The Great Leveraging

Five Facts and Five Lessons for Policymakers

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Fact 1. Crises: Almost forgotten: now they’re back

- A long standing problem
  - For DM and EM

- Exception: 1940 to 1970 period unusually quiescent. Why?
  - Internal or external constraints?
Fact 2. Consequences: forgot depressing/deflationary impacts

- Evidence-based macroeconomics
  - Event study
  - 14 “advanced” countries
  - 140 years of data

- Recessions are painful
  - Those with financial crises are more painful
  - Those with global financial crises are worse still

- Prewar versus Postwar
Fact 3. Extreme leverage: historically unprecedented

- Then
  - Age of Money
- Now
  - Age of Credit
- How?
  - More leverage
  - Wholesale funding
- Why?
  - Private actions (recovery from GD/WW2)
  - Government policies (financial liberalizations)
Fact 3. Extreme leverage: banks versus sovereigns

- Advanced countries
- Public debt crisis/excess?
  - There is a post 2008 blip
- Private credit crisis/excess?
  - Larger and trending up since 1990
- Reversal of ratios striking after 1960
  - “Safe assets”? 

![Graph showing Bank Loans/GDP and Public Debt/GDP ratios over time from 1870 to 2010. The graph illustrates the increasing trend in both ratios, with a significant rise in the late 20th century.]
Fact 4. Global asymmetry: EMs buy insurance, DMs sell it

- Post-1990s EMs switch to safer, countercyclical policies and larger buffers
- “Great Reserve Accumulation”
  - Unique phase in history?
  - Gold standard
- Net capital flows
  - Private inflows
  - Official outflows
- No “Lucas paradox”?
Fact 5. Savings glut: short run panic v. long run demography

- Short term reasons to think the era of cheap capital is over
  - Investment rebound in EM and DM after panic?
    - Not quite yet!
  - EM reserve “step change” completed?
  - DM delevering slow?

- Longer term reasons?
  - Demography

- Offsetting/postponing factor
  - Recurrent and ongoing flights to safety in panic

- Real rate = 0% in Jun 2012!
Summing up the facts

• An Inconvenient Truth
  – Crises just a fact of life in modern finance capitalism?
  – Exception was 1950–70 with financial repression, regulation, controls.
  – Period of low credit creation. But it was also still a period of high growth.

• Plus A Series of Unfortunate Events
  – Cheap capital in asymmetric world. Credit boom.
  – Good = productive projects. Bad = risk of boom-bust cycle.

• Sequel
  – Hunger for safe assets, demographic shifts slow (but coming).
  – Low real rates for now= deflationary shock continues, and credible sovereigns can be funded.

• Next
  – What lessons for policy in this kind of financial landscape
  – Macro policy / Financial policy
**Lesson 1: Past private credit growth does contain valuable predictive information about likelihood of a crisis**

- Schularick and Taylor 2012 AER “Credit Booms Gone Bust”
- Use lagged credit growth T–5,...,T–1
- Forecast of a financial crisis {0,1} in year T
- Ex ante credit boom makes a financial crisis more likely
  - Beats null (cointoss)
  - Beats narrow or broad money
  - Robust to other controls including macro, interest rates, and stock prices

![Graph](image-url)

- Null, FE only (AUC = 0.640)
- Credit + FE (AUC = 0.750)
- Money + FE (AUC = 0.686)

Reference
Lesson 2: External imbalances/public debts are a distraction

- Jordà, Schularick, Taylor 2011 IMF Economic Review “Financial Crises, Credit Booms, and External Imbalances: 140 Years of Lessons”

- Couldn’t it all be down to external imbalances rather than internal?
  - Add current account (%GDP) to the forecast system and run a horse race.
  - As a policymaker, which signal has more valuable information about incipient financial fragility?
- Not CA/GDP
- Same result holds for public debt/GDP
Lesson 3: After a credit boom, expect a more painful recession, normal or financial-crisis

- Credit boom before vs lost output afterwards
- Jordà, Schularick, Taylor 2012 “When credit bites back”
- Larger credit boom ex ante correlates with deeper recessions in each case
  - In addition to the larger credit boom making more painful financial crisis case more likely to occur

![Graphs showing normal and financial recessions](image-url)
Lesson 4: In a financial crisis with large run-up in private sector credit, mark down growth/inflation more

- Credit boom before v other outcomes
- Jordà, Schularick, Taylor 2012 “When credit bites back”
- Larger credit boom ex ante correlates with deeper recessions in each case
  - In addition to the larger credit boom making more painful financial crisis case more likely to occur
  - Also depressing for investment and inflation outcomes
Lesson 5: In a financial crisis with large public debt, and large run-up in private sector credit mark down growth/inflation *even more*

JST, work in progress

- Zero reference = “no treatment”
- Blue = normal recession after +1% extra credit/GDP ppy “treatment”
- Red = financial recession after +1% extra credit/GDP ppy “treatment”
- Lt gray = Blue line path as public debt/GDP vary from 0% to 100%
- Dk gray = Red line path public debt/GDP vary from 0% to 100%
Summing up the lessons

• Pre-crisis prevention
  – Central bank complacency, with two obvious and key failures
    • Inflation targeting not enough, unable to avert credit boom/bust crisis
      – Didn’t we know this already from history of the gold standard, etc.?
    • Not having well thought out banking supervision/resolution, LOLR regime
      – Ditto
    • Both failures present with a vengeance in the Eurozone with amplification factors

• Post-crisis response
  – What will the path look like?
  – Worse than people thought/think
    • Massive deflationary shock; CBs beware of premature tightening
    • ECB rate rise in 2011?
    • Fed/BoE/BoJ responses more accommodative, but large headwinds also
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