The next phase of China's growth

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IN BRIEF

- China's GDP has reached a milestone that puts it on the cusp of middle income status, a point after which other developing economies have lost growth momentum, falling into the "middle income trap."
- Exceptions were South Korea and Taiwan, which saw living standards continue to rise rapidly after reaching middle income; China faces a different set of challenges, however, including weaker global tailwinds and demographics, and greater reliance on an inefficient state sector.
- We project China's real GDP growth will average 4.4% annually over the next 10 to 15 years, which would put China into the high income group of countries, although the range of possible growth outcomes has widened.
- While China's equity and bond markets are the world's second largest, the investment opportunity set does not match China's economic heft, and significant changes to its financial markets likely lie ahead – posing opportunities and risks for investors.
- Investors able to carry out the requisite analysis may find opportunities, including in China's rising services and consumer sectors, and elsewhere in Asia as China's development effects reach beyond its borders.

WILL CHINA GROW RAPIDLY FROM HERE OR FALL INTO THE "MIDDLE INCOME TRAP"?

During 2019, China will likely pass a milestone in its development: Per capita GDP, measured using market exchange rates, will reach USD 10,000 (10K). This comes after China's per capita GDP doubling since 2011 and increasing 10-fold since 2000. This massive improvement in the living standards of a population that exceeds 1 billion represents one of the greatest and fastest economic success stories in history.

In recent years, China's growth has slowed from its double-digit pace, and the economy is now at an important juncture. Very few developing economies have maintained strong momentum in convergence toward the world's richest economies much past the point when they reached the USD 10K per capita GDP mark—a phenomenon known as the middle income trap. In our judgment, China will likely escape this trap. We expect its economy to continue growing rapidly during the next 15 years, nearing high income status by the end of that period.

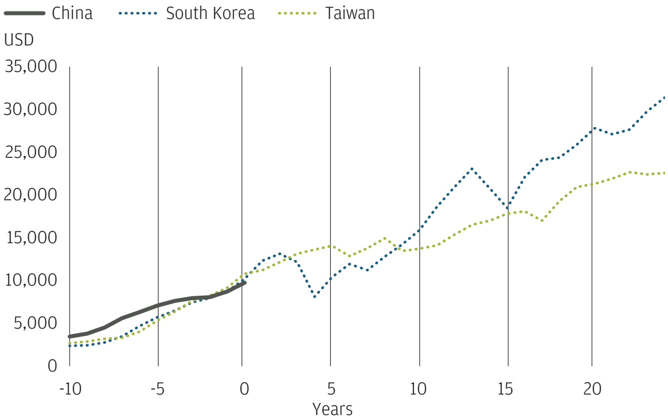
South Korea and Taiwan provide encouraging precedents, having grown steadily after crossing the 10K line in the 1990s, and their convergence with developed economy income levels is nearly complete. Both managed 5% annual average real GDP growth in the 15 years after hitting the 10K mark, and at present their convergence with developed economy income levels is nearly complete. We believe China will expand a bit more slowly than 5% from here, for a variety of reasons. This year's Long-Term Capital Market Assumptions (LTCMAs) project 4.4% Chinese real GDP growth. Potential upside could come from aggressive pursuit of the authorities' reform program (see box, "Structural reform could shift China's growth path upward"); downside risk comes primarily from elevated leverage.

IN GOOD COMPANY: COMPARING CHINA'S TRACK RECORD WITH EAST ASIA'S

Chinese per capita GDP has taken a similar path to those of South Korea and Taiwan as they approached USD 10K (**Exhibit 1**). Taiwan hit that level in 1992, South Korea in 1994. Encouragingly, both saw living standards improve for decades thereafter. A look at aggregate real GDP growth before and after the 10K level (**Exhibit 2**) suggests two points. First, growth in China has already slowed more than in South Korea and Taiwan at corresponding levels of development. Second, South Korea and Taiwan cooled noticeably once they hit the 10K mark, to an annual average of about 6% in the subsequent five years—roughly the clip at which China is expanding today.

The path of China's GDP per capita growth looks like South Korea's and Taiwan's when they approached USD 10K per capita GDP

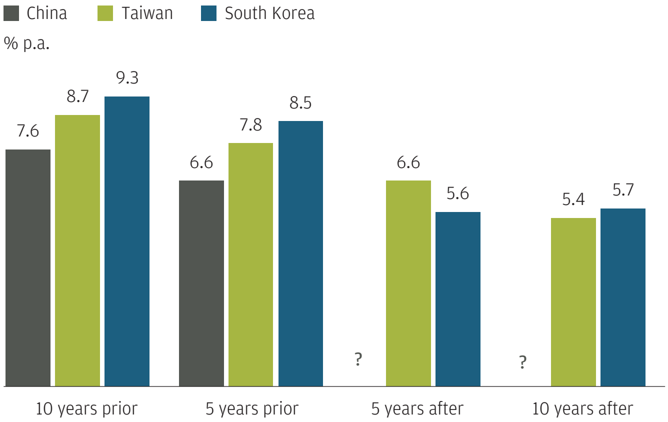
EXHIBIT 1: GDP PER CAPITA (USD) BEFORE AND AFTER REACHING USD 10K



Source: Haver Analytics, J.P. Morgan Asset Management Multi-Asset Solutions; data as of December 31, 2018.

China's growth has already slowed more than South Korea's and Taiwan's did at corresponding levels of development

EXHIBIT 2: AVERAGE REAL GDP GROWTH RATE BEFORE AND AFTER REACHING USD 10K PER CAPITA GDP



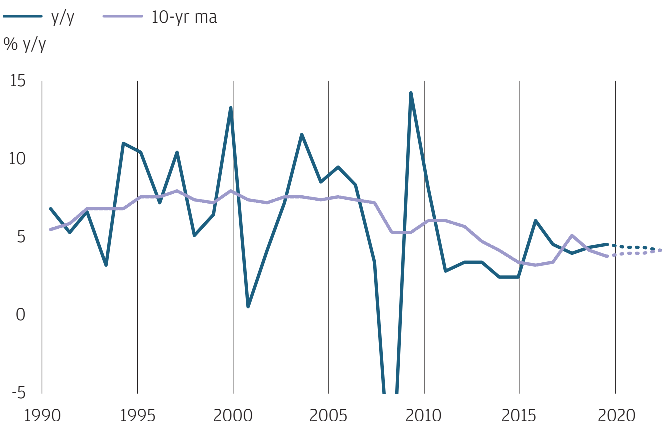
Source: Haver Analytics, J.P. Morgan Asset Management Multi-Asset Solutions; data as of December 31, 2018.

CHALLENGES AND OPPORTUNITIES ALONG CHINA'S LIKELY FUTURE GROWTH TRAJECTORY

China faces several challenges in seeking to maintain rapid growth and avoid the middle income trap. Some relate to the international environment. First, global tailwinds are blowing more weakly than before. Global trade volumes are rising much more slowly today than in the early 1990s, when South Korea and Taiwan were on this same path. Trade growth ran at roughly a 7% per annum pace in volume terms during the decade after those economies reached the 10K level, vs. 3% to 4% in the past few years (**Exhibit 3**). Growth in global trade appears to have come to a halt in recent quarters amid persistent U.S.-China trade tensions. The countries that rode an earlier globalization wave also benefited from improving export *prices*, another phenomenon that has faded. Both volume and price dynamics will make it more difficult for China to achieve rapid, trade-driven GDP growth from here.

Global trade volumes are rising 3%–4% annually today vs. 7% during the years South Korea and Taiwan were moving from middle to high income

EXHIBIT 3: CHANGE IN GLOBAL TRADE VOLUMES (% y/y)



Source: Haver Analytics, J.P. Morgan Asset Management Multi-Asset Solutions; data and forecasts as of October 31, 2019.

DOMESTIC HEADWINDS TO GROWTH

In addition to external challenges, three main domestic factors are likely to contribute to gradual deceleration in Chinese growth. First, China's demographics look appreciably worse than South Korea's and Taiwan's did at the 10K mark. During the next 15 years, China's prime working-age population—15 to 64—is projected to shrink by a drastic 0.5% a year. By comparison, in the 15 years after they crossed the 10K line, South Korea's prime-age population expanded 0.8% annually and Taiwan's grew by 1.1%. The shrinking of China's workforce may be partially offset by rising labor force participation among a rapidly expanding population of older adults. China's senior participation rate, though, already appears to be above the emerging market (EM) average. In our view, continued urbanization will provide a more significant boost. China remains relatively rural, even for a country at its current level of development, and the urbanization process has been underway steadily for many years, with no obvious recent signs of a slowdown.

Second, China's debt situation poses significant challenges to the growth outlook, as the authorities have acknowledged for several years. The previous development strategy leaned heavily on bank credit to favored sectors and enterprises to spur investment spending. Over the past decade, the shadow banking sector has grown enormously and, more recently, a bond market has flourished. Credit to the nonfinancial sector now stands at roughly 250% of GDP, more than 100 percentage points (ppt.) higher than was the case for South Korea at a similar income level. International experience suggests that rapid debt accumulation is associated with an elevated likelihood of a financial crisis.[1]

Even if that does not occur, China's breakneck pace of capital deepening has probably resulted in resource misallocation that will persistently reduce productivity growth. The Chinese government itself has signaled discomfort with further leverage and has cracked down especially on the shadow banking system. The government's orientation will likely lead to consistently tighter policy settings, particularly monetary, than would otherwise be the case.

Third, the structure of China's economy may inhibit future productivity growth. In particular, the prevalence of large state-owned enterprises (SOEs) looked more appropriate at an earlier stage of development, when the authorities needed to encourage rapid expansion of the capital stock. From here, however, convergence with high income economies will need to come more from total factor productivity (TFP) growth,[2] which international experience suggests thrives within more decentralized, innovation-based structures. Indeed, some calculations point to increasingly negative TFP growth in China during recent years. In this respect, the authorities' mooted reform plans represent an opportunity to achieve faster growth than envisioned in our baseline forecast (see box). At the same time, the likely rebalancing toward services that the economy will undergo in coming years (in cross-country analysis, a standard accompaniment to higher income levels) may not be an unambiguous positive for total growth, given that productivity is typically lower in services than in manufacturing.[3]

[1] John Bilton et al., "Tackling leverage," *2017 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, November 2016.

[2] Productivity growth not explained by capital stock accumulation or increased hours worked, capturing the efficiency or intensity with which inputs are utilized; a residual that likely reflects technological change.

[3] Shang-Jin Wei et al. "From 'Made in China' to 'Innovated in China': Necessity, prospect, and challenges," NBER Working Paper No. 22854, November 2016; Chang-Tai Hsieh and Peter Klenow, "Misallocation and manufacturing TFP in China and India," *Quarterly Journal of Economics* 12, no. 4 (November 2009).

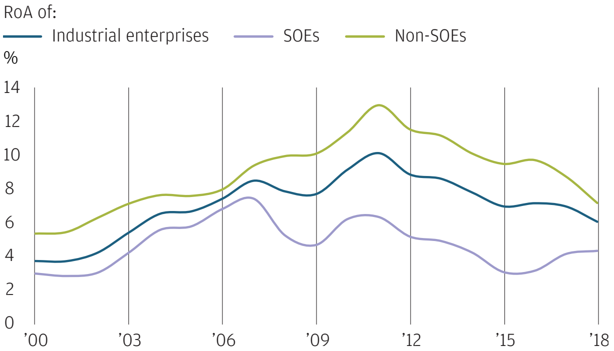
STRUCTURAL REFORM COULD SHIFT CHINA'S GROWTH PATH UPWARD

While China's economy appears less well positioned than its Asian neighbors were at a similar stage of development, economic efficiency, and thus growth, could potentially be improved through structural reforms. Reforms to state-owned enterprises (SOEs) and the financial and services sectors could lead to better resource allocation and boost productivity.

Although their share of the economy has steadily declined over the past two decades, SOEs still play a major role, accounting for around 20% of industrial output and 15% of urban employment (down from above 40% in 2000). During a 1990s phase of SOE reforms, the government restructured excessive debt and reduced overlaps, resulting in notable efficiency gains in the state sector over the subsequent decade. These dividends have waned somewhat as SOE efficiency has deteriorated since approximately 2010 (**Exhibit A**).

Despite subsidized inputs, the RoA of China's state sector underperforms those of the Chinese private sector and SOEs in other EM economies

EXHIBIT A: RETURN ON ASSETS OF CHINA'S SOEs AND NON-SOEs



Source: CEIC, J.P. Morgan Asset Management Multi-Asset Solutions; data as of December 31, 2018.

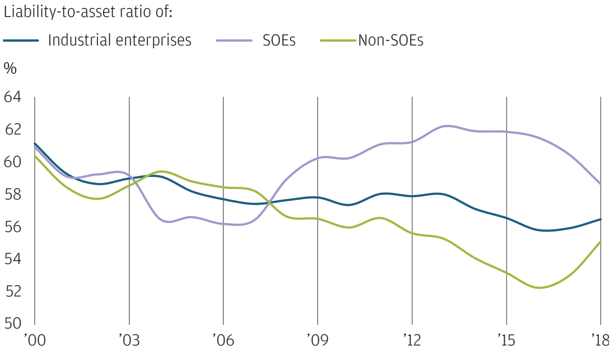
Chinese SOEs appear inefficient by both domestic and international standards; their return on assets (RoA) lags both private sector counterparts and the SOEs of other emerging markets. China's SOE returns would likely be even lower after adjusting for the favorable terms on which these firms can access land and credit. Productivity in the state sector is, on average, about 25% below private firms', even after controlling for differences in their industry mixes, according to International Monetary Fund estimates.* SOEs are also more indebted than private enterprises, with lower debt-servicing capacity (**Exhibit B**).

Facing these issues, the government has identified SOE reform as a priority. The current focus is on initiating mixed ownership – that is, introducing private capital into SOEs. Progress in early pilot programs has been slow, yet we see potential dividends from a shift to mixed ownership. Reforms might create board seats for private investors, which could help modernize corporate governance. The launch of an employee share ownership program could provide stronger long-term incentives for core staff by aligning their interests with their companies'.

* "The People's Republic of China – selected issues," Country Report No. 17/248, International Monetary Fund, 2017.

China's state sector is more leveraged than the private sector, likely reflecting better access to credit

EXHIBIT B: LIABILITY-TO-ASSET RATIO OF CHINA'S SOEs AND NON-SOEs



Source: CEIC, J.P. Morgan Asset Management Multi-Asset Solutions; data as of December 31, 2018.

Leveling the playing field may narrow the productivity gap between SOEs and private enterprises. Deregulating state-dominated services sectors, including financials, telecoms and health care, would help foster competition, and lowering barriers to entry could promote efficiency gains. Removing implicit guarantees for SOEs and liquidating nonviable ones would also help address the debt burden problem and improve credit allocation. We estimate that an optimal reallocation of capital between SOEs and private enterprises could by itself boost China's GDP by around 20 basis points (bps) per year if spread across a decade. Other empirical estimates are higher, suggesting a potential boost to GDP of 20bps–100bps per year.†

Also high on China's agenda are financial sector reforms. China is transitioning from a quantity-based to a price-based monetary policy framework – that is, switching from controlling the amount of money in the economy to managing the price of that money, with interest rates as the primary instrument. To work, this system requires effective transmission of the policy rate to market rates. The central bank has already established an interest rate corridor, centered on the seven-day repo rate, to limit volatility in short-term interbank rates. Transmission could be further enhanced if institutional constraints on banks – such as high reserve requirements on deposits, and loan quotas – were removed.

Another important step to reduce the misallocation of capital would involve China's capital markets, which could benefit from further reforms, including lessening restrictions on foreigners' access to China's equity and bond markets, encouraging fundamentals-based pricing of assets, lengthening the maturities of traded corporate bonds and strengthening the interest rate derivatives market.

† David Dollar and Shang-Jin Wei, "Das (wasted) Kapital: Firm ownership and investment efficiency in China," Working Paper No. 07/09, International Monetary Fund, 2007; W. Raphael Lam, Markus Rodlauer and Alfred Schipke, "State-owned enterprise reform," *Modernizing China: Investing in Soft Infrastructure,* International Monetary Fund, 2017.

PUTTING IT ALL TOGETHER: ADDING UP CHINA'S GROWTH PROSPECTS

As discussed in the Macroeconomic Assumptions article, we estimate long-term potential growth by making projections for each economy's labor input (the workforce, human capital and average hours worked per person), capital stock and TFP. We expect a marginally positive growth rate in China's labor input (thanks to urbanization). With China reaching the 10K GDP per capita mark, and bearing in mind the various challenges the country faces, we are lowering our sights for its future capital stock growth and for TFP. Our LTCMA forecast for Chinese growth over the next 15 years correspondingly shifts down, from 5.0% last year to 4.4% this year—still the second highest in our global sample (behind only India, which has a much lower current level of per capita income). Successful pursuit of structural reforms could steer China onto a somewhat faster growth trajectory.

Given the pervasiveness of the middle income trap, 4.4% per annum real growth for China over the next 15 years would constitute a remarkable and highly unusual success story, especially in a somewhat unforgiving international climate. It would result in substantial further gains in living standards, with per capita GDP in U.S. dollar terms rising (using our LTCMA exchange rate projections) into the upper USD 20,000 range by 2034. By these projections, China would reach high income status, as defined by the World Bank, by the mid 2020s at the latest. That achievement would likely result in another kind of rebalancing, with consumption representing a much higher share of GDP than it does today, along with a declining investment component. Moreover, the aggregate size of China's economy in U.S. dollars would roughly match, or perhaps exceed, that of the U.S. by the end of our forecast period. Such outcomes might have seemed implausible not very long ago, but they now constitute our base-case LTCMA expectation.

TRANSLATING DEVELOPMENT INTO INVESTOR OPPORTUNITIES: CHINA'S ASSET MARKETS

As China's economic heft continues to grow, its asset markets are also entering a new phase. Slowing growth, reforms—to both the structure of the economy and the function of the country's financial industry—and continued economic development will each, in different ways, affect the investment opportunities available in China.

In the fixed income market, the low cost at which firms can borrow, enforced by government influence in the banking system, depresses the base borrowing rate against which investors price instruments across the bond universe.[4] Additionally, low borrowing costs have constrained the development of an onshore bond market—why would a company want to deal with the vagaries of the market when it could access a fixed-term loan at an attractive rate? Bond financing in China may remain more expensive than it would be in a purely market-driven financial system, but that dynamic will likely support elevated yields onshore over our forecast horizon, attracting yield-seeking investors. Financial liberalization will likely allow the base interest rate to rise from its currently depressed level, but China's slowing nominal growth will put downward pressure on yields, a force we have long highlighted in our LTCMAs.

Policymakers' emphasis on market-driven pricing, as well as greater reliance on public markets overall, will likely support the growth of China's bond markets. China's debt-to-GDP ratio is famously high, but its bond market lags many other countries'. Market-driven pricing requires putting more of China's debt on the market, supporting bond market growth. New issuance, combined with the yield dynamics and systemic reforms discussed here, will likely draw a steady stream of offshore investors, pushing their ownership of the CNY bond market above its current measly 2%. At the same time, local investors will watch the development of the bond market carefully to see if government issues, in particular, take on "safe haven" status. Persistently negative correlation between stocks and bonds could allow for more stable, internally hedged onshore investment portfolios.

We don't mean to say that China's banking system won't continue to play an outsize role in economy-wide financing—banks are often the largest purchasers of bonds—but banks' role in intermediation may evolve from issuing loans to also underwriting securitized debt. Official promotion of market pricing of debt, and the shifting of risks from bank balance sheets to market participants, should also help improve liquidity onshore, which, in turn, could lead to less volatility in China's debt markets.

MARKETS: STILL AMPLE POTENTIAL ROOM TO GROW

It is instructive for investors to consider the examples of the asset markets of other EM economies that accelerated through the middle income trap to understand the likely trajectory ahead for China's financial markets. One useful metric is the equity market cap-to-GDP ratio, which tends to

[4] Hannah Anderson and Leon Goldfeld, "The cost of capital in China's changing markets," *2018 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, November 2017.

rise as economies develop. China's, currently about 70%, is already fairly high compared with some other economies at an equivalent stage (**Exhibit 4**). However, many developed market (DM) economies, including Taiwan, have market cap-to-GDP ratios exceeding 100%, implying potential room for growth in the Chinese equity market. Similar dynamics are likely to play out in bond markets. The Chinese bond market today is worth USD 13.2 trillion, or 100% of GDP, vs. 130% of GDP for the value of the U.S. bond market.

Economic growth is not the sole determinant of equity investor returns in China. One big reason for this, which we account for in our returns framework, is dilution: While corporate revenues usually grow in excess of an emerging market's GDP, share counts also tend to grow as financial markets develop, diluting returns to existing holders. This effect tends to diminish as markets develop, which can be seen in China in recent years.

POTENTIAL INVESTMENT INFLOWS AND THE EVOLUTION OF EQUITY SECTORS

The inclusion of Chinese securities in global benchmark bond and stock indices, and the emergence of vehicles allowing offshore investors access to China's onshore stock market, have prompted large increases in foreign investor holdings.[5] Yet foreign ownership still remains low by international standards, at 3% of A-share equities, an estimated 15% across all Chinese equity classes and just 2% of bonds (**Exhibit 5**). For comparison, foreign investors own around 23% and 24% of the U.S. equity and bond markets, respectively.[6] As foreign owners take advantage of recently expanded access to China, we would expect their ownership share to rise closer to the country's overall percentage of global markets—Chinese securities make up, by market capitalization, roughly 8% of global equity markets and 13% of global bond markets.[7]

Such ownership shifts, along with the further development of an onshore asset management industry to help Chinese citizens invest their growing incomes, will drive structural change in China's markets. Chinese equity markets, in particular, are still overwhelmingly held by retail investors, at 82%, while institutional ownership remains relatively low at 18%. This compares with 67% institutional ownership in the U.S. and 60% in the UK.[8]

This change to the investor base may exert a stabilizing influence on China's equity prices—now among the EM world's most volatile, largely due to retail investors' primacy in the market. China's increasing integration into the global financial system should also lead its asset market returns to become more correlated with global markets—something that is already happening.

[5] Because China would eventually dominate benchmark equity indices if its shares' weighting were commensurate with its market size, it seems likely that over time Chinese listed securities will be spun off into stand-alone indices and/or that a new EM ex-China benchmark index will be established.

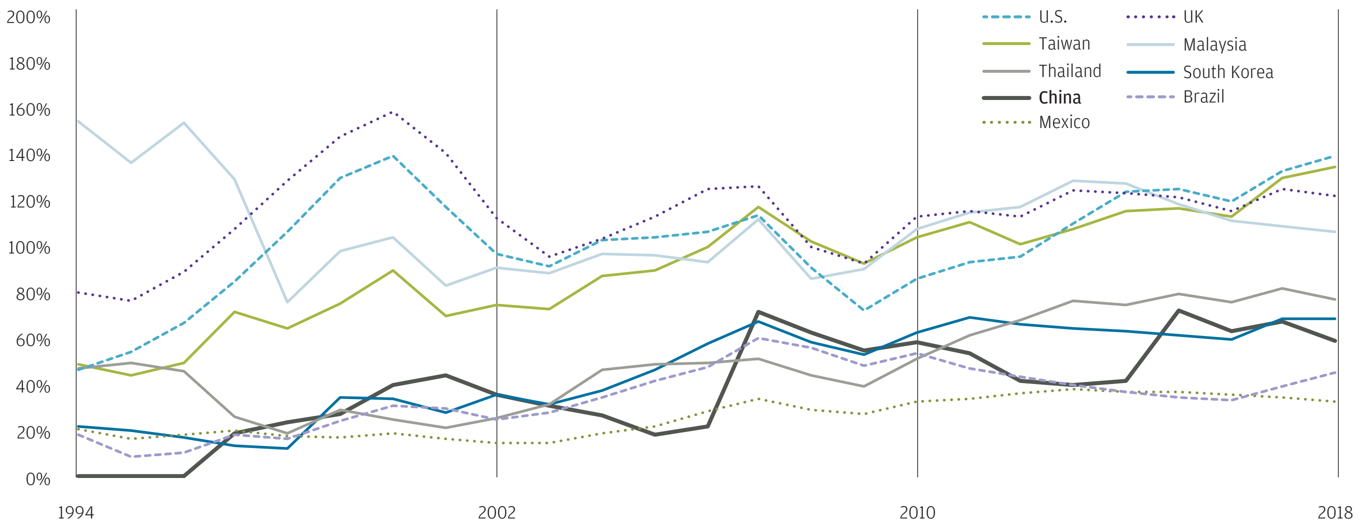
[6] Securities Industry and Financial Markets Association, U.S. Treasury Department, World Bank and World Federation of Exchanges; data as of December 31, 2018.

[7] Bloomberg Finance L.P., World Federation of Exchanges; data as of December 31, 2018.

[8] OECD Equity Market Review of Asia 2018. E-book, OECD, 2018. www.oecd.org/corporate/OECD-Asia-Equity-Market-Review-2018.pdf

While China's market cap-to-GDP is fairly high (70%) for the country's development stage, this ratio in developed market economies can exceed 100%, suggesting room to grow

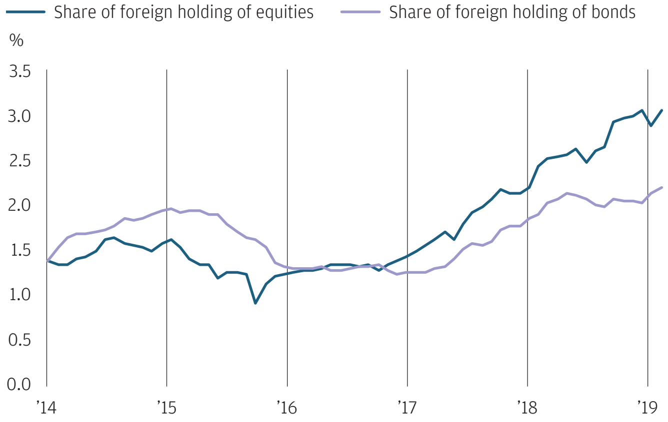
EXHIBIT 4: EQUITY MARKET CAPITALIZATION-TO-GDP, SELECTED MARKETS



Source: International Monetary Fund, national stock exchanges, Datastream; data as of December 31, 2018.

Foreign ownership in Chinese markets lags other large markets

EXHIBIT 5: CHINESE ASSETS, % FOREIGN OWNERSHIP



Source: People's Bank of China, Shenzhen and Shanghai stock exchanges; data as of June 30, 2019.

Changes in China's economic structure will also drive shifts in the equity market's composition. Services- and consumer-focused equity sectors will likely rise in importance at the expense of the energy, materials and industrial sectors that often dominate EM equity markets, in number of listings and market weight, during earlier stages of development. (Taiwan and South Korea exhibited this pattern in recent decades.)[9]

Investors should also keep in mind that many of China's champion technology and internet companies are not listed on the domestic A-share market, lowering the weight of consumer-focused sectors. The weight of China's financial sector will likely decline from its current 39%, but it still looks likely to continue to have an elevated weight in the A-share market, reflecting the banking system's size and outsize role. It should be noted that a dominating financial sector is not uncommon, even among developed markets such as Australia and Canada.

[9] The migration in equity weights in China's market is already fairly advanced, with energy and materials accounting for just 12% of A shares.

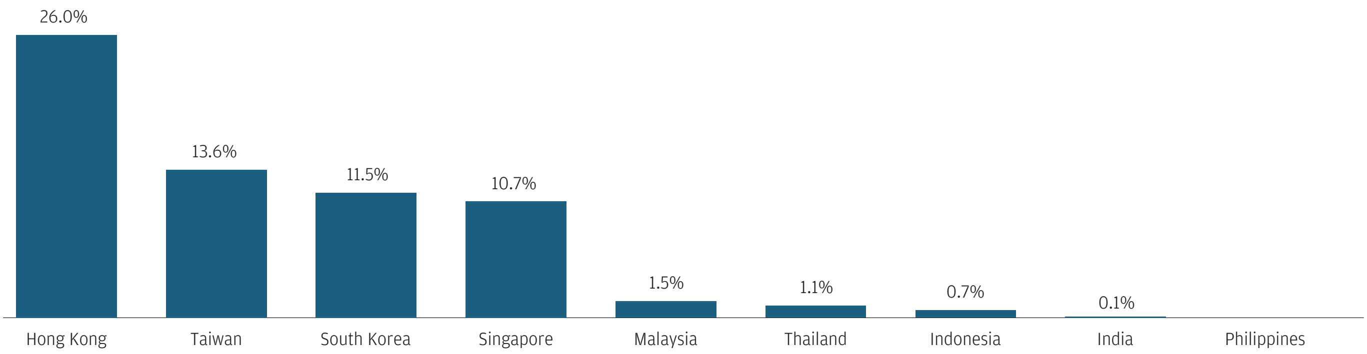
CHINA'S GROWTH TRAJECTORY: SPILLOVER EFFECTS

China's growth trajectory and the progress of its asset markets are likely to generate spillover effects for other Asian financial markets. We expect revenue growth for the MSCI All Country Asia ex Japan (MXASJ) Index, excluding China, to decelerate in accordance with China's slower pace of nominal GDP growth. This should especially be the case for Hong Kong, Taiwan, Korea and Singapore, partly because of China's central role in regional supply chains (**Exhibit 6**). China's internal shift to greater economic reliance on consumers and services does not bode well for Asian ex-China industrial firms but could be a boon for consumer-linked firms, especially as Chinese consumers continue to upgrade their purchases.

Within the financial industry, revenue growth opportunities resulting from China's financial market reform are unlikely to benefit Asia ex-Japan at the level of the MSCI index, given the constituent companies' limited direct financial exposure to China. Hong Kong's and Singapore's financial firms may be an exception, as they will likely gain wider access to China's banking, brokerage, asset management and insurance markets. As shown in **Exhibit 7**, China's households are still relatively underdiversified in their investments, creating a large opportunity for financial services providers.

China is an important source of revenue for Asian companies

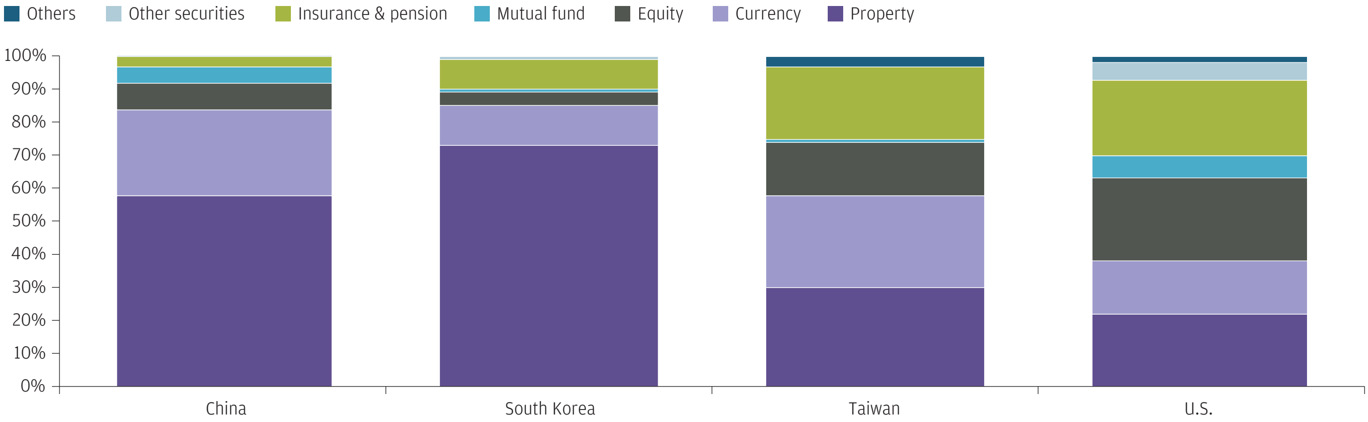
EXHIBIT 6: REVENUE EXPOSURE TO CHINA OF MXASJ EX-CHINA MARKETS



Source: J.P. Morgan, J.P. Morgan Asset Management; data as of May 31, 2019.

Chinese households have relatively few financial assets

EXHIBIT 7: HOUSEHOLD BALANCE SHEETS



Source: Goldman Sachs, J.P. Morgan Asset Management; data as of August 31, 2019.

CHINA STANDS OUT IN INVESTMENT OPPORTUNITIES, EVEN WITH SLOWER GROWTH

China's rise during the past two decades has exerted enormous influence on the global economy, reshaping supply chains, generating large-scale demand for commodities and creating hundreds of millions of middle class consumers. We expect China to remain a focal point for the global outlook over the next 15 years thanks to its sheer size, even though we forecast somewhat slower growth from here as the country moves from middle income toward high income status.

In some ways, we expect financial market trends to take center stage in China in coming years. Capital markets will likely grow in excess of the rate of GDP growth, deepening opportunities for foreign investors in particular. Foreign participation is rising but remains low by international standards and will likely step up significantly. At the same time, domestic institutional investors, both official and private, will likely gain greater prominence. Sector shifts will occur within markets, with the composition of listed equities likely to change significantly (though banks may well remain more prominent than elsewhere). Investors capable of carrying out deep analysis may thus find ample room for alpha generation. Bond yields will face competing influences from liberalization and slowing growth; a crucial question will be whether government bonds become a true safe haven asset for local investors.

The increasing size and importance of Chinese capital markets will also strongly influence other markets in Asia, and not in a uniformly positive way. Revenue growth elsewhere in Asia may slow, and China's shift away from manufacturing toward consumer- and service-oriented businesses may well pose a problem for the current set of listed companies in the region. Financial market liberalization in China seems unlikely to carry much benefit for the country's neighbors, with the exception of financial firms in Hong Kong and Singapore.

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