# Safety Traps in the Global Economy

Ricardo J. Caballero

**MIT** 

First ESRB Annual Conference

Frankfurt, September 2016

[For models see work with E. Farhi and P.O. Gourinchas]



#### The Idea

- Availability of Stores of Value is an important input into production, investment, and consumption activities
- SAFE stores of value play a very special role in this context, particularly so at times of great uncertainty
- A scarcity of them has the potential to cause a host of macroeconomic problems, from excessive risk build up in the financial system, to acute and stubborn forms of recessions and chronic economic malaise
- This is a serious problem for the Global Economy today



### **Big Picture**

#### Kocherlakota (2013)

In my view, the biggest challenge for central banks is changes in the nature of asset demand and asset supply since 2007. Those changes are shaping current monetary policy, and are likely to shape policy for some time to come.

The demand for safe financial assets has grown greatly since 2007. At the same time, the supply of the assets perceived to be safe has shrunk over the past six years. Americans thought in 2007 that it was highly unlikely that American residential land, and assets backed by land, could ever fall in value by 30 percent. They no longer think that. Similarly, investors around the world viewed all forms of European sovereign debt as a safe investment. They no longer think that either.

The increase in asset demand, combined with the fall in asset supply, implies that households and firms spend less at any level of the real interest rate—that is, the interest rate net of anticipated inflation. It follows that the Federal Open Market Committee (FOMC) can only meet its congressionally mandated objectives for employment and prices by taking actions that lower the real interest rate relative to its 2007 level. The FOMC has responded to this challenge by providing a historically unprecedented amount of monetary accommodation.



#### What is a Safe Asset?



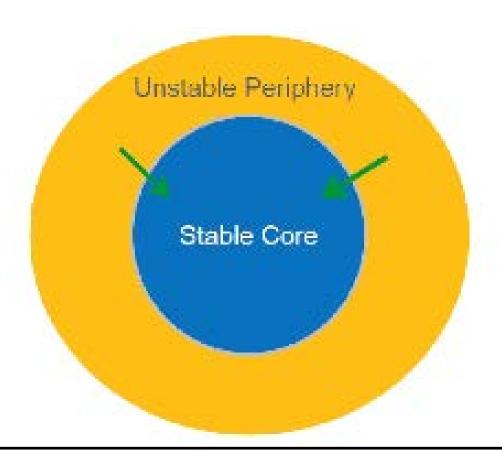
Survey of institutional portfolio managers, in AllianzGI Risk Monitor 2012. '13 respondents said there is no such thing as a safe asset.'

• Working definition: An asset that preserves much of its value in a large systemic event

#### The Players

- Who demands "safe" assets?
  - Sovereigns (EMs)
  - Insurance companies, pensions funds, retirees, mutual funds...
  - The financial system (collateral, repo)
- Who produces "safe" assets?
  - Sovereigns (DMs)
  - Very few corporations
  - The financial system (pooling and tranching)







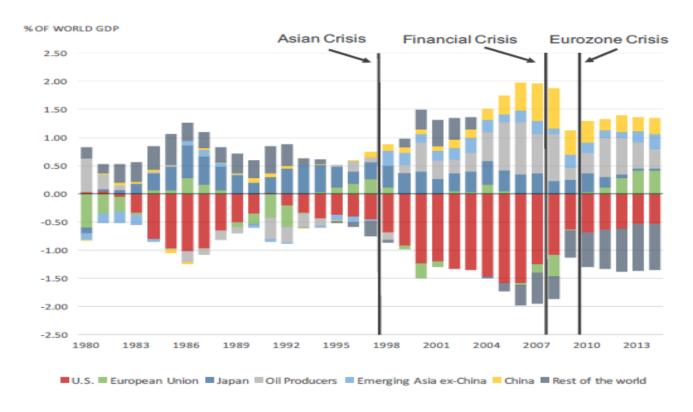
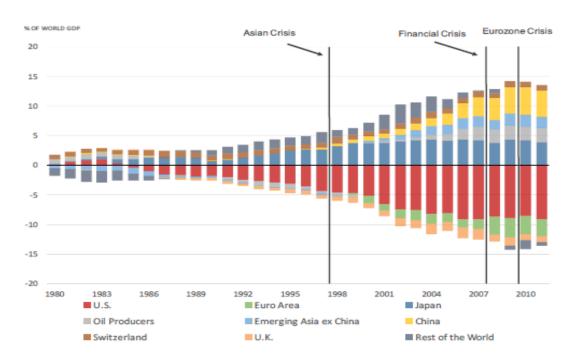


Figure: Current Account, % of World GDP

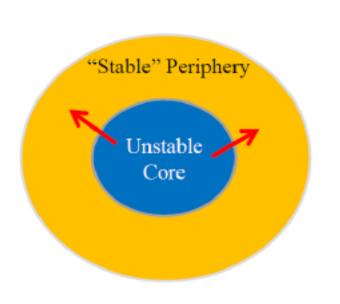


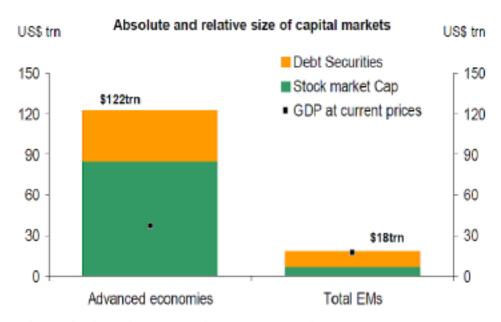


Note: Net Safe positions defined as the sum of Official Reserves (minus Gold), Portfolio Debt and Other Assets, minus Portfolio Debt and Other Liabilities. Source: Lane & Milesi-Ferretti (2007).

Regions defined as in Figure 1.







Note: 2009 data. Total EM is the sum of EM in LatAm, MENA, Africa and Eastern Europe

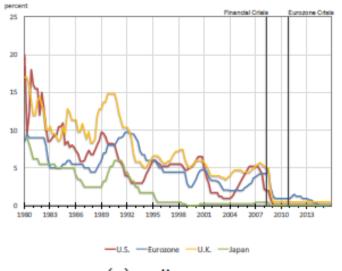
Source: Adapted from IMF, DB Global Markets Research

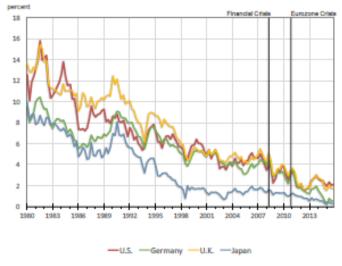


	\$ bn		% of World GDP	
	2007	2011	2007	2011
US Federal Government Debt held by the public	5,136	10,692	9.20%	15.80%
Held by the Fed	736	1,700	1.30%	2.50%
Held by private investors	4,401	8,992	7.90%	13.30%
GSE obligations	2,910	<del>2,023</del>	5.20%	3.00%
Agency- and GSE-backed mortgage pools	4,464	6,283	8.00%	9.30%
Private-issue ABS	3,901	1,277	7.00%	1.90%
German and French government debt	2,492	3,270	4.50%	4.80%
Italian and Spanish government debt	2,380	<del>3,143</del>	4.30%	4.70%
Safe assets	20,548	12,262	36.90%	18.10%

Note: Numbers are struck through if they are believed to have lost their "safe haven" status after 2007. Source: Federal Reserve, Haver Analytics, Barclays Research



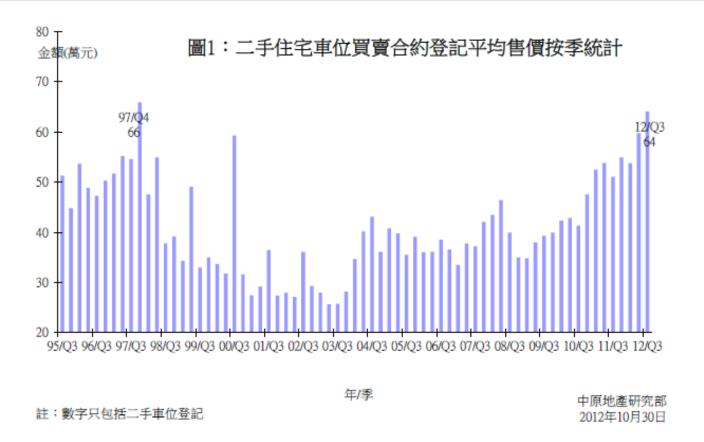




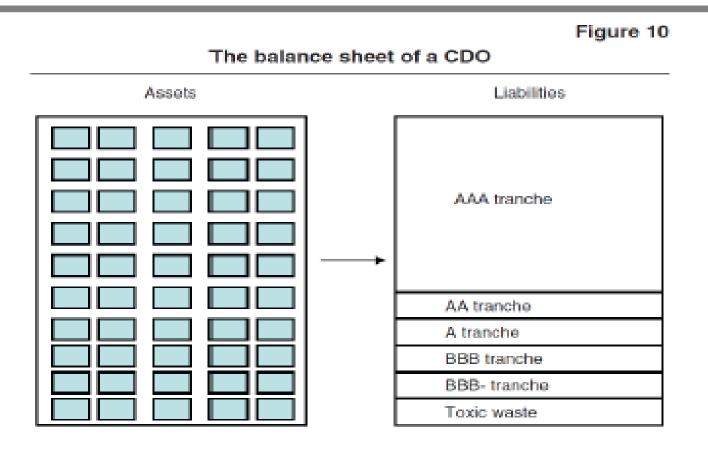
(a) policy rates

(b) 10-year nominal yields

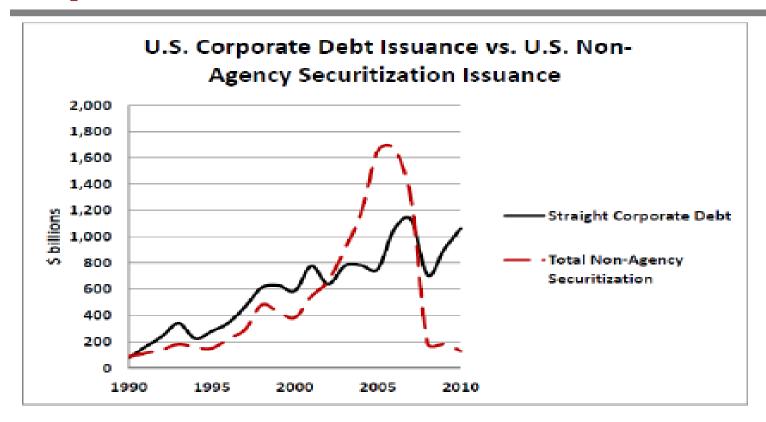








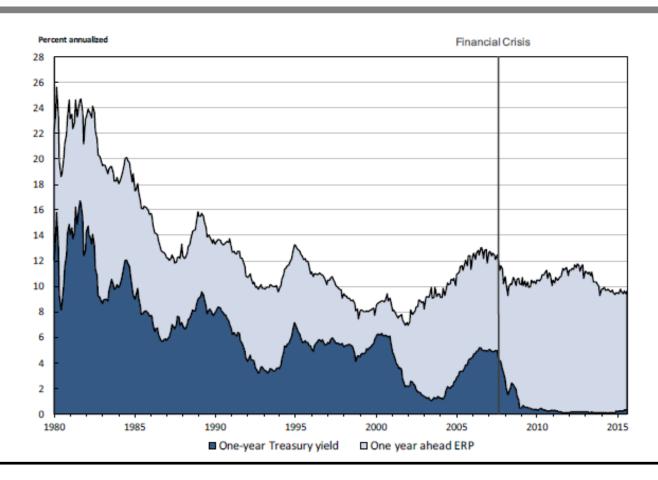




Sources: Bloomberg, Dealogic, Fitch Ratings, Moody's, prospectus filings, Standard and Poor's, Thomson Reuters, compiled by the Securities Industry and Financial Markets Association.



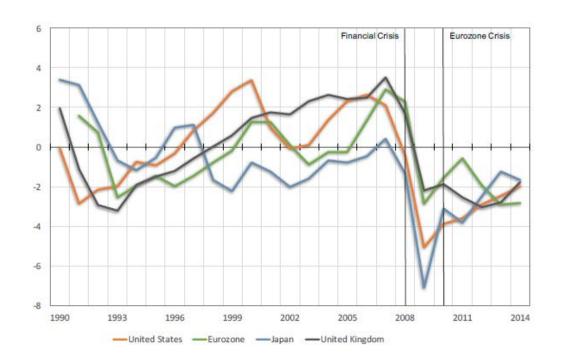
# Implications (Safety Trap)





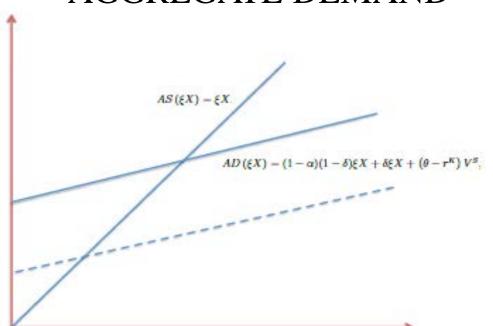
# Implications (Safety Trap)

Output Gap (Advanced Economies), percent





#### AGGREGATE DEMAND

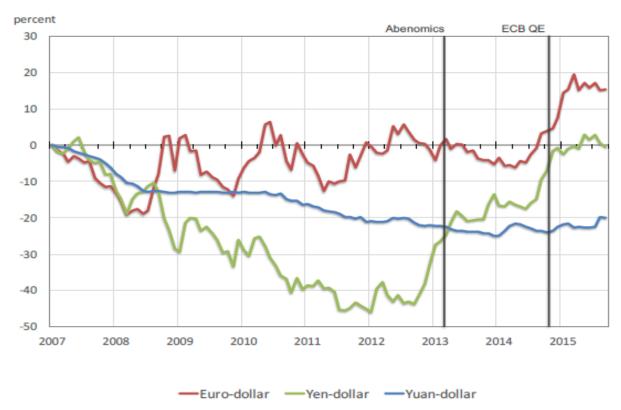


Go ESBies!!!



EX.

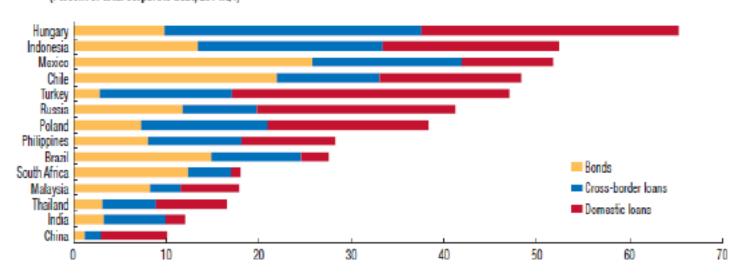
# Implications (FX)



The figure reports  $ln(E/E_{2007m1})$  where E denotes the foreign currency value of the dollar.



 Foreign Currency Nonfinancial Corporate Debt (Percent of total corporate debt, 2014:Q4)

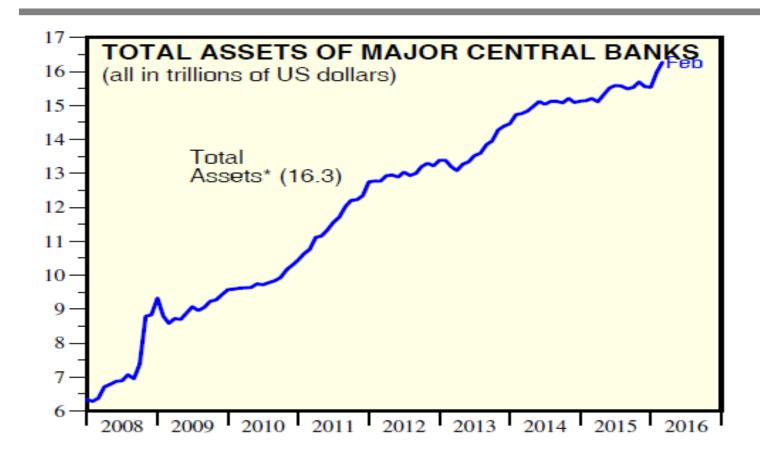


Sources: Bank for International Settlements (BIS); Bloomberg, L.P.; CEIC; IMF, Monetary and Banking database; and IMF staff calculations

Note: Bonds include securities issued abroad and are as of September 2015 (Bloomberg). Cross-border loans are for the nonbank sector. We approximate crossborder loans denominated in foreign currency using the level of cross-border loans for each country denominated in specific currencies as reported in the bank for
International Settlements international banking statistics. Indian domestic loans are as of 2013:03.

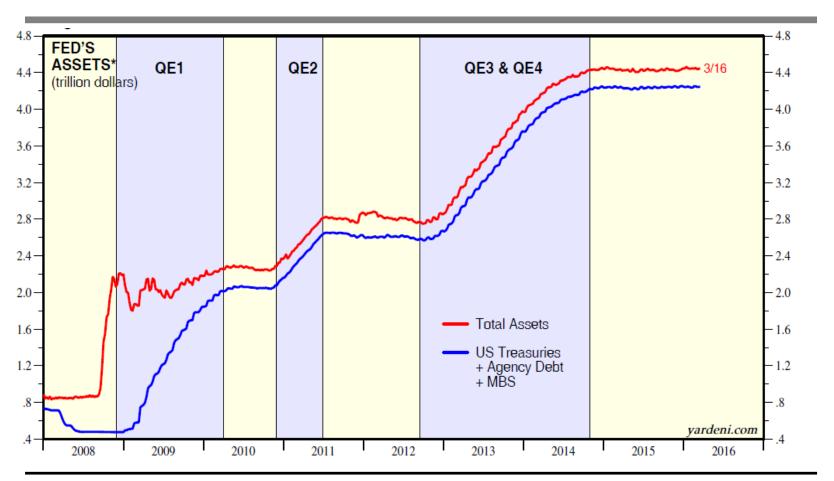


#### Reactions



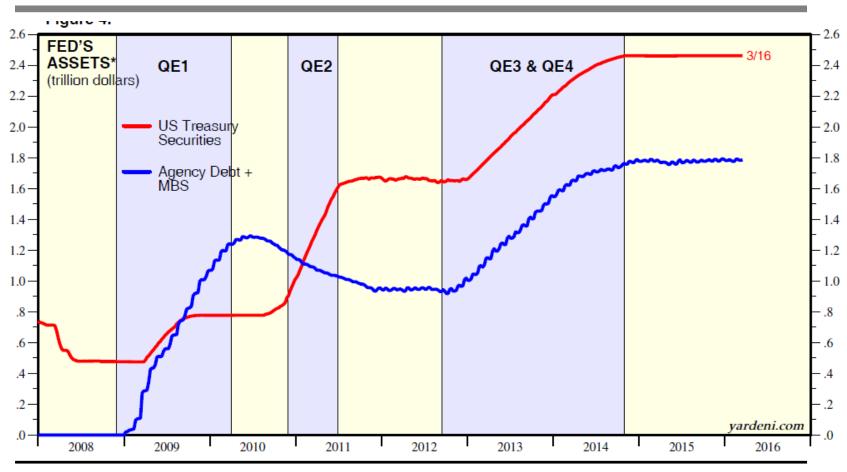


#### Reactions





#### Reactions





#### What's next?

- Hotelling like... the price of an exhaustible resource rises ad infinitum... very much the situation of safe debt normalized by global demand for it
- Potential medium term "solutions":
  - Valuation:
    - Exhausted rates channel (ZLB)
    - Appreciation of core currencies

Paradox of reserve currency

It has international political limits



#### What's next?

- Quantities:
  - More public debt...

Political limits and bubble like equilibrium...

Funding infrastructure makes sense

Private substitutes

Fragility is a real concern. Public-private? TICs?

Reducing Demand for Safe Assets – Central Banks

EM: More pooling

DM: Focus on risky assets



#### Wasteful....



