

# Financial “Whac-a-Mole”: Bubbles, Commodity Prices, and Global Imbalances

R. Caballero, E. Farhi, P. Gourinchas

Comments by:

Carmen M. Reinhart

*University of Maryland, NBER and CEPR*

BPEA, September 11-12, 2008, Washington DC

# Aim of the paper

- To provide a **theoretical** framework to explain three intertwined macroeconomic phenomena of recent years:
  - persistent global imbalances
  - the subprime crisis in the U.S.
  - and the volatile oil prices that followed

(the empirical analysis is 1 ½ out of 55 pages)

# Points stressed in the paper in explaining the 3 phenomena

- There is a growing **excess demand** by emerging markets (EMs) for sound and liquid **financial** assets (which are in scarce supply) to store their newfound wealth. **This is entirely a private sector phenomenon.**
- Commodity (oil) price fluctuations are importantly explained by speculative hoarding.

# Key assumptions of the model

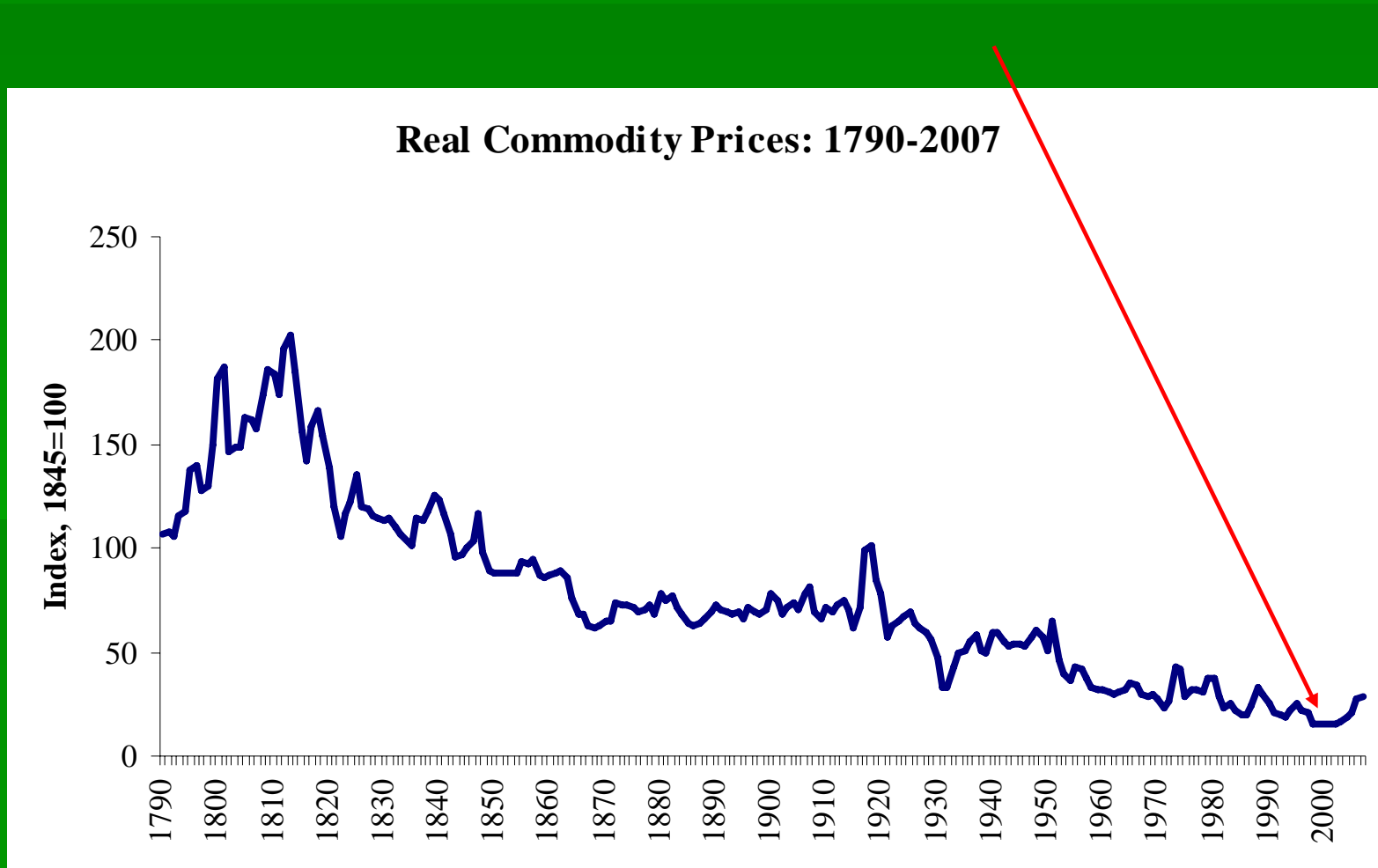
- Two regions, the US, which is endowed with trees ( $X$ ); emerging markets, which also “produce” trees but in addition have a fixed endowment of commodities/oil ( $Z$ ).
- There are two goods: trees (little trees grow at the rate  $g$ ); the endowment of commodities/oil does not grow at all.
- People in both regions eat trees and oil.

# Key assumptions of the model

- Taken together, these assumptions imply a **secular increase** in relative commodity prices,  $p_t$ , whose supply is **fixed over time...**

Which explains this portion of the time series...

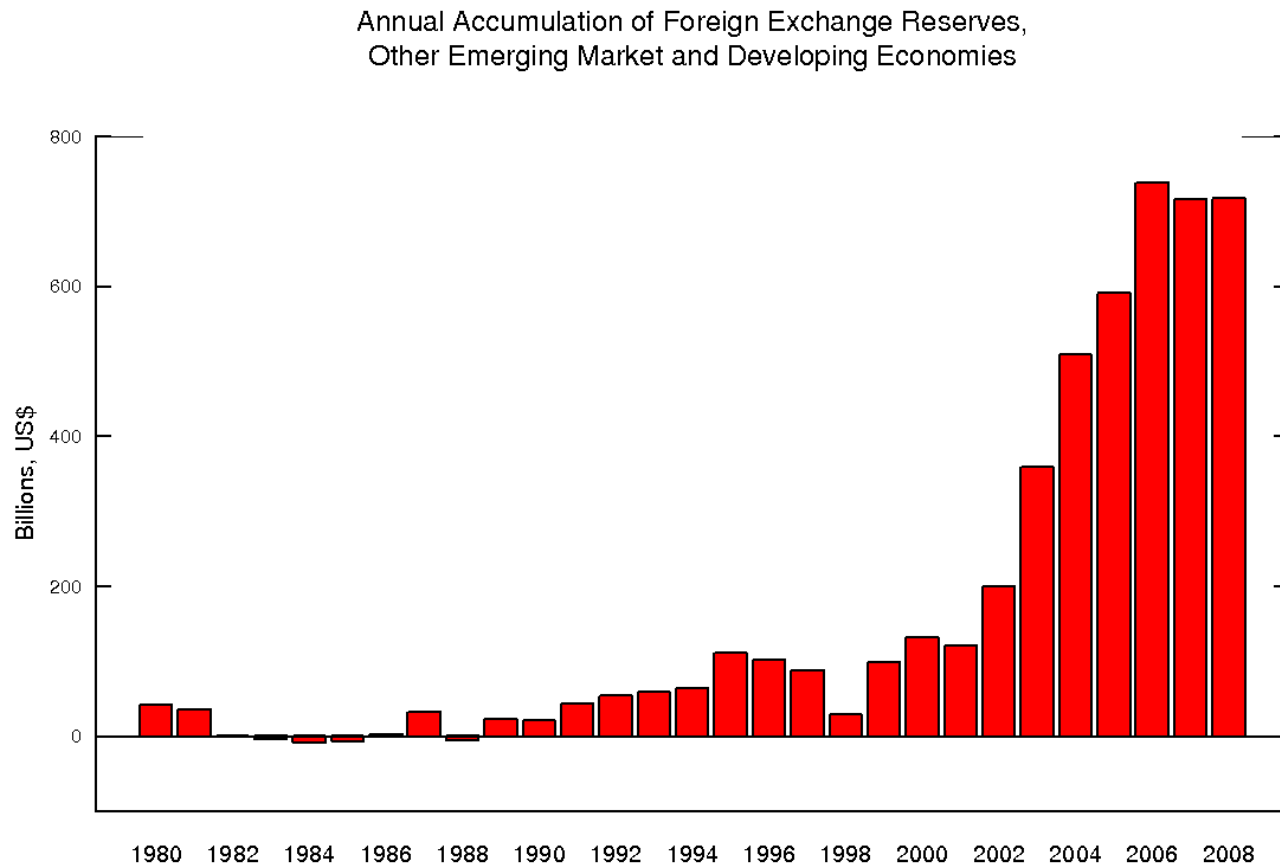
(see Reinhart & Rogoff, 2008)



# Back to more key assumptions of the model

- It is a **REAL** model
- There is **no money**
- There is **no credit**
- There are **no banks** or any other sort of financial intermediaries
- There is **no (nominal) exchange rate**
- There are **no central banks** in emerging markets stockpiling international reserves

In other words, this phenomenon (see Reinhart and Reinhart, 2008) did not happen and did not influence the demand for US assets...



Source: IMF World Economic Outlook Database (Apr. 2007)

# One diagnosis of the sub-prime financial crisis in the U.S.

- “Overindebtedness simply means that debts are out-of-line, are too big relative to other economic factors. It may be started by many causes, of which the most common appears to be *new opportunities to invest at a big prospective profit...* such as through new industries... **Easy money is the great cause of over of over-borrowing.**”

# This diagnosis...

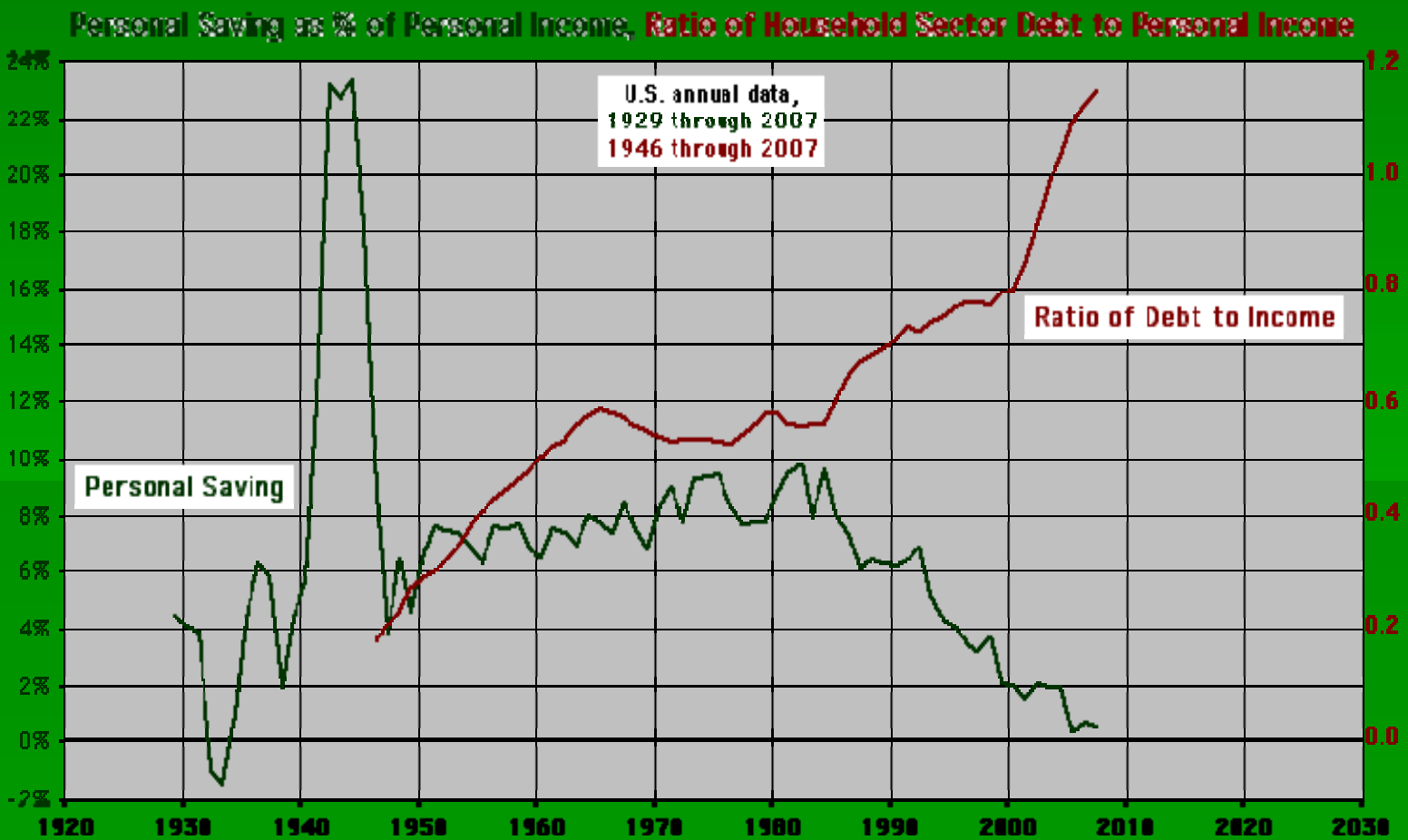
Comes from Irving Fisher (1933).

Clearly, the man was out of touch with economic theory as we know it today.

# Back to more key assumptions of the model

- Saving decreases with withdrawals (**deaths**) and increases with the endowment allocated to new generations and the return on accumulated savings
- Financial liberalization plays no role in determining saving

Between 1980 and 2007 the U.S. population must have dropped off like flies...



# Lastly, on key assumptions

- There is no uncertainty in the model. Thus, there is no concept of risk premia during a crisis and the collateral values of the nonstorable good ( $X$ ) are always known.

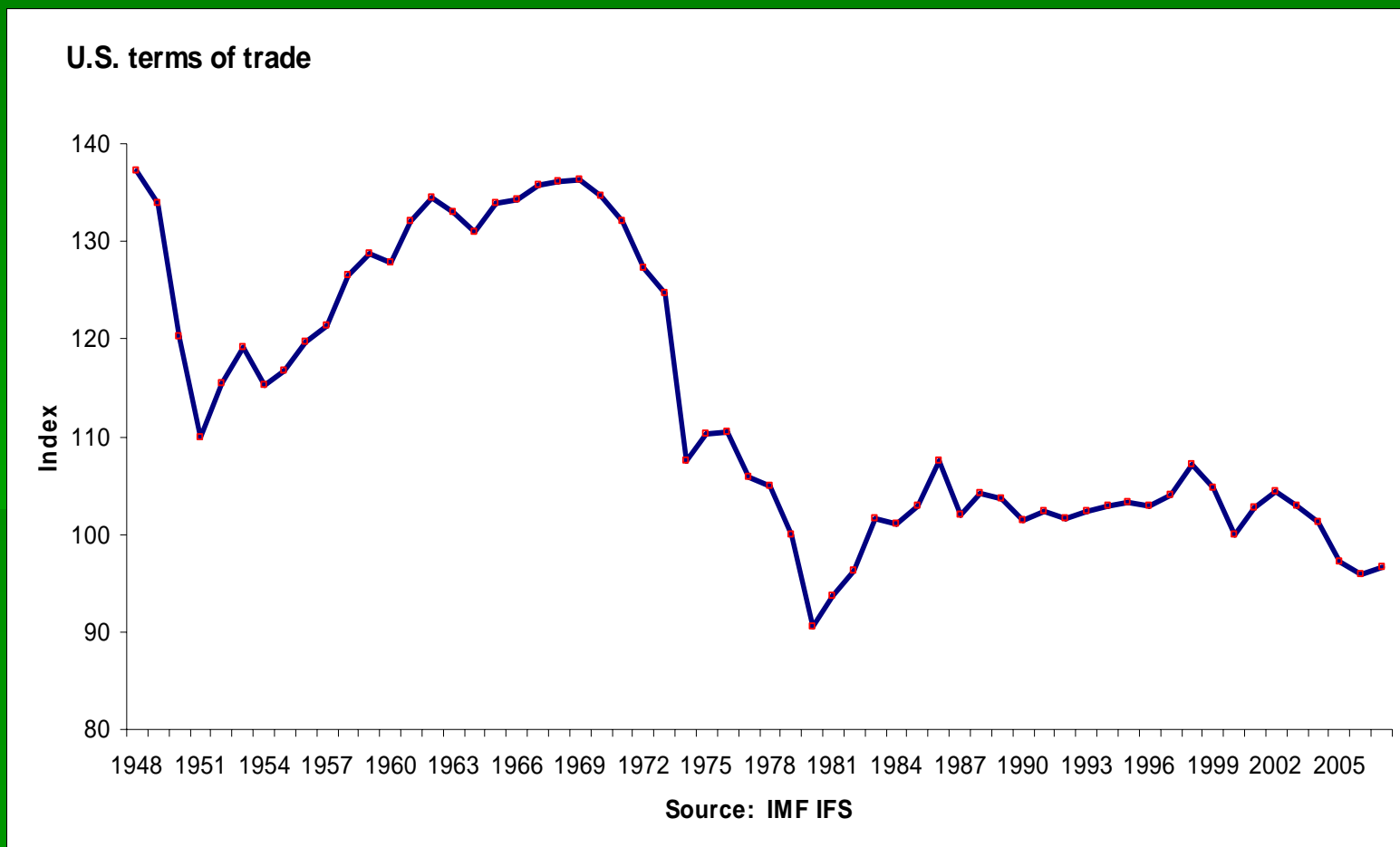
# The model: The financial crash and commodity boom (page 16)

- To quote: “*Suppose now that a ‘subprime’ shock takes place. This can be interpreted as the realization that financial instruments are less sound than they were once perceived to be*”
- In the absence of financial instruments and uncertainty and risk this statement is difficult to reconcile with the model.

# Let's call a spade a spade

- In the model the 'subprime crisis' is nothing more than an exogenous, adverse terms of trade shock.
- There is no overborrowing, leveraging, excessive risk taking, herding behavior, exchange rate crash, credit crunch and the other items that make up the usual laundry list of crises culprits in **this or any other financial crisis.**

The decline in the U.S. terms of trade that began in 1999 coincides with neither the **timing** nor the **magnitude** of the current **financial** crisis.



# To conclude

- The model offers some interesting insights on commodity price dynamics
- However, this is not a framework that lends itself to explaining or understanding a **financial** crash, be it in the subprime market or more traditionally at **banks**.

# Alternative suggested titles for the paper

- **How to Explain a Financial Crisis Without Finance**
- **The Role of Trees and Shrubbery in The Subprime Crisis: A View from the Garden**