Capitalism’s biggest crises have been credit crises...

Violent swing from high credit to extended period of negative credit:
- 1837: from +12% GDP to -9%; 7 years
- Great Depression: from +9% to -9%; 8 years
- Great Recession: 1837: from +15% to -6%; 3 years
Which mainstream economics ignores *because of a fantasy*…

- Ben Bernanke 2000: “Absent implausibly large differences in marginal spending propensities among the groups, it was suggested, pure redistributions should have no significant macro-economic effects.” (p. 24)
- Paul Krugman 2012: “any individual bank does, in fact, have to lend out the money it receives in deposits.”
- That Central Banks are now calling out...
  - *Bank of England* 2014: “Rather than banks receiving deposits when households save and then lending them out, *bank lending creates deposits.*”
  - *Bundesbank* 2017: “this refutes a popular misconception that banks act simply as intermediaries at the time of lending.”
  - *Central Bank of Norway* 2017: “banks create money out of nothing and withdraw it when loans are repaid.”
Expenditure IS Income. AND Credit matters

- Example Without Lending:

<table>
<thead>
<tr>
<th>Expenditure &amp; Income</th>
<th>Tom</th>
<th>Dick</th>
<th>Harry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom</td>
<td>-200</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Dick</td>
<td>100</td>
<td>-200</td>
<td>100</td>
</tr>
<tr>
<td>Harry</td>
<td>100</td>
<td>100</td>
<td>-200</td>
</tr>
</tbody>
</table>

- Expenditure≡Income=$600/Year

- With “Loanable Funds” Lending: Dick lends Tom $10 at 10% interest

<table>
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<th>Dick</th>
<th>Harry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom</td>
<td>-(200+10+1)</td>
<td>100+1</td>
<td>100+10</td>
</tr>
<tr>
<td>Dick</td>
<td>(100-5)</td>
<td>-(200-10)</td>
<td>(100-5)</td>
</tr>
<tr>
<td>Harry</td>
<td>100</td>
<td>100</td>
<td>-200</td>
</tr>
</tbody>
</table>

- $10 credit-based spending cancels at the aggregate level
- $1 interest is expenditure for Tom and income for Dick
  - Expenditure≡Income=$601/Year
Expenditure IS Income. AND Credit matters

• Real-world “Bank Originated Money & Debt” (BOMD)
  • Tom takes out a loan of $10 (not shown in this table) from the Bank & pays 10% interest on the loan to the Bank

• Total expenditure is total income equals $612/Year...

<table>
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<th>Dick</th>
<th>Harry</th>
<th>Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom</td>
<td>-(200-10+1)</td>
<td>100</td>
<td>100+10</td>
<td>+1</td>
</tr>
<tr>
<td>Dick</td>
<td>100</td>
<td>-200</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Harry</td>
<td>100</td>
<td>100</td>
<td>-200</td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td>+0.5</td>
<td>+0.5</td>
<td>-1</td>
<td></td>
</tr>
</tbody>
</table>

• $10 credit-based spending does not cancel:
  • $10 created by debt increases bank assets (debt) and liabilities (deposits) equally
  • $10 Demand created by expenditure of new money by Tom is income for Harry
    • $1 interest is expenditure for Tom and income for the Bank
      • Bank spends $1 interest income on Dick & Harry
      • Expenditure by Bank is income for Dick & Harry
Macroeconomic impact of credit is undeniable

- Especially with High Debt/GDP, Credit drives Employment & GDP

- Correlation from 1980 -0.63; from 1990 -0.91
Finance markets impact of credit is undeniable

- Acceleration of mortgage debt (Granger) causes house price changes

**Household Debt Acceleration & House Price Change**

- **Correlation from 1980 0.61; 1990 0.74**
- **Granger Debt → Price p value 0.003**
- **Granger Price → Debt p value 0.15**
Finance markets impact of credit is undeniable

• Margin Debt and the S&P500

Margin Debt & SP500 Cycle Adjusted PE Ratio

Margin Debt Acceleration & SP500 CAPE Change

Percent of GDP

Percent change per year
Policy Implications

- We have to reverse this mistake
Policy Implications: Modern Debt Jubilee

• “QE For the People”
  • Direct per-capita injection into household bank accounts
    • Those with debt have debt reduced
    • Those without debt get cash injection
      • Cash must be used to buy corporate shares
      • Corporate shares must be used to reduce corporate debt
  • Reverse income inequality rise caused:
    • By private debt bubble in the first place
    • By misguided QE since then
      • Massive increase in share prices has benefited wealthy who own shares
        • Benefit to poor via pension funds, etc., relatively trivial

• The alternative? Continued stagnation like Japan’s “Lost Decade”
• Political turmoil as voters reject the political mainstream
Theoretical Implications: Build Macroeconomics from Macro

• Simple “complex systems” model predicts both “moderation” and crisis

• Combine three true-by-definition dynamic statements:
  • “Employment will rise if economic growth exceeds the sum of population & labor productivity growth”
  • “Wages share of output will rise if wage rises exceeds growth in labor productivity”
  • “Debt ratio will rise if rate of growth of debt exceeds rate of growth of GDP”

• Two possible outcomes
  • Stability if Debt/GDP stabilises
  • Moderation/Crisis if it doesn’t
Rebuilding Macroeconomics **from Macroeconomics**

• Let’s **finally** put equilibrium-dependent, barter economics in the dustbin of history
DEBT TRAPS, PUBLIC AND PRIVATE

Speakers
Orsola Costantini
Steve Keen
Hashem Pesaran
Moritz Schularick
Adair Turner

Discussants
Roberto Ciccone
Pontus Rendahl

Chair
Richard Vague