

Asia Economics

China's Rising Wall of Savings

China Lifting Global Savings Rate to Historical High

Global savings rate has climbed to a historical high, as higher-savings China starts to account for greater share of global GDP relative to lower-savings US, Japan and Europe (see Fig 1). Global savings rate climbed to slightly above 26% of GDP in 2016, by our estimates, exceeding the highs seen in the early 1970s. Higher global savings will likely keep long-end global interest rates at a lower new normal relative to history. Higher global savings will also fund a higher global investment rate (as the world runs a zero current account balance).

Growing Foreign Assets, Large Net Creditor

China is emerging as a large net creditor and lender to the world, even as standard neoclassical models predict that China should be a net borrower given its relatively low income per capita. China's net foreign asset (NFA) position climbed to \$1.8 trillion in 2016 (or 16% of GDP). Its NFA position turned positive as early as 1999, probably two decades earlier than what most models would forecast but mirroring East Asia's historical experience as asset accumulators.

China's Foreign Assets to Overtake Japan by 2020

China's gross foreign assets (GFA) has climbed to \$6.5trn (58% of GDP) in 2016, fast catching up to Japan's (at \$9.2trn), and exceeding that of Singapore (\$3.1trn) and Korea (\$1.2trn). China will likely overtake Japan by 2020, in terms of GFA, propelled by its high savings and President Xi's push to "go global". China's fast-growing sovereign wealth funds CIC, SAFE & NSFF are ranked #2, #6 and #10 respectively, with total assets worth \$1.6trn (Table 3). China's GFA remains far behind the US (\$24trn) and UK (\$14trn) (see Table 2).

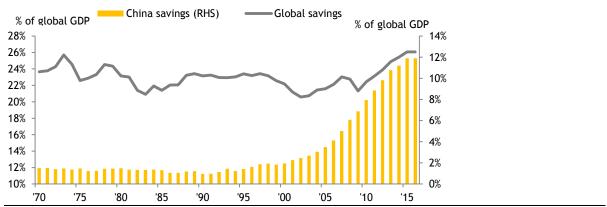
China's NFA Position: "Long Debt, Short Equity"

China's external balance is "long debt, short equity". Foreign assets are mainly in fixed-income instruments, a large portion of which are held by the official sector, while liabilities take the form of inward private direct and equity investment. This reflects China's earlier and faster push to liberalize its equity markets, while foreign access to its bond market was more restrictive. This may change as China opens up its bond market and internationalizes the RMB.

China's Growing Investments in Services, Real Estate, Infra

China's outward direct investment (ODI) increased 10-fold to \$128bn in 2015 from 2005, ranking 3rd after the US and Japan. Asia accounts for 70% of China's ODI, while ASEAN accounts for 6%. Investments have shifted from mining to services, particularly leasing & commercial and financial services. Real estate saw the fastest growth (+36% CAGR) over 2010-15. China-led investments into infrastructure will likely surge with "One Belt One Road" and the AIIB.

Fig 1: China is Driving Global Savings Rate to a Historical High, 1970 - 2016



Note: China's savings for 2016 is Maybank's estimate. Global GDP is based on the 4 largest economies: US, EU, China and Japan. Source: CEIC, Maybank Kim Eng estimates

Analysts

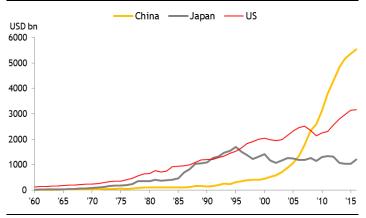
Chua Hak Bin (65) 6231 5830 chuahb@maybank-ke.com.sg

Lee Ju Ye (65) 6231 5844 leejuye@maybank-ke.com.sg

China's Great Wall of Savings

China has one of the highest savings rate in the world, resulting in a massive and rapid accumulation of wealth. China's savings rate is currently about 48% of GDP, more than sufficient to fund its domestic investments. China's high savings has supported its high-investment, export-led growth model. As diminishing returns on domestic investment sets in, a growing portion of excess savings is being invested abroad, resulting in a rapid accumulation of foreign assets.

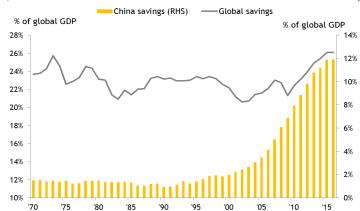
Figure 2: China's Gross Domestic Savings Far Exceeds that of the US and Japan



Note: Total savings estimated by deducting final consumption expenditure from nominal GDP. 2016 number for China's saving is our own estimate.

Source: CEIC, Maybank Kim Eng

Figure 3: China's Savings over Global GDP has Risen Significantly, Driving Up Global Savings Rate



Note: China's savings for 2016 is Maybank's estimate. Global GDP is based on the 4 largest economies: US, EU, China and Japan.

Source: CEIC, Maybank Kim Eng

China's total savings, at about \$5.4 trillion a year, is almost double that of the US and five times that of Japan (see Fig 2). This is despite China's nominal GDP still about 38% below US GDP. China's total savings overtook that of the US in 2008 because of its higher propensity to save and population size.

Global savings rate has climbed to slightly above 26% of GDP in 2016, by our estimates, exceeding the highs last seen in the early 1970s. China's large and growing savings is driving the global savings rate to a historical high (see Fig 3). This is because high-savings and faster-growing China is accounting for a greater share of global GDP relative to lower-savings US, Japan and Europe. Global savings rate reached a recent low of 21.3% during the global financial crisis.

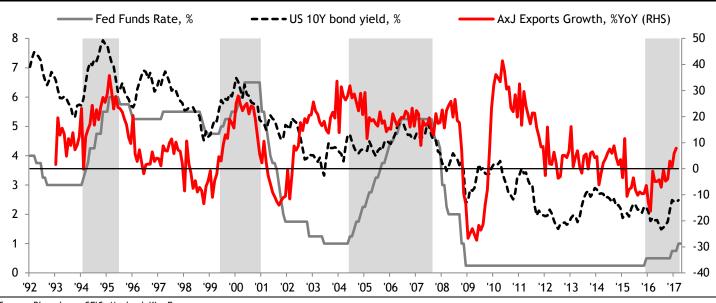
The rising wall of China savings will have major implications for global investments, interest rates and asset prices. Many have highlighted that China's trade and GDP in PPP terms have already overtaken the US several years ago. But few have highlighted that China's total savings, in nominal terms (not just PPP terms) had overtaken US savings in 2008. Higher and rising global savings will likely keep long-term global interest rates at a lower new normal relative to history. Higher global savings will also help fund a higher global investment rate (as the world cannot run a current account deficit).

Whether China's growing savings will be channeled into domestic or external investment will be a function of capital controls, and the global reception or restrictions to Chinese money. Magnitude of China outward investment may risk inflating asset prices, crowding out locals, and provoking a nationalist backlash. For example, stricter measures and taxes have been imposed on foreigners buying residential property in major cities, where Chinese buying has been prevalent.

Rising global savings will likely imply that long-end bond yields will not revert to the previous highs, even with a synchronized global recovery. The 10-year US bond yield has been trending lower over the business cycles during the last 3 decades (see Fig 4). This suggests that the Fed is not likely to hike the Fed funds rate to previous levels (and risk inverting the yield curve). The peak Fed funds rate may be lower compared to previous tightening episodes, with the Fed funds rate reaching a high of 5.25% in the last tightening cycle in 2004-07 (see <u>ASEAN</u>

Economics, 16 Mar 2017, "Synchronization and Rate Hike Cycles").

Figure 4: US10Y Bond Yield and Fed Rate Have Fallen from their Highs in 1990s



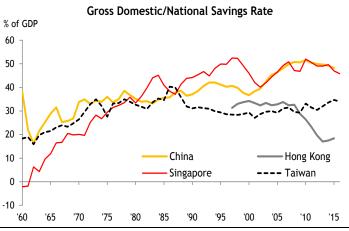
Source: Bloomberg, CEIC, Maybank Kim Eng

China's Savings Puzzle

Why China's total and household savings rate is so high remains somewhat of a puzzle. China's gross savings rate is unusually high, at 48% of GDP, given its low GDP per capita and even when benchmarked against its high-saving East Asian counterparts, such as Taiwan, Hong Kong and Korea during the years of their "miracle" growth (see Fig 5). At its peak, China's saving rate reached a startling 52% of GDP in 2010.

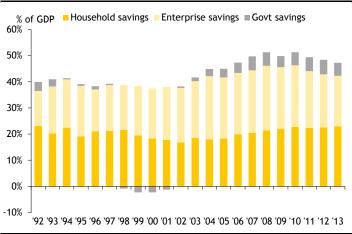
Only Singapore's gross savings rate is comparable to China, but Singapore has always been regarded as an exceptional case, given its "compulsory" saving scheme under its CPF (pension fund) and conservative fiscal accounting (where a proportion of revenue, such as land sales, is set aside as reserves). Singapore is also a small country, with a population of only 5.7 million, and its high savings rate has little bearing on the rest of the world (although GIC and Temasek are punching above their weight as sovereign wealth funds).

Figure 5: China's Savings Rate High Even When Compared Against the "Miracle" Asian Economies



Source: CEIC, Maybank Kim Eng

Figure 6: China - Rising Share of Household Savings, Overtaking Share of Enterprise Savings in 2011



Source: China National Bureau of Statistics, Maybank Kim Eng

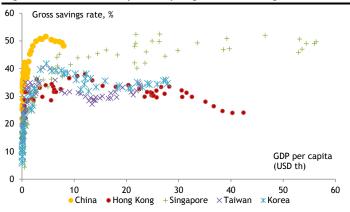
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¹ Yang, Zhang and Zhou (2011), "Why are saving rates so high in China?", IZA Discussion Paper No. 5465; Chamon, Liu and Prasad (2011), "The puzzle of China's rising household saving rate," CEPR.

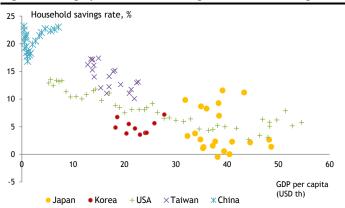
China's savings have been sliding from their highs in recent years, as the government rebalances the economy towards consumption (see Fig 7). But the rate at which the gross savings rate has been falling has been remarkably gradual, largely due to lower enterprise savings (profitability) in more recent years. Reasons for China's exceptionally high savings rate remain a big debate. Causes for the high saving rate include fast economic growth, accession to WTO, rising corporate profits, changes in life cycle earnings, pension system, other provisions of social services and the demographic transition.

Figure 7: China's Exceptionally High Gross Savings Rate



Source: CEIC, Maybank Kim Eng estimates

Figure 8: Largely Due to China's High Household Saving Rate



Note: China and Taiwan's household savings rate is estimated from official data (household disposable income less expenditure, as share of GDP).

Source: OECD, China National Bureau of Statistics, CEIC, Maybank Kim Eng estimates

A big part of the puzzle over the high total savings rate is due to the exceptionally high household savings rate. Even when compared to the high-saving "miracle economies" such as Taiwan or Korea, China's household savings rate is about 5 percentage points higher (see Fig 8). As of 2013, household savings was the highest at 23% of GDP, followed by enterprise savings (19%) and government savings (5%) (see Fig 6). Overall savings can be decomposed into 3 components: corporate savings, government savings and household savings.

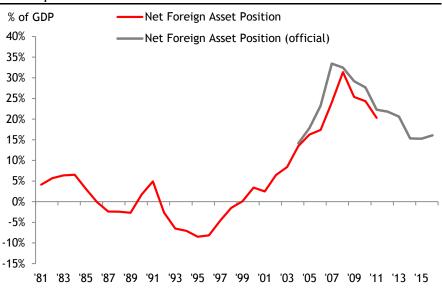
Most past studies predict a gradual decline in China's overall savings as growth slows, population ages and a more robust retirement and pension system develops. Still, the rate at which the savings rate has declined has been much slower than expected. We are of the view that China's savings rate will likely continue to be sticky - because of both cultural and institutional factors - and fall off only gradually, despite the government's rebalancing efforts towards a more consumption-driven economy.

Some studies have even highlighted an *increase* in Chinese household savings, even as the population ages, a paradox which runs against the life-cycle theory (see Chamon, Liu and Prasad (2011)). They attribute the rise to the declining public provision of education, health and housing services - or the breaking of the "iron rice bowl." Younger households accumulate assets to prepare for future education expenditure and house purchases, while older households prepare for uncertain (and lumpy) healthcare expenditures.

China's Rapid Foreign Asset Accumulation

China's high savings rate is a key reason why it is accumulating foreign assets much earlier and at a faster rate than what standard models or past country experiences would predict. And because of China's sheer size, its excess savings has already become a key driver of global interest rates, property prices in global cities and investment flows. Former Federal Reserve Governor Bernanke had argued that the "global savings glut", emanating in large part from China, was a major reason for low global interest rates.

Figure 9: China's Net Foreign Asset Position: Turning Positive Much Earlier Than Expected



Note: The red line refers to data from the "External Wealth of Nations" database² by Lane & Milesi-Ferretti, as China's official data only starts from 2004.

Source: "External Wealth of Nations" database, State Administration of Foreign Exchange (SAFE), Maybank Kim Eng estimates

Robert Lucas asked in a famous 1990 article, "Why doesn't capital flow from rich to poor countries?" He highlighted the classical paradox (now dubbed the "Lucas Paradox") that standard neoclassical economic models predict that capital should flow from rich to poor countries, where the marginal product of capital is higher. But this is often not observed in practice - which is the case for China - where capital has flowed from a poor country to more developed countries.

China emerged as a net foreign creditor as early as year 1999, with net foreign assets turning slightly positive, as a percent of GDP (see Fig 9). This is surprising as China was a low-income catch-up economy and should be a net debtor borrowing foreign savings, rather than a net creditor or lender. A World Bank model estimated that China's net foreign asset position should be -17% of China's wealth, not positive, at such a phase of development.

International cross-country comparisons (even in 2005) showed that China is a large outlier, with a more positive net foreign asset position than would be predicted by its characteristics (such as wealth per capita, productivity and institutional quality). By 2025, a World Bank model (in 2005) forecasted that China's net foreign asset position should be <u>negative</u> 3% to 9% of wealth. The current reality is that China's net foreign asset position could climb to more than (positive) 20% of GDP by 2025, from the current 16% of GDP in 2016.

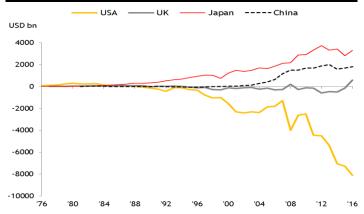
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² Lane and Milesi-Ferretti (2007), "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004", Journal of International Economics 73.

³ Dollar and Kraay (2005), "Neither a Borrower nor a Lender: Does China's Zero Net Foreign Asset Position Make Economic Sense?", World Bank Study 3801.

One argument (and criticism) for China's high NFA position is that China has restricted foreign investment and ownership of many sectors. With progressive market reforms - including financial liberalization, internationalization of the RMB, and opening of the capital account and RMB bond markets - China will see greater foreign capital inflows which will reduce its NFA position. This may adjust and reduce China's net foreign asset position to a lower or negative balance, where foreigners own more of China assets than vice versa.

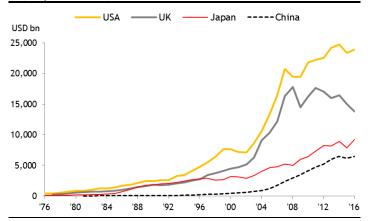
Figure 10: Net Foreign Asset Position of 4 Big Economies: China, US, Japan and UK, 1976 - 2016



Note: Data for China and Japan prior to 2004 and 1996 respectively are from the "External Wealth of Nations" database.

Source: "External Wealth of Nations" database, CEIC, Maybank Kim Eng

Figure 11: Gross External Assets for 4 Big Economies: China, US, Japan and UK, 1976 - 2016



Note: Data for China and Japan prior to 2004 and 1996 respectively are from the "External Wealth of Nations" database.

Source: "External Wealth of Nations" database, CEIC, Maybank Kim Eng

We think it is more likely given China's persistently high savings rate and diminishing returns to domestic investment, that China will likely see its net foreign asset position increase (as % of GDP) as investments abroad will likely outpace foreign investments onshore. China has nevertheless tightened capital controls of late to slow down the pace of Chinese outward investments. This may however be just a temporary interruption to the structural trend of greater China outward investments. Such capital controls may also simply shift the accumulation of external assets to via official channels (through sovereign wealth funds for example) rather via the private sector or individuals.

Table 1: China's International Investment Position (in USD billions)

| | 1985 | 1995 | 2000 | 2005 | 2010 | 2015 | 2016 |
|-------------------------------------|------|-------|-------|-------------|---------|---------|-------------|
| Net foreign asset position | -5.8 | -38.5 | -74.3 | 407.7 | 1,688 | 1,673 | 1,800 |
| (% of GDP) | -1.9 | -5.3 | -6.2 | 17.8 | 27.7 | 15.3 | 16.1 |
| Assets | 18.2 | 191.2 | 385.4 | 1223.3 | 4,119 | 6,156 | 6,467 |
| (% of GDP) | 5.9 | 26.3 | 32.2 | 53.5 | 67.5 | 56.1 | <i>57.7</i> |
| Direct investment abroad | 0.9 | 33.3 | 51.8 | 64.5 | 317.2 | 1095.9 | 1317.2 |
| Portfolio investment | 0 | 12.1 | 41.1 | 116.7 | 257.1 | 261.3 | 365.1 |
| Equity securities | 0 | 0 | 0 | 0.0 | 63.0 | 162.0 | 214.9 |
| —Debt securities | 0 | 12.1 | 41.1 | 116.7 | 194.1 | 99.3 | 150.2 |
| Other investment | 14.7 | 72.3 | 126.9 | 216.4 | 630.4 | 1,388.9 | 1,681.1 |
| Reserve assets | 2.6 | 73.6 | 165.6 | 825.7 | 2,914.2 | 3,406.1 | 3,097.8 |
| Liabilities | 24 | 229.8 | 459.7 | 815.6 | 2,431 | 4,483 | 4,666 |
| (% of GDP) | 7.8 | 31.6 | 38.4 | <i>35.7</i> | 39.8 | 40.9 | 41.6 |
| Direct investment inward | 3.2 | 109.2 | 289.6 | 471.5 | 1569.6 | 2696.3 | 2865.9 |
| Portfolio investment | 1 | 14.6 | 30.1 | 76.6 | 223.9 | 817.0 | 808.6 |
| Equity securities | 0 | 3.9 | 17.8 | 63.6 | 206.1 | 597.1 | 592.7 |
| —Debt securities | 1 | 10.7 | 12.3 | 13.0 | 17.8 | 220.0 | 215.9 |
| Other investment | 19.8 | 106 | 140 | 267.5 | 637.3 | 964.3 | 984.9 |

Note: China's official data only starts from 2004. Data prior to 2005 is sourced from "China's Increasing External Wealth" study 4 (Ma & Zhou, 2009), using the authors' estimates.

Source: SAFE, Ma and Zhou (2009) "China's Increasing External Wealth", Maybank Kim Eng estimates

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⁴ Ma and Zhou (2009), "China's Increasing External Wealth", Chapter 4 in "China's New Place in a World in Crisis", ANU E-Press, Canberra and Brookings Institution, Washington.

What might be more relevant for Asia or the rest of the world as a recipient of China's investment is the gross (rather than net) foreign assets. China's gross foreign assets (GFA) has climbed to \$6.5 trillion (or 58% of GDP) in 2016, fast catching up to Japan's (at \$9.2trn), and already far exceeding that of Hong Kong (\$4.6trn), Singapore (\$3.1trn) and Korea (\$1.2trn) (see Table 2).

Table 2: International Investment Positions, 2016: Asia, US and UK

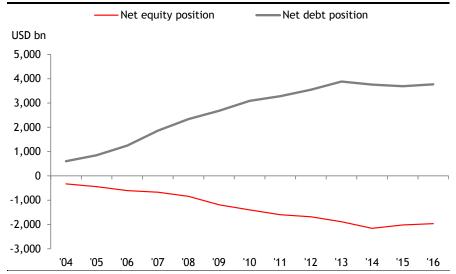
| | US | UK | Japan | China | Hong Kong | Singapore | Taiwan | Korea | Malaysia | Thailand |
|-------------------------------------|--------|--------------|-------------|--------|-----------|-----------|--------|-------|------------|-------------|
| Gross external assets (USD bn) | 23,917 | 13,781 | 9,222 | 6,467 | 4,610 | 3,109 | 1,635 | 1,240 | 390 | 382 |
| % of GDP | 129% | 526 % | 187% | 58% | 1438% | 1047% | 310% | 88% | 132% | 94 % |
| Gross external liabilities (USD bn) | 32,026 | 13,199 | 5,927 | 4,666 | 3,479 | 2,461 | 581 | 961 | 392 | 414 |
| Gross position (USD bn) | 55,943 | 26,980 | 15,149 | 11,133 | 8,089 | 5,571 | 2,216 | 2,201 | 782 | 797 |
| Net Foreign Asset (USD bn) | -8,110 | 582 | 3,294 | 1,801 | 1,131 | 648 | 1,054 | 278 | -1 | -32 |
| % of GDP | -44% | 22% | 67 % | 16% | 353% | 218% | 200% | 20% | 0 % | -8% |

Note: Singapore and Hong Kong's numbers are as of 3Q16; Malaysia's numbers are as of 2Q16; Taiwan's numbers are as of 2015.

Source: CEIC, Maybank Kim Eng estimates

China will likely overtake Japan by 2020, in terms of gross external assets, propelled by its high savings, wealth diversification and President Xi's push to "go global" and internationalize its companies. China companies and brands are still at an early stage of internationalization. China's GFA as a percentage of GDP is still only 58%, versus 310% in Taiwan, 187% in Japan, and 129% in US (see Table 2). China's gross foreign asset position (\$6.5trn) remains far behind the United States (\$24trn) and United Kingdom (\$14trn) (see Fig 11 and Table 2).

Figure 12: China's Net Foreign Asset Position - "Long Debt, Short Equity



Note: Net equity position is asset minus liability of direct investment and equity portfolio investment; net debt position is asset minus liability of all the other categories.

Source: SAFE, Maybank Kim Eng

China's external assets and liabilities have become more pronounced over time, largely towards "long debt, short equity" (see Fig 12). Foreign assets are mainly in fixed-income instruments and held by the official sector, while liabilities take the form of inward private direct investment (see Table 1). This is in part because of stricter restrictions on foreign investments in the RMB local bond market relative to the easing of foreign participation in China's stock market. Heavier concentration of reserves managed by state hands may have also skewed the preference for bonds. The composition may however change as China undertakes to liberalize the RMB bond market; open up to greater foreign investment and participation; and rebalances towards the private sector from state-owned enterprises.

China's large and fast growing sovereign wealth and pension funds reflect the growing wealth and rapid accumulation of foreign assets. China's three sovereign wealth funds: China Investment Corporation (CIC), State Administration of Foreign Exchange (SAFE) and National Social Security Fund (SFFF) are currently

ranked #2, #6 and #10 respectively as the largest global sovereign wealth funds (see Table 3). These three funds hold \$1,583 billion worth of assets as at March 2017. CIC has grown to become the <u>second</u> largest sovereign wealth fund (with \$814bn of assets) globally, just behind Norway's government pension fund (with \$871bn). CIC will likely overtake Norway's GPF over the next 2-3 years.

Table 3: Top Sovereign Wealth Funds - Oil & Gas Producing Countries vs. Emerging Asia (as of Mar-17)

| Oil producing countries | | | Emerging Asia | | | | |
|-------------------------|-------------------|-----------------------------------|-------------------|---------|---------------|--|-------------------|
| Ranking | Country | Fund | Assets, USD bn | Ranking | Country | Fund | Assets, USD bn |
| 1 | Norway | Government Pension Fund (Global) | 871 | 2 | China | China Investment Corporation | 814 |
| 3 | UAE Abu Dhabi | Abu Dhabi Investment Authority | 792 | 6 | China | SAFE Investment Company | 474 |
| 4 | Saudi Arabia | SAMA Foreign Holdings | 576 | 7 | Hong Kong | Hong Kong Monetary Authority Investment Portfolio | 457 |
| 5 | Kuwait | Kuwait Investment Authority | 592 | 8 | Singapore | Government of Singapore Investment Corporation | 350 |
| 9 | Qatar | Qatar Investment Authority | 335 | 10 | China | National Social Security Fund | 295 |
| 11 | UAE Dubai | Investment Corporation of Dubai | 201 | 12 | Singapore | Temasek Holdings | 180 |
| 13 | Saudi Arabia | Public Investment Fund | 160 | 15 | Korea | Korea Investment Corporation | 108 |
| 14 | UAE Abu Dhabi | Mubadala Investment Company | 125 | 23 | Brunei | Brunei Investment Agency | 40 |
| 17 | Russia | National Welfare Fund | 72 | 27 | Malaysia | Khazanah Nasional | 35 |
| 18 | Kazakhstan | Kazakhstan National Fund | 65 | | | | |
| 20 | Libya | Libyan Investment Authority | 66 | | | | |
| 21 | Iran | National Development Fund of Iran | 62 | | | | |
| 22 | US Alaska | Alaska Permanent Fund | 55 | | | | |
| 24 | Russia | Reserve Fund | 38 | | | | |
| | Size of all Oil 8 | t Gas related funds | \$4,231 | | Size of all A | sia Sovereign Wealth Funds | \$2,758 |

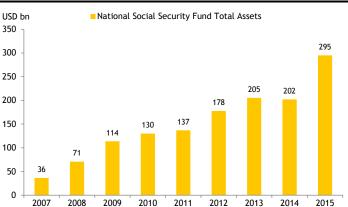
Source: Sovereign Wealth Fund Institute, Maybank Kim Eng

Figure 13: China Investment Corporation's (CIC) Assets Continue to Rise



Source: Company annual reports, Maybank Kim Eng

Figure 14: China's National Social Security Fund (NSSF) Assets Have Risen Strongly Over Past Decade



Source: Towers Watson, Maybank Kim Eng

China's National Social Security Fund⁵ (NSSF), which funds social security spending such as social insurance, has also grown explosively (>700%) over the last decade. NSSF's assets have grown to \$295bn in 2015 from \$36bn in 2007 (see Fig 14 & Table 4). Six of the top 10 sovereign pension funds are from Asia (Japan #1, Korea #3, China #4, Singapore #5, Malaysia #7 and India #9). It is conceivable that China's NSSF will catch up with Japan's GPIF by 2030. This potential is captured by the relative size: total assets of Japan's GPIF are currently about 24% of GDP, while total assets of China's NSSF are only about 2.6% of GDP.

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⁵ Funding sources of NSSF include fiscal allocation from the central government, the transfer of state-owned capital and the fund investment proceeds and capital raised by other methods approved by the State Council.

Table 4: Top 15 Sovereign Pension Funds, 2015 & 2006

| | | | Total Assets (USD bn) | | Cha | nge |
|------|---|-----------|-----------------------|-------|--------|------|
| Rank | Fund | Country | 2015 | 2006 | Assets | Rank |
| 1 | Government Pension Investment Fund (GPIF) | Japan | 1163.2 | 935.6 | +24% | ••• |
| 2 | Government Pension Fund | Norway | 865.9 | 285.6 | +203% | ••• |
| 3 | National Pension Fund | Korea | 435.4 | 203.2 | +114% | ••• |
| 4 | National Social Security Fund (NSSF) | China | 294.9 | 36.2 | +715% | +8 |
| 5 | Central Provident Fund | Singapore | 211.4 | 70.5 | +200% | +3 |
| 6 | Canada Pension Plan | Canada | 201.9 | 100.7 | +100% | |
| 7 | Employees Provident Fund | Malaysia | 161.7 | 82.3 | +96% | |
| 8 | Government Employees (GEPF) | Africa | 103.1 | 177.6 | -42% | -4 |
| 9 | Employees Porvident Fund | India | 93.7 | 31.6 | +197% | +4 |
| 10 | The Future Fund | Australia | 86.3 | 14.3 | +504% | +10 |
| 11 | National Wealth Fund | Russia | 71.7 | ••• | ••• | |
| 12 | Labor Pension Fund | Taiwan | 67.2 | ••• | ••• | |
| 13 | Public Institute for Social Security | Kuwait | 61.0 | 40.5 | +51% | -2 |
| 14 | Fonds de Reserve pour les retraites (FRR) | France | 39.4 | 41.3 | -4% | -4 |
| 15 | AP Fonden 3 | Sweden | 37.6 | 31.1 | +21% | ••• |

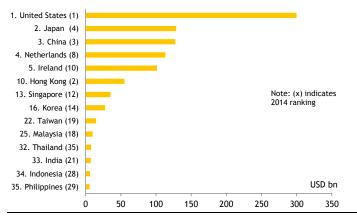
Source: Towers Watson, Maybank Kim Eng estimates.

China's Growing Investment to Asia and ASEAN

China's outward FDI has grown rapidly over the past decade, driven by excess savings. In 2005, China's outward FDI of \$12.3bn was below that of Singapore's and ranked only in the top 21, according to UNCTAD. A decade later, China's outward FDI has increased by more than 10 times to \$127.6bn in 2015, and ranks 3rd globally after the US and Japan (see Fig 15). By 2015, China was almost catching up with Japan in terms of outbound FDI (see Fig 16).

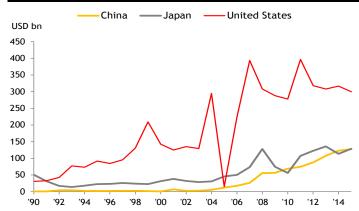
In 2015, China's outbound direct investment (ODI) exceeded FDI for the first time (see Fig 17). China's firms have been actively internationalizing their businesses, with outward investment flows in 2015 expanding by almost 7 times its size in 2006. The Ministry of Commerce stated that in 2016, there were 742 merger and acquisition projects overseas with an actual transition value of US\$107bn, mainly in the manufacturing (27% of total deals) and information & communications industries (15%).

Figure 15: China's Outbound FDI 3rd Largest Globally as of Figure 16: China's Growing Outbound FDI Close to Japan's 2015, after the US and Japan



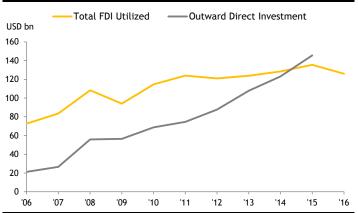
Source: CEIC, UNCTAD, Maybank Kim Eng

Level as of 2015



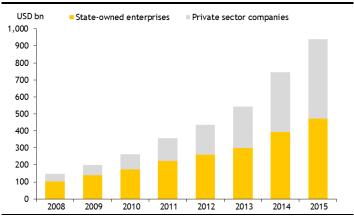
Source: CEIC, UNCTAD, Maybank Kim Eng

Figure 17: China's ODI Surpassed FDI for the First Time in 2015



Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Figure 18: Private Sector Companies Catching up with the SOEs in Non-Financial Investment



Note: 2014 data is not available, and is based on Maybank KE's own estimates.

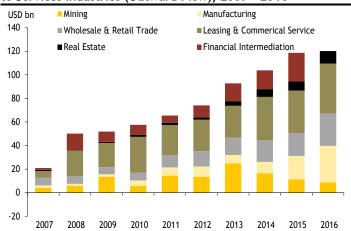
Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Pattern of Chinese outward direct investment has evolved over the years, shifting from mining to services (see Fig 19 & Table 5). In 2006, mining was the largest sector that Chinese companies invested in. In 2015, the dominant share has shifted to services industries such as leasing and commercial services, financial intermediation, and wholesale and retail trade.

Whilst outward investment activity used to be largely carried out by state-owned enterprises that invested in natural resources such as iron ore and copper, the recent trend is marked by private conglomerates. Examples include ChemChina's takeover of Swiss' Syngenta (\$43bn); Tencent's acquisition of Finnish mobile game developer Supercell (\$8.6bn); CGN's investment in British Hinkley Point C Nuclear Power Project (\$8.6bn); HNA Group's purchase of a 25% stake in Hilton Worldwide from Blackstone (\$6.5bn); and Tianjin Tinhai Investment's (a subsidiary of HNA Group) purchase of Ingram Micro (\$6.3bn).

China's investment in global real estate has grown at the fastest rate relative to other sectors, registering a cumulative annualized growth rate of +36% over 2010-15 (see Table 5). Real estate accounts for about 3.1% of stock of outward investments as at 2015. Overseas investment from China in residential, commercial and industrial property totaled \$33bn in 2016, up +53% from 2015, according to global real estate group JLL. Most popular destinations were the US, Hong Kong, Malaysia, Australia and the United Kingdom.

Figure 19: China's Target Industries Have Evolved from Mining to Services Industries (Outward Flow), 2007 - 2016



Note: Chart shows outbound investment flow of top 6 industries. 2016 data is not the full value as ODI to financial intermediation is not yet available.

Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Table 5: China's Stock of Outbound Investment in Top 10 Sectors, 2015

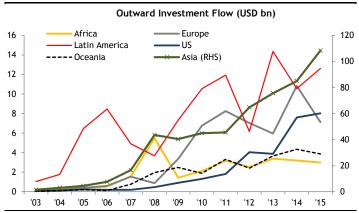
| | USD bn | Share of total outward direct investment | CAGR 2010 to 2015 |
|---|--------|--|----------------------|
| Total Outward Direct Investment | 1,098 | 100% | +28.2% |
| Leasing and Commercial Service | 410 | 37% | +33.3% |
| Financial Intermediation | 160 | 15% | +23.6% |
| Mining | 142 | 13% | +26.1% |
| Wholesale and Retail Trade | 122 | 11% | +23.8% |
| Manufacturing | 79 | 7% | +34.6% |
| Transport, Storage and Postal Service | 40 | 4% | +11.5% |
| Real Estate | 33 | 3% | +35.7% |
| Construction | 27 | 2% | +34.5% |
| Information Transmission, Software and Information Technology Service | 21 | 2% | +20.0% |
| Electricity, Gas & Water Production and Supply | 16 | 1% | +35.6% |

Source: CEIC, Ministry of Commerce, Maybank Kim Eng

⁶ Financial Times, "China investment in foreign real estate hits record \$33bn", 29 January

China's outward investment had largely been in Asia, although China has been expanding its investments to other regions as well since the mid-2000s (see Fig 20 & Table 6). Asia accounts for about 70% of China's outward investment. Latin America (12% of total outward direct investment), Europe (8%), and the US (4%) are the largest investment recipients, after Asia. In more recent years however, China has re-focused back on Asia. In 2015, China investments to Asia surged +28%, and contracted or slowed to most other regions. Investments to Latin America (+20% from a year ago) and US (+5.7%) were still growing but at a slower pace.

Figure 20: China's Outward Investment Mostly to Asia



Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Table 6: Asia Accounts for 70% of China's Total Stock of Outward Direct Investment

| | USD bn | Share of China's total outward direct investment | CAGR 2010 to 2015 |
|------------------------------------|--------|--|-------------------|
| Total Outward Direct Investment | 1,098 | 100% | +28.2% |
| Asia | 769 | 70% | +27.5% |
| Latin America | 126 | 12% | +23.6% |
| Europe | 84 | 8% | +39.7% |
| United States | 41 | 4% | +53.0% |
| Africa | 35 | 3% | +21.6% |
| Oceania | 32 | 3% | +30.1% |

Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Around 14% of China's stock of total outward investment (excluding Hong Kong) was into ASEAN as of 2015. While Hong Kong remains the largest recipient of China's outward FDI, ASEAN has increasingly become a bigger recipient especially Singapore and Indonesia (see Tables 7 & 8). Most of China's investment into ASEAN is directed to the Leasing and Commercial Service industry, followed by Manufacturing and Utilities (see Fig 23). Examples of China's major acquisitions in Southeast Asia include Alibaba's purchase of Singapore-based online shopping start-up Lazada and China General Nuclear Power Corp's purchase buyout of 1MDB's energy business.

Table 7: China's Stock of Cumulative Outward Investment by Country, 2015

| by Country, 2015 | | | | | |
|------------------|------------------|-------------------------------------|--|--|--|
| | Stock of China's | | | | |
| | outward | Share of China's stock of total ex- | | | |
| | investment | Hong Kong outward investment | | | |
| | (USD bn) | | | | |
| *Hong Kong | 656.9 | 59.8% | | | |
| Singapore | 32.0 | 7.3% | | | |
| Indonesia | 8.1 | 1.8% | | | |
| Laos | 4.8 | 1.1% | | | |
| Myanmar | 4.3 | 1.0% | | | |
| India | 3.8 | 0.9% | | | |
| Korea | 3.7 | 0.8% | | | |
| Cambodia | 3.7 | 0.8% | | | |
| Thailand | 3.4 | 0.8% | | | |
| Vietnam | 3.4 | 0.8% | | | |
| Japan | 3.0 | 0.7% | | | |
| Malaysia | 2.2 | 0.5% | | | |
| Taiwan | 1.0 | 0.2% | | | |
| Philippines | 0.7 | 0.2% | | | |
| Brunei | 0.1 | 0.0% | | | |

*Hong Kong's number refers to share of China's total outward investment. Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Table 8: China's Outward Investment Flow to Asia in 2015

| | China Outward Investment (USD mn) | Share of China's total ex-Hong Kong outward investment | CAGR (2011 to 2015) |
|------------|---|--|------------------------|
| *Hong Kong | 89,790 | 61.6% | +26% |
| Singapore | 10,452 | 18.7% | +34% |
| Indonesia | 1,451 | 2.6% | +25% |
| Korea | 1,325 | 2.4% | +40% |
| India | 705 | 1.3% | +41% |
| Vietnam | 560 | 1.0% | +31% |
| Laos | 517 | 0.9% | +3% |
| Malaysia | 489 | 0.9% | +51% |
| Cambodia | 420 | 0.8% | -7% |
| Thailand | 407 | 0.7% | +15% |
| Myanmar | 332 | 0.6% | +11% |
| Taiwan | 267 | 0.5% | +122% |
| Japan | 240 | 0.4% | +13% |

*Hong Kong's number refers to share of China's total outward investment. Source: CEIC, Ministry of Commerce, Maybank Kim Eng estimates

Table 9: China's Investment into Asia and ASEAN (Year-end Table 10: Asia's Direct Investment into China (2000-2016) Stock)

| JUCK) | | | | |
|-------|---------------------|-------------------------|---------------------|-------------------------|
| | China Investment | % of China's outward | China Investment | % of China's outward |
| | into Asia | investment | into ASEAN | investment |
| 2005 | | | | |
| 2005 | 40,954 | 63.5% | 1,256 | 1.9% |
| 2006 | 47,978 | 52.9% | 1,763 | 1.9% |
| 2007 | 79,218 | 68.3% | 3,953 | 3.4% |
| 2008 | 131,317 | 70.7% | 6,487 | 3.5% |
| 2009 | 185,547 | 75.5% | 9,571 | 3.9% |
| 2010 | 228,146 | 71.9% | 14,350 | 4.5% |
| 2011 | 303,435 | 71.4% | 21,462 | 5.1% |
| 2012 | 364,407 | 68.5% | 28,238 | 5.3% |
| 2013 | 447,408 | 67.7% | 35,668 | 5.4% |
| 2014 | 600,966 | 68.1% | 47,633 | 5.4% |
| 2015 | 768,901 | 70.2% | 62,716 | 5.7% |

Source: CEIC, Ministry of Commerce, Maybank Kim Eng

| | USD bn | % total China FDI |
|-------------|--------|-------------------|
| Hong Kong | 758.9 | 48.7% |
| Japan | 79.9 | 5.1% |
| Singapore | 70.2 | 4.5% |
| Korea | 59.8 | 3.8% |
| Taiwan | 40.7 | 2.6% |
| Malaysia | 5.4 | 0.3% |
| Philippines | 2.4 | 0.2% |
| India | 0.7 | 0.0% |

Note: Indonesia and Thailand were not included as their data are only available up

Source: CEIC, Ministry of Commerce, Maybank Kim Eng

China is also leveraging on its large savings and reserves pool to increase infrastructure investments in the region, particular into the "One Belt, One Road" (OBOR) countries. China's investment into the OBOR countries has surged to \$14.8bn in 2015, about +18% higher than the previous year. Countries that benefited the most from this investment include Singapore, Russia, Indonesia, the UAE and Turkey, as 90% of the invested amount was to these countries'. In particular, Singapore individually received more than half of the investment which amounted to around \$6.4bn, which went into financial services, manufacturing, wholesale and retail services.

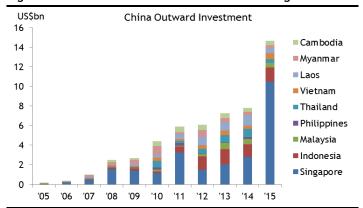
The new China-led Asian Infrastructure Investment Bank (AIIB) has already extended over \$2 billion in funds for infrastructure projects in Azerbaijan, Bangladesh, Indonesia, Oman, Pakistan and Tajikistan, since it commenced operations in January 2016. AllB aims to help members meet an estimated \$21 trillion financing gap between the region's demand for infrastructure, projected at \$40 trillion from 2015-30. AIIB identified 3 priorities for 2017: sustainable infrastructure, cross-country connectivity and private capital mobilization. Proposed projects under review include India (roads, power, urban services), Tajikstan (hydropower), Georgia (roads), Philippines (flood management), Indonesia (infrastructure finance) and Kazakhstan (power).

Conclusion

China is playing a big part in the current synchronized global recovery. China's import demand is far larger than the US and explains a large part of the current global trade and commodity price recovery. China's massive savings pool is driving up the global savings rate and funding a growing proportion of global investments. Higher global savings rate will keep global interest rates at more subdued levels compared to the past. Whether the world accommodates China's excess savings or China restricts fund outflows with capital controls will influence how these savings are channeled and what investments are supported. Asia currently accounts for a large share of China's outward investments (about 70%), but the flows will likely move further afield. China's accumulation of foreign assets is probably only in its early phase, judging by their size relative to GDP versus other developed countries, but the magnitude is already unprecedented in terms of the potential investment flows.

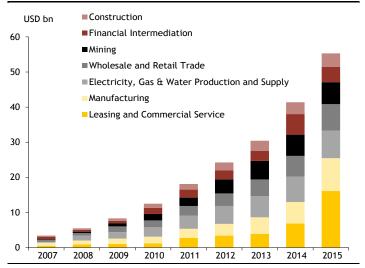
⁷ Business Times, "China firms' going global gives Singapore major hub role", 31 March

Fig 21: China Outward Investment to ASEAN Rising



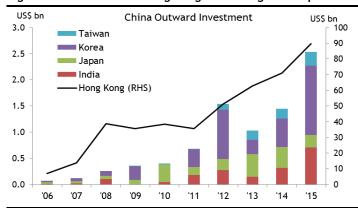
Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Figure 23: China's Outward Investment into ASEAN Mostly in Leasing & Commercial Service Industry



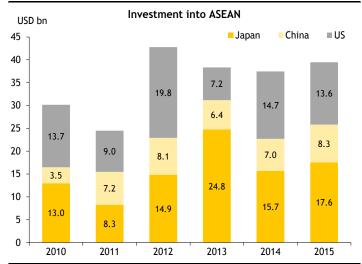
Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Fig 22: Northeast Asia - Hong Kong is the Largest Recipient



Source: CEIC, Ministry of Commerce, Maybank Kim Eng

Figure 24: Japan Remains the Largest Investor for ASEAN Countries



Source: ASEAN Secretariat, Maybank Kim Eng

Figure 25: Indonesia - Investment Realization by China More than Quadrupled in 2016



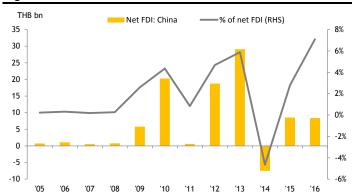
Source: CEIC, Maybank Kim Eng

Figure 27: Philippines - Investment from China Relatively Small



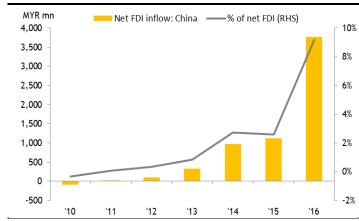
Source: CEIC, Maybank Kim Eng

Figure 29: Thailand - China's Share of Net FDI was Record High in 2016



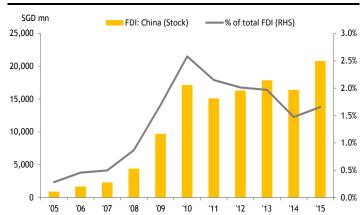
Source: CEIC, Maybank Kim Eng

Figure 26: Malaysia - Surge in FDI from China



Source: CEIC, Maybank Kim Eng

Figure 28: Singapore - China's Share of FDI Has Fallen from Its Peak in 2010



Source: CEIC, Maybank Kim Eng

Table 11: Examples of Chinese Investment in Southeast Asia

| Project | Project/Contract Value | | | |
|--|---------------------------|--|--|--|
| Troject | (USD bn) | | | |
| 1) Indonesia | (552 211) | | | |
| Power plant project in Kalimantan | 17.0 | | | |
| Nickel smelting plant in Morowali | 4.0 | | | |
| Jakarta-Bandung high speed railway | 3.9 | | | |
| Construction of Jatigede dam in Sumedang, West Java | 0.5 | | | |
| 2) Malaysia | | | | |
| Forest City in Johor | 100.3 | | | |
| Bandar Malaysia | 13.4 | | | |
| East Coast Rail Link (ECRL) | 12.3 | | | |
| Melaka Gateway Project | 9.6 | | | |
| Malaysia-China Kuantan Industrial Park | 3.4 | | | |
| Sarawak Steel Plant | 2.9 | | | |
| China General Nuclear Power Corp purchase of 1MDB's Edra Global | 2.7 | | | |
| Energy | 2.3 | | | |
| Gemas-Johor Bahru Double track | 2.0 | | | |
| Penang Second Bridge | 1.0 | | | |
| 3) Philippines (pledged investments during Duterte's state visit to Chir | | | | |
| MOU between MVP Global Infrastructure Group and Suli Group to build | ia iii Oct-10) | | | |
| cabling manufacturing facilities | 3.0 | | | |
| MOU between China Railway Engineering Corp and MVP Global | | | | |
| Infrastructure Group | 2.5 | | | |
| Greenergy Development Corp and Power china Guizhou Engineering Corp | 4.0 | | | |
| for the development of the 300MW Pulangui-5 Hydro Project | 1.0 | | | |
| Agreement between Zonar Systems and Power China Sino Hydro for a | 0.8 | | | |
| nationwide island provinces link bridges for sustained development | 0.8 | | | |
| MOU between Mega Harbour Port and Development, Inc. and China | | | | |
| Harbour Engineering Co. Ltd. (CHEC) for the Davao coastline port | 0.8 | | | |
| development project | | | | |
| 4) Singapore | | | | |
| Alibaba's acquisition of Lazada Group in Apr-16 | 1.0 | | | |
| Offered to purchase CWT in Apr-17, a Singaporean logistics company | 1.0 | | | |
| 5) Thailand | | | | |
| High-speed railway project joining Thailand's border with Laos to the | 5.2 | | | |
| ports and industrial zones in Thailand's eastern area | J.2 | | | |
| China's Trina Solar TSL.N, the world's top solar panel maker, opened a | 0.2 | | | |
| manufacturing facility in Rayong | | | | |
| Gong Yan Diamond Tools, which makes precision manufacturing blades, | N.A. | | | |
| opened a factory in 2014 | ant G | | | |
| 6) Vietnam (Chinese companies were the main Engineering, Procurement & Construction contractors for key projects listed below) | | | | |
| Quang Ninh 1, 2 Power Plant | 1.2 | | | |
| Cat Linh - Ha Dong metro line | 0.9 | | | |
| Ninh Binh fertilizer plant | 0.7 | | | |
| Thai Nguyen steel plant | 0.4 | | | |
| Nhan Co Aluminum Plant | 0.4 | | | |
| The state of the s | U. 1 | | | |

Source: Various news sources, Maybank Kim Eng

Research Offices

REGIONAL

Sadiq CURRIMBHOY

Regional Head, Research & Economics (65) 6231 5836 sadiq@maybank-ke.com.sg

WONG Chew Hann, CA

Regional Head of Institutional Research (603) 2297 8686 wchewh@maybank-ib.com

ONG Seng Yeow

Regional Head of Retail Research (65) 6231 5839 ongsengyeow@maybank-ke.com.sg

TAN Sin Mui Director of Research

(65) 6231 5849 sinmui@kimeng.com.hk

Suhaimi ILIAS

Chief Economist Malaysia | Philippines

(603) 2297 8682 suhaimi ilias@maybank-ib.com

Regional Thematic Macroeconomist (65) 6231 5830 chuahb@maybank-ke.com.sg

LEE Ju Ye

Singapore (65) 6231 5844 leejuye@maybank-ke.com.sg

Tim LEELAHAPHAN

Thailand

(66) 2658 6300 ext 1420 tim.l@maybank-ke.co.th

Saktiandi SUPAAT

Head, FX Research (65) 6320 1379 saktiandi@maybank.com.sg

STRATEGY

Sadiq CURRIMBHOY

Global Strategist

(65) 6231 5836 sadiq@maybank-ke.com.sg

Willie CHAN

Hong Kong / Regional

(852) 2268 0631 williechan@kimeng.com.hk

WONG Chew Hann, CA Head of Research (603) 2297 8686 wchewh@maybank-ib.com

Strategy

Desmond CH'NG, ACA

(603) 2297 8680 desmond.chng@maybank-ib.com

. Banking & Finance

LIAW Thong Jung (603) 2297 8688 tjliaw@maybank-ib.com • Oil & Gas Services- Regional

ONG Chee Ting, CA (603) 2297 8678 ct.ong@maybank-ib.com • Plantations - Regional

Mohshin AZIZ

(603) 2297 8692 mohshin.aziz@maybank-ib.com • Aviation - Regional • Petrochem

YIN Shao Yang, CPA (603) 2297 8916 samuel.y@maybank-ib.com • Gaming - Regional • Media

TAN Chi Wei, CFA (603) 2297 8690 chiwei.t@maybank-ib.com • Power • Telcos

WONG Wei Sum, CFA (603) 2297 8679 weisum@maybank-ib.com

Property

LEE Yen Ling (603) 2297 8691 lee.yl@maybank-ib.com • Building Materials • Glove • Ports • Shipping

(603) 2297 8612 ivan.yap@maybank-ib.com
• Automotive • Semiconductor • Technology

Kevin WONG

(603) 2082 6824 kevin.wong@maybank-ib.com
• REITs • Consumer Discretionary

LIFW Wei Han

(603) 2297 8676 weihan.l@maybank-ib.com Consumer Staples

Tee Sze Chiah Head of Retail Research (603) 2082 6858 szechiah.t@maybank-ib.com

HONG KONG / CHINA

Howard WONG Head of Research (852) 2268 0648

howardwong@kimeng.com.hk

• Oil & Gas - Regional

Benjamin HO (852) 2268 0632 benjaminho@kimeng.com.hk Consumer & Auto

Christopher WONG

(852)2268 0652 christopherwong@kimeng.com.hk

• HK & China Properties

Jacqueline KO, CFA

(852) 2268 0633 jacquelineko@kimeng.com.hk
• Consumer Staples & Durables

Ka Leong LO, CFA (852) 2268 0630 kllo@kimeng.com.hk Consumer Discretionary & Auto

Mitchell KIM

(852) 2268 0634 mitchellkim@kimeng.com.hk
• Internet & Telcos

Ning MA, CFA (852) 2268 0672 ningma@kimeng.com.hk

Ricky NG, CFA (852) 2268 0689 rickyng@kimeng.com.hk

Regional Renewables HK & China Properties

Sonija LI, CFA, FRM (852) 2268 0641 sonijali@kimeng.com.hk • Gaming

Stefan CHANG, CFA (852) 2268 0675 stefanchang@kimeng.com.hk • Technology - *Regional*

Jigar SHAH Head of Research (91) 22 6623 2632 jigar@maybank-ke.co.in
• Strategy • Oil & Gas • Automobile • Cement

Vishal MODI

(91) 22 6623 2607 vishal@maybank-ke.co.in

Banking & Financials

Neeray DALAL (91) 22 6623 2606 neerav@maybank-ke.co.in

• Software Technology • Telcos

SINGAPORE

Neel SINHA Head of Research (65) 6231 5838 neelsinha@maybank-ke.com.sg

• Strategy • SMID Caps - Regional

Gregory YAP (65) 6231 5848 gyap@maybank-ke.com.sg SMID Caps

Technology & Manufacturing • Telcos

Derrick HENG, CFA

(65) 6231 5843 derrickheng@maybank-ke.com.sg • Transport • Property • REITs (Office)

John CHEONG, CFA

(65) 6231 5845 johncheong@maybank-ke.com.sg • Small & Mid Caps • Healthcare

Ng Li Hiang (65) 6231 5840 nglihiang@maybank-ke.com.sg Banks

INDONESIA

Isnaputra ISKANDAR Head of Research (62) 21 8066 8680

isnaputra.iskandar@maybank-ke.co.id • Strategy • Metals & Mining • Cement

Rahmi MARINA (62) 21 8066 8689

rahmi.marina@maybank-ke.co.id
Banking & Finance

Aurellia SETIABUDI

(62) 21 8066 8691 aurellia.setiabudi@maybank-ke.co.id Property

Pandu ANUGRAH

(62) 21 8066 8688 pandu. anugrah@maybank-ke.co.id • Infra • Construction • Transport• Telcos

Janni ASMAN (62) 21 8066 8687

janni.asman@maybank-ke.co.id • Cigarette • Healthcare • Retail

Adhi TASMIN

(62) 21 8066 8694

adhi.tasmin@maybank-ke.co.id
• Plantations

Anthony LUKMAWIJAYA (62) 21 8066 8690

anthony.lukmawijaya@maybank-ke.co.id

Aviation

PHILIPPINES

Michael BENGSON Head of Research (63) 2 849 8840

michael_bengson@maybank-atrke.com
• Strategy • Utilities • Conglomerates • Telcos

Lovell SARREAL

(63) 2 849 8841 lovell_sarreal@maybank-atrke.com

Consumer • Media • Cement Rommel RODRIGO

(63) 2 849 8839 rommel_rodrigo@maybank-atrke.com

Conglomerates • Property • Gaming Ports/ Logistics

Katherine TAN (63) 2 849 8843

kat_tan@maybank-atrke.com
Banks • Construction

Maria LAPIZ Head of Institutional Research Dir (66) 2257 0250 | (66) 2658 6300 ext 1399

Maria.L@maybank-ke.co.th Strategy • Consumer • Materials • Ind. Estates

Sittichai DUANGRATTANACHAYA (66) 2658 6300 ext 1393

Sittichai.D@maybank-ke.co.th
• Services Sector • Transport

Yupapan POLPORNPRASERT (66) 2658 6300 ext 1395 yupapan.p@maybank-ke.co.th • Oil & Gas

Tanawat RUENBANTERNG

(66) 2658 6300 ext 1394 Tanawat.R@maybank-ke.co.th

· Banks & Diversified Financials

Vorapoj HONGPINYO (66) 2658 6300 ext 1392

Vorapoi.h@maybank-ke.co.th Real Estate & Contractors

Sukit UDOMSIRIKUL Head of Retail Research (66) 2658 6300 ext 5090 Sukit.u@maybank-ke.co.th

Mayuree CHOWVIKRAN (66) 2658 6300 ext 1440

mayuree.c@maybank-ke.co.th • Strategy

Padon VANNARAT (66) 2658 6300 ext 1450 Padon.v@maybank-ke.co.th • Strategy

Surachai PRAMUALCHAROENKIT

(66) 2658 6300 ext 1470 Surachai.p@maybank-ke.co.th • Auto • Conmat • Contractor • Steel

Suttatio PEERASUB

(66) 2658 6300 ext 1430 suttatip.p@maybank-ke.co.th • Media • Commerce

Sutthichai KUMWORACHAI

(66) 2658 6300 ext 1400 sutthichai.k@maybank-ke.co.th • Energy • Petrochem

Termporn TANTIVIVAT

(66) 2658 6300 ext 1520 termporn.t@maybank-ke.co.th • Property

Jaroonpan WATTANAWONG (66) 2658 6300 ext 1404 jaroonpan.w@maybank-ke.co.th • Transportation • Small cap

VIETNAM

LE Hong Lien, ACCA Head of Institutional Research (84) 8 44 555 888 x 8181

lien.le@maybank-kimeng.com.vn
• Strategy • Consumer • Diversified • Utilities

THAI Quang Trung, CFA, Deputy Manager,

Institutional Research (84) 8 44 555 888 x 8180 trung.thai@maybank-kimeng.com.vn • Real Estate • Construction • Materials

Le Nguyen Nhat Chuyen (84) 8 44 555 888 x 8082 chuyen.le@maybank-kimeng.com.vn

NGUYEN Thi Ngan Tuyen, Head of Retail Research (84) 8 44 555 888 x 8081

tuyen.nguyen@maybank-kimeng.com.vn
• Food & Beverage • Oil&Gas • Banking

TRINH Thi Ngoc Diep (84) 4 44 555 888 x 8208

• Oil & Gas

• Technology • Utilities • Construction

PHAM Nhat Bich (84) 8 44 555 888 x 8083

diep.trinh@maybank-kimeng.com.vn

bich.pham@maybank-kimeng.com.vn • Consumer • Manufacturing • Fishery

NGUYEN Thi Sony Tra Mi (84) 8 44 555 888 x 8084 mi.nguyen@maybank-kimeng.com.vn

Port operation • Pharmaceutical
 Food & Beverage

TRUONG Quang Binh (84) 4 44 555 888 x 8087

binh.truong@maybank-kimeng.com.vn
• Rubber plantation • Tyres and Tubes • Oil&Gas



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Malaysia

Maybank Investment Bank Berhad (A Participating Organisation of Bursa Malaysia Securities Berhad) 33rd Floor, Menara Maybank, 100 Jalan Tun Perak, 50050 Kuala Lumpur

Tel: (603) 2059 1888; Fax: (603) 2078 4194

Stockbroking Business:

Level 8, Tower C, Dataran Maybank, No.1. Jalan Maarof 59000 Kuala Lumpur

Tel: (603) 2297 8888 Fax: (603) 2282 5136

Philippines

Maybank ATR Kim Eng Securities Inc. 17/F, Tower One & Exchange Plaza Ayala Triangle, Ayala Avenue Makati City, Philippines 1200

Tel: (63) 2 849 8888 Fax: (63) 2 848 5738

South Asia Sales Trading

Kevin Foy Regional Head Sales Trading kevinfoy@maybank-ke.com.sg Tel: (65) 6636-3620 US Toll Free: 1-866-406-7447

Malavsia Joann Lim

joann.lim@maybank-ib.com Tel: (603) 2717 5166

Indonesia

Harianto Liong

harianto.liong@maybank-ke.co.id Tel: (62) 21 2557 1177

New York Andrew Dacey

adacey@maybank-keusa.com Tel: (212) 688 2956

Vietnam

Patrick Mitchell patrick.mitchell@maybank-kimeng.com.vn

Tel: (84)-8-44-555-888 x8080

Singapore

Maybank Kim Eng Securities Pte Ltd Maybank Kim Eng Research Pte Ltd 50 North Canal Road Singapore 059304

Tel: (65) 6336 9090

Hong Kong

Kim Eng Securities (HK) Ltd Level 30, Three Pacific Place, 1 Queen's Road East, Hong Kong

Tel: (852) 2268 0800 Fax: (852) 2877 0104

Thailand

Maybank Kim Eng Securities (Thailand) Public Company Limited 999/9 The Offices at Central World, 20th - 21st Floor, Rama 1 Road Pathumwan, Bangkok 10330, Thailand

Tel: (66) 2 658 6817 (sales) Tel: (66) 2 658 6801 (research)

North Asia Sales Trading

Andrew Lee andrewlee@kimeng.com.hk Tel: (852) 2268 0283 US Toll Free: 1 877 837 7635

Thailand

Tanasak Krishnasreni Tanasak.K@maybank-ke.co.th Tel: (66)2 658 6820

Scott Kinnear-Nock SKinnear-nock@maybank-ke.co.uk Tel: (44) 207-332-0221

India

Manish Modi manish@maybank-ke.co.in Tel: (91)-22-6623-2601

Philippines

Keith Roy keith_roy@maybank-atrke.com

Tel: (63) 2 848-5288

London

Maybank Kim Eng Securities (London) Ltd 77 Queen Victoria Street London EC4V 4AY, UK

Tel: (44) 20 7332 0221 Fax: (44) 20 7332 0302

Indonesia

PT Maybank Kim Eng Securities Sentral Senayan III, 22nd Floor Jl. Asia Afrika No. 8 Gelora Bung Karno, Senayan Jakarta 10270, Indonesia

Tel: (62) 21 2557 1188 Fax: (62) 21 2557 1189

Vietnam

Maybank Kim Eng Securities Limited 4A-15+16 Floor Vincom Center Dong Khoi, 72 Le Thanh Ton St. District 1 Ho Chi Minh City, Vietnam

Tel: (84) 844 555 888 Fax: (84) 8 38 271 030

New York

Maybank Kim Eng Securities USA 777 Third Avenue, 21st Floor New York, NY 10017, U.S.A.

Tel: (212) 688 8886 Fax: (212) 688 3500

India

Kim Eng Securities India Pvt Ltd 2nd Floor, The International, 16, Maharishi Karve Road, Churchgate Station, Mumbai City - 400 020, India

Tel: (91) 22 6623 2600 Fax: (91) 22 6623 2604

Saudi Arabia

In association with Anfaal Capital Villa 47, Tujjar Jeddah Prince Mohammed bin Abdulaziz Street P.O. Box 126575 Jeddah 21352

Tel: (966) 2 6068686 Fax: (966) 26068787

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