ which generated US\$25.5 and US\$24.5 billion respectively. The number of new listings on Hong Kong's Main and Growth Enterprise Market (GEM) Boards grew by 30% to 208 listings in that year, generating almost HK\$300 billion. In addition to domestic listings, there were also 75 overseas listings.

THE MAGNET OF AMERICA

In 2018 a record number of Chinese firms chose to list on the New York Stock Exchange (NYSE) or NASDAQ rather than on domestic exchanges or in Hong Kong. In 2018, 33 Chinese incorporated companies raised capital in the US - an increase of 17 from the previous year. The most notable listing of a Chinese firm in the US in the past five years was Alibaba Group, the largest IPO in history raising over US\$21 billion in 2014. Among the many reasons Alibaba chose to list in the US rather than in its home market was the greater number of institutional owners in the US and the prestige associated with a US listing. However, the main driver was its unique share structure. Dual share class structures, which are common in technology companies, allow for the issuance of two tiers of share classes with one tier allocated a greater number of votes per share, thus allowing founders with minority shareholdings to retain voting control. However, this is prohibited on the mainland Chinese exchanges, as it was in Hong Kong until mid 2018. Dual share class structures are, however, permitted in the US. In consequence and especially since Alibaba's listing and most recently that of Tencent Music *via* a sponsored ADR arrangement, the number of Chinese firms choosing the NYSE or Nasdaq as their primary exchange has grown markedly.

CHINESE RESPONSES

In response to the increasing number of Chinese firms listing abroad, both the mainland and Hong Kong exchanges have implemented a range of measures with the aim of allowing more Chinese firms to list locally and broadening the investment opportunities available to local investors.

In April 2018 the Hong Kong Stock Exchange introduced changes allowing firms with dual share class capital structures to be listed (although potential issuers with dual share class structures will still need to assign limited voting rights to ordinary shares). These changes to the listing rules had an immediate impact with technology companies such as Xiaomi Corporation and Meituan Dianping choosing Hong Kong for their primary listing. In addition, the Hong Kong Stock Exchange has relaxed the financial requirements for biotech firms. Since then four biotech companies have chosen to list in Hong Kong. In addition, in late 2018 the Shanghai, Shenzhen and Hong Kong exchanges started talks to allow newly listed dual share class firms in Hong Kong to be traded on the mainland *via* the Hong Kong Stock Connect initiative.

Mainland exchanges have also implemented other measures granting international investors greater access and expanding the range of international investments available to domestic Chinese investors. For example, the proposed Shanghai - London Stock Connect Scheme will allow UK-listed companies to sell shares directly to domestic Chinese investors and Chinese listed firms also to raise capital and sell shares in London *via* global depositary receipts.

Furthermore, 2018 also saw a new type of depositary receipt launched, namely the Chinese Depositary Receipt (CDR). Aiming to attract capital back to mainland markets, the CDR, like a traditional depositary receipt, will be a domestic security issued by a depositary bank allowing local retail and institutional investors to invest and trade in foreign issuers as well as in Chinese firms listed outside China. The initial target companies include Red Chip firms listed abroad with no less than a 200 billion RMB market capitalisation. In May 2019, the Shanghai Stock Exchange plans to also launch a new Tech Board enabling technology and innovation companies to raise capital.

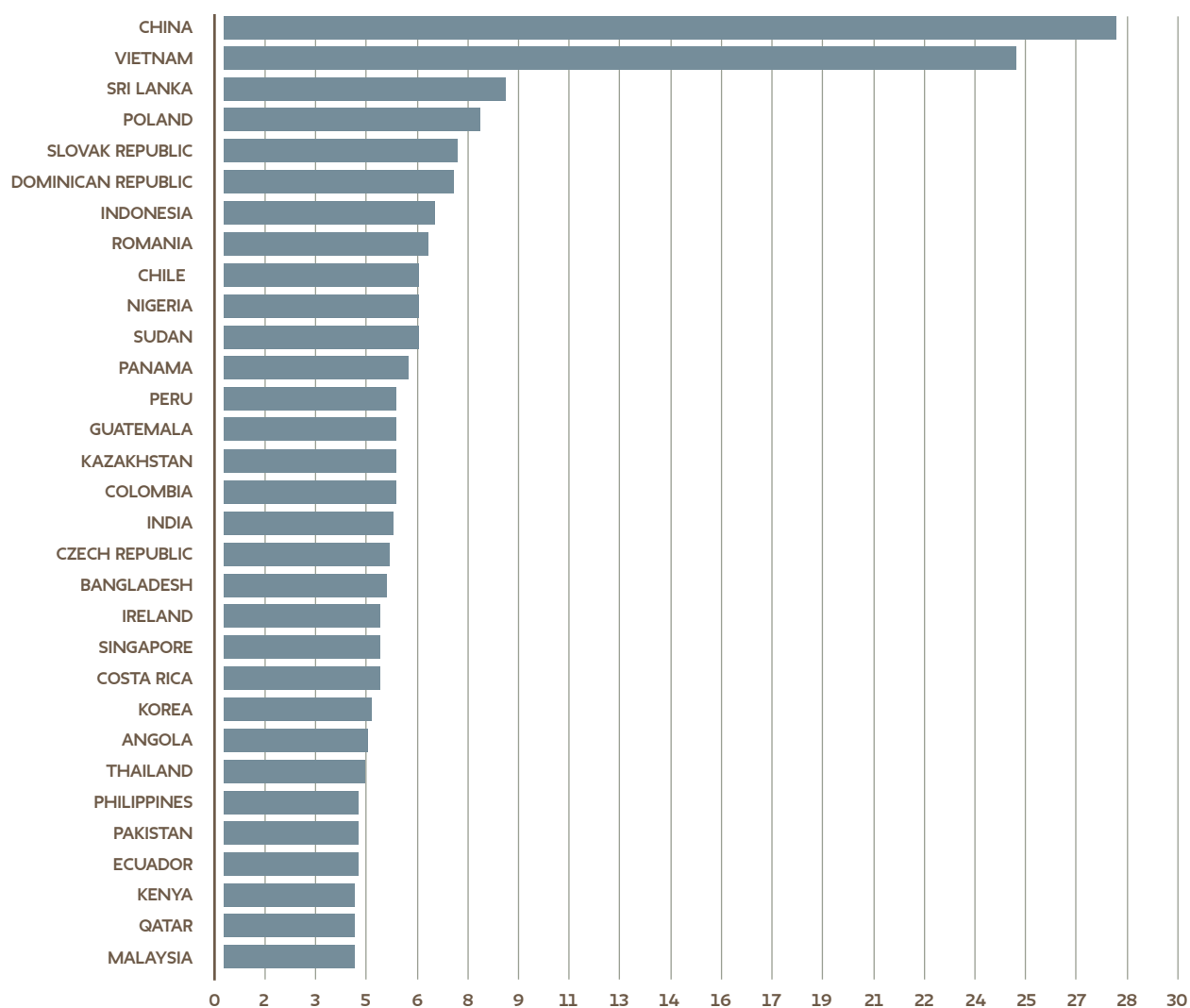
INVESTMENT OPPORTUNITIES

In the 1980s China built its reputation as the world's factory, a populous nation reinvigorating its economy *via* basic manufacturing and exports. Fast forward thirty years and things look dramatically different. In what is now the world's second largest economy, exports are no longer the backbone of growth in China, but have been replaced by consumption. According to China's National Bureau of Statistics, consumption contributed a hefty 76% of China's GDP growth in the first three quarters of 2018.

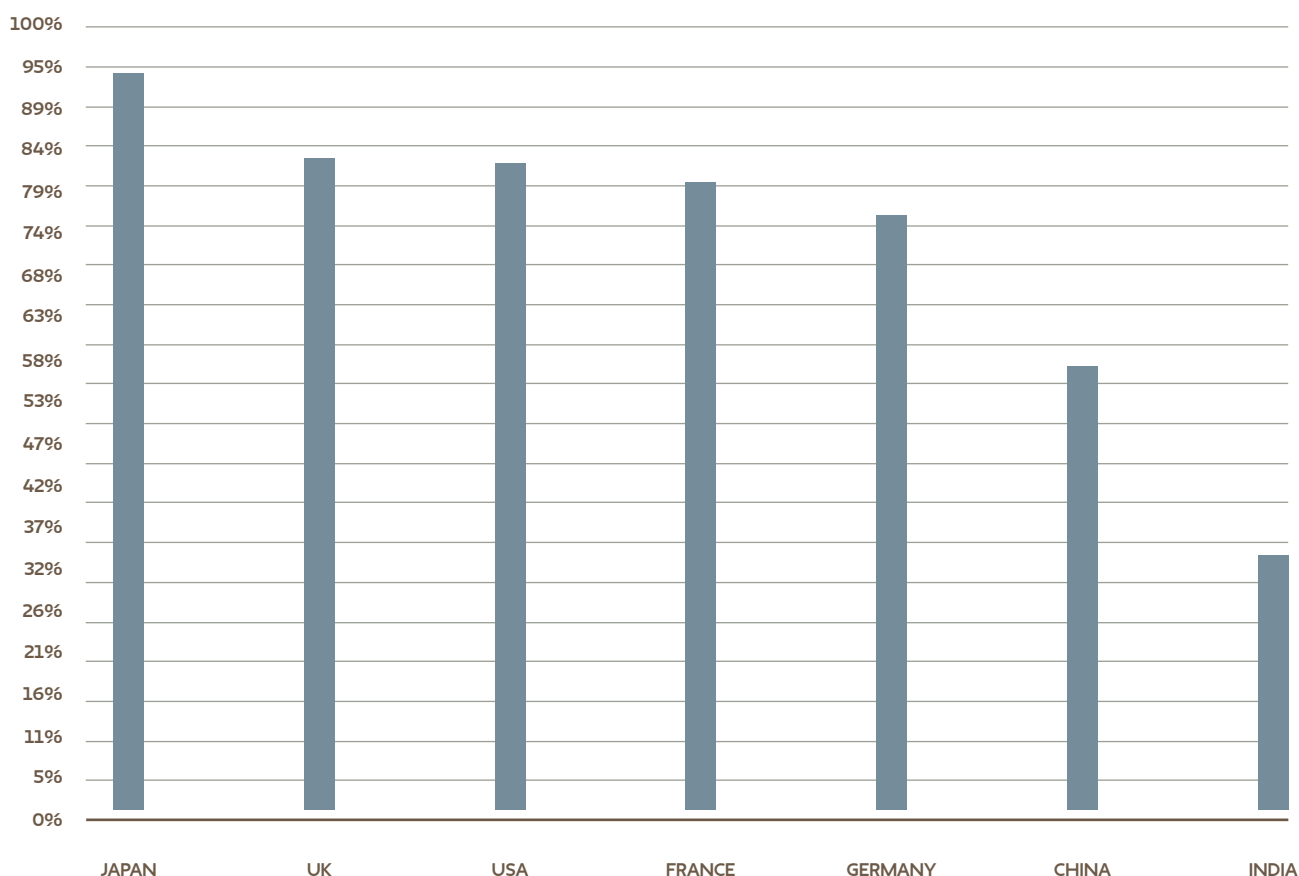
The composition of Chinese consumption is itself also changing as income levels rise with a shift in demand in recent years away from goods towards services. For example, demand for sports and fitness services grew at almost 40% year-on-year in 2018, outpacing the under 10% growth for retail sales of sports goods over the same period. Moreover, in the consumption of goods, greater emphasis is now being placed on quality and brand. We expect the trajectory of Chinese consumption to continue to soar in coming years, offering golden opportunities for investors.

FIGURE 11: GDP per capita as a multiple of 1990 level

SOURCE: World Bank, November 2018



Several factors are driving the China consumption story. As figure 11 shows, China's GDP per capita has grown at close to a staggering 28 times since 1990 - a rate exceeding any other country. China is on track to become a high-income country by 2027 (as defined by the World Bank one with a per capita GDP of equal to or greater than US\$12,476). Continuing growth in China's per capita GDP will coincide with an expansion of the country's already large middle class which currently stands at just below 400 million. Importantly, Chinese households are also relatively free of debt. Total household credit in China was equivalent to just 42% of GDP in 2018 - lower than Japan's 47% and far lower than America's 72%. Urbanisation and the rise of the millennial generation will further fuel consumption. China is expected to be the world's largest contributor to urban population growth at some point between 2017 and 2030. By that time the country's urban population is projected to increase by 201 million people. China, like many nations, may have a greying demographic, but it also boasts the world's second largest population of high-spending millennials.



Among the many sectors set to benefit from the growth in Chinese consumption three long-term investment opportunities are particularly prominent: healthcare, education and the internet.

FIGURE 12: Urban population growth in 2016
SOURCE: World Bank, November 2018

HEALTHCARE

Defensive healthcare stocks have consistently outperformed in recent years. However, their valuations fell to cyclically low levels in the second half of 2018 in the wake of a high profile vaccine scandal. Subsequent drug price cuts exerted further downward pressure. While valuations for healthcare stocks have recovered somewhat since the beginning of 2019 as part of a market-wide rally, they still remain at attractive levels. The MSCI China Health Care Index currently trades at twenty times estimated 2019 earnings, well below its historical average of 25 times.

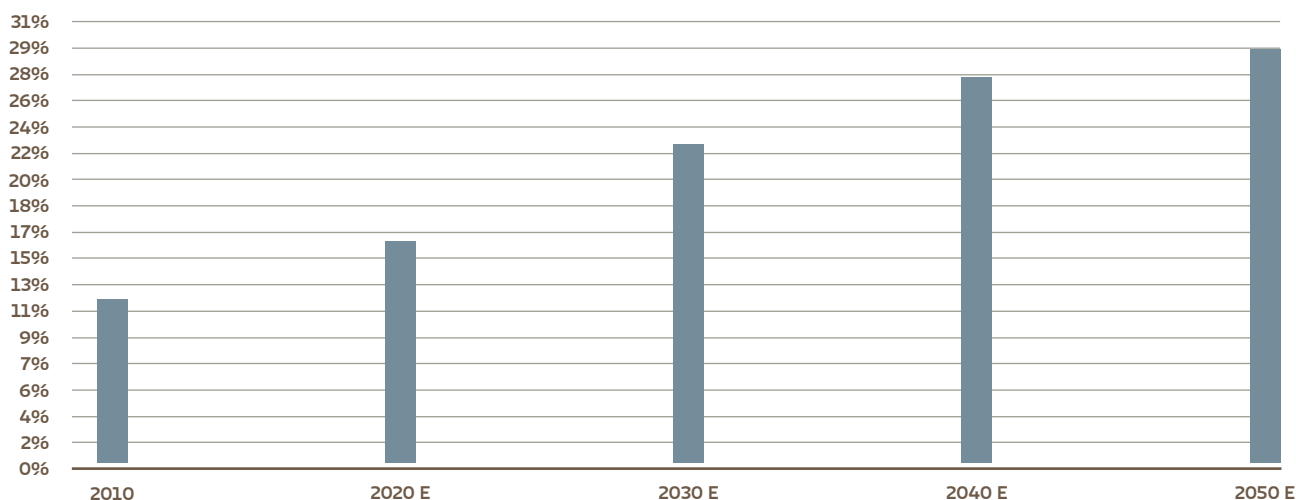


FIGURE 13: China's 60+ population growth

SOURCE: China Industry Information Network (CHYXX), Morgan Stanley Research, E= CYHXX Estimates, May 2018

Despite recent negative headwinds, underlying demand remains strong in the healthcare sector. As figure 13 shows, by 2050 30% of China's population is expected to be over the age of sixty which bodes well for demand for healthcare products and services. To place this in an international perspective; China is projected to have 310 million people aged 65 or above by 2050, a figure exceeding the U.S., Europe and Japan combined. There is additional room for China's healthcare spending to grow as in 2015 China spent the equivalent of only 5.6% of its GDP on healthcare, far lower than the US's 17.1% and Japan's 10.3%. An area that looks particularly interesting is the nascent biosimilars market which is expected to grow at a compound annual rate of 32% between 2019 and 2030.

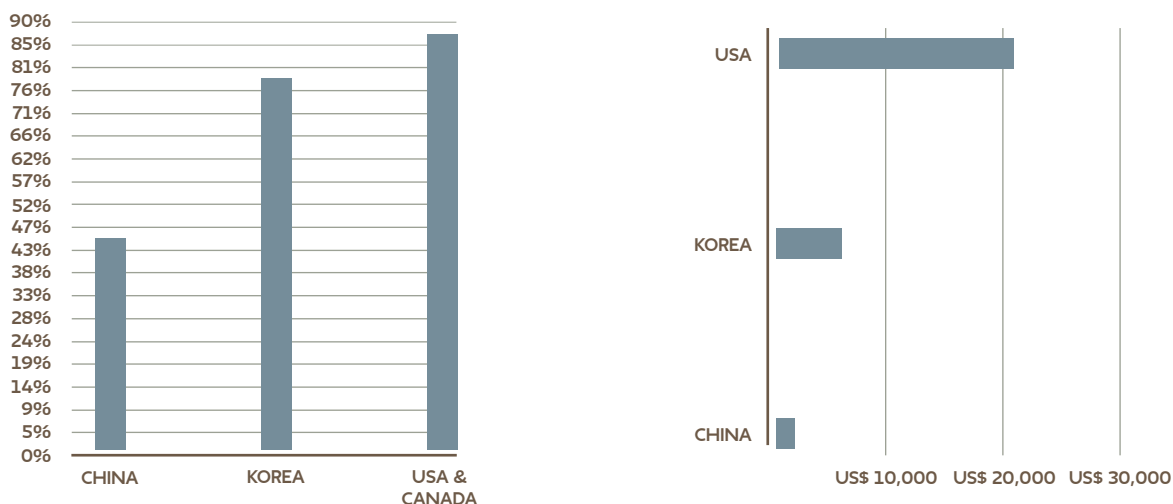
INVESTMENT RECOMMENDATIONS

We recommend that investors should target high quality pharmaceutical companies with strong R&D capabilities that produce supplements and healthcare products not subject to reimbursements to the government.

EDUCATION

Chinese education stocks dominated the headlines in August 2018 when policy uncertainty sparked a sell-off in this once desirable sector. The announcement of the draft private education regulation raised the specter of higher taxes on for-profit schools, raising concerns that the private sector may as a consequence become more reluctant to invest in education. However, with the regulatory review and approval by the State Council, greater clarity can be expected. Investors should bear in mind that such is the cultural significance of education in China that it outranks daily goods, food and travel as the top items on which

households are most likely to spend their additional income. Currently, Chinese education stocks are trading at attractive levels. For example, one leading Hong Kong-listed Chinese education provider is trading at 24 times its estimated 2019 earnings, well below its historical average of 30 times.



INVESTMENT RECOMMENDATIONS

We recommend that within the education sector, private higher and vocational education providers particularly stand out as this sector suffers from a sizeable supply gap. Approximately 9.5 million students take the ‘gaokao’ (university entrance examination) every year but only 7.5 million places on bachelor’s or diploma programmes are available to candidates. This imbalance offers an opportunity to private higher and vocational education providers. In addition as shown in figure 14 above, enrolment ratios and fees for private higher and vocational education providers are well below those in the US and Korea, reflecting ample further room for growth.

THE INTERNET

Valuations for Chinese Internet stocks fell last year as a result of the sector’s underperformance in 2018. The MSCI China Information Technology Index currently trades at 18 times estimated 2019 earnings, below a historical average of 23 times. However, sentiment towards the sector has improved following a round of approvals for new gaming titles in December 2018.

The internet sector is a major force driving the rise of overall consumption in China. Retail sector disruptors such as smartphones and e-commerce are enabling ever more households to shop for goods and services from the comfort of their own homes. As convenience becomes an increasingly desirable factor, e-commerce providers are expanding into areas such as fresh food and are also beginning to penetrate China’s lower-tier cities. Meanwhile, China’s online entertainment market is expected to more than double in the coming years while artificial intelligence and smart devices will drive further innovative developments in home healthcare.

INVESTMENT RECOMMENDATIONS

We recommend that within the internet sector, market leaders with strong core businesses and sufficient capital to facilitate growth stand out as particularly worthwhile targets for investors.

FIGURE 14: Enrolment ratios and tuition fees for private higher education in China

SOURCE: CSCI Research, Frost & Sullivan, January 2019

NAVIGATING THE MAZE: INVESTING IN CHINA

CHINA'S BIG THREE MARKETS

Together, the three largest exchanges in mainland China and Hong Kong - Shanghai, Shenzhen and Hong Kong represent the second largest market in the world by market capitalization after the United States with a market capitalisation of over US\$11 trillion.

FEBRUARY 2019	SHANGHAI	SHENZHEN	HONG KONG
NUMBER OF LISTED FIRMS	1,460	2,144	2,324
NUMBER OF SECURITIES	12,737	8,134	13,434
MARKET CAPITALISATION (BN USD)	4,292	2,656	4,082
TURNOVER (BN USD)	15,81	22,6	13,68
BROAD MARKET INDEX	SSE COMPOSITE	SHENZHEN COMP	HANG SENG

TABLE 2: Summary of Chinese exchanges

SOURCE: Shanghai, Shenzhen & Hong Kong
Stock exchanges

1. Shanghai Stock Exchange

It was only during the late 20th that century China began to implement reforms and re-open its market to allow trading of bonds and stocks. Opened in December 1990, the Shanghai Stock Exchange is today the largest stock exchange in China with a market capitalisation of over US\$4.2 trillion, over 1,460 listed firms and more than 12,700 traded securities. Market participants tend to include larger institutional investors, pension funds and China's larger state-owned firms such as the Industrial and Commerce Bank of China. Seventy-five indices track the exchange, including, the broad market index for Shanghai, the Shanghai Stock Exchange (SSE) Composite Index, a capitalised weighted index including all listed stocks with A and B - shares.

2. Shenzhen Stock Exchange

Opened in 1991, Shenzhen is the third largest stock exchange in China and the second largest in mainland China with a market capitalisation of over US\$2.6 trillion. Traditionally it has more individual retail investors and smaller companies than Shanghai. Given its listings mix, it also has the highest turnover among the three exchanges and tends to experience greater volatility. It is made up of the Main Board, accounting for 22% of the firms listed in the exchange, mostly larger blue chip companies, the Small and Medium Enterprises (SME) Board containing 927 smaller to medium size enterprises, and ChiNext, established in 2009 for high growth technology firms, which as of February 2019 lists 744 firms with an average 38.86 P/E ratio.

The SSE Index tracks the performance of all A and B-shares listed in the exchange. Other indices track the performance of particular types of constituents. Table 3 compares the sector distribution of firms listed in Shanghai and Shenzhen and highlights the greater weighting of high growth technology companies in Shenzhen.

TABLE 3: Sector breakdown by exchange

SOURCE: Shanghai & Shenzhen Stock Exchanges

% OF LISTED COMPANIES BY SECTOR	SHANGHAI (DEC 2017)	SHENZHEN (DEC 2018)
AGRICULTURE	1,10%	1,20%
MINING	3,50%	1,20%
MANUFACTURING	55,90%	68%
UTILITIES	4,40%	2,20%
CONSTRUCTION	3,40%	2,30%
WHOLESALE & RETAIL	6,80%	3,10%
TRANSPORTATION	4,70%	1,60%
HOTELS & CATERING	0,20%	0,30%
TECHNOLOGY	3,90%	9,40%
FINANCE	3,90%	1,20%
REAL ESTATE	4,90%	2,90%
BUSINESS SUPPORT	1,20%	1,70%
RESEARCH & DEVELOPMENT	1,40%	1,30%
ENVIRONMENTAL PROTECTION & RESIDENT SERVICES	1,20%	1,50%
EDUCATION	0,10%	0%
PUBLIC HEALTH	0,20%	0,30%
MEDIA	1,90%	1,50%
CONGLOMERATES	1,10%	0,30%

3. Hong Kong Stock Exchange

Opened in 1986, the Hong Kong Stock Exchange (HKEX) is the second biggest stock exchange in China, with a market capitalisation of over US\$4 trillion, over 2,300 listed companies and over 13,400 traded securities. The exchange consists of the Main Board and the Growth and Emerging Markets (GEM) Board for small to mid-size companies and its broad market index is the Hang Seng Index. With free floating adjustment and weighting towards individual constituents capped at 10%, it reflects the most liquid stocks on the Main Board. Recently, the Hong Kong Stock Connect system was established to allow Hong Kong and overseas investors access to mainland markets (see below).

EQUITY SHARE CLASSES

Given the complexity of Chinese investment regulations and controls, it is important for overseas investors to distinguish between the various equity share classes that trade on mainland and offshore exchanges. Each share class is different, determining who can invest, where it can be traded and in what currency.

A-shares, the main form of Chinese shares, are shares issued by corporations in the People's Republic of China (PRC), priced in Renminbi (RMB), that trade on both the Shanghai and Shenzhen exchanges. This share class can only be traded by residents of mainland China or institutional investors that fall under China's Qualified Institutional Investor Rules (QFII). There are a number of criteria that must be met for approval under QFII relating to assets under management (AUM) and the making of deposits in local currency. However, in 2011 Renminbi Qualified Foreign Institutional Investor (RQFII) rules were established allowing funds raised in RMB by Hong Kong-based subsidiaries of domestic fund management companies to invest in A-shares.

There are, however, at least half a dozen other Chinese share classes, the most prominent being B-shares. Issued by PRC companies, B-shares trade in US and Hong Kong dollars on the Shanghai and Shenzhen Stock Exchange respectively and thus can be accessed by foreign investors. Yet other Chinese share classes include H-shares issued by PRC firms that trade on HKEX; Red Chip shares issued by firms outside the PRC that generate over 55% of their revenue or assets inside the PRC and are controlled by the Chinese state; P-Chip shares issued by firms outside the PRC that generate over 55% of revenue or assets inside the PRC and are controlled by PRC companies or individuals; S-Chip shares that trade on the Singapore Stock Exchange in Singapore dollars, but remain controlled by Chinese state organisations, individuals or Chinese corporations; and finally N-shares that trade on the NYSE or Nasdaq in US dollars.

This confusing plethora of share classes reflects, on the one hand, the demands of the Chinese authorities to impose and retain control and, on the other, the increasing trend in Chinese share dealing towards greater transparency, integration and accessibility in order to more easily accommodate investors, especially foreign investors - a trend that ultimately is likely to continue, but with ever greater impetus in the latter direction.

THE HONG KONG STOCK CONNECT SCHEME

To encourage integration between mainland and offshore Chinese markets and increase access by overseas investors, the Hong Kong Stock Connect scheme was established in 2014. Known as 'Northbound Trading', it allows direct access to mainland markets for retail, institutional and overseas and Hong Kong-based investors. However, such investors must trade through authorised brokers that are accredited HKEX members. Conversely, 'Southbound Trading' allows mainland investors to trade in HKEX listed shares. 'Home Market Rules' allow listed companies to operate

under the rules where they are listed, while trading and clearing participants are subject to the rules where they operate. Trading and clearing rules are applied at the point where trades are executed. Hong Kong and overseas investors nevertheless remain protected by Hong Kong laws. A further raft of rules controls which types of shares can be traded (see Equity Share Classes above).

In addition, all trades must trade and settle in RMB, limits to orders are enforced and no day trading is permitted. Furthermore, a daily quota restricts the volume of cross-border flows, currently measured as the daily value of net buying (buys less sells) with an upper limit of 52 billion RMB. While this limits the number of buy orders on a particular day, investors are nevertheless free to initiate sell orders.

Table 4 provides an indication of the size of flows across the Hong Kong Stock Connect scheme for both Shanghai and Shenzhen. It is clear that the large majority of the flows consist of 'Northbound Trading' to the Shanghai Stock Exchange.

TABLE 4: Hong Kong Stock Connect scheme flows
SOURCE: HKEX market statistics, 2018

SHANGHAI-HONG KONG		NORTHBOUND TRADING	SOUTHBOUND TRADING
AVERAGE DAILY TRADING VALUE (BUYS AND SELLS) MILLION RMB		11.626	8.171
TOTAL TRADE VALUE (BUYS AND SELLS) BILLION RMB		2.662	1.822
AVERAGE DAILY NUMBER OF TRADES (BUYS AND SELLS)		558.653	112.297
NUMBER TRADING DAYS		229	223
SHENZHEN-HONG KONG		NORTHBOUND TRADING	SOUTHBOUND TRADING
AVERAGE DAILY TRADING VALUE (BUYS AND SELLS) MILLION RMB		8.784	4.536
TOTAL TRADE VALU (BUYS AND SELLS) BILLION RMB		2.012	1.012
AVERAGE DAILY NUMBER OF TRADES (BUYS AND SELLS)		501.199	84.328
NUMBER TRADING DAYS		229	223

In addition, the proposed Shanghai-London Stock Connect scheme will also greatly facilitate two-way international capital flows, allowing international investors to deal in Chinese A-shares in London in the form of Global Depositary Receipts (GDRs) and London-based companies to be listed in Shanghai in the form of Chinese Depositary Receipts (CDRs).

11.SOURCE: MSCI Inc, March 2019

INTERNATIONALISATION VIA INDEX

China's domestic A-share market was thrown into the spotlight in May 2018 when the Morgan Stanley Capital Index (MSCI) announced that it would be including Chinese A-shares in its influential Emerging Markets Index. Once phased in this could see A-shares account for more than 16%¹¹ of the total index. MSCI initially included 234 large cap A-shares in August 2018 at a partial inclusion factor of 5%, which translated to a weighting of just 0.8% of the MSCI Emerging Market Index. Despite the conservative nature of this first step, MSCI has since quadrupled the inclusion factor to 20% and expanded the number of stocks to include 448 large cap, mid cap and ChiNext A-shares.

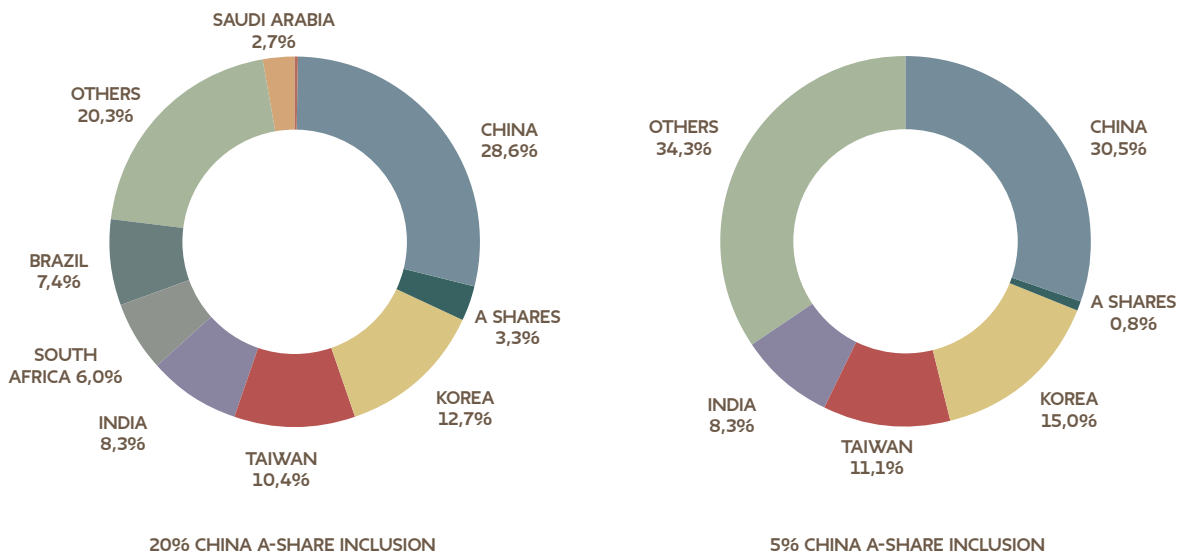
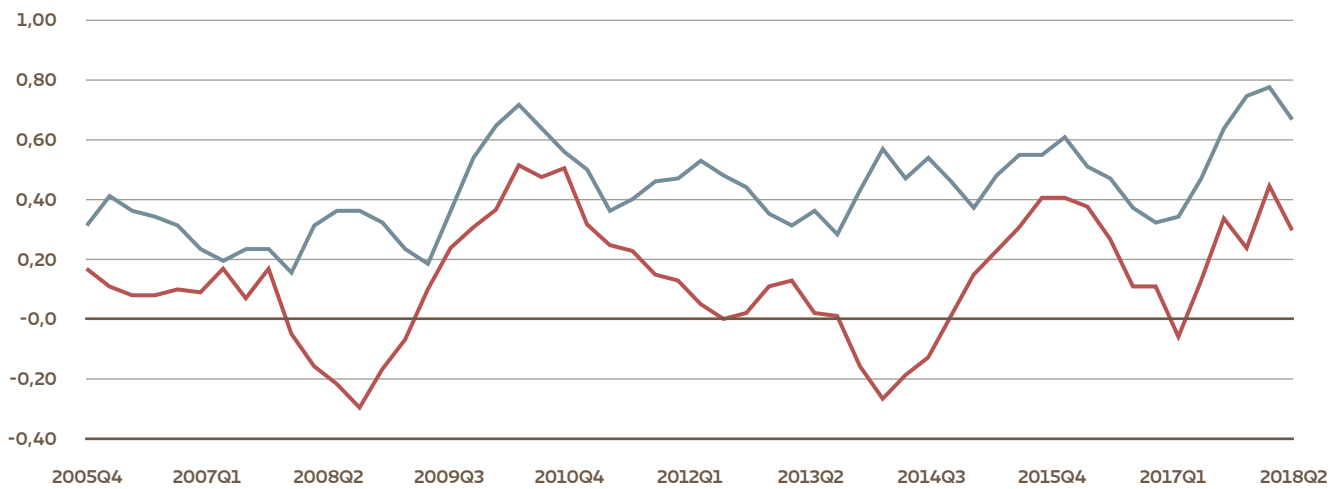


FIGURE 15: MSCI EM Index A-share inclusion
SOURCE: MSCI, March 2019

MSCI's landmark decision and the rapid pace of its implementation underscore the prominence of the A-share market on the global stage. Despite its youth, China's A-share market has now become the world's second largest stock market with a market capitalisation of US\$8.2 trillion¹². Liquidity-wise, the average daily trading volume internationally of the A-share market is more than ten times¹³ its more established Hong Kong counterpart.

But sheer scale is not the only reason why the A-share market warrants a closer look by global investors. The market offers ample opportunities for diversification. The historical average correlation between A-shares and US stocks is a mere 11%¹⁴, which is well below the 32% for Hong Kong stocks. The 3,500 companies on the A-share market offer opportunities unavailable on any other stock market in the world. Unique sectors that can be accessed through the A-share market include baijiu (or 'white liquor'), home appliances and Chinese medicine. The A-share market is also less dominated by large capitalisation stocks compared to the US stock market. The top decile of these companies by market cap account for 75%¹³ of the total market capitalisation of the US stock market whereas for A-shares, it is just 59%. The recent establishment of the ChiNext Board for technology companies on the Shanghai Stock Exchange will further expand the A-share investment universe.



Yet the A-share market has its weaknesses. Retail investors accounted for 86%¹³ of the total market trading volume in 2016, more than double the 35% in the Hong Kong stock market. This high level of retail company participation has resulted in greater volatility and consequently lower efficiency in the A-share market than in other major markets. In recent months the A-share market has gone from being globally the worst performing major stock market in 2018 to the best in 2019 before falling back again as a result of the anxiety generated by press headlines. This indicates some mispricing in the A-share market compared to more mature markets with higher institutional investor participation. Nevertheless, for bottom-up stock pickers, the lower efficiency of the A-share market presents opportunities for alpha generation...at least for now.

FIGURE 16: Correlation of China A-shares with the S&P and Hang Seng indices

SOURCE: Bloomberg, UBS, March 2019

12. SOURCE: Bloomberg, March 2019

13. SOURCE: UBS, May 2018

14. SOURCE: Bloomberg, UBS, March 2019

— HANG SENG INDEX
— S&P 500

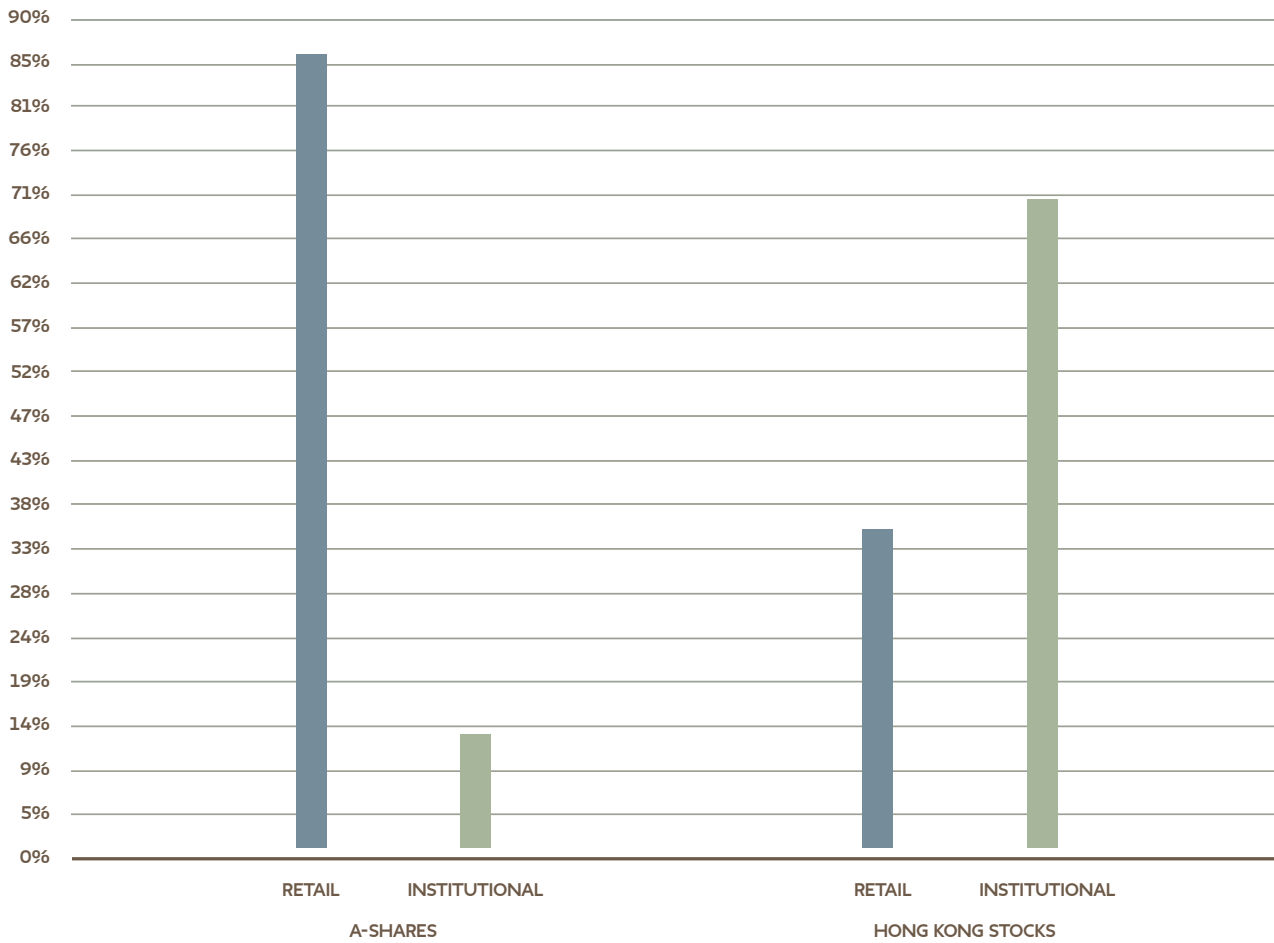


FIGURE 17: Retail versus institutional turnover

SOURCE: CEIC, UBS, MAY 2018

15. SOURCE: CICC, April 2018

Volatility and efficiency on the A-share market could improve in future with greater participation by foreign institutional investors and the growth of the asset management industry in China. Foreign investors currently only own 5%¹³ of the A-share market's free floating market capitalisation, but that level is set to rise as a projected RMB400 billion¹⁵ of foreign inflows are brought into the A-share market in the coming years as a result of MSCI inclusion. While foreign access to the A-share market remains constrained, the launch of the Hong Kong Stock Connect programme in recent years is a most welcome step towards facilitating the ability of foreign investors to trade in Chinese markets.

OXFORD METRICA CLIENTS

BANKING

BNY Mellon
Credit Suisse
Deutsche Bank
Invesco
Schroders
Templeton & Phillips
UBS

ENERGY & MINING

BP
De Beers
Exxon Mobil
Gazprom
Gold Fields
Royal Dutch Shell

FOOD

DongA One
General Mills
Nestlé

FOUNDATIONS

John Templeton Foundation
TWCF

HEALTH CARE

Baxter
Bristol-Myers Squibb
Johnson & Johnson
Merck Serono
Natura
Novartis
Novo Nordisk
Solvay

INDUSTRIAL

ABB
Aker Solutions
BAA
BAE Systems
General Electric
INI
Jardine Matheson
Kone

INSURANCE

AIG
Aviva
FM Global
If
ING Group
Munich Re
OIL
RSA
SCOR
Swiss Life
Swiss Re
Zurich Insurance Group

PROFESSIONAL SERVICES

Accenture
Aon
Ashurst
Blue Rubicon
Deloitte
Edelman
EY
Freehills
Hill & Knowlton
Ince & Co
KBC Peel Hunt
Kenyon International
Marsh
Ogilvy PR
OTC Markets Group
Porter Novelli
PriceWaterhouse Coopers

PUBLISHING

Reed Elsevier

RETAIL

Huhtamaki
Tesco

TECHNOLOGY

Cisco Systems
Green ICN
Hitachi
IBM
ICN Telecom
Infosys
Intel
KNTV
Oracle
Tencent
Xilinx

TRANSPORT

P&O Ferries

OXFORD METRICA CLIENTS

BANKING

BNY Mellon
Credit Suisse
Deutsche Bank
Invesco
Schroders
Templeton & Phillips
UBS

ENERGY & MINING

BP
De Beers
Exxon Mobil
Gazprom
Gold Fields
Royal Dutch Shell

FOOD

DongA One
General Mills
Nestlé

FOUNDATIONS

John Templeton Foundation
TWCF

HEALTH CARE

Baxter
Bristol-Myers Squibb
Johnson & Johnson
Merck Serono
Natura
Novartis
Novo Nordisk
Solvay

INDUSTRIAL

ABB
Aker Solutions
BAA
BAE Systems
General Electric
INI
Jardine Matheson
Kone

DISCLAIMER

THIS DOCUMENT HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE INTENDED RECIPIENT(S) ONLY. WHILST EVERY EFFORT HAS BEEN MADE TO ENSURE THE ACCURACY OF THE INFORMATION CONTAINED IN THIS DOCUMENT, NEITHER OXFORD METRICA NOR ANY OF ITS MEMBERS PAST PRESENT OR FUTURE WARRANTS ITS ACCURACY OR WILL, REGARDLESS OF ITS OR THEIR NEGLIGENCE, ASSUME LIABILITY FOR ANY FORESEEABLE OR UNFORESEEABLE USE MADE THEREOF, WHICH LIABILITY IS HEREBY EXCLUDED. CONSEQUENTLY, SUCH USE IS AT THE RECIPIENT'S OWN RISK ON THE BASIS THAT ANY USE BY THE RECIPIENT CONSTITUTES AGREEMENT TO THE TERMS OF THIS DISCLAIMER. THE RECIPIENT IS OBLIGED TO INFORM ANY SUBSEQUENT RECIPIENT OF SUCH TERMS. THE INFORMATION CONTAINED IN THIS DOCUMENT IS NOT A RECOMMENDATION OR SOLICITATION TO BUY OR SELL SECURITIES. THIS DOCUMENT IS A SUMMARY PRESENTED FOR GENERAL INFORMATIONAL PURPOSES ONLY. IT IS NOT A COMPLETE ANALYSIS OF THE MATTERS DISCUSSED HEREIN AND SHOULD NOT BE RELIED UPON AS LEGAL ADVICE.

THE VIEWS EXPRESSED ARE THE VIEWS OF VALUE PARTNERS HONG KONG LIMITED ONLY AND ARE SUBJECT TO CHANGE BASED ON MARKET AND OTHER CONDITIONS. THE INFORMATION PROVIDED DOES NOT CONSTITUTE INVESTMENT ADVICE AND IT SHOULD NOT BE RELIED ON AS SUCH. ALL MATERIAL HAS BEEN OBTAINED FROM SOURCES BELIEVED TO BE RELIABLE AS OF THE DATE OF PRESENTATION, BUT ITS ACCURACY IS NOT GUARANTEED. THIS MATERIAL CONTAINS CERTAIN STATEMENTS THAT MAY BE DEEMED FORWARD-LOOKING STATEMENTS. PLEASE NOTE THAT ANY SUCH STATEMENTS ARE NOT GUARANTEES OF ANY FUTURE PERFORMANCE AND ACTUAL RESULTS OR DEVELOPMENTS MAY DIFFER MATERIALLY FROM THOSE PROJECTED.

OXFORDMETRICA.COM