

# Energy Prices, Business Cycles, and Financial Crises

## The Argument for Cycle Attenuation

Mahmoud A. El-Gamal & Amy M. Jaffe

Rice University & Baker Institute for Public Policy

October 2008



# Frequency and Causes of Crises

## Globalizations Past and Present

Reckless Lending Era 1850s–1870s: Major currency and banking crises

Gold Standard Era 1880–1913: Some currency and banking crises

Between Wars 1919–1939: Numerous currency and banking crises

Bretton Woods 1945–1971: Many currency crises but no banking crises

Dollar Era 1973–present: Numerous currency & many banking crises

Trade surpluses, Reckless Lending, and Recent Crises 1980–present:

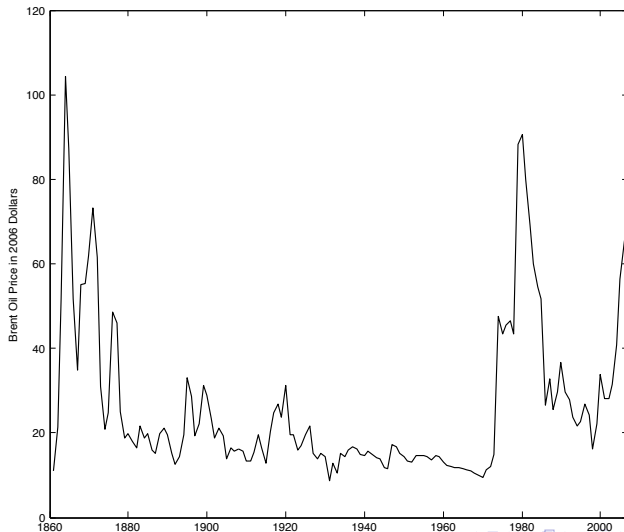
**1980s** **Scandinavia & Latin America:** Reckless lending fueled bubbles that collapsed with oil prices, leading to currency and banking crises

**1990s** **Japan, Asia:** Supporting the Dollar and reckless lending fueled bubbles, which burst with tightened monetary policy, banking crisis

**2000s** **Contagion** + record U.S. debt pose substantial global-systemic risk

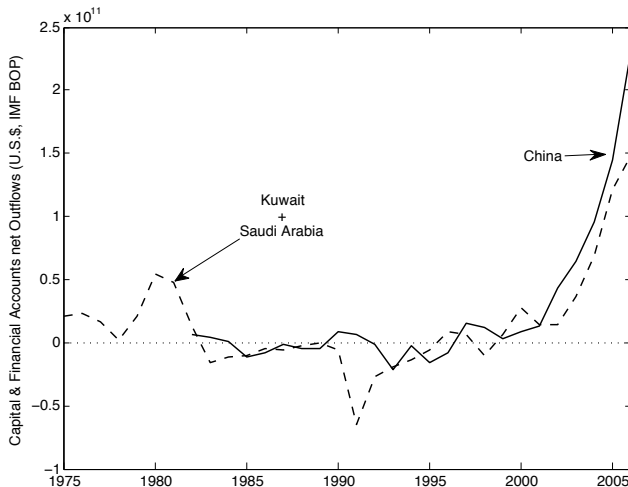
# Coincidence of High Oil Prices with Financial Crises

Crises Severest 1850s-70s (before gold standard), and 1970s– (after Bretton Woods)



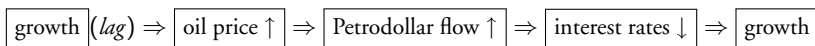
# Asian Savings Glut and The Return of Recycled Petrodollars

Contagion + Petrodollar Flows Have Contributed Substantially to Bubbles & Inflation

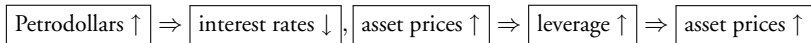


# Cyclical Petrodollar Recycling and Financial Crises

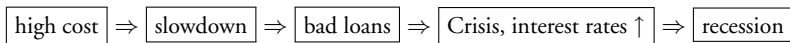
- Feedback mechanism during booms



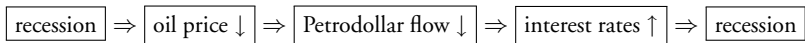
- Hubris (80's: *countries don't go bankrupt*; 00's: *house prices don't fall!*)



- Eventually (*Minsky moment*; *Ponzi finance*)



- Feedback mechanism during busts

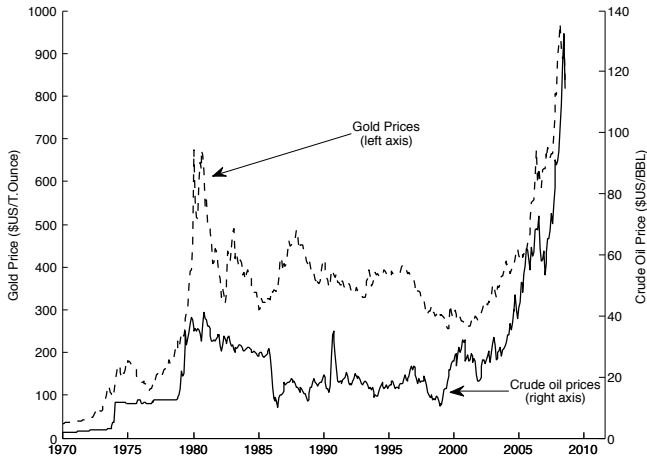


- Low cost of production + monetary and fiscal policies (*lag*)  $\Rightarrow$  economic growth + geopolitical strife (*lag*)  $\Rightarrow$  oil price  $\uparrow$



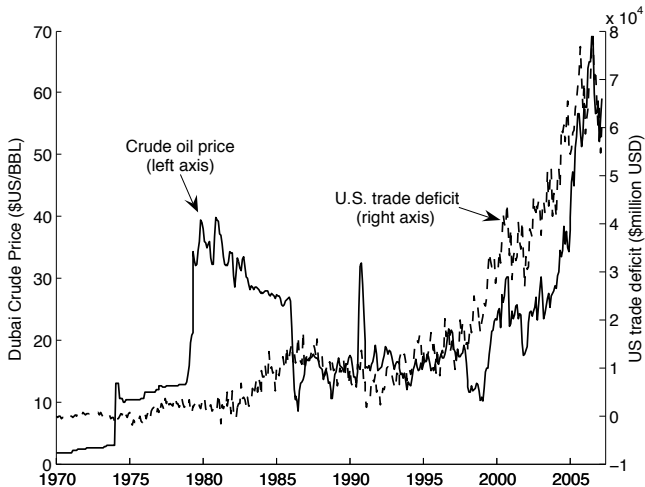
# Lag in Oil-Price Responses, Lag in Capacity Development

## Declining Real Oil Prices Precede Jumps



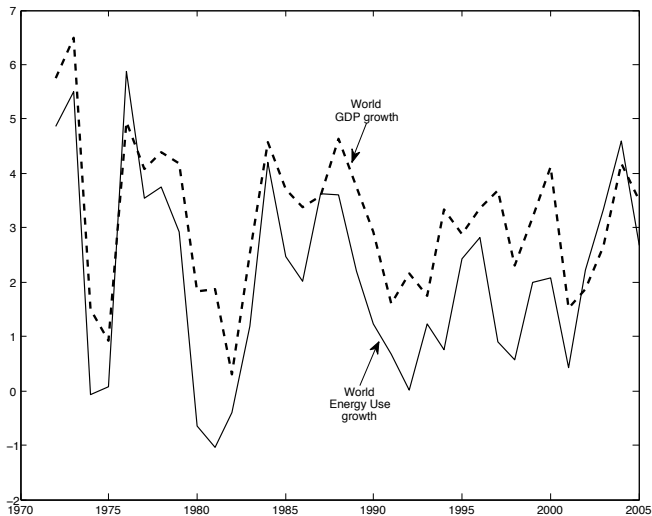
# The Absence of Automatic Exchange-Rate Cycle Attenuation

## Trade Deficits, Debts, Debased Dollars, and Oil



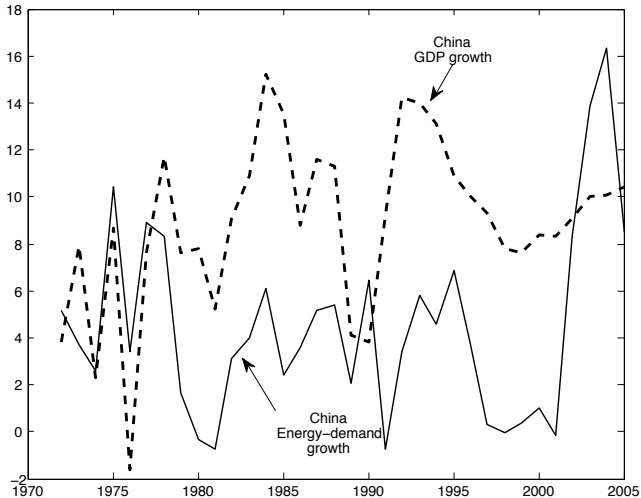
# Self-Perpetuating Cycle, Magnified during Financial Crises

Amy's Presentation Will Cover Current Decline in Demand



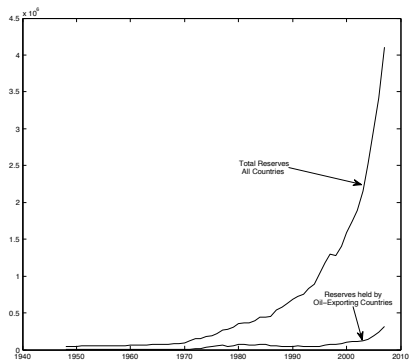
# China's Dependent Business Cycle

## The Dangerous Mirages of "Economic Miracles"

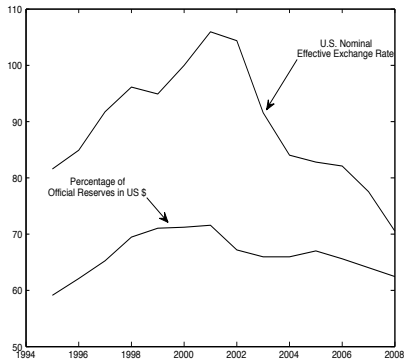


# Beginning of the End for the Dollar Era?

Compare to British Pound A Century Ago



Total Official Reserves (millions of SDRs)



Percentage of Official Reserves in U.S.\$



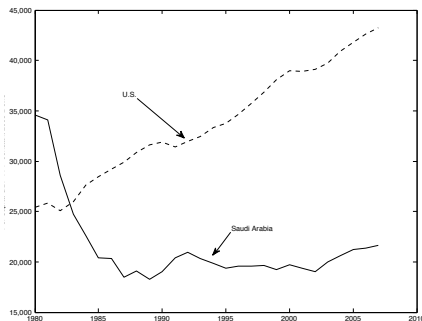
# Inevitable Cycle, Amplitude Ramifications

Ramifications for Middle-East

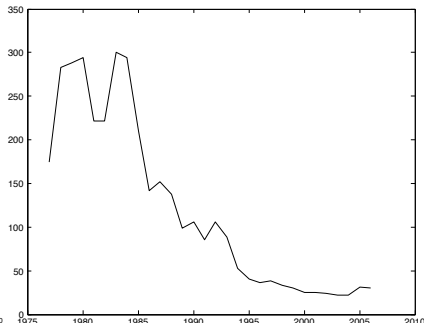
**Upswing amplifiers:** Cheap-money driven bubbles and financial crises

**Amplification catalyst:** Amnesia/hubris: "This time is different"

**Downswing amplifiers:** Socioeconomic & geopolitical costs



Saudi vs. U.S. Real Per-Capita GDP



Real Per-Capita Egyptian Worker Remittances



RICE



# The Need for Counter-Cyclical SWF Investments

Avoiding Extreme Fluctuations through Cycle Attenuation

**Paradox 1:** Middle-East Sovereign Wealth Funds invest pro-cyclically (data collected by Chhaochharia and Laeven, 2008)

- Focus on private equity deals in Middle East
- Focus on oil & gas (ADIA), financials (KIA), utilities (QIA)
- U.S. exposure too much (KIA) or too little (ADIA)

**Paradox 2:** Banking crisis flight to safety led to Dollar appreciation!

**Attenuate:** Invest in fuel-production capacity during recessions

**Diversify:** Invest in alternative energy, green technology, etc.

**Balance:** America & Middle East need to consume less and invest more, Asia needs to consume more and save less

