# SUDDEN STOP AND RECOVERY Lessons and Policies

# **Guillermo Calvo**

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**Ouline of Presentation** Background Accidents on the Highway Sudden Stops Phoenix Miracles (Rising from the Ashes)

Implications and Policy Issues



# 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)



## LAC 7: GROWTH (LAC-7, s.a. GDP, 1998.II=100)



# **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**



# Sudden Stops and Large Depreciation

#### In % of total

	Emerging Markets	Developed Economies
Depreciations associated with Sudden Stop	<b>63</b>	17
Of which: First Sudden Stop, then depreciation	42	9
First depreciation, then Sudden Stop	21	9

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**



# **Anatomy of Post-Collapse Recoveries**

Post-collapse recoveries are steep (V-shaped)

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Total Factor Productivity
 Domestic Credit

## **EM Collapses & the US Great Depression: Similarities**

## - Domestic Credit -

#### **Collapses in EM Economies**



# **Anatomy of Post-Collapse Recoveries**

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\* Total Factor Productivity

\* Domestic Credit

Capital Stock

# EM Collapses & the US Great Depression: Similarities - Capital Stock -

#### **Collapses in EM Economies**



# **Anatomy of Post-Collapse Recoveries**

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Total Factor Productivity

- Domestic credit
- Capital stock
- \* Investment

## **EM Collapses & the US Great Depression: Similarities**

### - Investment -

#### **Collapses in EM Economies**



# **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

In 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**



# EM Collapses & the US Great Depression: Differences - CPI Inflation -

#### **Collapses in EM Economies**



# EM Collapses & the US Great Depression: Differences - Nominal Exchange Rate -

#### **Collapses in EM Economies**

US Great Depression (Gold, USD/Ounce)



# EM Collapses & the US Great Depression: Differences - Real Exchange Rate -

#### **Collapses in EM Economies**



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

- Real Wages -

(deflated by WPI)

#### **Collapses in EM Economies**



## **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**

### Solution Series Series 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 <u>unfeasible</u> if government is part of the problem
- Monetary expansion:
  - requires <u>control on K outflows</u> under fixed exchange rates
  - may trigger inflationary expectations under floating exchange rates
  - However, tight fiscal and monetary policy may be counter productive

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