

Demystifying three themes that are critical to China's future development



Freddy Wong
Head of Asia Pacific,
Invesco Fixed Income



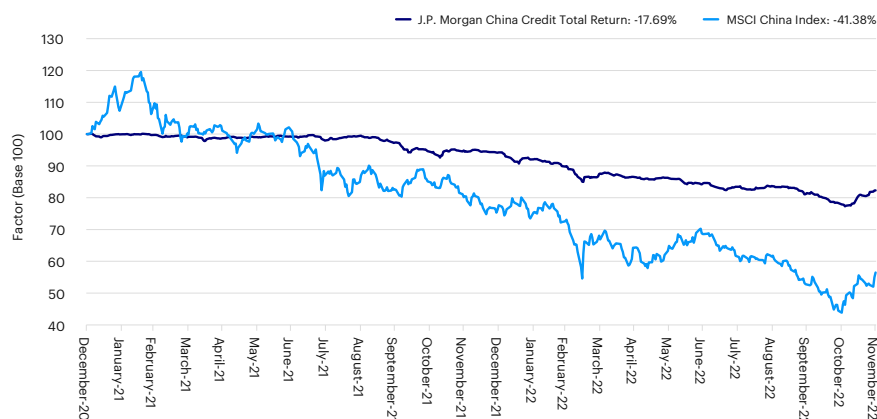
Anthony Xiao
Client Portfolio Manager,
Invesco Fixed Income

Executive Summary:

China risk assets have experienced broad selloff since 2021, driven by four major factors: real estate sector crisis, Covid developments and lockdowns, economic growth slowdown, and heightened regulatory and geopolitical risks. **A lack of confidence and understanding of China's future path has resulted in global investors reallocating out of China assets.**

As a reference, China offshore USD bonds registered a -17.69% return as of end-November while China stocks registered a -41.38% return.ⁱ

Figure 1 – China's equity and credit performance since end 2020



Source: Bloomberg, data as of November 30, 2022. Past performance does not guarantee future results. An investment cannot be made in an index.

However, we see light at the end of the tunnel. We believe China is on the right track to tackle its challenges and enter a new phase of more sustainable and higher quality growth. In this paper we will elaborate on three main areas to allow investors to better understand the roadmap China is currently on and our expectations of policymakers' plans.

These include:

- 1) Property market restructuring;
- 2) Zero Covid policy;
- 3) Internal circulation and Common Prosperity.

We believe global investor confidence can be regained as these themes play out and these themes can be better understood by a wider investor base. The pullback in asset prices over the past two years provides a better entry point for long-term investors.

We believe China assets are becoming increasingly more attractive and will continue on this trajectory in 2023.

i. Bloomberg, data as of November 30, 2022.

This document is for Professional Clients only in Dubai, Jersey, Guernsey, the Isle of Man, Continental Europe (as defined in the important information at the end) and the UK; for Institutional Investors only in the United States, for Sophisticated or Professional Investors in Australia; in New Zealand for wholesale investors (as defined in the Financial Markets Conduct Act); for Professional Investors in Hong Kong; for Qualified Institutional Investors in Japan; in Taiwan for Qualified Institutions/Sophisticated Investors; in Singapore for Institutional/Accredited Investors; for Qualified Institutional Investors and/or certain specific institutional investors in Thailand; for certain specific sovereign wealth funds and/or Qualified Domestic Institutional Investors approved by local regulators only in the People's Republic of China; for certain specific institutional investors in Malaysia upon request; for certain specific institutional investors in Brunei; for Qualified Professional Investors in Korea; for certain specific institutional investors in Indonesia; for qualified buyers in Philippines for informational purposes only; in Canada, this document is restricted to i) accredited investors and ii) permitted clients as defined under National Instrument 45-106 and 31-103 respectively. It is not intended for and should not be distributed to or relied upon by the public or retail investors. Please do not redistribute this document.

Demystifying three themes that are critical to China's future development

1) Property Market Restructuring

What has driven the rise of China's commercial housing market?

Since China's "Reform and Opening-up" policy in 1978, the real estate sector has become one of the major pillar industries responsible for the country's economic boom. Over time, policymakers in China replaced the welfare-based urban housing system with a market-based housing provision scheme. The demand for commercial urban housing was also boosted by a series of policy developments.

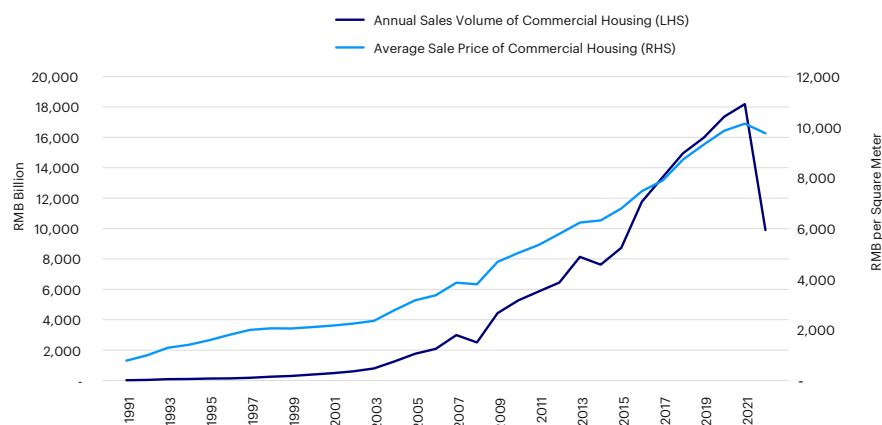
Table 1 – Policy developments implemented to boost China's commercial real estate sector

Policy development	Outcome
Household Responsibility System	Facilitated the migration of surplus rural labor to urban areas
Household Registration (Hukou) System reform	Allowed rural migrant workers to settle in urban areas as residents
Land Leasehold System	Emergence of commercial property developers
Right to property ownership	The previous planned welfare allocation system where citizens only had the right to live in houses without owning the property, was gradually abandoned by the 1990s. Residents were able to own the new houses they bought. State-owned welfare houses were also sold to the residents living in these houses at affordable prices.
Introduction of housing mortgages	Enlarged the buying power of citizens

Source: Invesco, for illustrative purposes only.

Since these initiatives came into effect, China's real estate market has experienced rapid and prolonged growth. Over the past 30 years, both the sales volume of commercial housing and average sale prices of commercial houses have skyrocketed.

Figure 2 – China commercial housing sales volume and prices



Source: National Bureau of Statistics of China, Invesco, data as of September 30, 2022.

What are the causes of the current property market restructuring?

China's real estate market entered a new phase in 2018, as growth slowed down and regulation intensified. The annual sales area of commercial houses grew from 30 million sqm in 1991 to 1.7 billion sqm in 2017, up by more than 56 times. ⁱⁱ This figure stayed roughly stable until 2021. Since early 2021, major developers in China, especially private developers, started to suffer from liquidity issues and many went into default. This could be partly explained by the tighter sector regulations but was fundamentally due to long-term supply/demand dynamics.

ii. National Bureau of Statistics of China

Demystifying three themes that are critical to China's future development

Table 2 - Triggers for current property market restructuring

Trigger	Description
Policy tightening	<p>Three-red-lines policy to regulate the leverage being taken on by property developers.</p> <p>Tighter regulations on the use of money in escrow accounts.</p> <p>Tighter restrictions on funding from capital markets and financial institutions to property developers.</p>
Shifts in fundamental supply/demand drivers	<p>China's population is likely to peak at 1.4 billion with downside pressure, given the rising elderly population rate (18% in 2020, expected to reach 28% by 2040¹) and decreasing birth rate (8.52% in 2020 compared to 21.06% in 1990²).</p> <p>While there's still room for further increases in the urban population rate, its growth potential is not as large as it used to be. China's urban population rate reached 65% in 2021, compared to 20% back in 1980.³ In comparison, the urban population rates in the US and EU were 80% and 75% respectively, in 2021.⁴</p> <p>Stock of unsold housing and vacant houses is picking up. First-hand unsold housing inventory was over 600 million sqm as of June 2022. Vacant house rate is estimated to be 20%.⁵</p> <p>While there's still room for further increases in residential area per person, its growth potential is not as large as it used to be. As of 2019, residential area per person reached 49 sqm (versus 9 sqm in 1980) in rural areas and 39 sqm (7 sqm in 1980) in urban areas.⁶ As a comparison, the figures differ a lot across major developed market countries, 65 sqm per person for US, 45 sqm per person for Germany, UK, and Japan, as of September 2021.⁷</p> <p>Demand for urban redevelopment and the construction of new schools/hospitals has largely been met already.</p> <p>Property developers have accumulated too much debt as land and housing prices have risen significantly over the past 30 years.</p>

Sources: 1. The elderly population rate refers to the percentage of population of people over 60 years old. 2020 figure is from China's Seventh National Population Census, data as of November 1, 2020. 2040 forecast is from World Health Organization. 2,3. National Bureau of Statistics of China. 4. The World Bank, data as of September 15, 2022. 5. First-hand unsold housing inventory refers to commercial houses that have been approved for selling but not sold yet. Figure is from CRIC China, data as of June 30, 2022. Source for Vacant house rate is Li Gan, an economics professor at Texas A&M University, data as of October 20, 2021. 6. National Bureau of Statistics of China. 7. China Ping An Research, data as of September 2021.

What is our outlook for China's property market?

We believe the restructuring process is painful but necessary for China's property sector to have a more sustainable and healthy growth model. We expect the real estate industry to enter a new era of development in the next five to 10 years with the previous standard development model no longer suitable. We anticipate that:

- Chinese property developers will stay away from the previous development model of "high leverage, high debt, high turnover". We expect them to stop aggressively bidding for land at extremely high prices in order to build new houses.
- Chinese property developers will focus on development projects based on actual market demand and avoid expansions in non-core businesses.
- The number of property developers will shrink, with higher quality developers taking more market share. State-owned (SOE) property developers will take more market share than privately-owned enterprises (POE), reversing the trend in previous years.

We expect that China's property sector will have healthier and more sustainable development starting from 2023, given that:

- After the restructuring in China's property sector over the past two years, yearly commercial housing sales have become much more sustainable in the medium to long term based on fundamental supply and demand factors. In the first nine months of 2022, commercial housing sales reached around 1 billion sqm. ⁱⁱⁱ We estimate that the average annual demand of new houses till 2030 will be around 1.5 billion sqm, assuming a 1.5% redevelopment rate, 1% annualized growth on residential area per person, and growing urbanization rate to 75% by 2030 (detailed calculation shown in Appendix). **As such, we expect fundamental supply and demand to be at an equilibrium in 2023.**
- The leverage ratios for major property developers have recently dropped to a healthier level. More accommodative easing measures were also announced in mid-November to help address the liquidity issue faced by private developers, including a 16-measure rescue package and "three-arrows" easing measures (loans, debt and equity). **The property sector remains important for China. Previous rounds of policy tightening were not intended to eliminate the sector, but to control the market bubble and target more sustainable long-term growth pattern going forward.**

ii. National Bureau of Statistics of China, data as of September 30, 2022

Demystifying three themes that are critical to China's future development

2) Zero Covid policy

The implementation of dynamic zero Covid policy in China, which involves mass testing, strict quarantine measures, and regional lockdowns, has negatively impacted economic growth and investor confidence in China over the past year. However, since early November 2022, a series of events suggest that China is embarking on a clearer path toward the end of the zero Covid policy.

Table 3 – Timeline of recent events indicating China is embarking on a clearer path toward ending the zero Covid policy

Timing	Event
22-Oct	China's airline companies announced increases in the numbers of international flights
22-Oct	President Xi met four foreign leaders within one week since the conclusion of the 20th National Party Congress
22-Nov	Top leaders' foreign visits were resumed and large-scale events (Shanghai and Beijing Marathon) resumed
22-Nov	The People's Daily published an article clarifying that the risk of "long Covid" is low for most people
22-Nov	BioNTech vaccine was agreed to be approved for expats
22-Nov	20 optimization measures were unveiled by the National Health Commission to optimize Covid prevention and control measures

Source: Invesco, for illustrative purposes only.

We believe that policymakers have learnt from the reopening experiences elsewhere around the world and have taken into consideration China's unique situation. **Chinese officials are making good progress in achieving the four pre-conditions needed for a full reopening and we expect these pre-conditions to set good foundation for a smoother process once reopening occurs.**

Pre-condition 1: Boosting vaccination rate, especially that of the elderly population

A critical reason why China has stuck to its zero Covid policy is because of its large elderly population, as emphasized by President Xi in multiple press meetings. As such, it's natural for Chinese policymakers to focus on boosting the vaccination rate for elderly population to prepare for reopening. Chinese health authorities claimed on November 29 that 66% of elderly people over 80 years old had received booster shots, which was up from 40% as of November 11.^{iv} According to Caixin's December report, Chinese officials have made plan to improve the booster vaccination rate for elderly people over 80 years old to above 90%, and for elderly people aged between 60 to 79 years old to above 95%, by end of January 2023.^v The targeted higher vaccination rate for the elderly would remove the biggest obstacle for policymakers to relax the strict Covid policy rules.

Pre-condition 2: Availability of effective Covid treatments including oral anti-Covid drugs

The availability of effective Covid treatments is another crucial pre-condition for China's potential shift away from the zero Covid policy. Given the large population and wealth/resource inequality in the country, oral treatment against the Coronavirus stands out as an important option.

After giving conditional approval to a large global pharmaceutical's Covid treatment drug Paxlovid in February 2022, Chinese officials have continued to push domestic oral antiviral drugs. Regulators granted conditional approval to Azvudine, the first Chinese-made oral antiviral drug to treat Covid-19 in July 2022. The drug only costs RMB 270 per course, compared to the cost of the imported drug Paxlovid of RMB 2,300.^{vi}

Another domestic oral antiviral drug GST-HG171 was also approved for clinical trials for the treatment of mild-to-moderate Covid-19 in adults in September 2022.

iv. CNBC, data as of November 29, 2022.

v. Caixin, data as of December 1, 2022.

vi. China Daily, data as of August 13, 2022.

Demystifying three themes that are critical to China's future development

Pre-condition 3: Education to reshape the public perception of Covid

Another key milestone to full reopening is to reduce public concerns around the virus. This is important as many Chinese people are still highly concerned about spread of the virus given: 1) the serious consequences of Covid have been highlighted by the Chinese government over the past 2 years; 2) Lack of education on the difference between the virus from the early Wuhan days and later variants (much milder but more contagious).

We have seen the Chinese government making efforts to change the narrative in this regard. For example, in November, People's Daily stated that long-Covid is temporary and mild. And a few authoritative experts were also highlighted who gave context to the latest fatalities and severity of the situation.

Pre-condition 4: Availability of medical treatment and equipment to manage high caseloads

In November it was reported that China's top health authorities vowed to strengthen hospital networks in order to more effectively treat Covid patients. The country will build more hospitals that specialize in treating moderate and severe Covid patients and ensure that intensive care units account for 10% of all beds in these hospitals to tend to the most vulnerable. Earlier in the year, there was also a report that the National Health Commission instructed county-level hospitals to boost medical equipment supplies, targeting Covid treatments, particularly for severe cases.

The safeguarding of hospital capacity to manage high caseloads is a clear sign and a significant step in the reopening process, which could result in the quicker identification treatment of Covid cases in the short-term.

3) Internal circulation and Common Prosperity

Both internal circulation and Common Prosperity are important policy initiatives that Chinese officials have been emphasizing. **Neither has been welcomed or widely understood by foreign investors. We believe there are some misperceptions which need to be clarified. These are well-thought initiatives that would bring clear benefits to the economy in the long-term and set a good foundation for more sustainable and high-quality growth.**

Internal Circulation

China's dual circulation strategy was first mentioned by President Xi in May 2020. The strategy places a greater focus on the domestic market, or internal circulation, with less reliance on an export-oriented development strategy given the increasingly unstable external relationships China has with major trading partners including the US and EU.

Internal circulation is a defensive approach by Beijing to prepare for the worst-case scenario as the world undergoes significant geopolitical and economic changes. China's major trading partners have ramped up their defensive policy actions. The US' tariffs and other trade barriers, US advanced chip ban, and Huawei ban in both US and EU are all examples of trade protectionism or technology supply chain disruptions that are forcing China to adapt.

As such, the concept of dual circulation was introduced, which focuses on:

- **Boosting domestic consumption.** This can be achieved by increasing the size of the country's middle-class population (currently 400 million^{vii}) and by narrowing the wealth gap.
- **Push for technological self-reliance.** This involves a supply-side evolution, particularly in areas such as advanced chips that have been and could be sanctioned by the US.
- **Reallocation of labor, land, and financial resources to more productive areas.**

Improvements in these three areas could lead to higher quality growth.

While some foreign investors are concerned that internal circulation can push China to completely close itself off from the outside world, we believe this is simply not true. **While the country can lean more on domestic consumption, we do not expect China to turn away from the international market, as internal circulation is just one part of the dual circulation strategy.** Instead, China has cooperated more closely with its partner countries under the Belt and Road Initiative. Rather than becoming a manufacturing hub as part of the old global supply chain order led by the US, **China has started to build its own supply chain through its Belt and Road network.** The construction of Chinese industrial parks in Belt and Road countries is an example where China has not only helped to speed up the industrialization of Belt and Road countries, but also diversified the export risks for Chinese products.

vii. National Bureau of Statistics of China, data as of December 31, 2021.

Demystifying three themes that are critical to China's future development

Common Prosperity

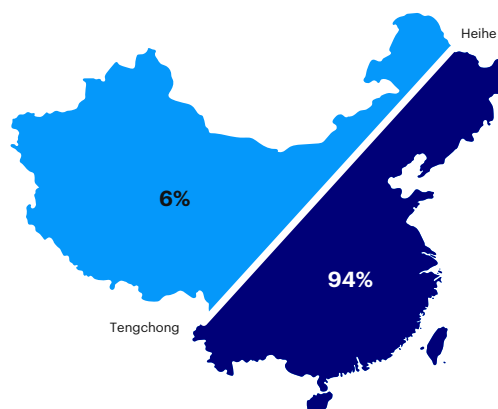
Common Prosperity has emerged as one of the most important concepts in China since it was mentioned by President Xi in August 2021. **This is often misperceived to be a Robin Hood-style redistribution of wealth or full equality. However, the goal for Common Prosperity is about creating a society that's prosperous "overall" rather than "uniform egalitarianism".**

There are three underlying goals under the Common Prosperity framework:

- 1) Reducing regional inequality;
- 2) Reducing rural-urban inequality;
- 3) Reducing sector inequality.

For the regional inequality, the reduction would mainly be achieved by modernized high quality growth in the lesser-developed regions. The Heihe-Tengchong Line was an imaginary border line drawn by demographer Hu Huanyong in 1935. The line illustrated how the China's population is distributed unevenly. The area to the west of the line comprised two-thirds of China's territory but contained only 6% of the country's population. Inversely, 94% of the Chinese lived to the east of the line, on just one-third of the land. The western side of the line was less developed mainly because of natural causes such as weather. As such, we believe this needs to be addressed by modernization and technology.

Figure 3 – Heihe-Tengchong Line



Source: BigThink, February 2021.

China's West-East Electricity, Oil and Gas Transfer Projects and the newly built Western China Clean Energy bases are examples of China's push to develop its western areas. The solar park located in Qinghai is over 600 square kilometers and the electricity that can be produced here can help accumulate wealth for local people of this region. Since China's "Go West" campaign, the wealth inequality between western and eastern areas has been reducing. Back in 2000, the GDP per capita ratio between the Western and Eastern regions was 1:3.2. This rose to 1:2 in 2020.^{viii} The emphasis on carbon neutrality and achieving peak carbon in China by 2030 can further benefit the Western region as it has been revamped into a high-quality energy base. As illustrated, **the reduction of inequality has been achieved not by transferring wealth from the East to West, but by high-quality development in the West itself.**

Similarly, in order to reduce rural-urban inequality, Chinese officials have been providing the necessary elements to rural residents to help them accumulate wealth such as through asset investment and use of leverage. The household registration (Hukou) system was also further reformed in recent years to allow rural migrant workers to settle as urban residents.

To address sector inequality, historically, Chinese citizens working in finance, internet, and property sectors have had higher incomes, which was fundamentally driven by looser regulatory policies and more supply of resources to these sectors. Chinese officials have now reallocated the supply of resources more fairly and intervened with tighter regulations on selected sectors to ease the overall burden on citizens.

By implementing these measures, we believe China's economy and society will be able to benefit in the long-term despite the more recent short-term volatility.

viii. National Bureau of Statistics of China. The GDP per capita ratio for Western region considers of Xinjiang, Inner Mongolia, Qinghai, Gansu, Ningxia, Tibet. The GDP per capita ratio for Eastern region considers Shanghai, Jiangsu, Zhejiang, Fujian, Guangdong.

Demystifying three themes that are critical to China's future development

Common Prosperity is also a pre-condition for achieving internal circulation. **The push to advance the Common Prosperity framework is expected to increase China's middle-class population, which can further boost the domestic consumer market.** This would set a **better foundation for internal circulation and sustainable economic growth.** It can also help to promote technological innovation, as the larger the consumer market, the more realistic it can be for technology innovation investments to gain back their original investments and realize profits.

Investment implications

In summary, the volatility in the China market since 2021 has been the result of the real estate crisis, Covid developments and lockdowns, a slowdown in economic growth and heightened regulatory and geopolitical risks. While some of these factors are still playing out and challenges to China's growth persist, in 2023 we expect that:

- China's property market will enter a more sustainable growth phase.
- China will gradually pivot away from the zero Covid policy as the four pre-conditions are met.
- Internal circulation and Common Prosperity initiatives will bring about higher-quality, more sustainable, and healthier long-term growth to China.

As the above three themes play out or become better understood by global investors, we anticipate that China assets can enjoy better sentiment and demand in 2023. As such we are positive on China assets in the coming year.

Appendix

Calculation for the estimation of the average annual demand of new houses till 2030

Estimation of average annual demand of new houses till 2030 (sqm)	Formula	Rationale
526,890,000	Current urban residential housing stock x Redevelopment Rate	Redevelopment Demand
600,444,444	Current total population x (Expected Urbanization Rate in 2030 - Current Urbanization Rate) x Current urban residential area per capital / Years till 2030	Demand from higher Urbanization Rate
351,260,000	Current urban residential housing stock x Annual growth of residential area per capita	Demand from higher residential area per capita
1,478,594,444		

Current urban residential housing stock (sqm)	35,126,000,000
Redevelopment Rate	1.5%
Current Urbanization Rate	65%
Expected Urbanization Rate in 2030	75%
Current total population	1,400,000,000
Current urban residential area per capita (sqm)	38.6
Years till 2030	9
Annual growth of residential area per capital	1.0%

Sources: Current urbanization rate and current total population are from National Bureau of Statistics of China, data as of December 2021.

Assumptions:

- Morgan Stanley has forecast that China's urbanization rate would reach 75% by 2030. ^{ix}
- The current urban residential housing stock was estimated by multiplying the total urban population and the urban residential area per capita.
- A 1.5% redevelopment rate is assumed.
- An annual growth of residential area per capita of 1.0% is assumed, so that the current 38.6 sqm would grow to around 42.2 sqm by 2030.

Demystifying three themes that are critical to China's future development

Investment risks

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested.

When investing in less developed countries, you should be prepared to accept significantly large fluctuations in value.

Investment in certain securities listed in China can involve significant regulatory constraints that may affect liquidity and/or investment performance.

Important information

This document is for Professional Clients only in Dubai, Jersey, Guernsey, the Isle of Man, Continental Europe (as defined below) and the UK; for Institutional Investors only in the United States, for Sophisticated or Professional Investors in Australia; in New Zealand for wholesale investors (as defined in the Financial Markets Conduct Act); for Professional Investors in Hong Kong; for Qualified Institutional Investors in Japan; in Taiwan for Qualified Institutions/Sophisticated Investors; in Singapore for Institutional/Accredited Investors; for Qualified Institutional Investors and/or certain specific institutional investors in Thailand; for certain specific sovereign wealth funds and/or Qualified Domestic Institutional Investors approved by local regulators only in the People's Republic of China; for certain specific institutional investors in Malaysia upon request; for certain specific institutional investors in Brunei; for Qualified Professional Investors in Korea; for certain specific institutional investors in Indonesia; for qualified buyers in Philippines for informational purposes only; in Canada, this document is restricted to i) accredited investors and ii) permitted clients as defined under National Instrument 45-106 and 31-103 respectively. It is not intended for and should not be distributed to or relied upon by the public or retail investors. Please do not redistribute this document.

The publication is marketing material and is not intended as a recommendation to invest in any particular asset class, security, or strategy. Regulatory requirements that require impartiality of investment/ investment strategy recommendations are therefore not applicable nor are any prohibitions to trade before publication. The information provided is for illustrative purposes only, it should not be relied upon as recommendations to buy or sell securities.

By accepting this document, you consent to communicate with us in English, unless you inform us otherwise.

For the distribution of this document, Continental Europe is defined as Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland.

All articles in this publication are written, unless otherwise stated, by Invesco professionals. The opinions expressed are those of the author or Invesco, are based upon current market conditions and are subject to change without notice. This publication does not form part of any prospectus. This publication contains general information only and does not take into account individual objectives, taxation position or financial needs. Nor does this constitute a recommendation of the suitability of any investment strategy for a particular investor.

Neither Invesco Ltd. nor any of its member companies guarantee the return of capital, distribution of income or the performance of any fund or strategy. Past performance is not a guide to future returns.

This publication is not an invitation to subscribe for shares in a fund nor is it to be construed as an offer to buy or sell any financial instruments. As with all investments, there are associated inherent risks. This publication is by way of information only. This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else and you may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. Asset management services are provided by Invesco in accordance with appropriate local legislation and regulations.

Certain products mentioned are available via other affiliated entities. Not all products are available in all jurisdictions.

Demystifying three themes that are critical to China's future development

This publication is issued:

- in **Hong Kong** by Invesco Hong Kong Limited 景順投資管理有限公司, 41/F, Champion Tower, Three Garden Road, Central, Hong Kong. This document has not been reviewed by the Securities and Futures Commission.
- in **Singapore** by Invesco Asset Management Singapore Ltd, 9 Raffles Place, #18-01 Republic Plaza, Singapore 048619.
- in **Taiwan** by Invesco Taiwan Limited, 22F, No.1, Songzhi Road, Taipei 11047, Taiwan (0800-045-066 **Invesco Taiwan Limited is operated and managed independently.**
- in **Japan** by Invesco Asset Management (Japan) Limited, Roppongi Hills Mori Tower 14F, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6114; Registration Number: The Director-General of Kanto Local Finance Bureau (Kin-sho) 306; Member of the Investment Trusts Association, Japan and the Japan Investment Advisers Association.
- in **Australia** by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia which holds an Australian Financial Services Licence number 239916.

This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else. Information contained in this document may not have been prepared or tailored for an Australian audience and does not constitute an offer of a financial product in Australia. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco.

The information in this document has been prepared without taking into account any investor's investment objectives, financial situation or particular needs. Before acting on the information the investor should consider its appropriateness having regard to their investment objectives, financial situation and needs.

You should note that this information:

- may contain references to dollar amounts which are not Australian dollars;
- may contain financial information which is not prepared in accordance with Australian law or practices;
- may not address risks associated with investment in foreign currency denominated investments; and
- does not address Australian tax issues.

- in **New Zealand** by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia which holds an Australian Financial Services Licence number 239916.

This document is issued only to wholesale investors (as defined in the Financial Markets Conduct Act in New Zealand to whom disclosure is not required under Part 3 of the Financial Markets Conduct Act. This document has been prepared only for those persons to whom it has been provided by Invesco. It should not be relied upon by anyone else and must not be distributed to members of the public in New Zealand. Information contained in this document may not have been prepared or tailored for a New Zealand audience. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. This document does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for, an opinion or guidance on interests to members of the public in New Zealand. Applications or any requests for information from persons who are members of the public in New Zealand will not be accepted.

- in the **United States** by Invesco Advisers, Inc., Two Peachtree Pointe, 1555 Peachtree Street N.E. Atlanta, Georgia 30309, USA.
- in **Canada** by Invesco Canada Ltd. 120 Bloor Street East, Suite 700, Toronto, Ontario M4W 1B7.
- in **Austria and Germany** by Invesco Asset Management Deutschland GmbH, An der Welle 5, 60322 Frankfurt am Main, Germany.
- in **Belgium, Denmark, Finland, France, Greece, Italy, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain and Sweden** by Invesco Management S.A., President Building, 37A Avenue JF Kennedy, L-1855 Luxembourg, regulated by the Commission de Surveillance du Secteur Financier, Luxembourg.
- in **Dubai** by Invesco Asset Management Limited, PO Box 506599, DIFC Precinct Building No 4, Level 3, Office 305, Dubai, United Arab Emirates. Regulated by the Dubai Financial Services Authority.
- in the **Isle of Man, Jersey, Guernsey** and the **UK** by Invesco Asset Management Limited, Perpetual Park, Perpetual Park Drive, Henley-on-Thames, Oxfordshire, RG9 1HH, United Kingdom. Authorised and regulated by the Financial Conduct Authority.
- in **Switzerland** by Invesco Asset Management (Schweiz) AG, Talacker 34, 8001 Zurich, Switzerland.