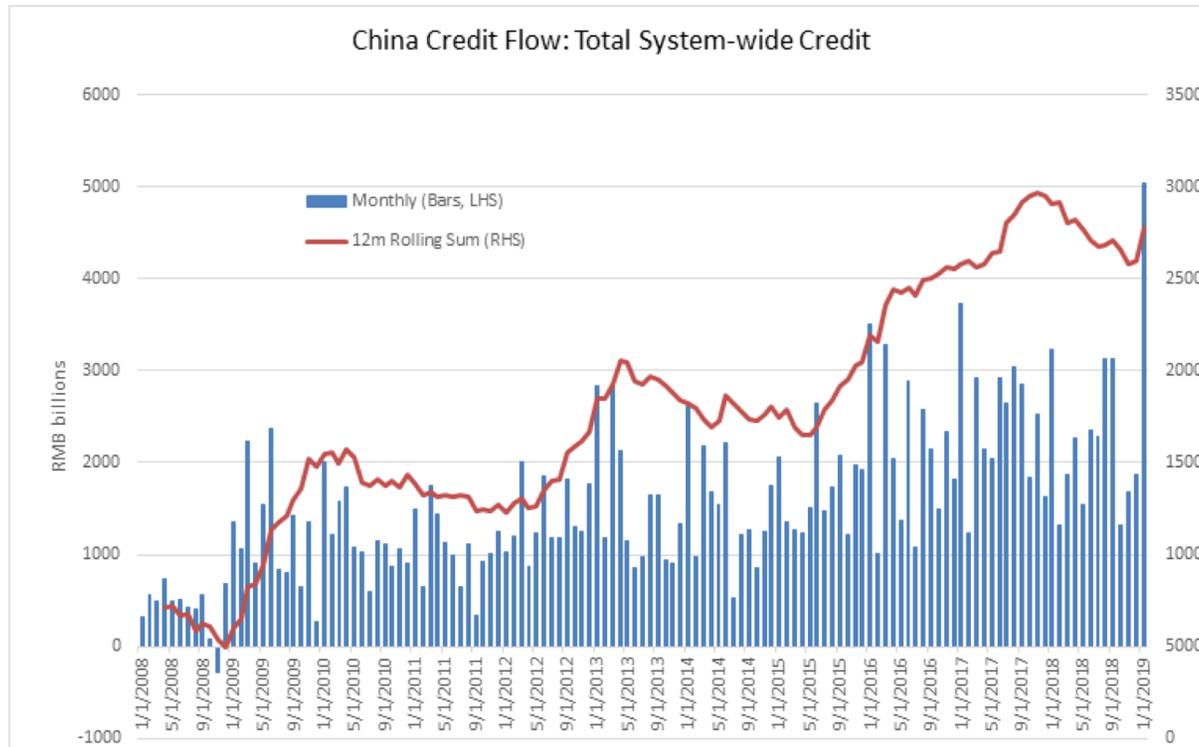


Contents

- January Credit blowout
- Proper measurement of Chinese credit growth
- Components of Chinese credit extension
- What is the “credit impulse?”
- Declining credit efficiency
- China’s Dollar problem
- The 2016-17 boom was Dollar-driven, not stimulus-driven
- **Credit stimulus in 2019 will merely serve to fill the cash-flow hole left by declining nominal growth**
- No repeat of the 2016-17 party: China remains a drag on global growth in 2019
- China’s growth model has been exposed as a dead-end

January Credit Blowout

- There is heavy “front-loading” of annual credit quotas in January
- An early-Feb New Year holiday makes seasonals very tricky – expect some payback in Feb

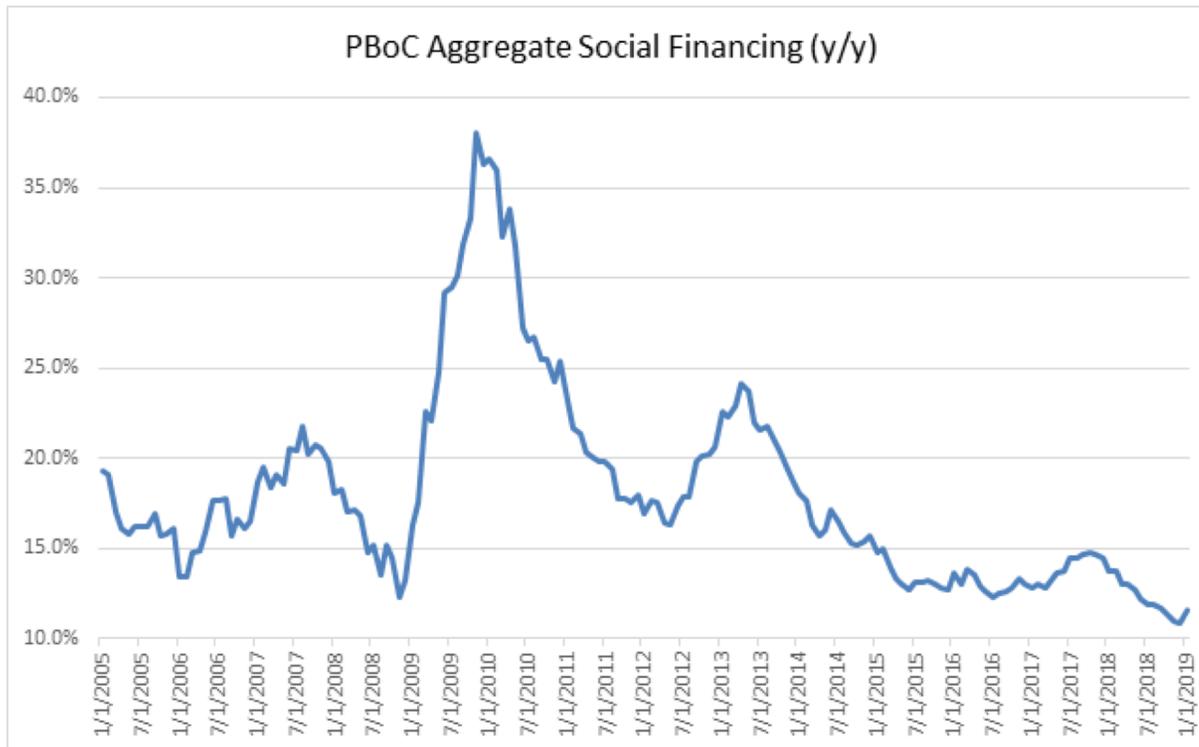


- Still...
- **Rmb 5T in a month is a monster number**
- Even while “deleveraging,” China continues to crank out >\$4T in new credit per year

Source: PBoC

PBoC Headline Metric: “Total Social Financing”

- TSF measures credit to the private sector in the form of bank loans, bond issuance, and other “shadow” channels

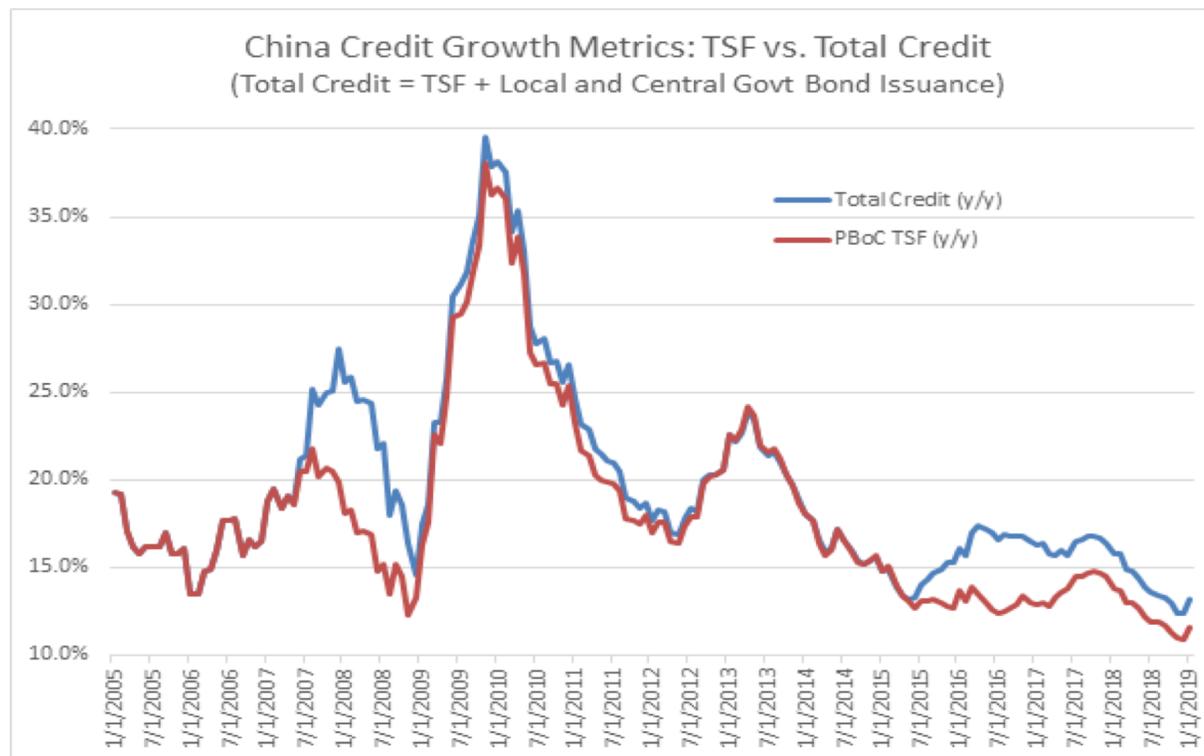


- Finally an uptick in January, from 10.9% y/y to 11.6%

Source: PBoC

We Can Capture any “Fiscal Easing” by Adding Govt Bond Issuance to TSF

- Chinese “Fiscal easing” is designed to “put money in people’s pockets” – in entails little to no incentive effects
- We can capture the effect of any “fiscal easing” by simply adding local & central govt bond issuance to TSF

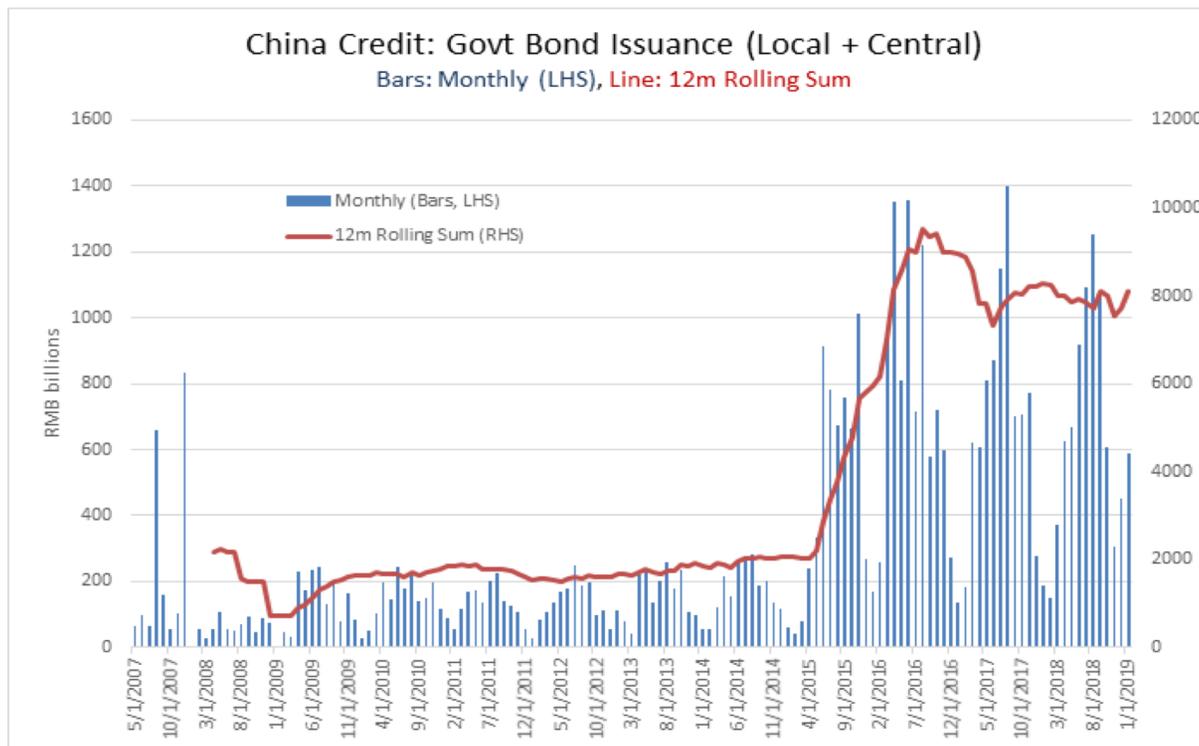


- This measure of “total credit” rose 13.1% in Jan, up from 12.4% in Dec
- The 2015 “stimulus” was largely driven by muni bond issuance not captured in **TSF**

Source: PBoC, Chinabond, Macrolens calculations

Fiscal Easing: YAWN

- Seriously, forget about fiscal policy...

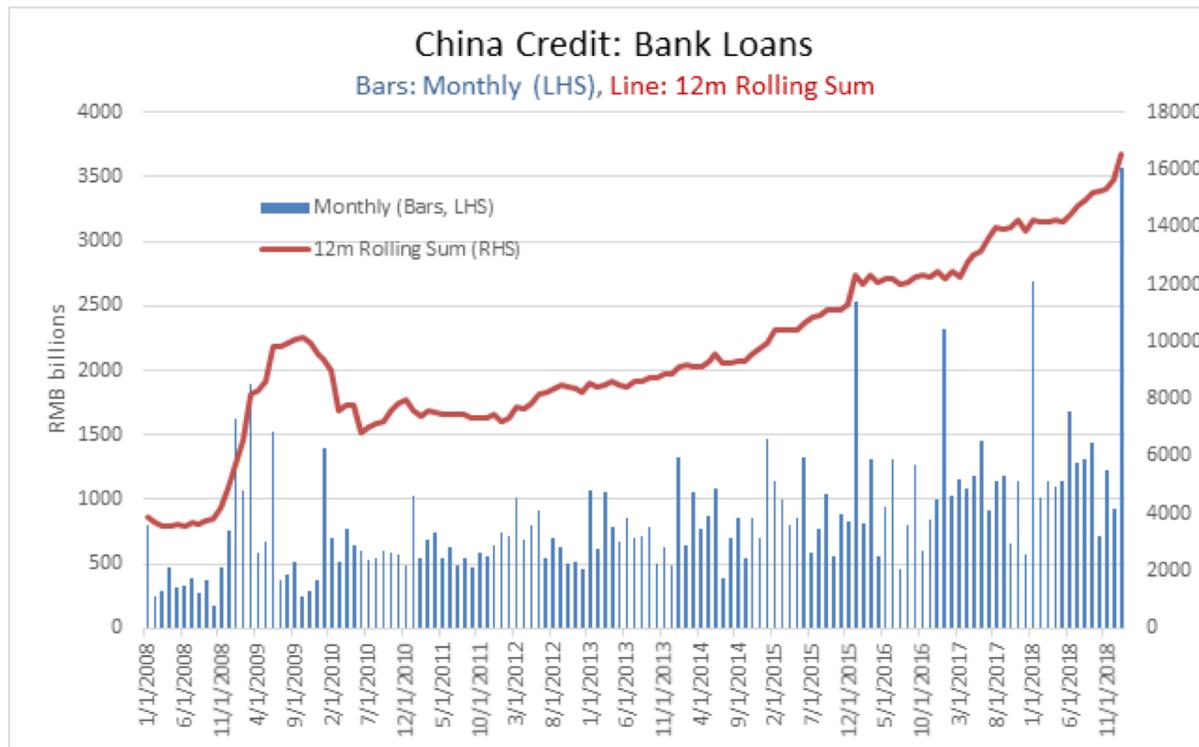


- China shot its fiscal wad in 2015-16
- There has been no additional “fiscal impulse” since then
- **RMB 8T in gov't bond issuance is 9% of GDP** and that doesn't even include credit to Local Gov't Financing Vehicles (registered as corporates)

Source: PBoC

Bank Loans

- Bank Loans are the largest component of TSF

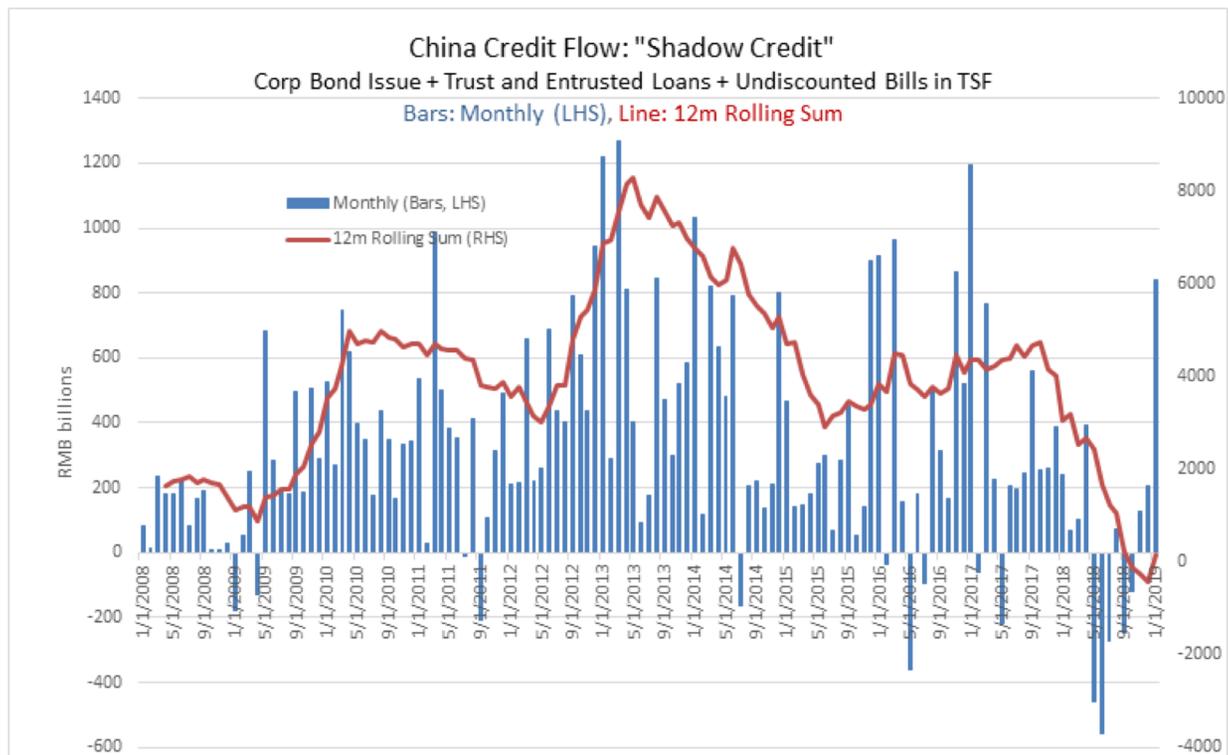


- RMB 3.5T in new loans in January is pretty juicy
- That's *more than U.S. Banks increased lending in all of 2018*

Source: PBoC

Shadow Stabilization

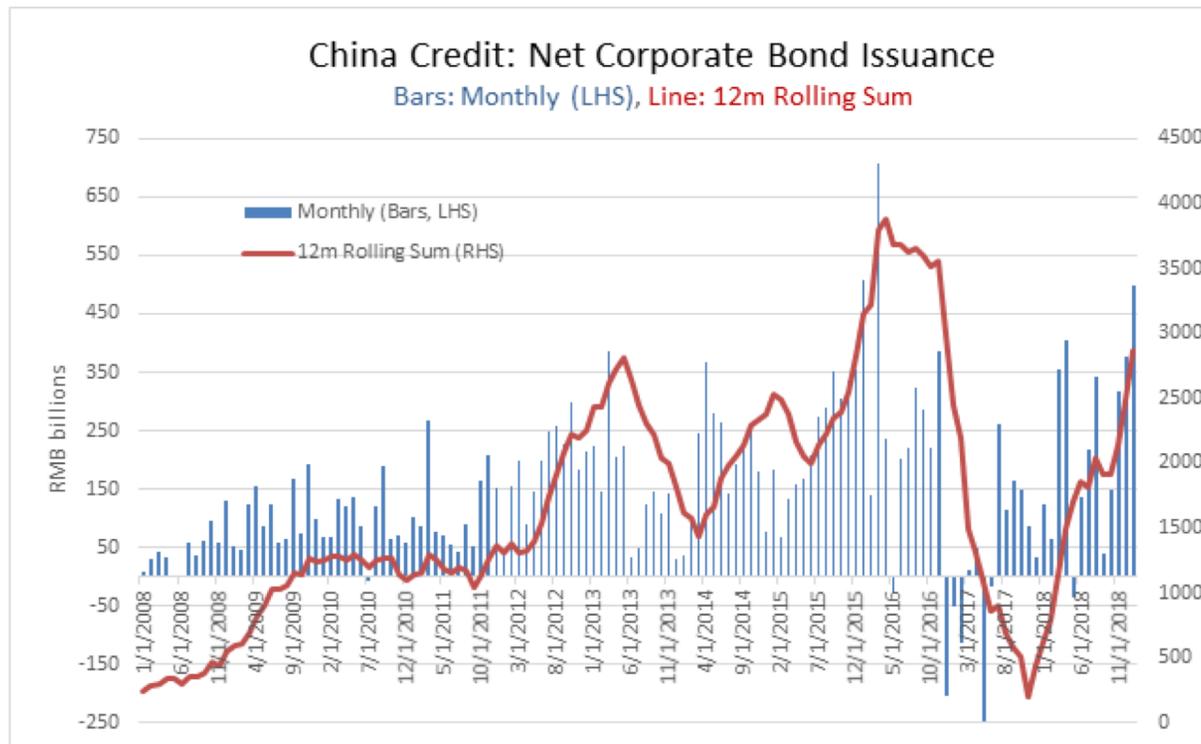
- “Shadow Credit” = Corporate Bond Issuance, Trust Loans, Entrusted Loans, and Undiscounted Bills



- Entrusted loans are bank-arranged off-balance sheet loans booked through trusts
- Undiscounted bankers acceptances (up Rmb 378bn in Jan) are IOU's that float around as an inter-corporate parallel currency
- Despite the big bounce in Jan, policymakers are likely to maintain the clamps on off-balance sheet activity

Source: PBoC

Corporate Bonds

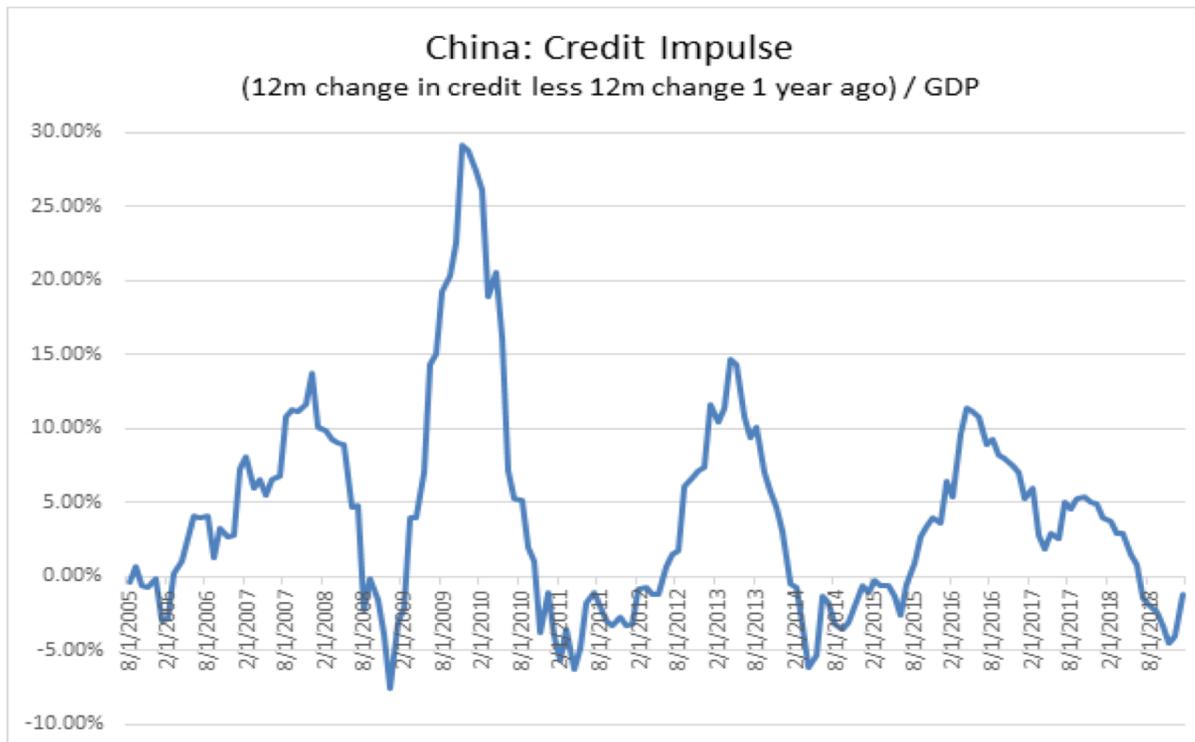


- The corporate bond market has revived in recent months but most issuance has been by SOE's

Source: PBoC

Credit Impulse Remains a Drag

- “Credit impulse” is the second derivative of credit outstanding
- It is the increase in NEW credit that provides the impulse to GDP growth



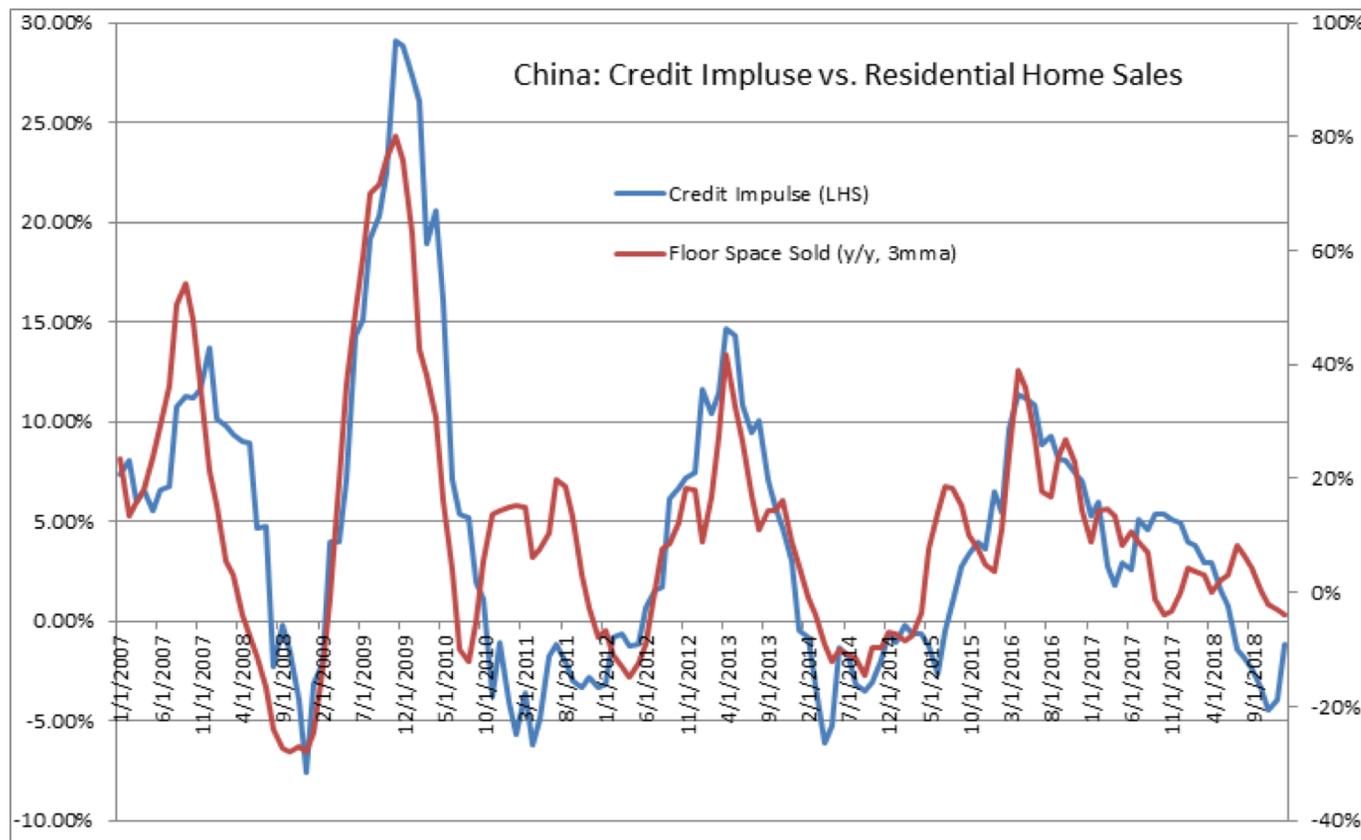
Conceptualizing the “Credit Impulse”

- Outstanding credit funded past GDP
- New credit will fund this year’s GDP
- *More new credit than last year will fund **GDP growth***

Source: PBoC

The Housing Bubble Feeds on Credit

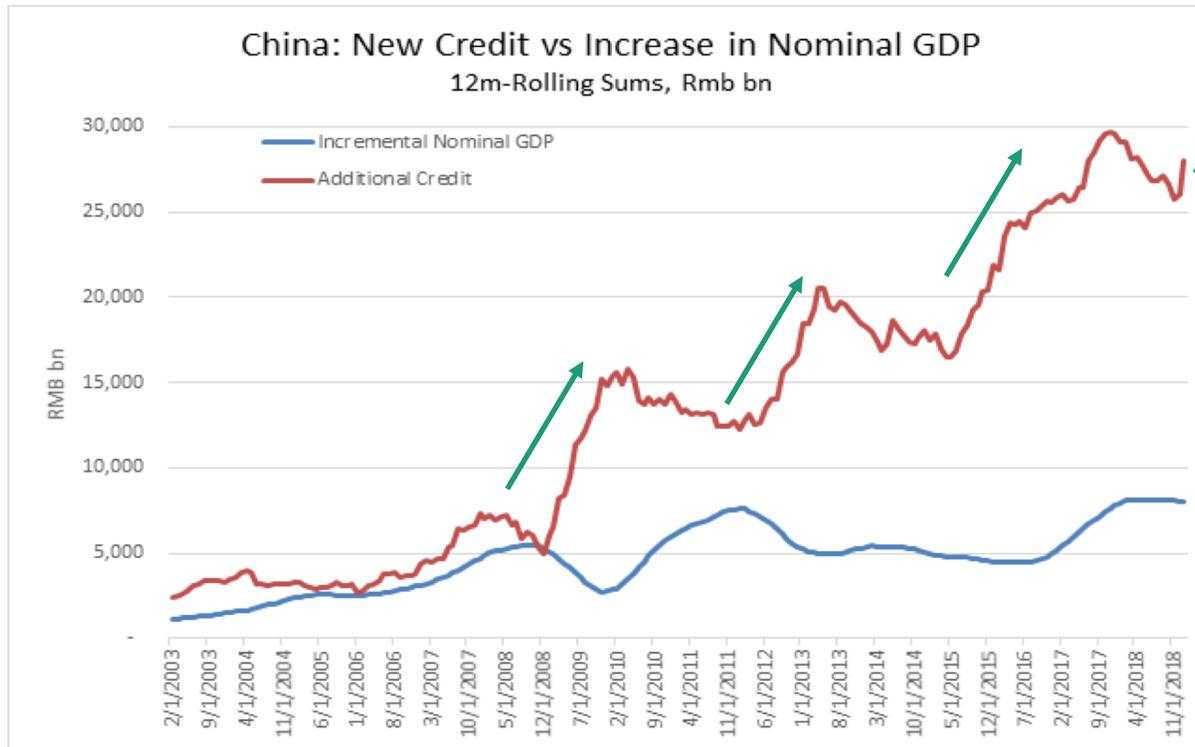
- Sales activity in the Chinese Real Estate market has been driven by the credit impulse



Source: China NBS, PBoC, Macrolens calculations

Declining Credit Efficiency

- The credit flow necessary to sustain a steady flow of GDP expansion continues to increase



- Again?**
- Next iteration could see \$5T in annual credit expansion

Source: China NBS, PBoC, Macrolens calculations

Stimulus Headwinds: China Has a Dollar Problem

- Global commodity prices drive China's PPI Inflation



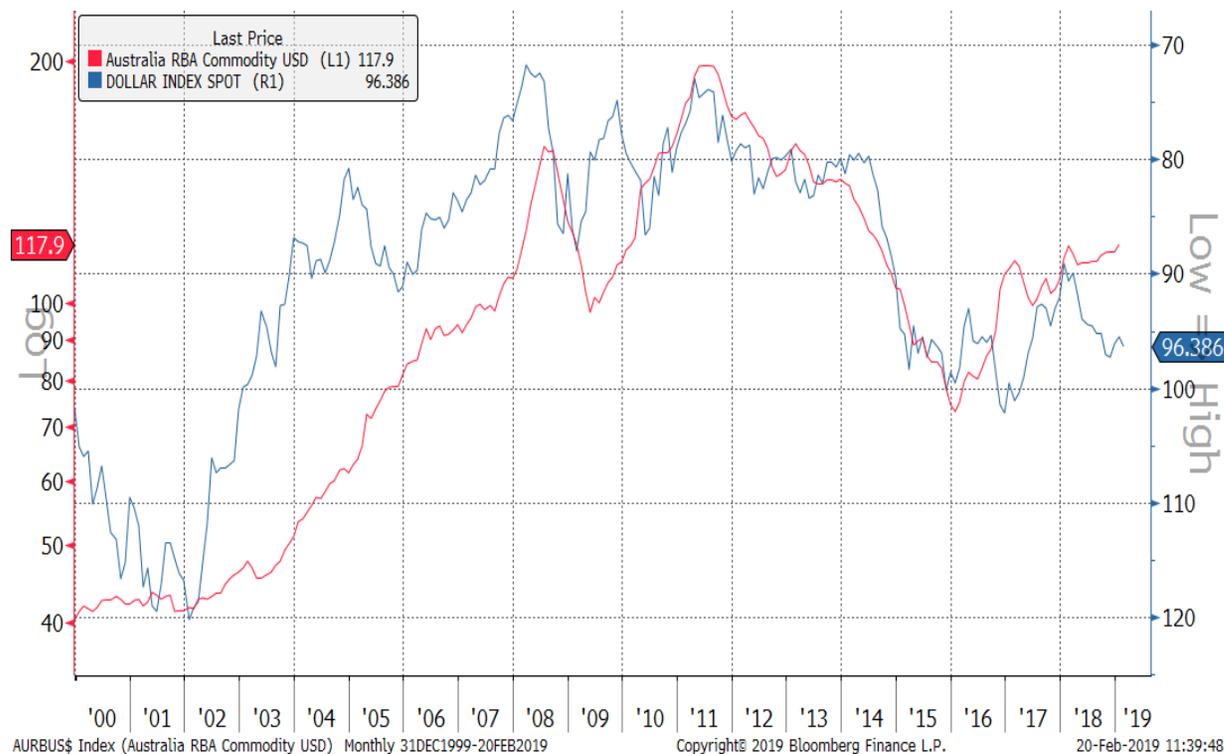
- 88% correlation

Sources: China NBS, Reserve Bank of Australia

The Dollar Drives Global Commodity Prices, not China

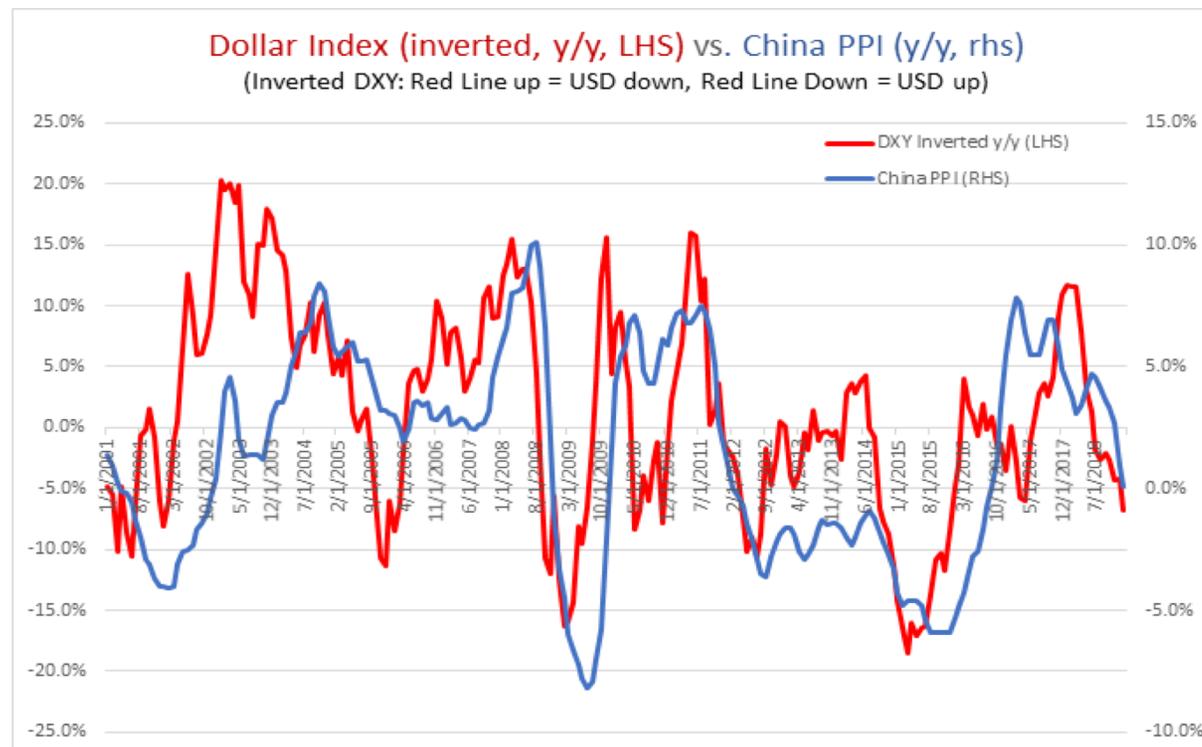
- Yes, there is some reflexivity between Chinese stimulus and global commodity prices
- “China demand” may effect individual commodities at times *but the value of a broad basket will ultimately be driven by movements in the currency in which is it denominated.*

RBA Commodity Index in USD (log scale, lhs) vs The Dollar Index (inverted, rhs)



China Definitely Has a Dollar Problem

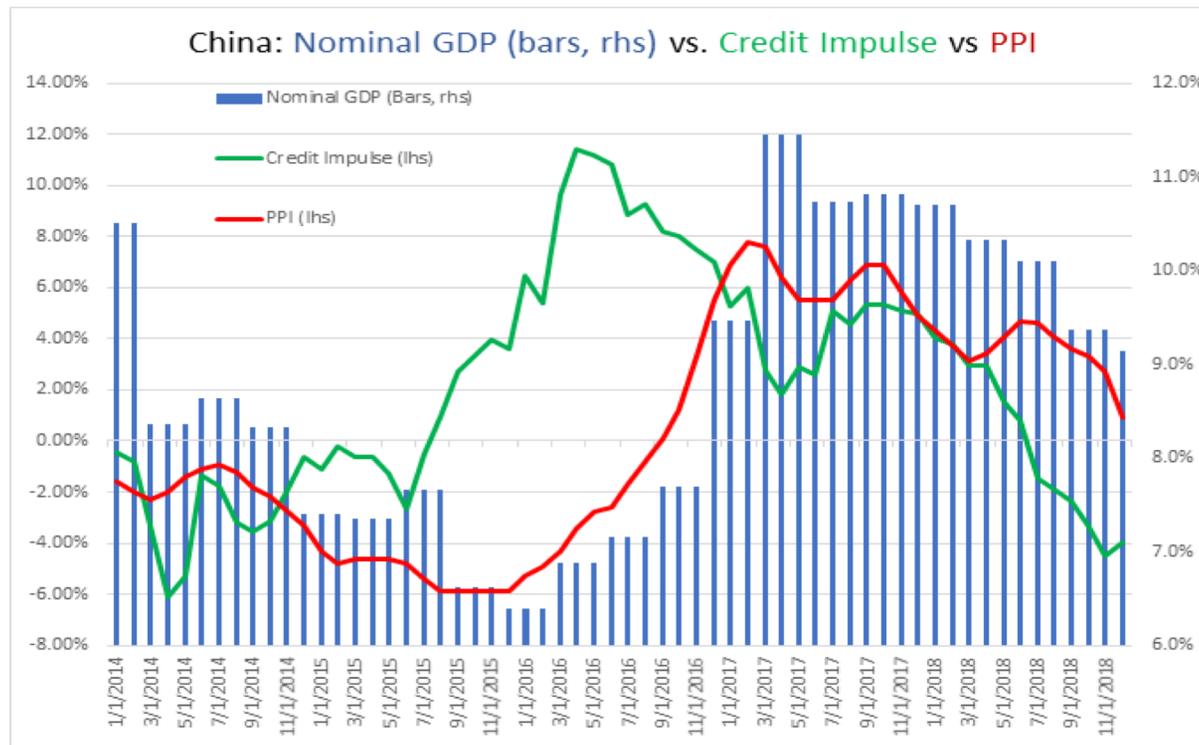
- The Dollar's influence on Chinese inflation is also directly visible
- This is perfectly consistent with economic theory regarding pegged / semi-pegged currencies



Sources: China NBS, Bloomberg

Stimulus Didn't Bail out China Last Time: *The Dollar Did*

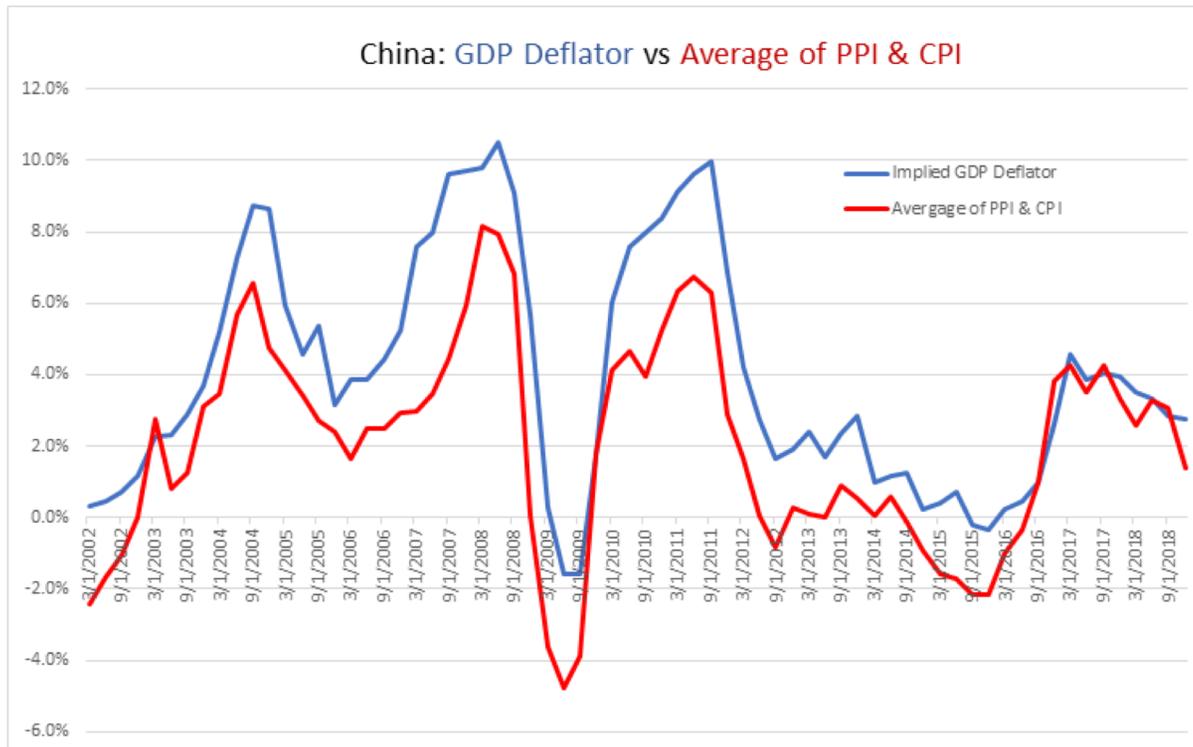
- **Credit stimulus** in 2015 was necessary to combat weakness stemming from deeply negative **PPI** and a collapse in **Nominal GDP**
- While stimulus helped, *the economic upswing was driven by a 14 ppt swing in PPI which goosed nominal growth*



Sources: China NBS, PBoC. Macrolens calculations

China's GDP Deflator = @AVG(PPI+CPI)

- Averaging CPI and PPI is a good back-of-the-envelope estimate of China's GDP deflator...

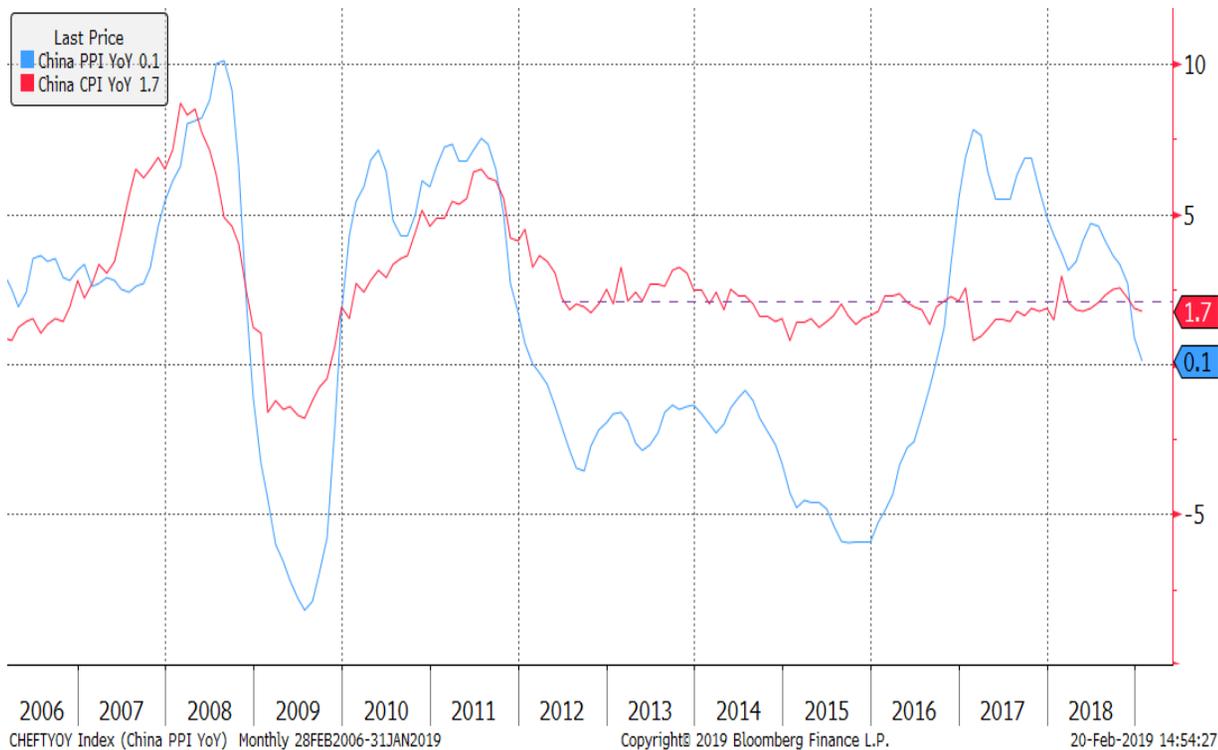


Sources: China NBS, Macrolens calculations

PPI is the swing variable for China's GDP Deflator

- Because CPI hasn't budged in 6 years...

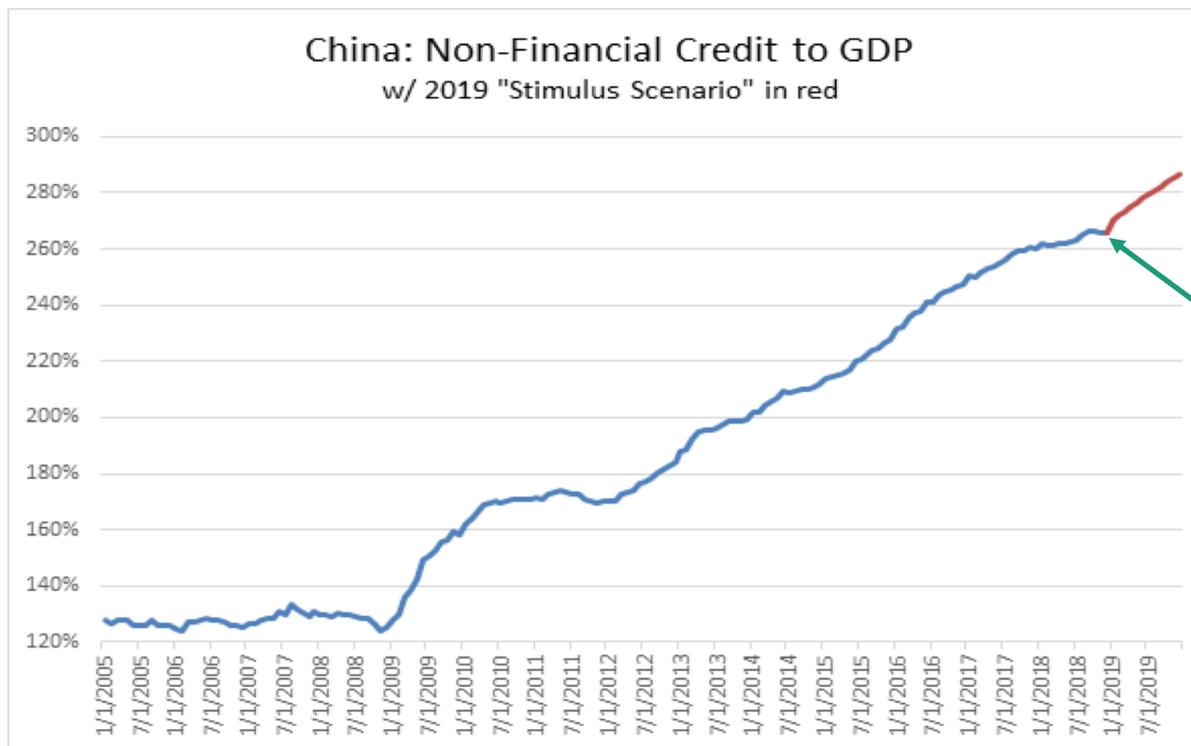
China CPI vs China PPI



Sources: China NBS

China Growth Model is Badly Exposed

- **The Deleveraging Dream is dead:** China has proven incapable of sustaining single-digit credit growth
- The goal of "moving up the value chain" is under grave threat from the U.S.
- There is no Plan B



- 7% nominal GDP growth
- + 15% credit growth
- will take the debt ratio to 286% in 2019

Xi's "deleveraging campaign" is over in the blink of an eye

Sources: PBoC, China NBS, Macrolens calculations

Conclusions

- “Fiscal Stimulus” is a myth
- “Credit Stimulus” is underway, subject to the restrictor plate of a possible RMB-stability pact
- The U.S. Dollar is the key to China’s outlook
- “Credit stimulus” is necessary merely to fill the cash-flow hole left by declining nominal growth
- Forget the 2016-17 analog: China will remain a drag on global growth in 2019
- China’s growth model is exposed: the risk of a devastating break in domestic sentiment is ever-present