What Will China's Financial Reckoning Look Like?

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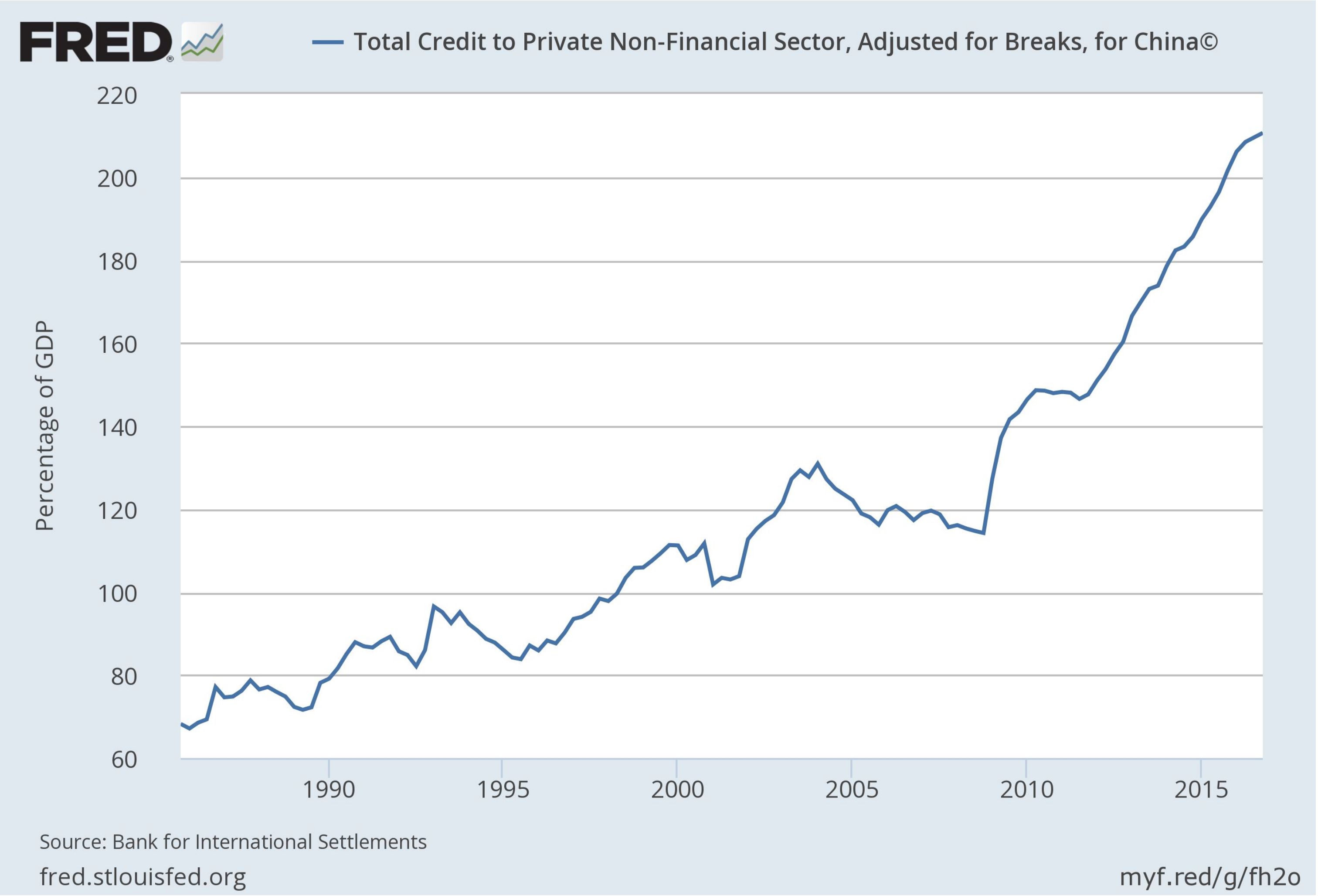
Purpose / Outline

- Deliberately provocative / speculative / conversation starter. What to make of the rapid increase in credit in China and what will the aftermath look like?
  - Thought a lot about this in policy circles. There are reasons to believe it is the chief risk out there, OR that it is not a problem.
- Outline:
  - Why a Financial Reckoning ?
  - Why it might not be a Crisis ?
  - Importance of who owes what to whom
  - Possible outcomes

What is the worry

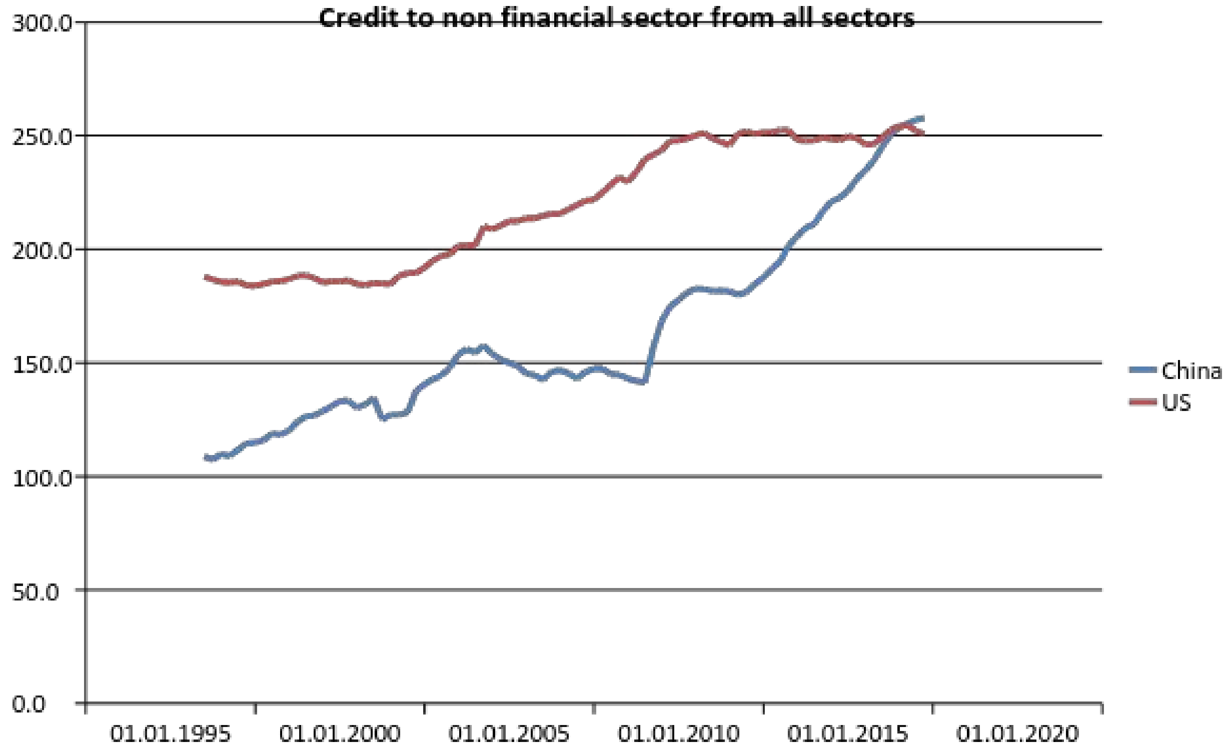


- + government sector is higher

Who’s worried

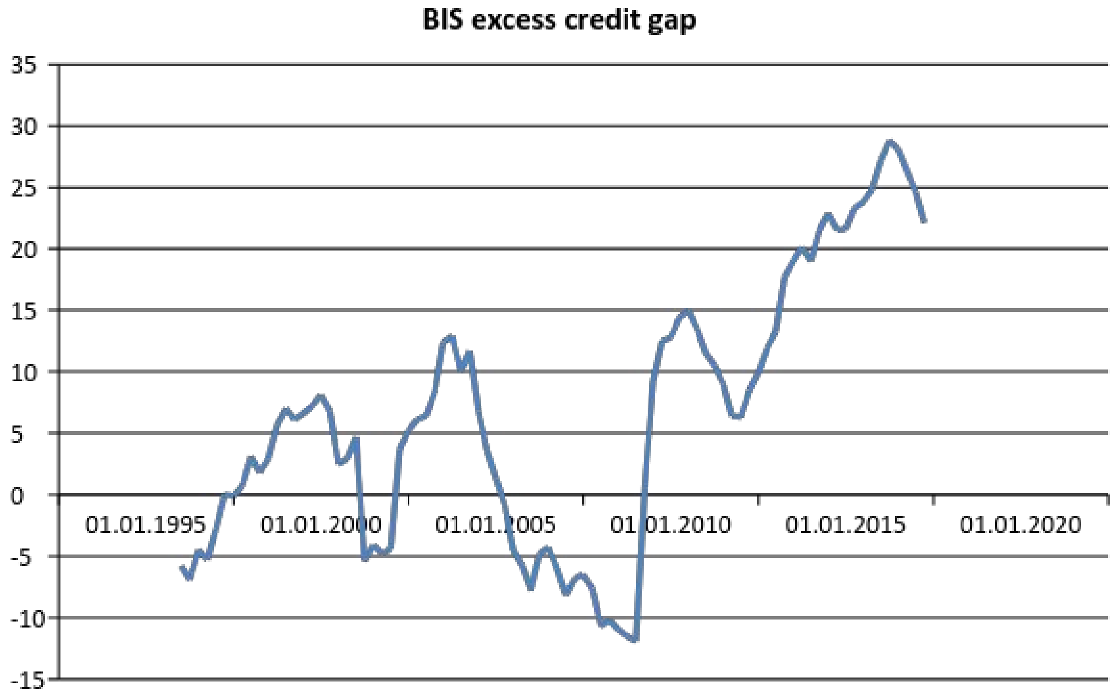
- **“BIS warns China banks risk crisis within three years” – September 2016**
- **“S&P Cuts China’s Credit Rating, Citing Risk From Debt Growth” – September 2017**
  - **“**“China’s prolonged period of strong credit growth has increased its economic and financial risks,”
- **“China Hit by First Moody's Downgrade Since 1989 on Debt Risk” May 2017**
- **“China could experience a disorderly deleveraging and the credit cycle could worsen in emerging markets**.”
  - Major risk cited in the 2016 IMF global financial stability report

Growth not level is worrying



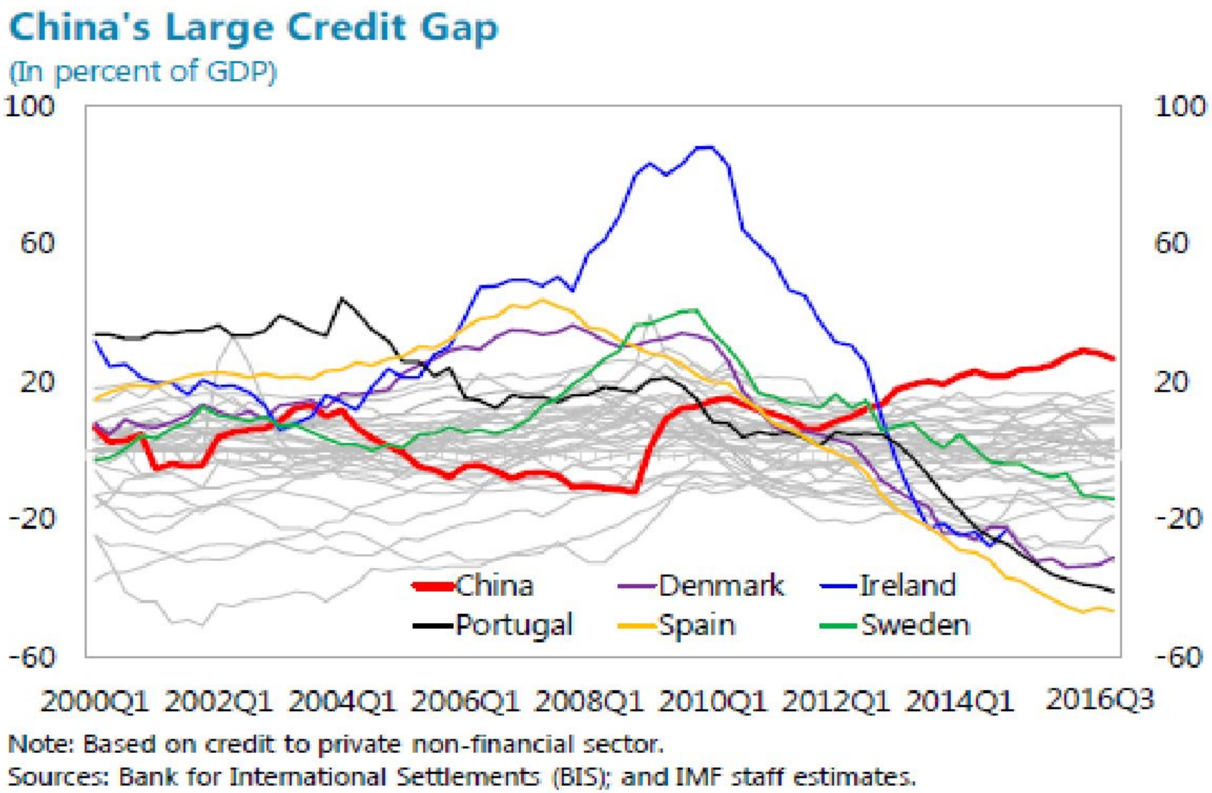
- US has more in official public sector than China, but total level is nearly same
- Growth rate is concern

Summary stat



- The BIS measures "excess credit growth"
  - Really just credit to non financial sector / GDP relative to a trend
- Only 17 / 44 EVER get to 25. Most were prior to or immediately after crises

In comparison…



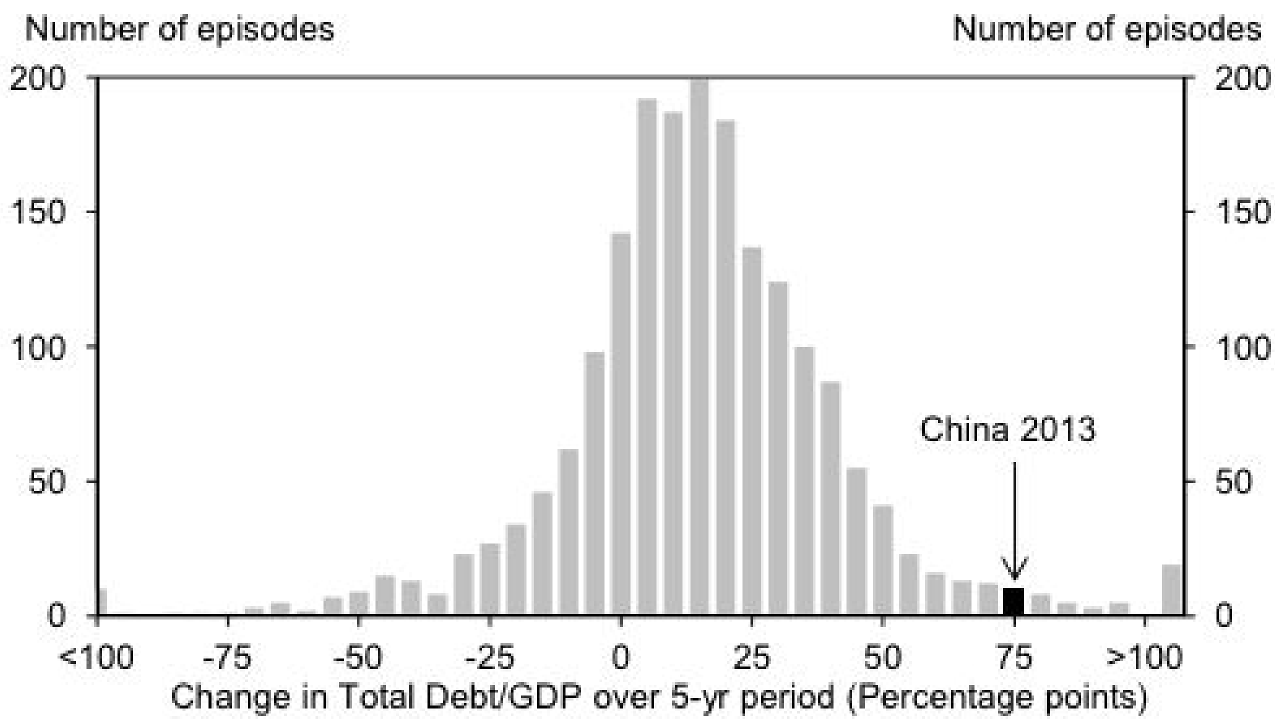
- China not as high as some peaks, but…
  - Highest right now (other than HK)
  - Looks similar to some other bad crises

Literature on Credit Growth

- Wide range of estimates, but consensus:
  - Rapid growth in credit frequently >>> crisis
  - Even if no crisis, usually followed by sharp GDP growth slowdown
- Examples:
  - Jorda, Schluriak, Taylor credit fueled recessions are worse
  - Mendoza and Terrones ~25% credit booms end badly
  - Astrid-Martinez, as many as ~40% end badly
  - IMF & others estimate sliding scale:
    - "For every percentage point the annual change in the private-credit-to-GDP ratio exceeds the average, the probability of financial crisis goes up by 0.4 percent."
    - Others find range from .35-.72 per point

Private sector analysts

Exhibit 3: An exceptionally rapid credit buildup
Distribution of historical 5-year debt ratio changes

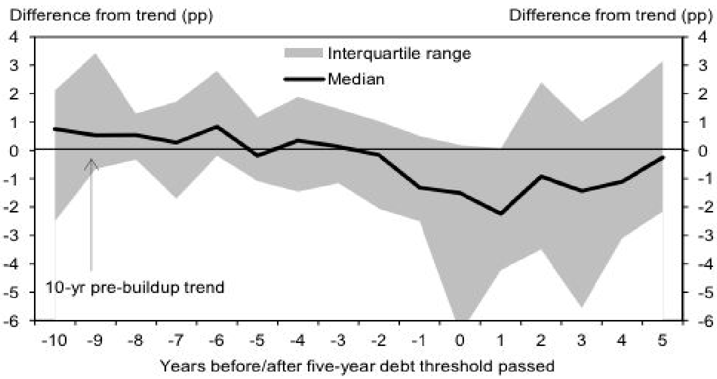


Source: BIS, Goldman Sachs Global Macro Research

- Again, China an outlier in terms of growth of debt / credit

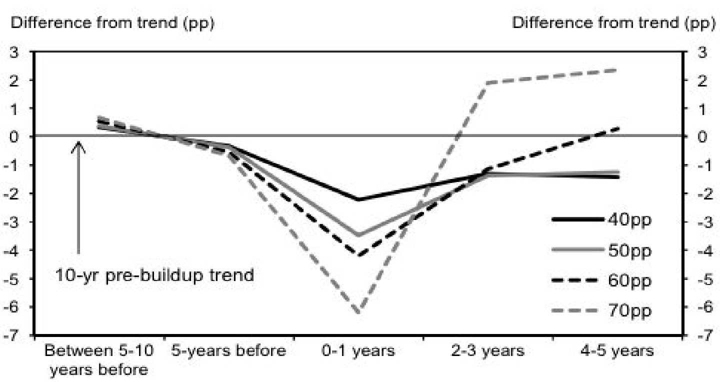
Impact:

Exhibit 32: Growth typically slows moderately after a debt boom
Real GDP growth after large debt buildups (>40pp of GDP within five years)



Source: Goldman Sachs Global Investment Research, WDI, Penn World Table, IMFWEO, BIS

Exhibit 33: Bigger buildups mean bigger letdowns (in growth)...
Real GDP growth after large debt buildups



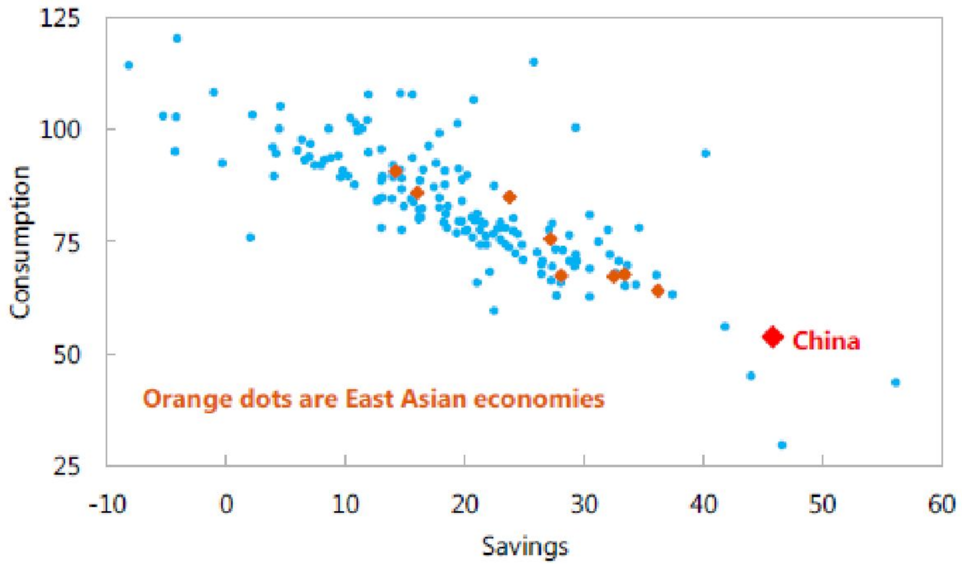
Source: Goldman Sachs Global Investment Research, WDI, Penn World Table, IMFWEO, BIS

- A 40 p.p. buildup correlates with growth that slows by around 2pp, relative to its prior 10-yr trend.
- Bigger slowdown for bigger buildup
- In China's case, note that the "pre-buildup trend" was just over 10% growth and its peak 5-year debt increase was 73pp.
- BUT!!!!!! Note the huge range around the averages

Why so much credit growth

- 1. Stimulus: much of China's stimulus came in the form of credit growth
- 2. lots of saving: remember, assets = liabilities. So if there is a ton of savers lending money, someone must be borrowing

China is Major Outlier in Savings and Consumption
(In percent of GDP, 155 countries)



Sources: *World Economic Outlook (WEO)*; and IMF staff estimates.

Why this is so messy

- “Deleveraging is a complicated task since many debtors have been allowed to borrow without the prospect of feeling the pain of failure, as they would in a full market-based system.”
- SAVERS TOO!
  - Shadow banking concerns
  - Do people really understand the risks
  - Do people assume everything is actually safe / govt backed

Different potential outcomes:

- Pessimist: Credit has gone up too much, financial sophistication not high enough >> crisis
- Semi-Pessimist: even if avoid crash, growth model must switch. Deleveraging is going to crush growth since it is all leverage based at this point
- Less-Pessimistic: Growth has already slowed, maybe we've seen the impact
- Government: Downgrades ridiculous.
  - Scholars at the Chinese Academy of Social Sciences, a government think tank in Beijing, analyzed several years worth of government balance sheets and concluded that the state's massive assets can offset the debt threat

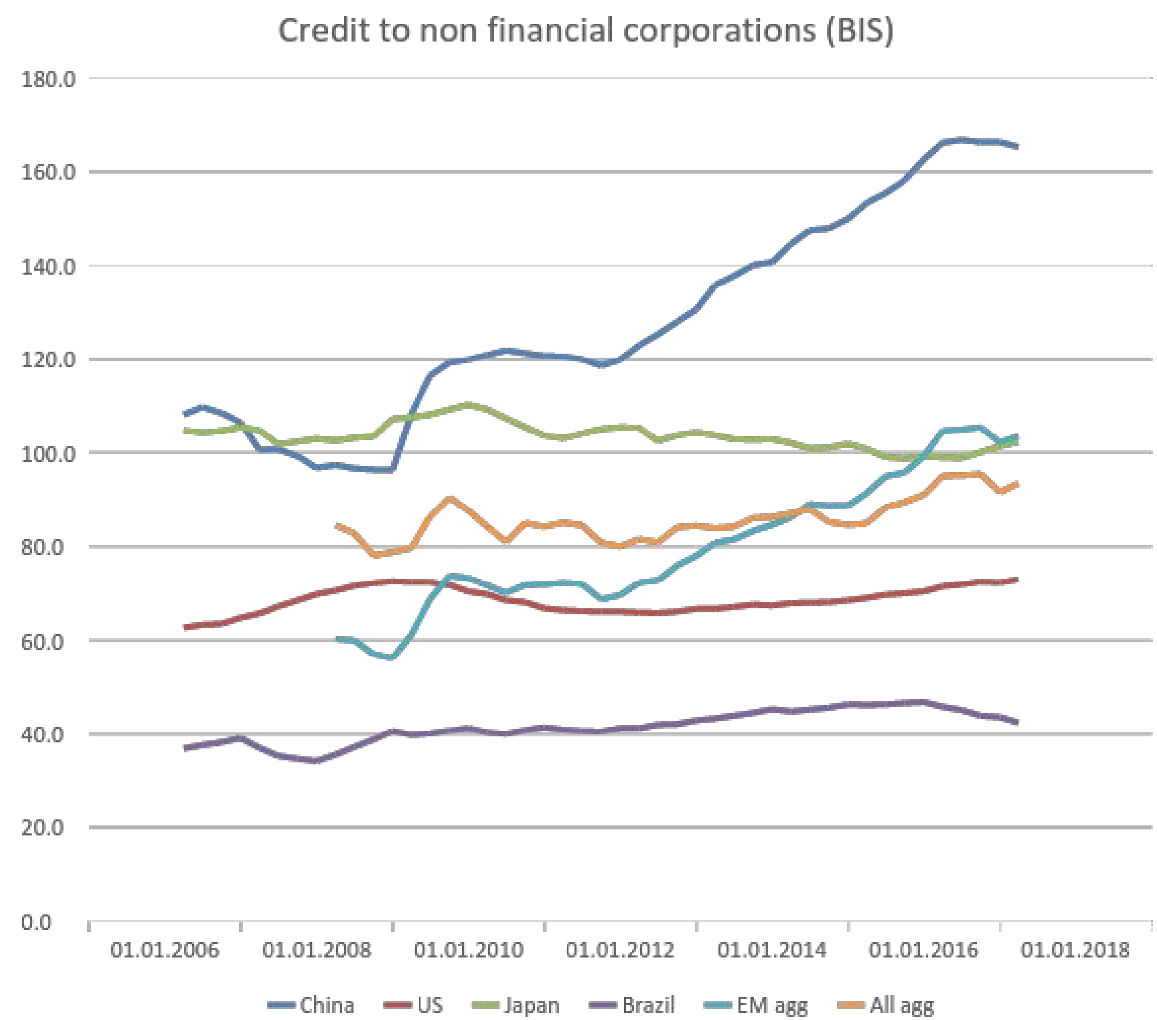
Why might China not look like a typical Financial Crisis?

- Unique role of government
  - Most of the major borrowers and lenders are in fact tied to the government balance sheet already
- Expansive room on China's balance sheet to begin with
  - Official government debt ~40-45% of GDP
  - MASSIVE government assets
    - Reserves, SOE assets, etc.
- Households not that leveraged
  - Also ~45% of GDP. Pales in comparison to some ADV countries
- It's all local…
  - Much of the borrowing in local currency and / or to local investors.
  - Again, often the ultimate lender effectively the state if bank is state owned / controlled

Core Problem: Corporate leverage

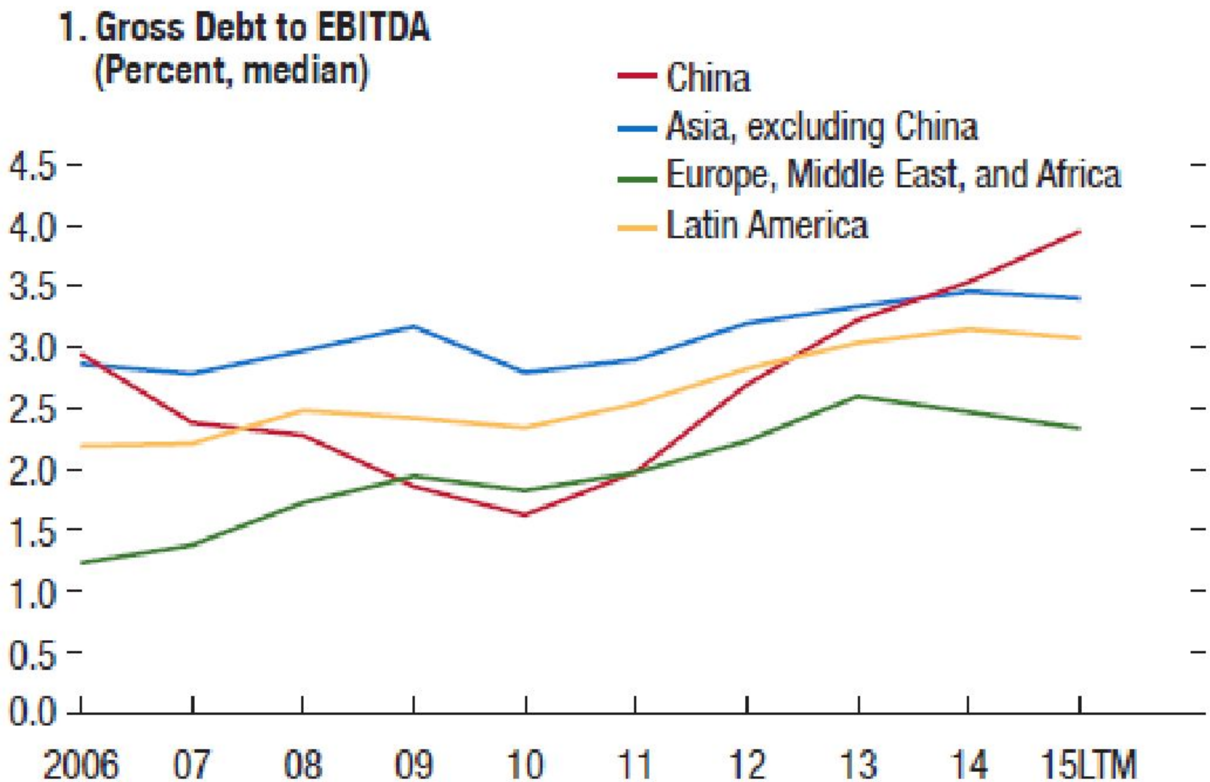
- If Government and HH not terribly leveraged >>> problem is in corporate sector (~165% of GDP in debt)

- Consistently listed as one of the chief concerns not just of China but of the world



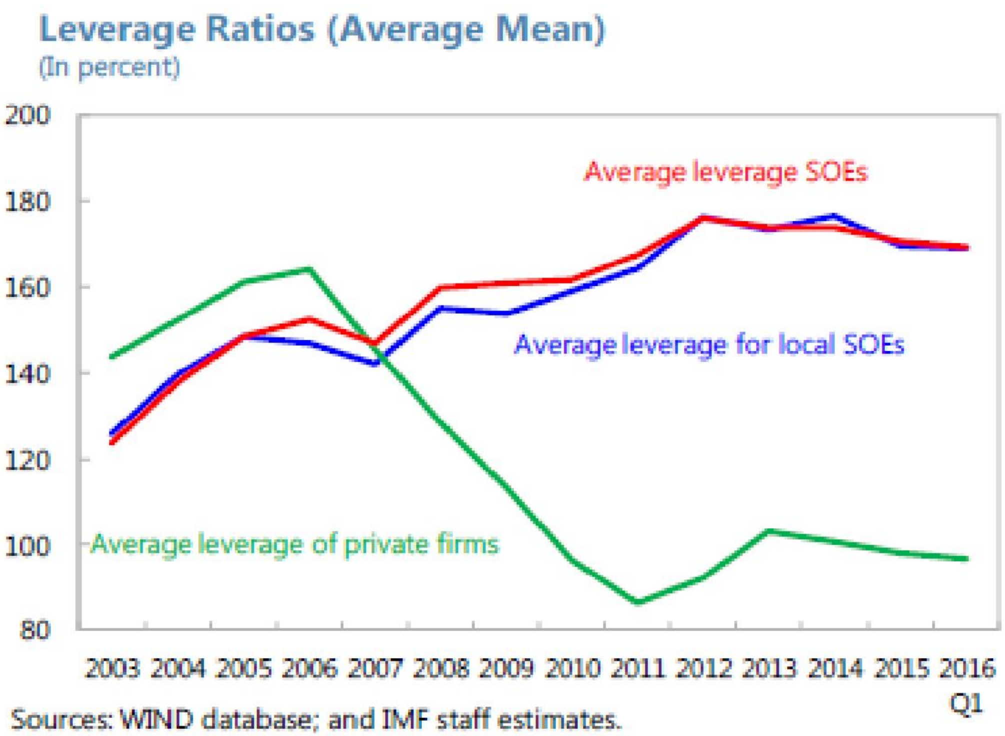
And the debt is looking weaker

- Debt over earnings is getting far worse



Sources: S&P Capital IQ; and IMF staff estimates.
Note: Ratios of companies with negative EBITDA are set to 10. The China sample contains 3,241 firms (2015LTM). EBITDA = earnings before interest, taxes, depreciation, and amortization; LTM = last 12 months.

But it is SOE, not all corporates



- The buildup in 2008-2017 is largely leverage in the SOE sector.
- “after years of downsizing, SOEs starting growing after the GFC, accounting for ¾ (or 60 p.p.) of the rise in corporate debt/GDP since then, and now have assets > 200% of gdp.” – IMF article IV

Back of envelope…

- Corporate sector debt increased from 100% of GDP to 165% in last decade.
  - Say the increase is a problem
  - Say losses are 50%
  - >>> someone needs to lose 30% of GDP

- Much of the losses are on banks' balance sheets, but big banks are government linked too

- The thing that makes it easier is government is ultimate borrower and lender. Should be easier to settle up.

- Government CAN absorb 30% of GDP. Doesn't need to absorb all 220%
  - Large financial assets and SOE equity (and CB reserves) give flexibility missing in many countries
  - IMF currently estimating ~7% of GDP from bank loans to companies
    - If true, that is highly manageable. But corporate bond debt too

Why not a (bad) crisis (maybe)

- Fundamental issue of a financial crisis is fear
  - Fear you won't get paid
  - Fear anyone who wants to borrow won't pay back
  - Fear you won't get liquidity if you need it
- Two things solve financial crises
  - A lender / balance sheet that can absorb
  - Information
- China in a position to have all relevant parties in the room with similar incentives & adequate space on balance sheet
- Some of the worst elements of crisis/financial reckoning could be avoided
  - Currency crisis spillovers (see Setser (2017))
  - Run by foreign creditors
  - Complete panic and freezing of lending

BUT….. Won't be easy

- Requires political choices
- Might be unpopular
- Could spur capital flight
- Might push past the capacity of the state / institutions to manage
- Likely need to expand fiscal policy & especially consumption to replace some of the corporate demand & investment
- If not done quickly, the asset management / shadow banks / smaller banks could run into severe problems of a typical bank run / crisis which again would be a challenge
- Fact that this is stretching on is in fact a concern
  - Need to deal with bad debt, harden budget constraints for SOE, restore confidence in banking system, crack down on shadow banking sector, clarify what is backed and what isn't