Outline of Presentation

- Background
  - Accidents on the Highway
  - Sudden Stops
- Phoenix Miracles (Rising from the Ashes)
- Implications and Policy Issues
Background
Accidents on the Highway
External Financial Conditions for EMs
(EMBI sovereign spread & Current Account Balance in EMs, millions of USD, last four quarters)

Note: Includes Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Slovak Republic, South Africa, Thailand, Turkey and Venezuela.
LAC 7: INVESTMENT
(LAC-7, s.a. Investment, 1998.II=100)

Annualized growth: 10.6%
2002.IV-2004.III

Russian Crisis

Annualized growth: 7.4%

Annualized growth: -4.1%
1998.II-2002.IV
Annualized growth: 5.5%
2002.IV-2004.III

Russian Crisis

Annualized growth: 4.4%

Annualized growth: 0.2%
1998.II-2002.IV
Emerging Asia: Investment and Economic Growth
(s.a. Investment and GDP, 1997.II=100)

Includes Indonesia, Korea, Malaysia, Philippines and Thailand.
SUDDEN STOP

(of International Capital Inflows)
Number of Sudden Stops: The Bunching Effect

- Emerging Markets
- Developed Economies
# Sudden Stops and Large Depreciation

In % of total

<table>
<thead>
<tr>
<th></th>
<th>Emerging Markets</th>
<th>Developed Economies</th>
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<tbody>
<tr>
<td>Depreciations associated with Sudden Stop</td>
<td>63</td>
<td>17</td>
</tr>
<tr>
<td>Of which: First Sudden Stop, then depreciation</td>
<td>42</td>
<td>9</td>
</tr>
<tr>
<td>First depreciation, then Sudden Stop</td>
<td>21</td>
<td>9</td>
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Note: The total number of large devaluations is 19 in emerging markets and 23 in developed economies.
SS: Results of Earlier Empirical Tests

- The probability of a SS increases with
  - Current Account Deficit (as a share of Absorption of Tradables), CAD.
  - Domestic Liability Dollarization (as a share of GDP), DLD.
  - Interaction of CAD and DLD.
  - Inverse of TOT

- On the other hand, given the above, the probability of SS is not a function of
  - The foreign exchange system
  - Total debt
  - Fiscal deficit and other standard macro control variables.
Bottom Line

- External factors play a key role in triggering financial crises in EMs.

- However, domestic vulnerabilities (e.g., DLD and small tradables sector) are also important in generating a full-fledged SS, and the depth of the resulting crisis.
Phoenix Miracles
Miracle in Argentina (?)
(s.a. GDP, II. 1998=100)
Anatomy of Post-Collapse Recoveries

- Post-collapse recoveries are steep (V-shaped)
The Behavior of Output
(Average 3S Episode, annual GDP)
Anatomy of Post-Collapse Recoveries

- Post-collapse recoveries are steep (V-shaped)

- Post-collapse recoveries in EMs display striking parallels with the US Great Depression...

  - Total Factor Productivity
EM Collapses & the US Great Depression: Similarities

- Total Factor Productivity -

Collapses in EM Economies

US Great Depression

Collapse
Recovery

Collapse
Recovery

GDP
TFP

1929 1930 1931 1932 1933 1934 1935 1936

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Anatomy of Post-Collapse Recoveries

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- Total Factor Productivity
- Domestic Credit
EM Collapses & the US Great Depression: Similarities

- Domestic Credit -

Collapses in EM Economies

US Great Depression

Collapses & the US Great Depression: Similarities
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  - Total Factor Productivity
  - Domestic Credit
  - Capital Stock
EM Collapses & the US Great Depression: Similarities

- Capital Stock -

Collapses in EM Economies

US Great Depression

1929 1930 1931 1932 1933 1934 1935 1936

GDP

100 102 104 106 108 110

Capital Stock

90 92 94 96 98 100 102 104 106 108 110

GDP

t-2 t-1 t t+1 t+2

GDP

90 92 94 96 98 100

Capital Stock

90 92 94 96 98 100 102 104 106 108 110
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EM Collapses & the US Great Depression: Similarities

- Investment -

Collapses in EM Economies

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EM Collapses & the US Great Depression: Similarities

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GDP

Investment

Collapse

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Anatomy of Post-Collapse Recoveries

- Post-collapse recoveries are steep (V-shaped)

- Post-collapse recoveries in EMs display striking parallels with the US Great Depression...
  - Total Factor Productivity
  - Domestic Credit
  - Capital Stock
  - Investment

- ...However, the US Great Depression differs substantially from output collapses in EMs in many other aspects
EM Collapses & the US Great Depression: Differences

- Current Account % GDP -

Collapses in EM Economies

US Great Depression

Current Account

GDP

Collapse

Recovery

Collapse

Recovery

1929 1930 1931 1932 1933 1934 1935 1936

GDP

Current Account

-0.2 0.0 0.2 0.4 0.6 0.8 1.0

100 95 100 105 110 115 120 125 130 135 140

100 102 104 106 108 110

-6 -5 -4 -3 -2 -1 0 1 2 3

-0.2 0.0 0.2 0.4 0.6 0.8 1.0

100 95 100 105 110 115 120 125 130 135 140

100 102 104 106 108 110

-6 -5 -4 -3 -2 -1 0 1 2 3
EM Collapses & the US Great Depression: Differences

- CPI Inflation -

Collapses in EM Economies

US Great Depression

1. **CPI Inflation**
2. **GDP**

1. **Collapse**
2. **Recovery**

1. **1929**
2. **1930**
3. **1931**
4. **1932**
5. **1933**
6. **1934**
7. **1935**
8. **1936**

- CPI Inflation -

1. **-10%**
2. **-8%**
3. **-6%**
4. **-4%**
5. **-2%**
6. **0%**
7. **2%**
8. **4%**

1. **100**
2. **102**
3. **104**
4. **106**
5. **108**
6. **110**

1. **GDP**
2. **CPI Inflation**

1. **t-2**
2. **t-1**
3. **t**
4. **t+1**
5. **t+2**

1. **25%**
2. **30%**
3. **35%**
4. **40%**
5. **45%**
6. **50%**
7. **55%**
8. **60%**
9. **65%**
10. **70%**

- CPI Inflation -

1. **-8%**
2. **-6%**
3. **-4%**
4. **-2%**
5. **0%**
6. **2%**
7. **4%**
8. **6%**
9. **8%**
10. **10%**

1. **t-2**
2. **t-1**
3. **t**
4. **t+1**
5. **t+2**
EM Collapses & the US Great Depression: Differences

- Nominal Exchange Rate -

Collapses in EM Economies

US Great Depression
(Gold, USD/Ounce)

GDP

Nominal Exchange Rate

XR

(Gold, USD/Ounce)
EM Collapses & the US Great Depression: Differences

- Real Exchange Rate -

Collapses in EM Economies

US Great Depression
EM Collapses & the US Great Depression: Differences

- Real Wages -
(deflated by WPI)

Collapses in EM Economies

US Great Depression

Collapses & Recovery

Real Wages and GDP Trends
Mild Recessions in the US

- GDP
- Real Credit
- Current Account % GDP
- Investment

- Mild Recessions in the US
Implications and Policy Issues
Implications

- Price deflation and wage rigidity play a central role in the discussion of the US Great Depression.
- However, these factors are non-existent for EMs crises.
- Financial factors, especially contraction and non-recovery of bank credit are relevant for both.
  - Moreover, output collapses in EMs are typically accompanied by banking crises, as in the Great Depression.
- Moreover, Irving Fisher’s Debt Deflation (Econometrica 1933) is a close relative of Liability Dollarization in EMs.
- This suggests that financial factors could be key to explaining the viciousness of the worst EM crises and the US Great Depression.
- Moreover, price/wage flexibility may not be effective for preventing crises, unless they help to deactivate the financial bomb.
Crisis Prevention

Global policies aimed at reducing the likelihood of 3S
- Trade Integration agreements with the North
- Code of Conduct for debt restructuring
- Global Lender of Last Resort

Domestic policies aimed at reducing financial vulnerabilities
- Self-Insurance
- Mitigation of excessive short term lending
- De-dollarization
Dubious Policies

Controls on Capital Inflows
- Capital outflows may occur even if there were no capital inflows, e.g., as a result of a bank run
- Large current account adjustment may take place even if there is no capital outflow
- Empirical evidence casts serious doubts about the effectiveness of capital controls, e.g., Chile

Floating Exchange Rates
- Dangerous under Domestic Liability Dollarization

(after crisis) Expansionary Fiscal-Monetary Policies
- Fiscal expansion unfeasible if government is part of the problem
- Monetary expansion:
  - requires control on K outflows under fixed exchange rates
  - may trigger inflationary expectations under floating exchange rates
  - However, tight fiscal and monetary policy may be counter productive