ΡΙΜΟΟ

Global Economic Outlook

Synching Lower

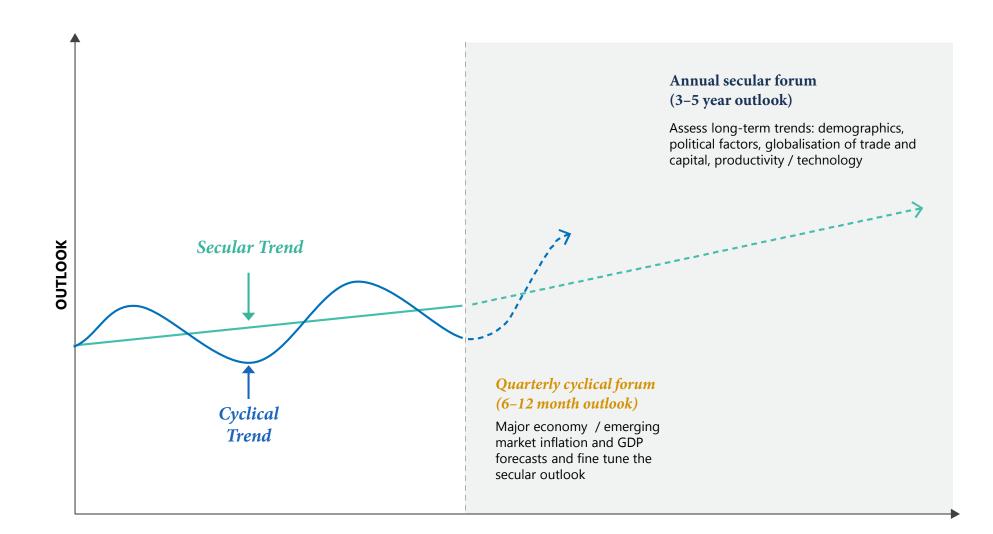
CalPERS Offsite, January 22, 2019 Joachim Fels

For institutional investor use only

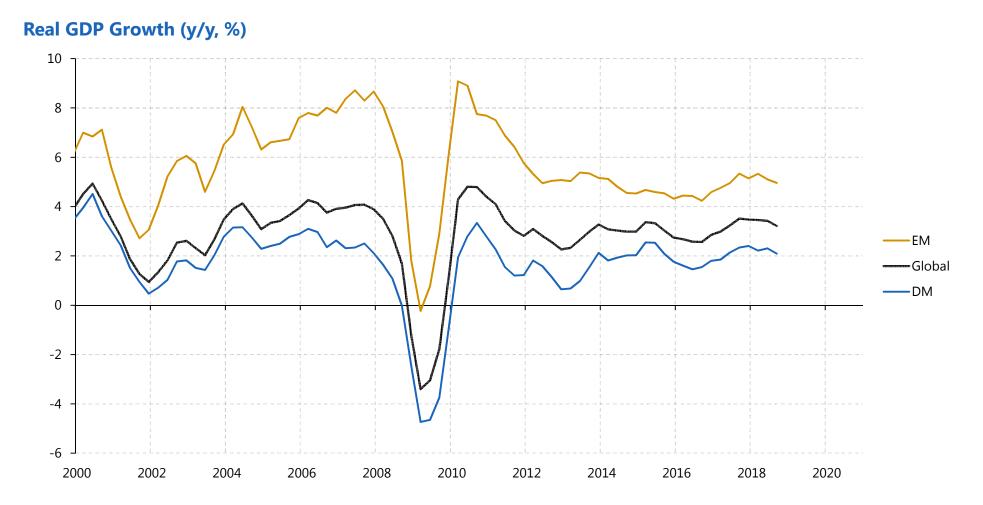
A company of **Allianz** (II)



PIMCO's investment process *Forums: Themes that anchor portfolio construction*



Global GDP growth: The peak is behind us

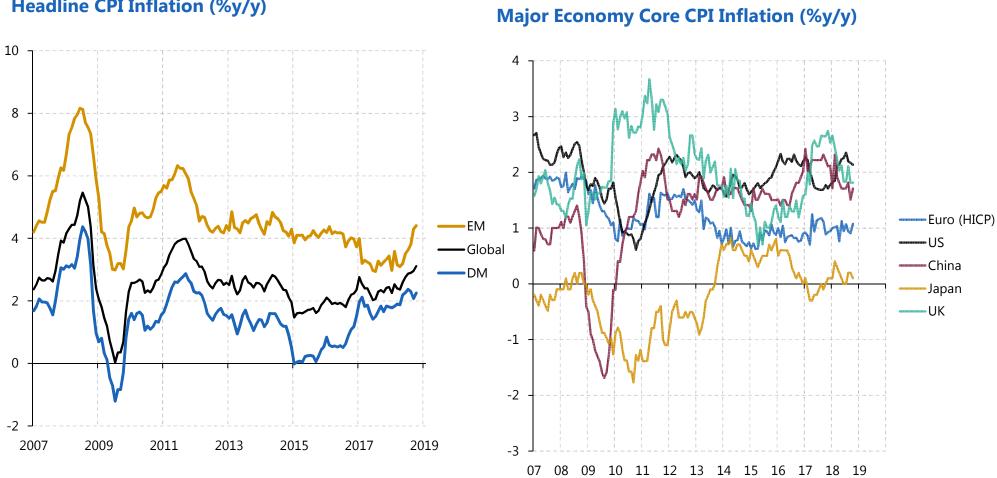


As of September 2018.

SOURCE: Haver Analytics, PIMCO calculations.

DM = Australia, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, Switzerland, UK, US. EM = Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Poland, Russia, Singapore, South Africa, Taiwan, Thailand, Turkey. Global = EM + DM. Aggregates are GDP-weighted averages using market exchange rates. Note: Australia, Argentina, South Africa and Turkey are excluded for 3Q 2018.

Headline inflation has peaked, core inflation flat like a pancake



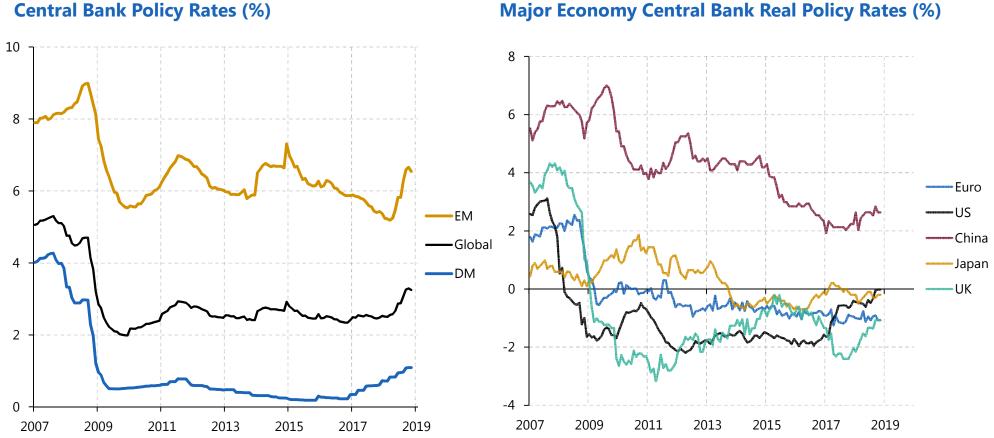
Headline CPI Inflation (%y/y)

As of November 2018.

SOURCE: Haver Analytics, PIMCO calculations.

DM = Australia, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, Switzerland, UK, US. EM = Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Poland, Russia, Singapore, South Africa, Taiwan, Thailand, Turkey. Global = EM + DM. Aggregates are GDP-weighted averages using market exchange rates.

Global policy rate higher, but real rates still historically low



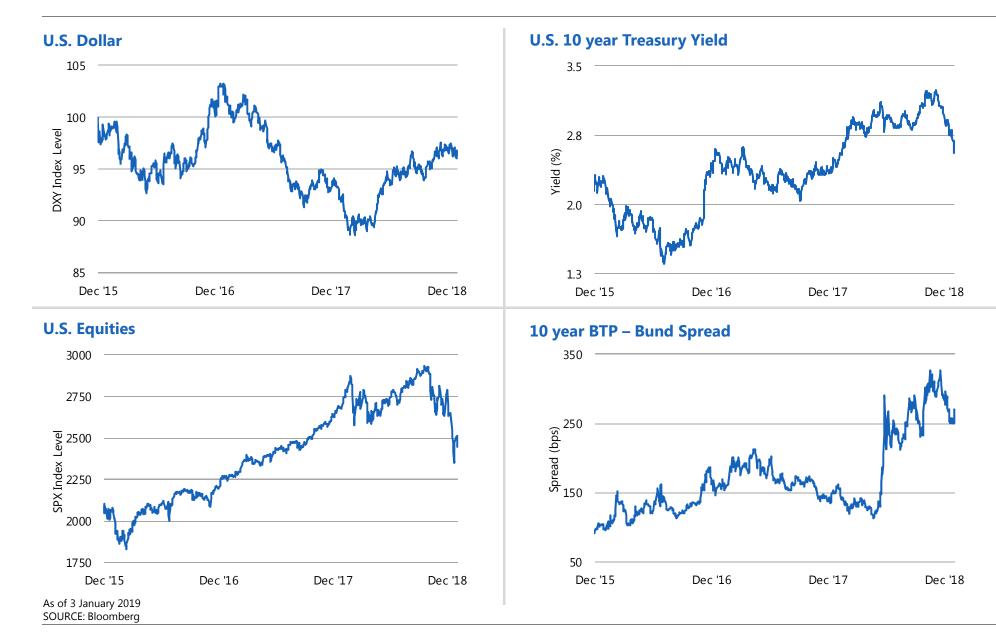
Major Economy Central Bank Real Policy Rates (%)

As of November 2018.

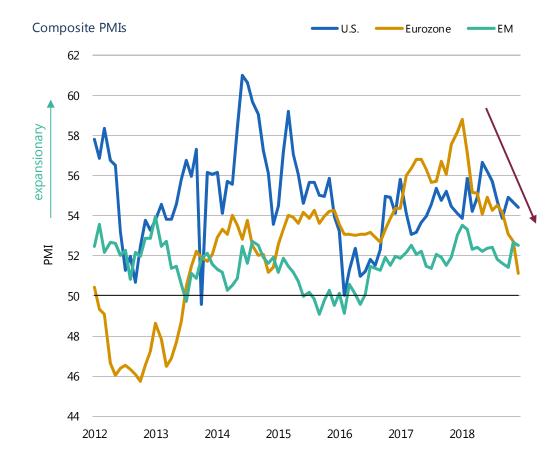
SOURCE: Haver Analytics, PIMCO calculations.

DM = Australia, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, Switzerland, UK, US. EM = Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Poland, Russia, Singapore, South Africa, Taiwan, Thailand, Turkey. Global = EM + DM. Aggregates are GDP-weighted averages using market exchange rates.

Wobbly markets have tightened financial conditions



2019 Cyclical Outlook: Synching Lower

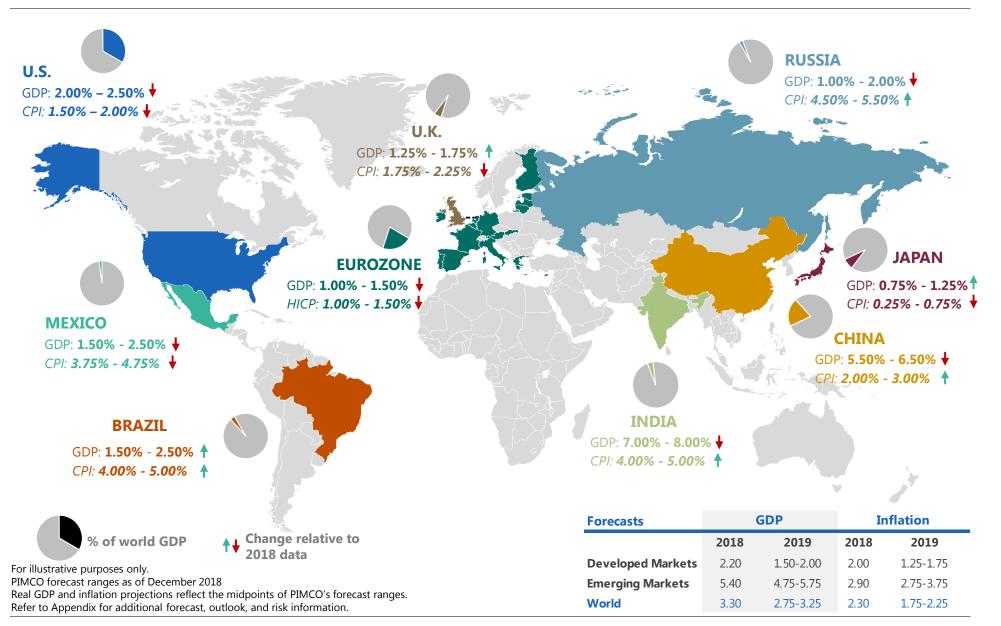


Debates shaping the outlook for 2019:

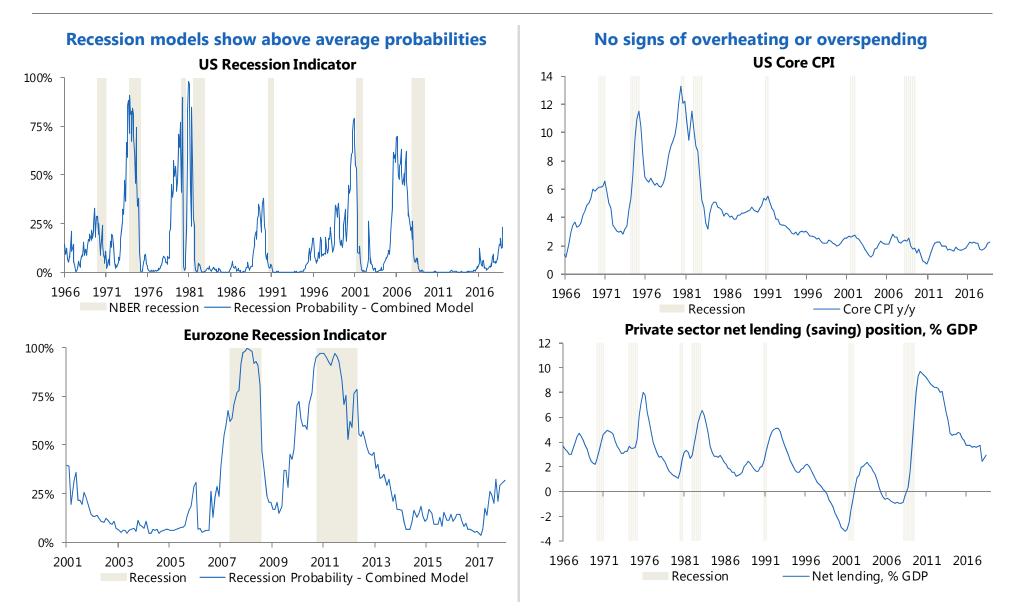
- 1. How late is it in the cycle?
- 2. The end of U.S. economic exceptionalism?
- 3. Will inflation ever return?
- 4. The Fed pauses, then what?
- 5. U.S. versus China: truce or peace?

As of December 2018 SOURCE: Haver Analytics

2019 Cyclical Outlook: Synching Lower

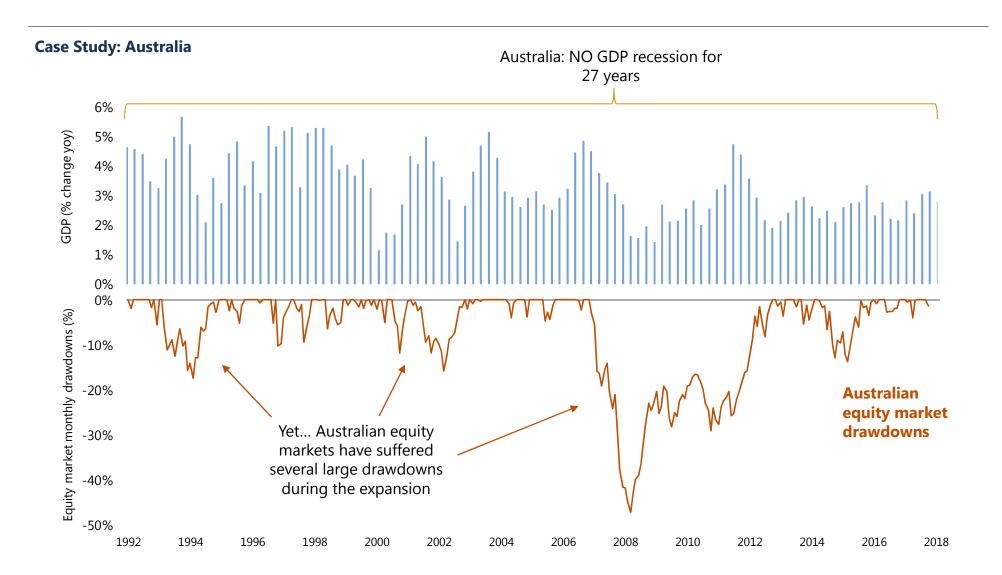


Debate #1: How late is it in the cycle? Recession models are flashing orange, but few traditional signs of overheating

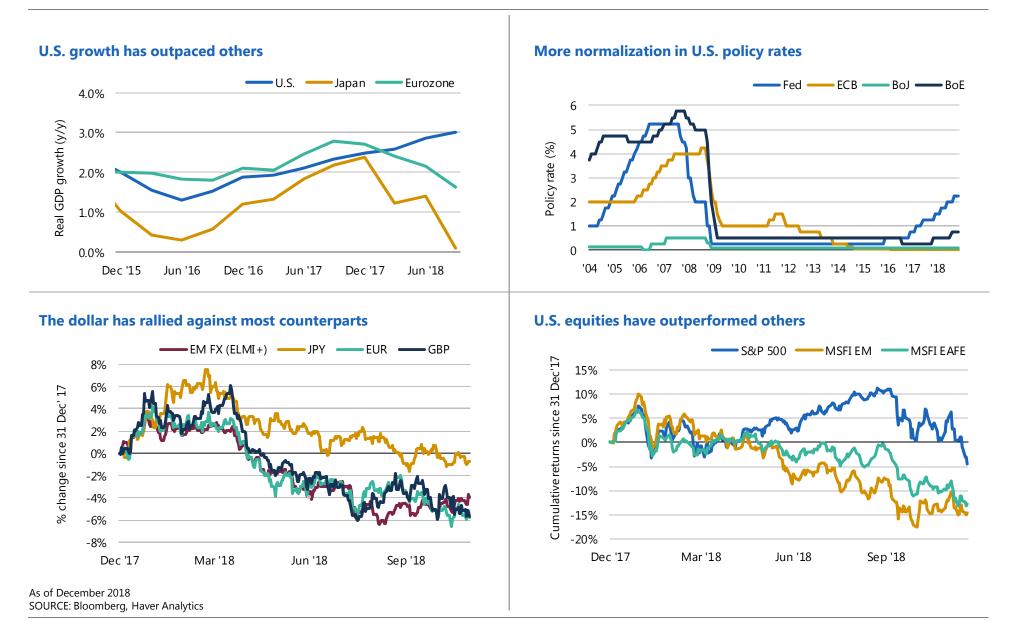


As of December 2018. SOURCE: PIMCO, Bloomberg, NBER, Haver. Note: Model-based recession probabilities are only one input into PIMCO's overall assessment of recession risks

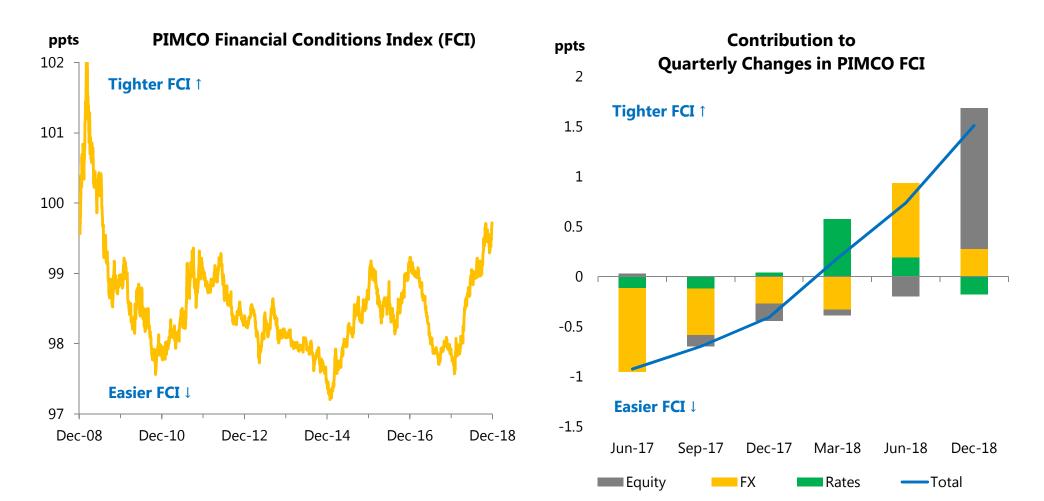
Debate #1: How late is it in the cycle? Note: It doesn't take a recession for turmoil to roil financial markets



Debate #2: Is U.S. economic exceptionalism coming to an end? US economy and policy was exceptional in 2018

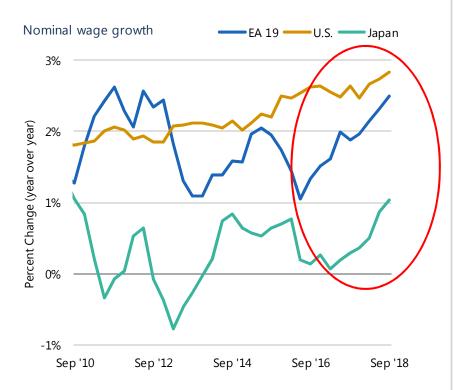


Debate #2: Is U.S. economic exceptionalism coming to an end? Tighter financial conditions will start to bite soon



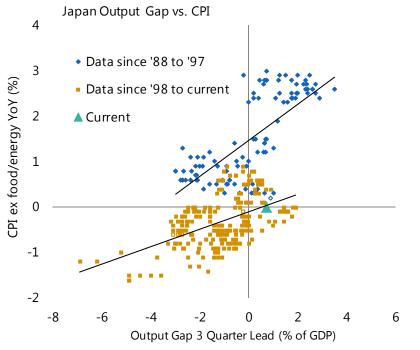
As of December 2018 Source: Haver, FRBUS, PIMCO Calculations

Debate #3: Will inflation ever return? Wages are picking up, but inflation more likely to remain tame



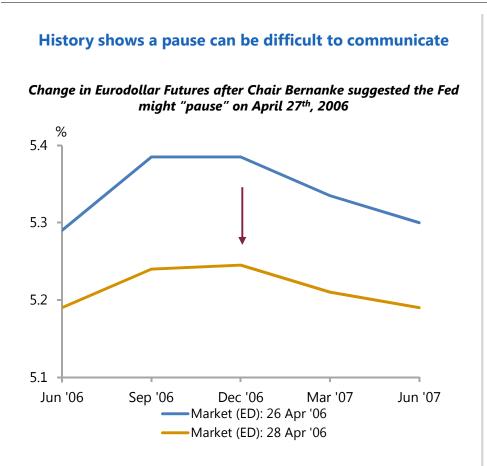
Nominal wages are showing signs of life...

...But Phillips Curves are flat and inflation expectations remain well-anchored

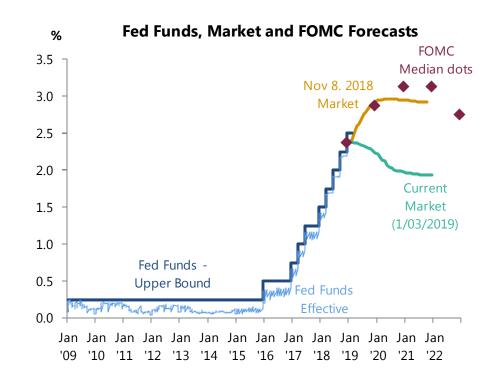


As of 30 November 2018 or latest available. SOURCE: Eurostat, BEA, MHLW, Haver, PIMCO

Debate #4: The Fed pauses, then what? Fed has arrived in PIMCO's New Neutral Range, no need to overshoot



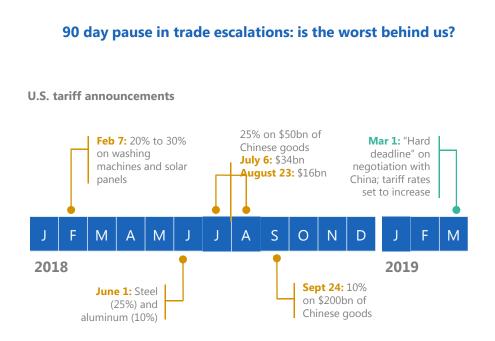
Markets now think the Fed is done hiking



As of 3 January 2019

SOURCE: PIMCO, Bloomberg, Minack Advisors. Bernanke, Ben. "The courage to act : a memoir of a crisis and its aftermath." New York : W.W. Norton & Company, 2015.

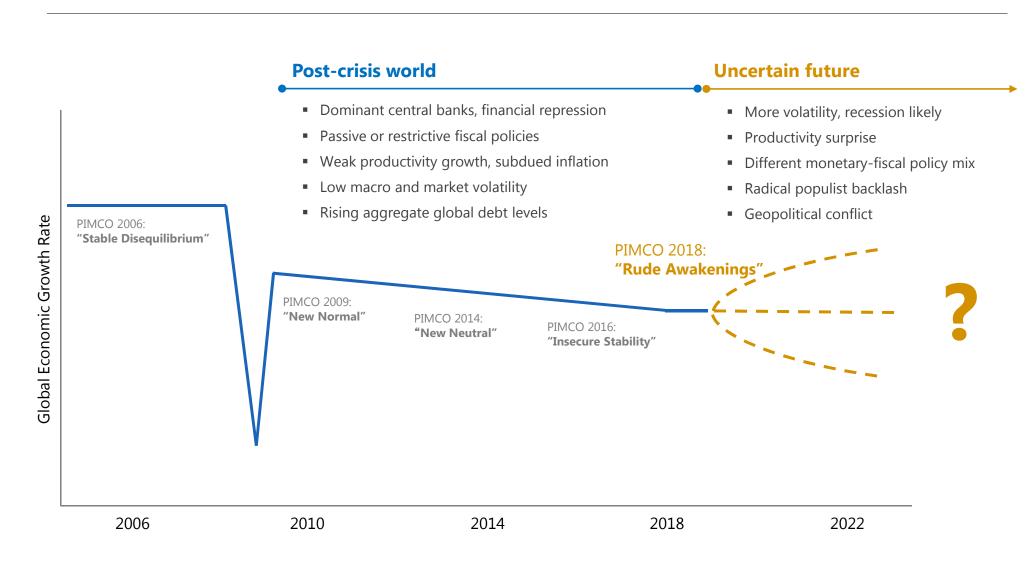
Debate #5: U.S. versus China – truce or lasting peace? A deal on trade looks likely, but the underlying conflict won't be resolved



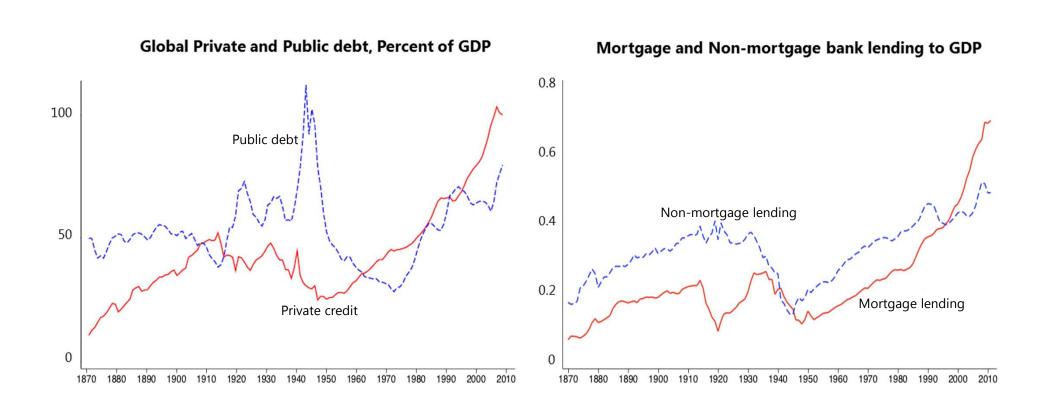
...But conflict between the U.S. and China is more deep-rooted and not only about trade Information technology Numerical Agricultural control Machinery tools/ robotics Energy Railway saving and new energy equipment Made in vehicles China 2025 Medicine/ Power medical equipment devices Ocean engineering/ Aerospace high tech equipment ships New materials

As of December 2018 SOURCE: PIMCO, Bloomberg

The next five years could be radically different, prepare for 'Rude Awakenings'



The elephant in the room: The debt hockey stick



Source: Oscar Jordà, Moritz Schularick, and Alan M. Taylor. 2017. "Macrofinancial History and the New Business Cycle Facts." in NBER Macroeconomics Annual 2016, volume 31, edited by Martin Eichenbaum and Jonathan A. Parker. Chicago: University of Chicago Press.

Appendix

FORECAST

Forecasts, estimates and certain information contained herein are based upon proprietary research and should not be interpreted as investment advice, as an offer or solicitation, nor as the purchase or sale of any financial instrument. Forecasts and estimates have certain inherent limitations, and unlike an actual performance record, do not reflect actual trading, liquidity constraints, fees, and/or other costs. In addition, references to future results should not be construed as an estimate or promise of results that a client portfolio may achieve.

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There is no guarantee that these investment strategies will work under all market conditions or are suitable for all investors and each investor should evaluate their ability to invest long-term, especially during periods of downturn in the market.

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Investing in the **bond market** is subject to risks, including market, interest rate, issuer, credit, inflation risk, and liquidity risk. The value of most bonds and bond strategies are impacted by changes in interest rates. Bonds and bond strategies with longer durations tend to be more sensitive and volatile than those with shorter durations; bond prices generally fall as interest rates rise, and the current low interest rate environment increases this risk. Current reductions in bond counterparty capacity may contribute to decreased market liquidity and increased price volatility. Bond investments may be worth more or less than the original cost when redeemed. Investing in **foreign denominated and/or domiciled securities** may involve heightened risk due to currency fluctuations, and economic and political risks, which may be enhanced in emerging markets. **Equities** may decline in value due to both real and perceived general market, economic, and industry conditions.

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