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Investing in China's Future

BREAKFAST BRIEFING
CHICAGO: SEPT 13
NEW YORK: SEPT 20

Exploring Opportunity in China's Bond Market

Teresa Kong, CFA
Portfolio Manager
Matthews Asia



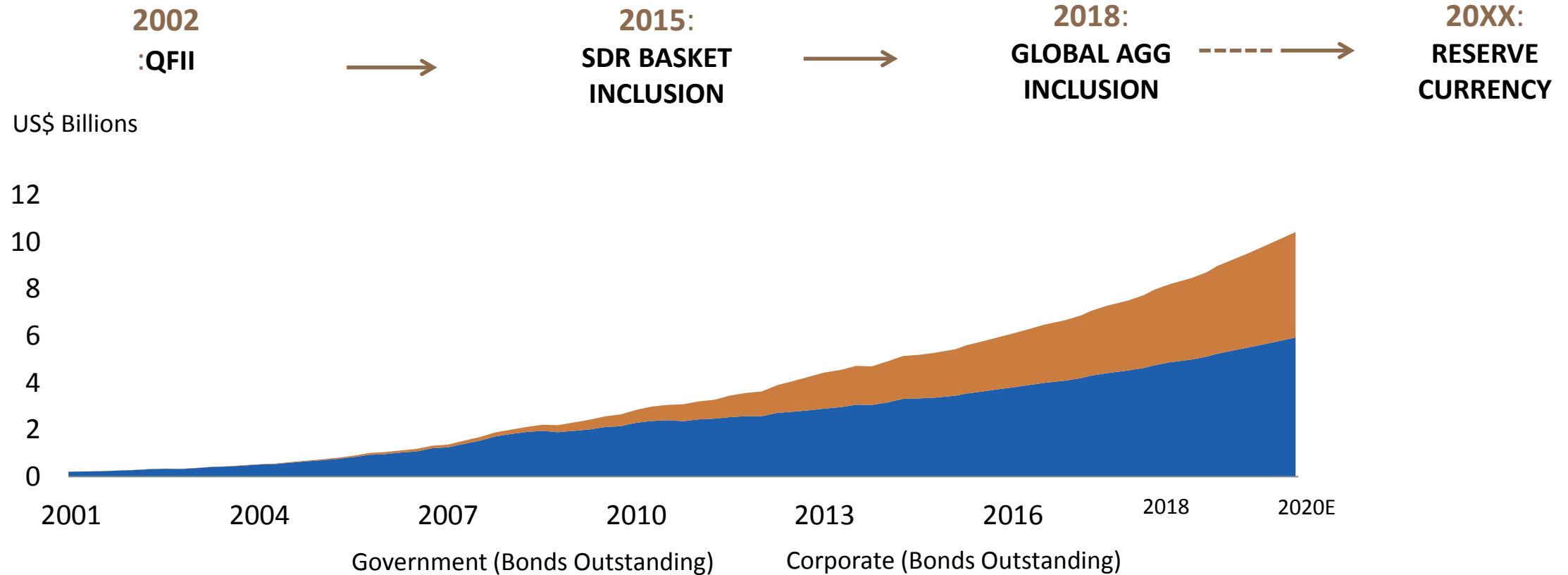


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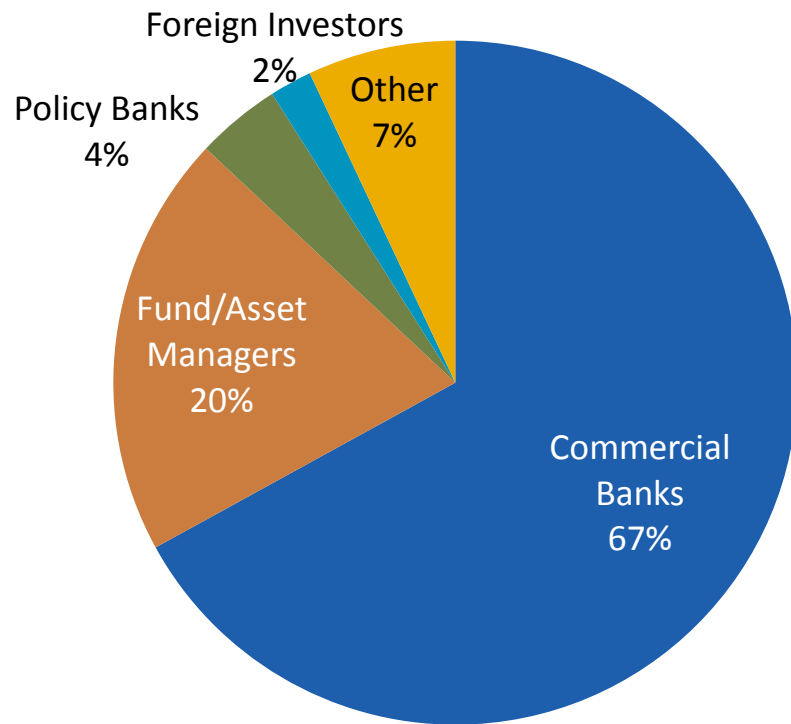
September 2018

Evolution of China Bond Market

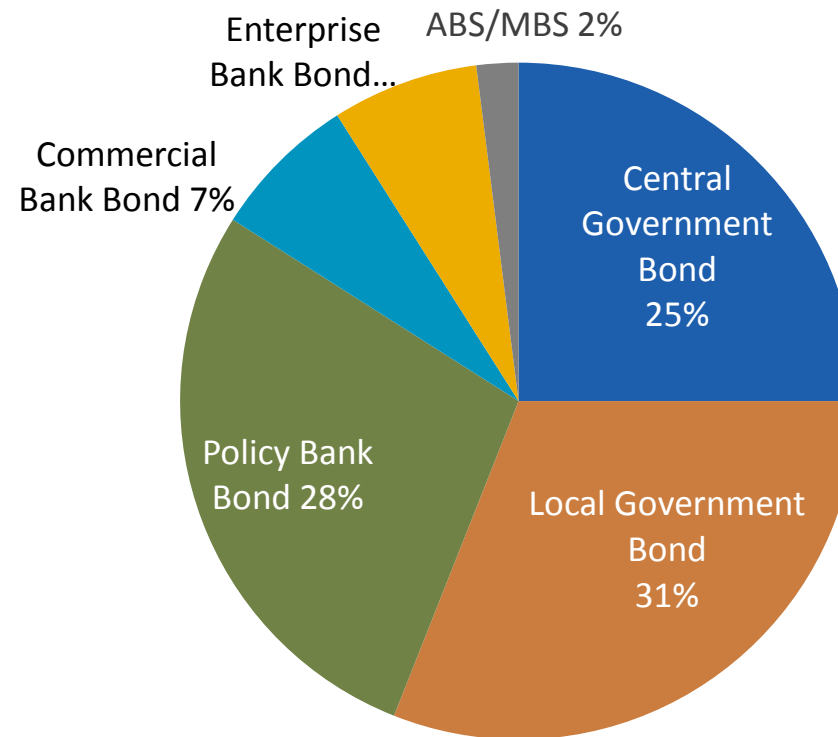


China Onshore Renminbi Bonds

BY INVESTOR TYPE



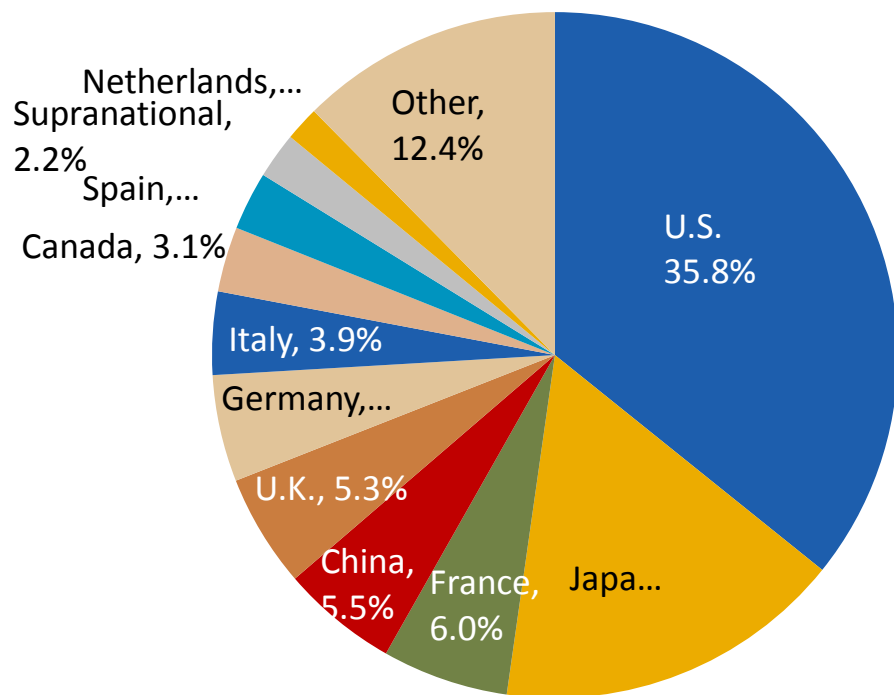
BY BOND TYPE



China Will Be in the Top Five by Weight in Global Bond Indices

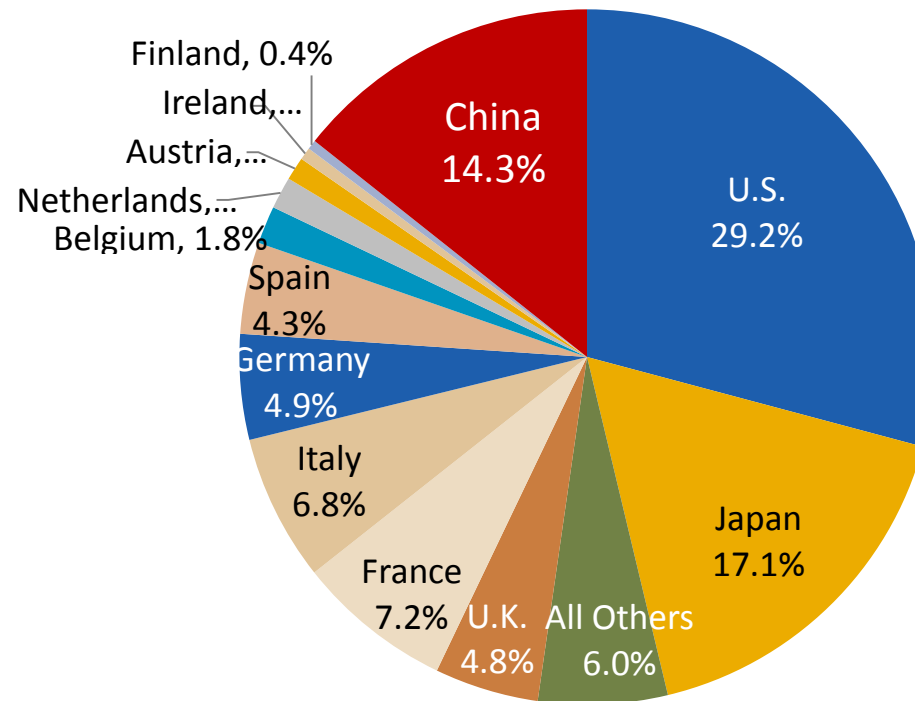
**BLOOMBERG BARCLAYS GLOBAL AGGREGATE
(GLOBAL AGG)**

Pro-Forma including China
Size: US\$53.4 TN



**FTSE WORLD GOV'T BOND INDEX
(WGBI)**

Pro-Forma including China
Size: US\$25.2 TN



Data for inclusion of China bonds is simulated and based on securities values as of the noted date. There is no guarantee any estimates or projections will be realized.

Assuming fixed coupon bonds with over RMB20BN issue size and over 1yr to maturity, per WGBI inclusion criteria

Source: ChinaBond.cn, Bloomberg, Matthews Asia; Global Agg Data as of 3/31/18, WGBI Data as of 4/30/18

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China Bond Flows Over the Next Five Years

Index Family	Index	Status	Est. Weight	Est. Inflow
Bloomberg Barclays Indices	✓ Global Aggregate Index	Will include China starting April 2019	5%	US\$100-250 BN
JP Morgan Global Bond Indices	<input type="checkbox"/> GBI EM Global Div ✓ GBI EM Broad	Inclusion likely in 1-5y Already includes China	10%	US\$20 BN
FTSE World Govt Bond Indices	<input type="checkbox"/> WGBI ✓ WGBI – Extended China	Inclusion likely in 1-5 yr Already includes China	14%	US\$250 BN
Cross over flows (unconstrained)				US\$300-450 BN
			TOTAL	US\$670 - 970BN

Matthews Asia estimates. Inflows based on AUM following the respective indexes and unbenchmarked and actively managed AUM.

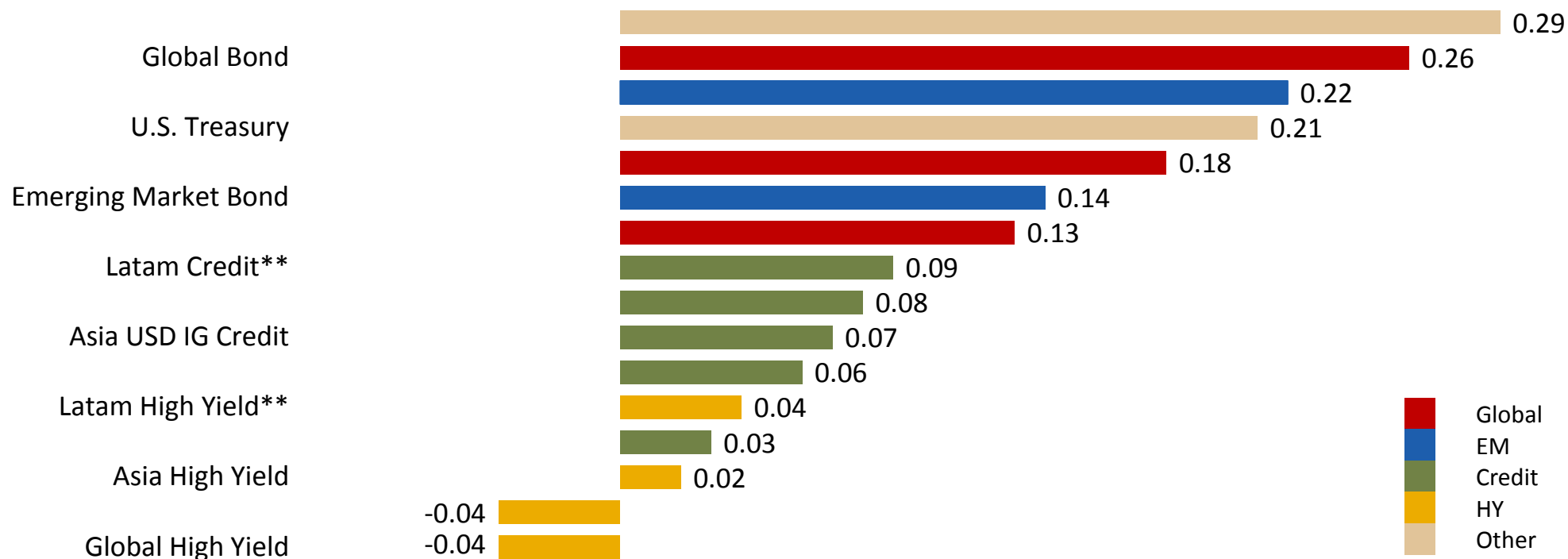
Source: Matthews Asia estimates

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Renminbi Bonds Offer Diversification

CORRELATION COEFFICIENTS OF ONSHORE CHINA BONDS

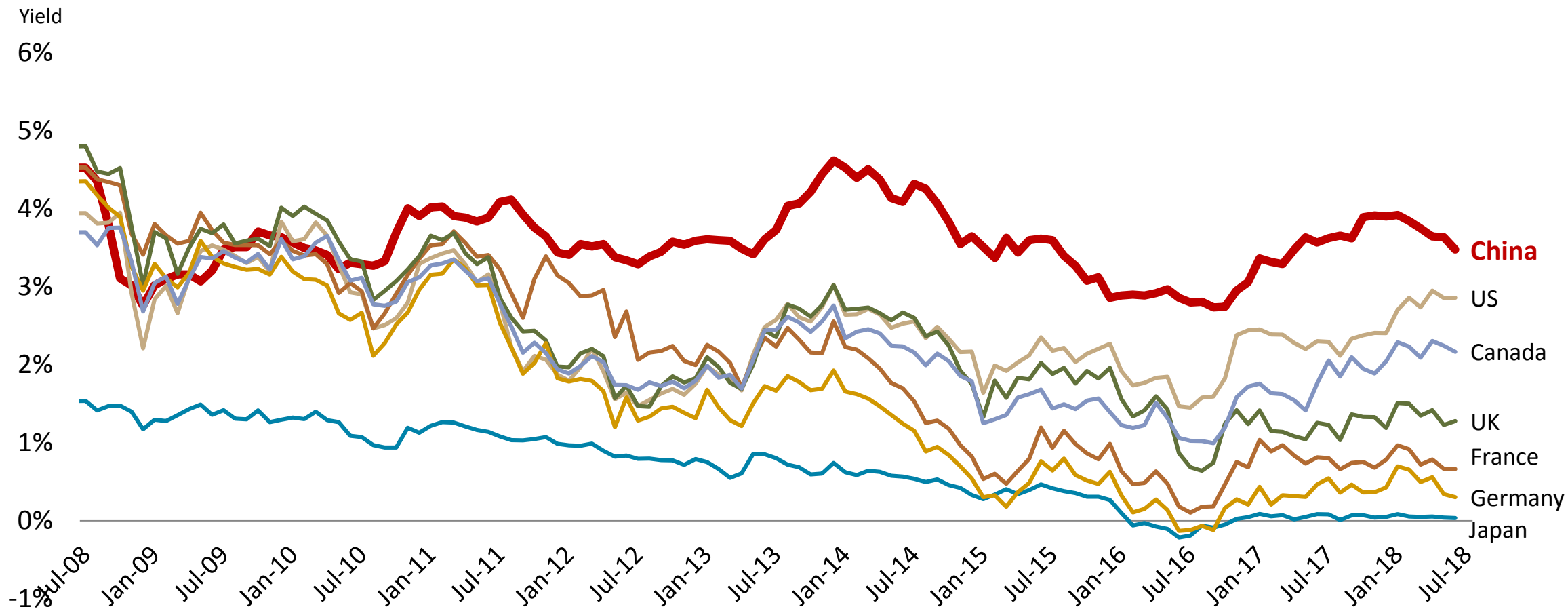


Asia High Yield (high yield portion of J.P. Morgan Asia Credit Index), Asia USD IG Credit (Investment Grade portion of JACI Index), Asia Local Bond (Markit iBoxx Asian Local Bond Index), Asia USD Credit (J.P. Morgan Asia Credit Index–JACI), CEEMEA Credit (J.P. Morgan Corporate Broad EMBI CEEMEA Index), Emerging Market Debt (J.P. Morgan EMBI Global), Emerging Markets (EM) Bond (JP Morgan Emerging Markets Bond Index Global), Euro Bond (Barclays Euro Aggregate Bond Index), Global Bond (Barclays Global Aggregate Bond Index), Global High Yield (BofA Merrill Lynch Global High Yield Index), LATAM Credit (J.P. Morgan Corporate Broad EMBI Latin America Index), LATAM High Yield (J.P. Morgan CEMBI Broad Latin American High Yield Index), U.S. Bond (Barclays U.S. Aggregate Bond Index), U.S. Credit (BofA Merrill Lynch US Corporate Index), U.S. High Yield (BofA Merrill Lynch High Yield Master II Index) and U.S. Treasury (Bloomberg Barclays US Treasury Index)

Source: Bloomberg; data period Dec 1998 to March 2018; *Dec 2001 to March 2018, **2002 to March 2018, †2000 to March 2018; Merrill Lynch, Pierce, Fenner & Smith Incorporated (“BofAML”), used with permission. See Disclosures for full disclaimer.

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China Government Bonds Offer Yield Pickup

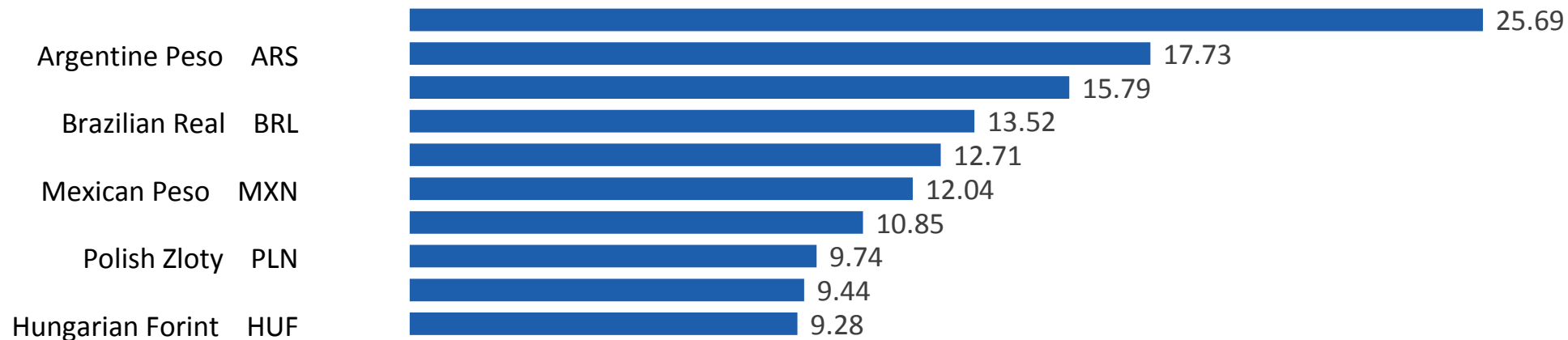


10 Year Government Bonds for Each Country
Source: Bloomberg

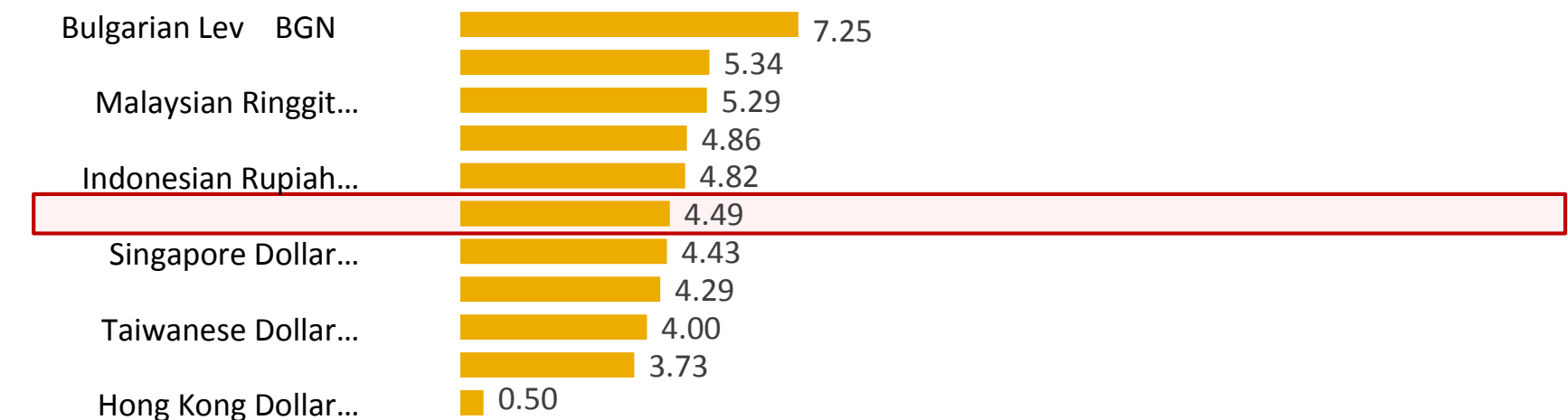
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The Chinese Currency Has Low Volatility Despite Headlines and Trade War

HIGHEST VOLATILITY (%)



LOWEST VOLATILITY (%)



Source: Bloomberg, one year volatility as of Aug 17, 2018

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Onshore Credit Spread Remains Elevated

CORPORATE SPREAD OVER RMB GOVERNMENT BOND YIELD

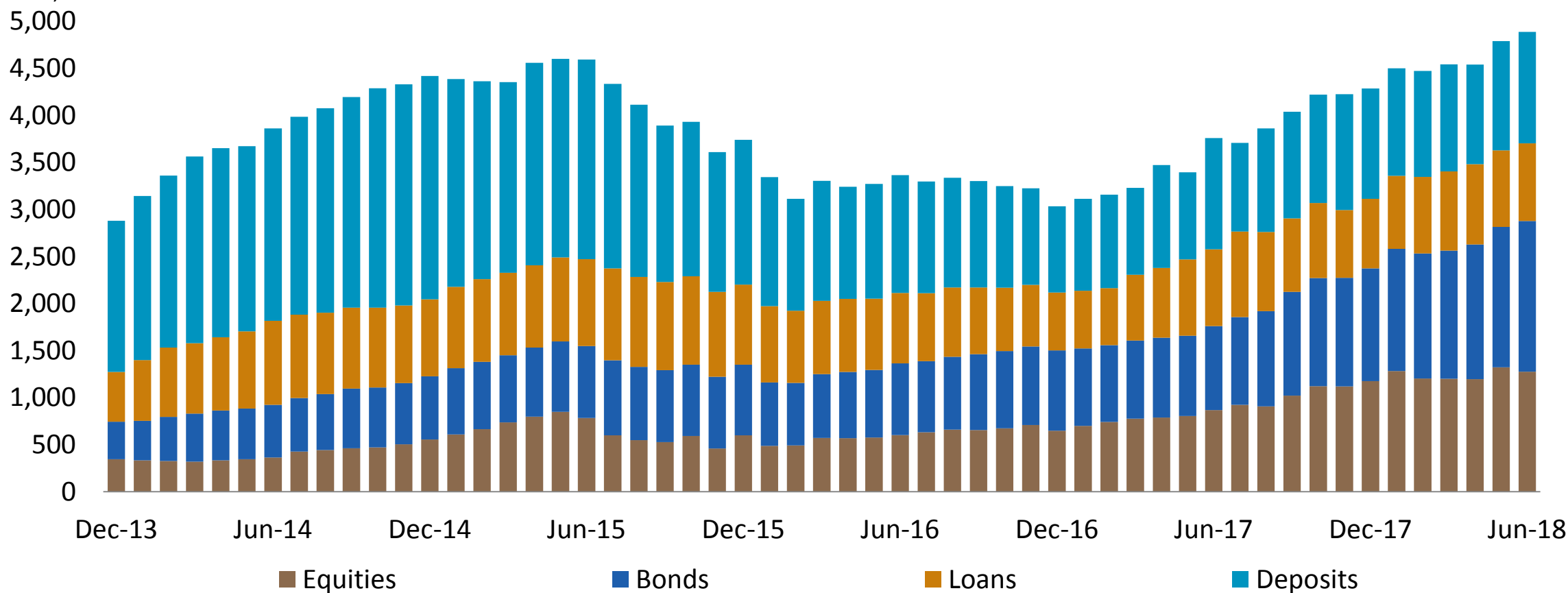


Source: Bloomberg

China Has Been a Recipient of Positive Inflows in Contrast to Rest of EM

FOREIGN HOLDINGS OF ONSHORE ASSETS

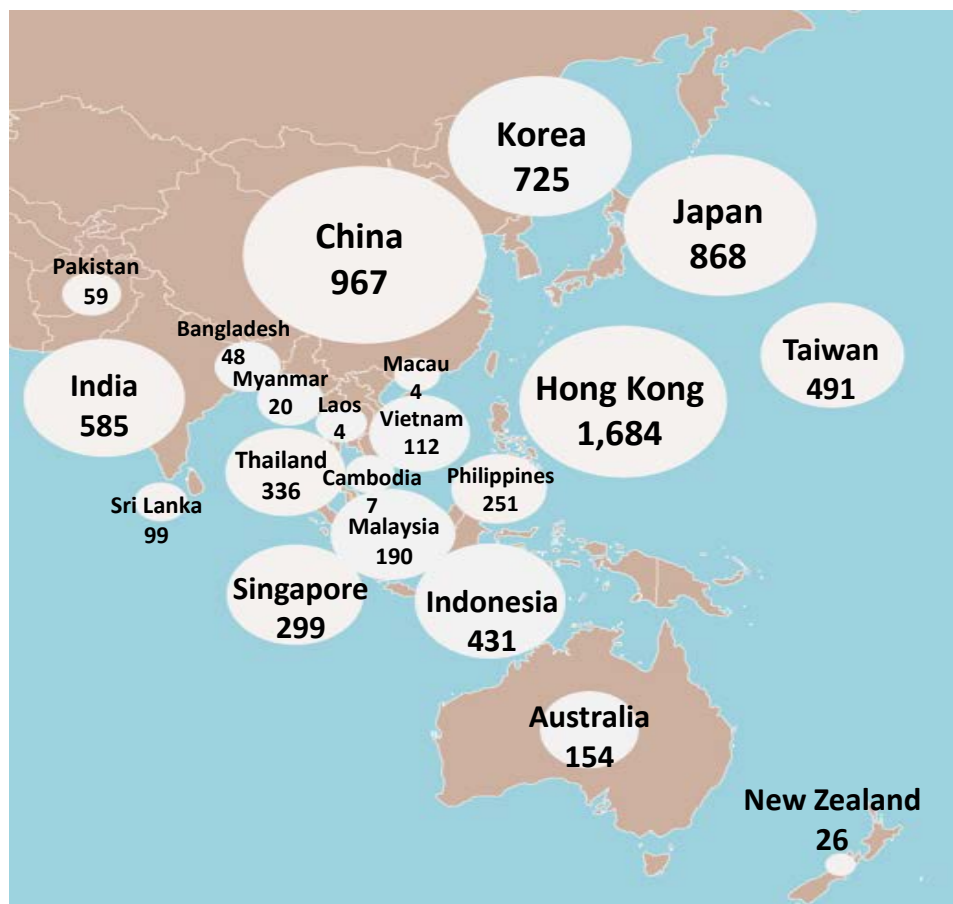
CNY, Billions



Matthews Asia—“Boots on-the-Ground”

Fundamental, bottom-up investment process

7,100+ On-Site Meetings in Asia Since 2013*



Identifying investment opportunities that stand to prosper from Asia’s transformation calls for in-depth, on-the-ground, bottom-up research and active management:

- ✦ Over **2,700** company meetings each year
- ✦ Half of the meetings are on-site visits in Asia in locations ranging from Asian financial centers to remote island outposts

*From 1/1/2013 to 12/31/2017

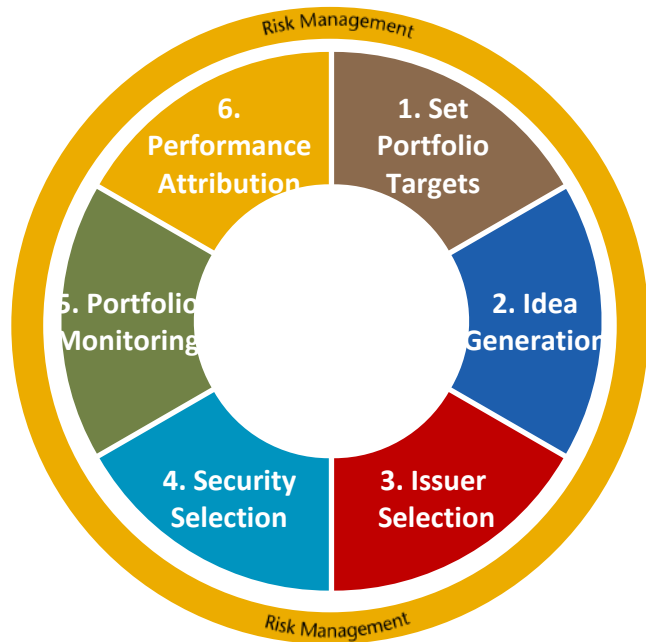
Key Takeaways

- ✦ China fixed income is a growing opportunity for institutional portfolios
 - Significant addition to Global Aggregate Index
 - Enhanced liquidity and access with the establishment of Bond Connect Program
 - Attractive risk-adjusted yield
- ✦ A dedicated strategic allocation to China Bonds is worth consideration
 - Index exposure is incomplete and flawed
 - Low correlation relative to major fixed income indices
 - Low volatility relative to other EM currencies
- ✦ Fundamental research is key to capitalizing on opportunity while managing risk
 - Source unique exposures not found in indices
 - Focus on growing areas of the Chinese economy
 - Minimize risk and total impairment of capital through security selection and deep on the ground due diligence

Appendix

Matthews Asia Fixed Income Investment Process

In-depth analysis of the balance sheets, cash flows and bond prospectus are required



1. Set Portfolio Targets	<ul style="list-style-type: none"> * Set portfolio targets by: <ul style="list-style-type: none"> — Asset type (by capital structure, bond vs. convertible vs. preferred) — Credit (OAS bucket, industry, country) stage of credit cycle — Interest rate bucket (duration, convexity) stage of rate cycle
2. Idea Generation	<ul style="list-style-type: none"> * Approximately 200 high quality corporates within the China onshore bond market, convertible bonds * In-depth understanding of China * Fundamental screens (company specific) * Intelligence from broad Matthews Asia investment team * Metrics compared to the peers in country's industry <ul style="list-style-type: none"> — Quality of cash flow — Margin momentum — Consistency between operating and financial leverage — Management incentives, corporate governance — Degrees of importance within the government complex
3. Issuer Selection	<ul style="list-style-type: none"> * Relative value by: <ul style="list-style-type: none"> — Seniority / capital structure — Credit / OAS * Marginal contribution to risk, correlation to existing securities
4. Security Selection	<ul style="list-style-type: none"> * Momentum of return and standard deviation * Add/hedge risk tactically (e.g. long/short FX forwards) * Use return dashboard to monitor add, sell targets * Relative value monitor (e.g. across capital structures and issuers) * Vulnerabilities monitor (e.g. FX reserves, sudden stops of capital)
5. Portfolio Monitoring	<ul style="list-style-type: none"> * Determine whether ex-post drivers of returns foot with ex-ante priors quarterly * Top contributors and detractors by OAS bucket, industry
6. Performance Attribution	

Parameters set by the Advisor are subject to change.

Matthews Asia Has Deep Expertise in China

Name	Investment Focus	Years of Experience			Country of Origin	Asia Countries Lived In	Asian Languages & Dialects Spoken
		Asia	Industry	Firm			
Robert Horrocks, PhD	Asia Regional	24	24	10	U.K.	China, Hong Kong, Taiwan, Korea	Mandarin
Kenichi Amaki	Japan, China Small Cap	15	17	10	Japan	Japan	Japanese
Sunil Asnani	India, Asia Regional	10	13	10	India	India	Sindhi, Hindi, Malayalam
Winnie Chwang	China, Asia ESG	14	14	14	Singapore	Singapore	Mandarin, Cantonese
David Dali	Broad EM	21	29	3	U.S.	N/A	N/A
Raymond Deng, CFA	China	9	10	4	China	China, Thailand	Mandarin
Richard Gao	China	29	29	21	China	China	Mandarin, Cantonese, Shanghaiese
Rahul Gupta	Asia Regional	16	24	4	India	India	Hindi
Michael Han, CFA	Korea, Asia Value	16	16	11	South Korea	South Korea	Korean
Robert Harvey, CFA	Emerging and Frontier Asia	18	24	6	South Africa	Vietnam, Hong Kong	N/A
Tiffany Hsiao, CFA	China Small Cap, Asia Regional	17	17	4	Taiwan	China, Japan, Taiwan	Mandarin
Taizo Ishida	Japan, Emerging Asia, Asia Growth	28	34	12	Japan	Japan, Bangladesh	Japanese
Yuanyuan Ji	China	9	9	1	China	China, Hong Kong	Mandarin, Shanghaiese
Teresa Kong, CFA	Asia Debt	18	23	8	Hong Kong	Hong Kong, China	Cantonese
John Paul Lech	Asia Regional	10	14	<1	U.S.	N/A	N/A
Joyce Li, CFA	Asia Regional	12	12	2	China	China	Mandarin, Cantonese
Kenneth Lowe, CFA	Asia Regional	12	12	8	U.K.	N/A	N/A
Andrew Mattock, CFA	China	19	23	3	Australia	Singapore	N/A
Peeyush Mittal, CFA	India	9	9	3	India	India	Hindi
Michael Oh, CFA	Korea, Asia Regional	18	18	18	South Korea	South Korea	Korean
Satya Patel	Asia Debt	7	11	7	U.S.	N/A	Gujarati
Sriyan Pietersz	ASEAN, Frontier Markets	25	27	2	Sri Lanka	Sri Lanka, India, Thailand, Hong Kong	Sinhalese, Thai
Andy Rothman	China	34	34	4	U.S.	China, Indonesia	Mandarin
Sharat Shroff, CFA	India, Asia Regional	15	18	13	India	China, India, Taiwan	Hindi, Bengali
Lydia So, CFA	Asia Small Cap, Asia Regional	14	19	14	Hong Kong	Hong Kong	Cantonese, Mandarin
Jeremy Sutch, CFA	Asia Small Cap, Asia Regional	23	23	3	Hong Kong	China, Hong Kong	N/A
Shuntaro Takeuchi	Japan	13	17	2	Japan	Japan	Japanese
Vivek Tanneeru	Asia ESG, Asia Regional	13	13	7	India	India	Telegu, Hindi
Henry Zhang, CFA	China	11	16	11	China	China	Mandarin
Sherwood Zhang, CFA	China, Asia Regional	10	15	7	China	China, Hong Kong	Mandarin, Cantonese
Yu Zhang, CFA	China, Asia Regional	14	14	11	China	China, Japan	Mandarin
Beini Zhou, CFA	Asia Small Cap, Asia Value	13	13	5	China	China	Mandarin
Hardy Zhu	China	11	11	7	China	China	Mandarin
Julia Zhu	China	11	11	7	China	China, Hong Kong	Mandarin, Shanghaiese

Senior Investment and China Strategies Teams as of July 9, 2018

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Investing in international and emerging markets may involve additional risks, such as social and political instability, market illiquidity, exchange-rate fluctuations, a high level of volatility and limited regulation. Fixed income investments are subject to additional risks, including, but not limited to, interest rate, credit and inflation risks. In addition, single-country and sector strategies may be subject to a higher degree of market risk than diversified strategies because of concentration in a specific industry, sector or geographic location. Investing in small companies is more risky and more volatile than investing in large companies.

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Index Definitions

The Bank of America Merrill Lynch High Yield Master II Index is a market-capitalization-weighted index that includes sub-investment grade sovereign and corporate issuers included in the J.P. Morgan Asia Credit Index.

The Bank of America Merrill Lynch U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market.

The MSCI All Country Asia ex Japan Index is a free float-adjusted market capitalization-weighted index of the stock markets of China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand.

The MSCI China Index is a free float-adjusted market capitalization-weighted index of Chinese equities that include China-affiliated corporations and H shares listed on the Hong Kong exchange, and B shares listed on the Shanghai and Shenzhen exchanges.

The MSCI Europe Index captures large and mid-cap representation across 15 Developed Markets (DM) countries in Europe. With 446 constituents, the index covers approximately 85% of the free float-adjusted market capitalization across the European Developed Markets equity universe.

The S&P 500 Index is a broad market-weighted index dominated by blue-chip stocks in the U.S.

The MSCI EAFE Index is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada.

The MSCI Emerging Markets Index captures large and mid cap representation across 23 Emerging Markets (EM) countries. With 833 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The Barclays Capital U.S. Aggregate Bond Index is commonly used as a benchmark by both passive and active investors to measure portfolio performance relative to the U.S. dollar-denominated investment grade fixed-rate taxable bond market.

The Barclays Global Aggregate Index (GAI) provides a broad-based measure of the global investment grade fixed-rate debt markets. The GAI contains three major components: The U.S. Aggregate Index, the Pan-European Aggregate Index, and the Asian-Pacific Aggregate Index. In addition to securities from these three benchmarks (94% of the overall Global Aggregate market value as of December 31, 2010), the Global Aggregate Index includes Global Treasury, Eurodollar, Euro-Yen, Canadian and Investment Grade 144A index-eligible securities not already in the three regional aggregate indices.

The Barclays Municipal Bond Index is a market-value-weighted index for the long-term tax-exempt bond market. To be included in the index, bonds must have a minimum credit rating of Baa. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date.

The Barclays Pan-European High Yield Index tracks fixed-rate, investment-grade securities issued in the following European currencies: Euro, British pounds, Norwegian krone, Danish krone, Swedish krona, Czech koruna, Hungarian forint, Polish zloty, and Slovakian koruna.

The Bloomberg Barclays US Treasury Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury. Treasury bills are excluded by the maturity constraint, but are part of a separate short Treasury Index.

The Barclays European Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, euro-denominated, fixed-rate bond market, including treasuries, government-related, corporate and securitized issues. Inclusion is based on currency denomination of a bond and not country of risk of the issuer.

The Bank of America Merrill Lynch Emerging Markets Corporate Plus Index is a broad, capitalization-weighted composite index designed to track the performance of U.S. dollar- and euro-denominated debt of corporate issuers who primarily do business in emerging market countries.

The Bank of America Merrill Lynch Global High Yield Index is a capitalization-weighted index that tracks the performance of USD, CAD, GBP and EUR denominated below investment grade corporate debt publicly issued in the major domestic or eurobond markets.

The BofA Merrill Lynch BB & Lower Latin America Non-Sovereign USD External Debt Index is a subset of The BofA Merrill Lynch BB & Lower Non-Sovereign External Debt Index including all securities denominated in US dollars with a country of risk associated with the geographical region of Latin America.

The BofA Merrill Lynch Asian Dollar High Yield Index tracks the performance of sub-investment grade U.S. dollar denominated sovereign, quasi-government, corporate, securitized and collateralized debt publicly issued in the U.S. domestic and eurobond markets by Asian issuers.

Index Definitions *continued...*

The J.P. Morgan Corporate Broad EMBI CEEMA Index is a market-capitalization-weighted index that contains corporate issuers from Central, Eastern Europe, Middle East and Africa included in the J.P. Morgan Emerging Markets Bond Index.

The J.P. Morgan Corporate Broad EMBI Latin America Index is a market-capitalization-weighted index that includes corporate issues from Latin America included in the J.P. Morgan Emerging Markets Bond Index.

The J.P. Morgan Emerging Markets Bond Index Global ("EMBI Global") tracks total returns for traded external debt instruments in the emerging markets and includes US dollar-denominated Brady bonds, loans, and Eurobonds with an outstanding face value of at least \$500 million. The EMBI Global defines emerging markets countries with a combination of World Bank-defined per capita income brackets and each country's debt-restructuring history.

BAML High Yield Master II (name changed to The BofA Merrill Lynch US High Yield Index) tracks the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market.

BAML US Corporate Master Index (name changed to The BofA Merrill Lynch US Corporate Index) tracks the performance of US dollar denominated investment grade corporate debt publicly issued in the US domestic market.

BAML Mortgage Master (name changed to The BofA Merrill Lynch US Mortgage Backed Securities Index) tracks the performance of US dollar denominated fixed rate and hybrid residential mortgage pass-through securities publicly issued by US agencies in the US domestic market.

The J.P. Morgan CEMBI Broad Latin American High Yield Index is the Latin America High Yield portion of the JPM CEMBI Broad Index. The CEMBI is a global, liquid corporate emerging markets benchmark that tracks U.S.-denominated corporate bonds issued by emerging markets entities. The CEMBI Broad Index is more comprehensive and includes smaller issues to cover a wider array of corporate bonds.

The Bank of America Merrill Lynch Corporate Master Index is an unmanaged index comprised of approximately 4,256 corporate debt obligations rated BBB or better. These quality parameters are based on composites of ratings assigned by Standard and Poor's Ratings Group and Moody's Investors Service, Inc. Only bonds with minimum maturity of one year are included.

The Bank of America Merrill Lynch U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market.

The Bloomberg US Corporate Bond Index is a rules-based market-value weighted index engineered to measure the investment grade, fixed-rate, taxable, corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-U.S. corporate issuers.

Glossary

CAGR (Compound Annual Growth Rate) is the year-over-year growth rate of an investment over a specified period of time.

EBIT Margin (Earnings Before Interest and Taxation Margin) is a profitability measure equal to EBIT divided by net revenue. This value is useful when comparing multiple companies, especially within a given industry, and also helps evaluate how a company has grown over time.

EBITDA (Earnings Before Interest and Taxation, Depreciation and Amortization) is a measure of a company's earnings before considering the financing of that company (the share of equity capital and debt employed), and disregarding potential depreciation and amortization policies, which can be very different. EBITDA allows like-for-like comparisons between different companies' performance.

EPS (Earnings per Share) is the amount of annual profit (after tax and all other expenses) attributable to each share in a company. EPS is calculated by dividing profit by the average number of shares on issue.

EVA (Economic Value Added) is a measure of a company's financial performance based on the residual wealth calculated by deducting cost of capital from its operating profit (adjusted for taxes on a cash basis).

EV/EBITDA (Enterprise Multiple) is a ratio used to determine the value of a company. The enterprise multiple looks at a firm as a potential acquirer would, because it takes debt into account - an item which other multiples like the P/E ratio do not include.

EV (Enterprise Value) is a measure of a company's value, often used as an alternative to straightforward market capitalization. Enterprise value is calculated as market cap plus debt, minority interest and preferred shares, minus total cash and cash equivalents.

FCF (Free Cash Flow) is a measure of financial performance calculated as operating cash flow minus capital expenditures. Free cash flow (FCF) represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base.

Forward P/E (Forward Price to Earnings) is a measure of the price-to-earnings ratio (P/E) using forecasted earnings for the P/E calculation. While the earnings used are just an estimate and are not as reliable as current earnings data, there still may be benefit in estimated P/E analysis. The forecasted earnings used in the formula can either be for the next 12 months or for the next full-year fiscal period.

Gross Margin is a company's total sales revenue minus its cost of goods sold, divided by the total sales revenue, expressed as a percentage. The gross margin represents the percent of total sales revenue that the company retains after incurring the direct costs associated with producing the goods and services sold by a company.

Net Margin is the ratio of net profits to revenues for a company or business segment—typically expressed as a percentage—that shows how much of each dollar earned by the company is translated into profits. It is calculated by dividing net profit by revenue.

Operating Margin is a ratio used to measure a company's pricing strategy and operating efficiency. Operating margin is a measurement of what proportion of a company's revenue is left over after paying for variable costs of production.

P/E Ratio (Price-to-Earnings Ratio) is a valuation ratio of a company's current share price compared to its per-share earnings, calculated as market value per share divided by earnings per share (EPS).

P/B Ratio (Price-to-Book Ratio) is used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share. A lower P/B ratio could mean that the stock is undervalued.

PPP (Purchasing Power Parity) is an economic theory that estimates the amount of adjustment needed on the exchange rate between countries in order for the exchange to be equivalent to each currency's purchasing power.

ROE (Return on Equity) is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested, and is calculated as net income divided by shareholder's equity.

ROIC (Return on Invested Capital) is a calculation used to assess a company's efficiency at allocating the capital under its control to profitable investments. The return on invested capital measure gives a sense of how well a company is using its money to generate returns.