



# World Economic Roundtable

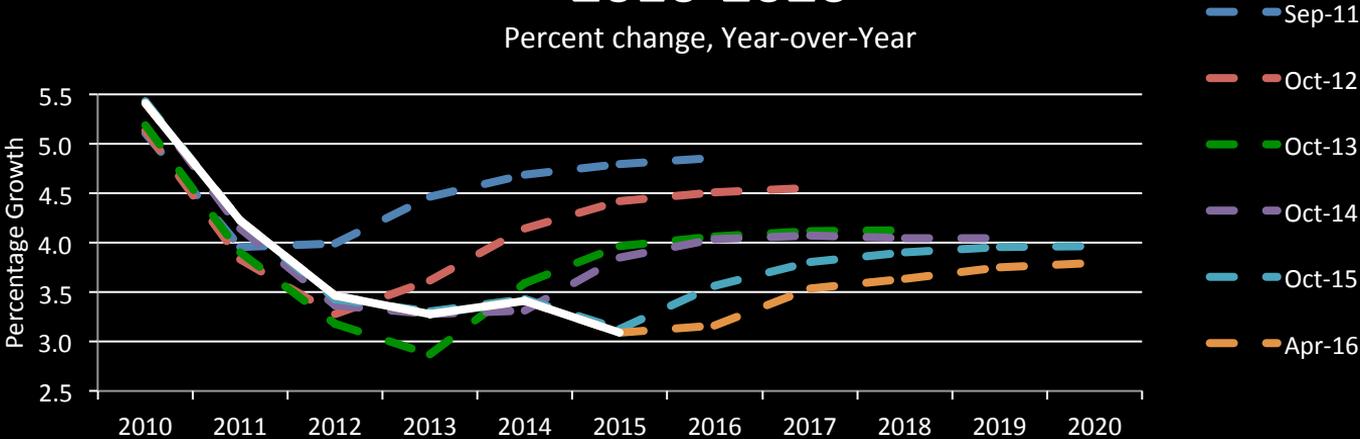
*with* RICHARD VAGUE

*Wednesday, November 2, 2016*

# THE PRIVATE DEBT CRISIS

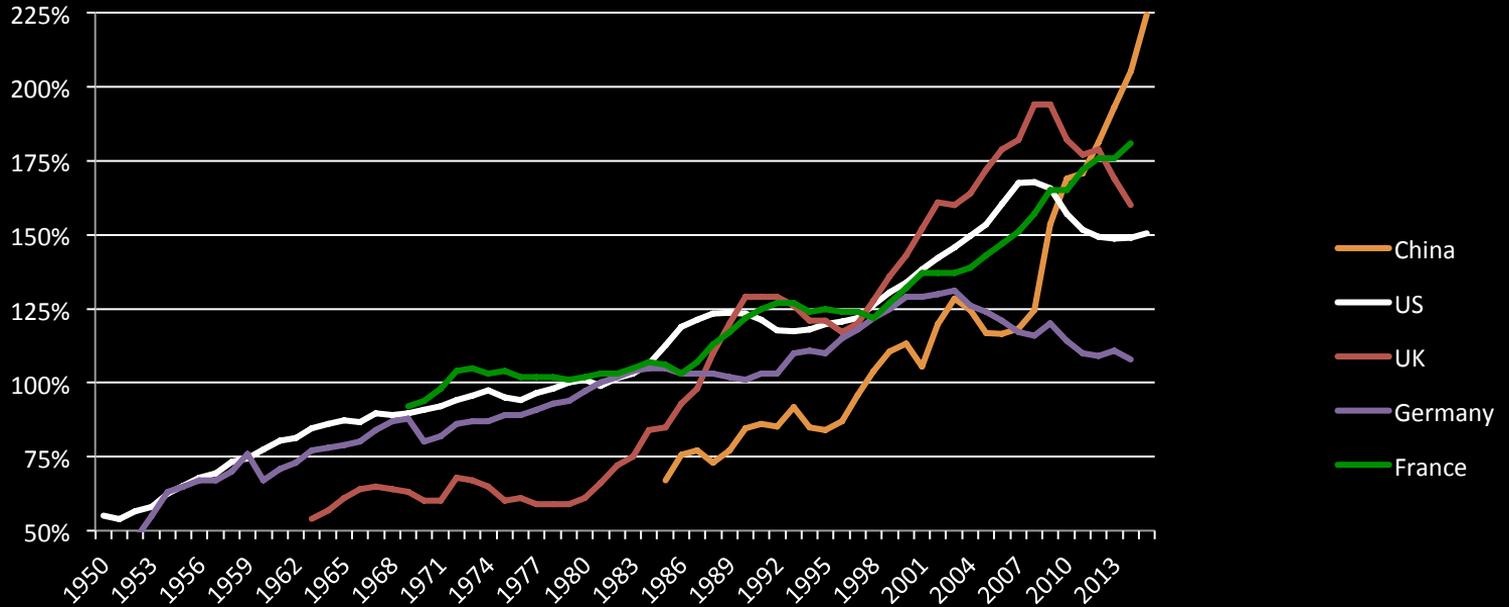
# IMF World Real GDP Growth Forecast, 2010-2020

Percent change, Year-over-Year



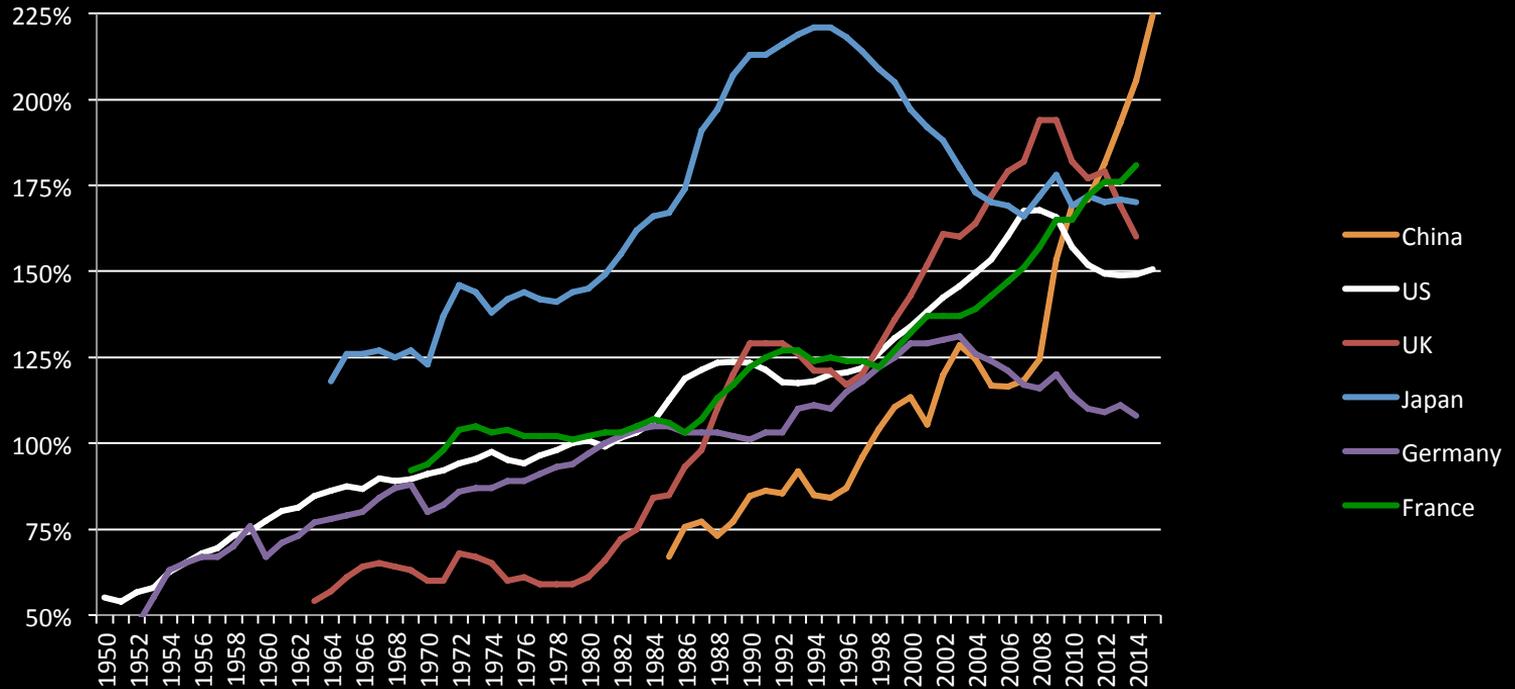
Source- International Monetary Fund (IMF), World Economic Outlook

# Private debt to GDP 1950-2015

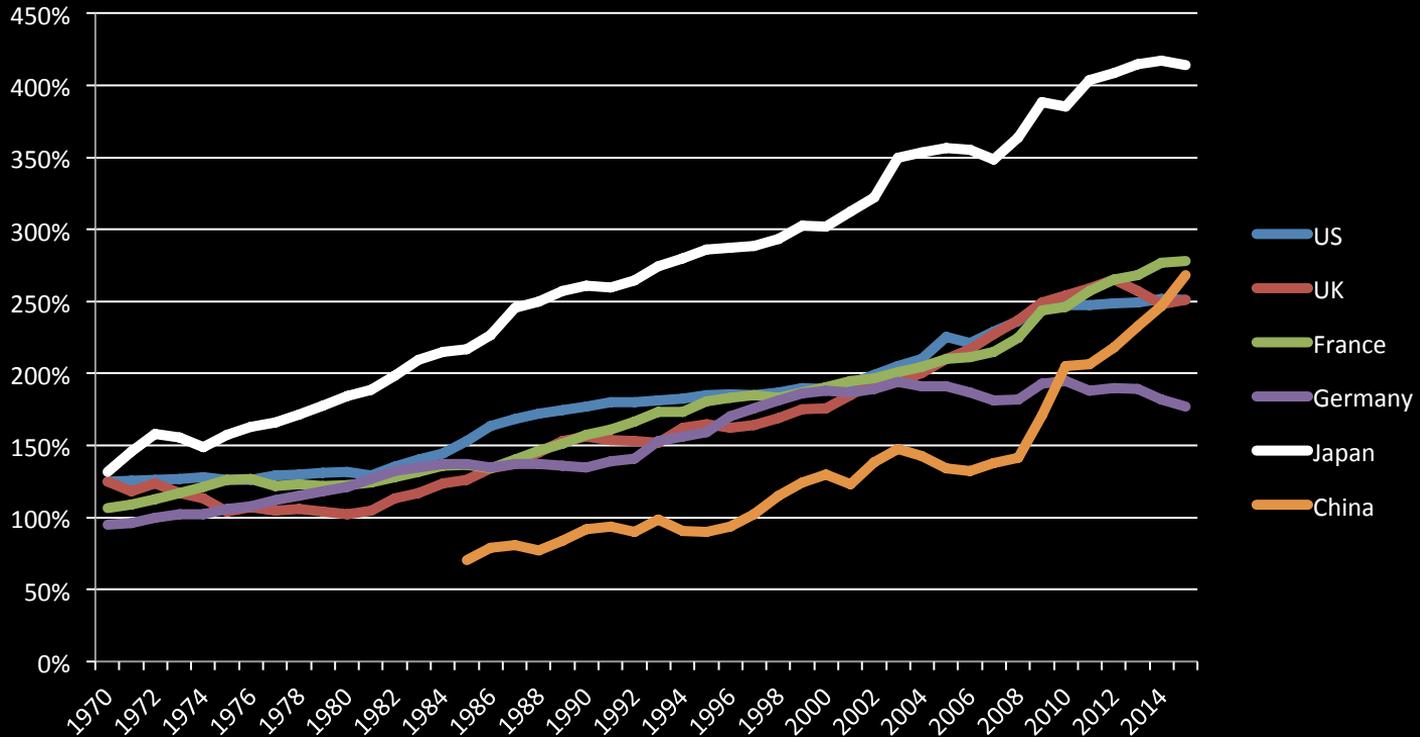


Sources- GDP- UN data, BEA; Private debt- BIS, Federal Reserve, CEIC data

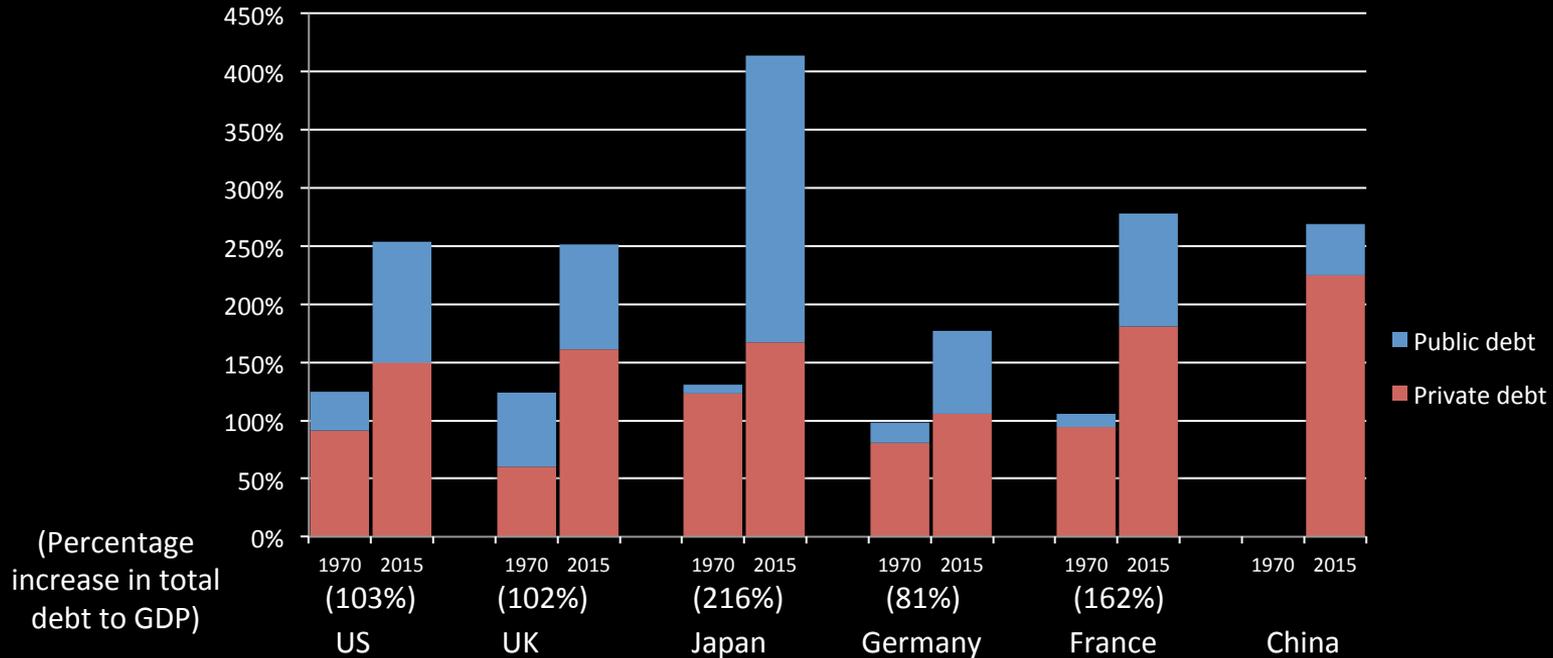
# Private debt to GDP 1950-2015



# Total debt to GDP 1970-2015



# Total Debt to GDP



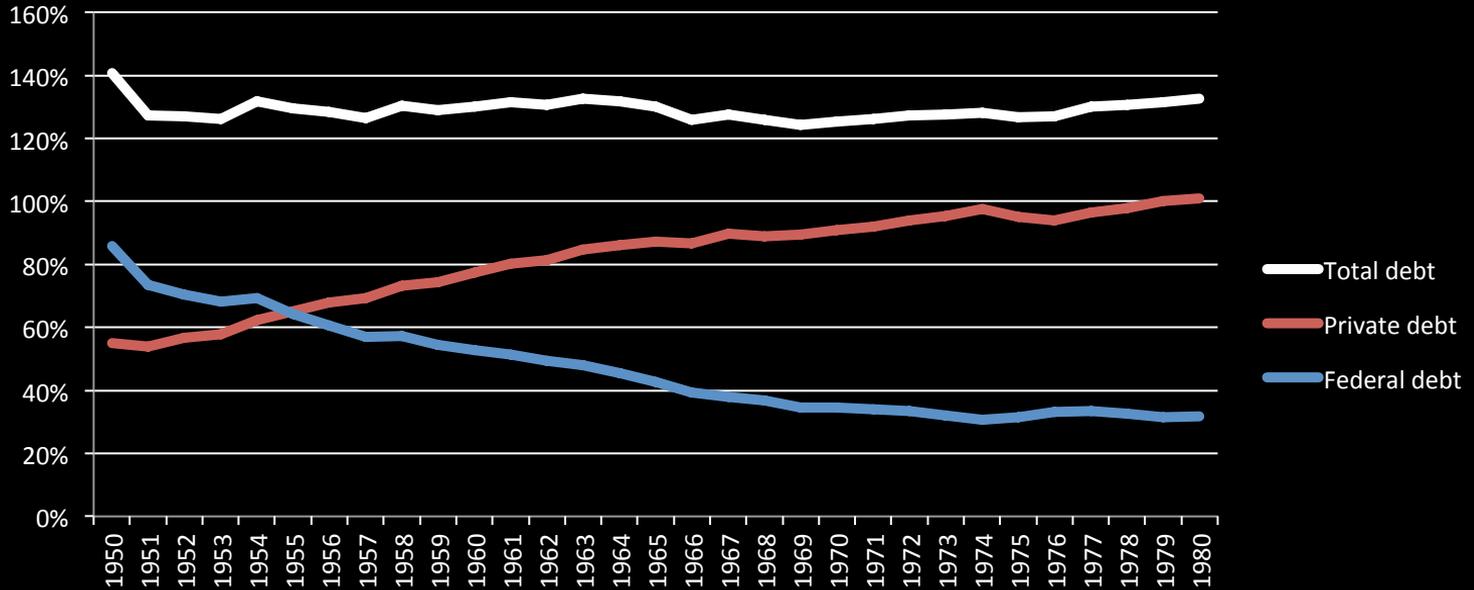
# Private Debt has the Largest Influence

- We address both private debt and public debt in this presentation
- But private debt is the bigger concern
  - Larger globally than public debt
  - Direct impact on business and household spending and investment
  - Private borrowers have fewer alternatives for repayment
- Private debt is more correlated to economic outcomes

# Deleveraging after World War II

## US debt to GDP

1950-1980

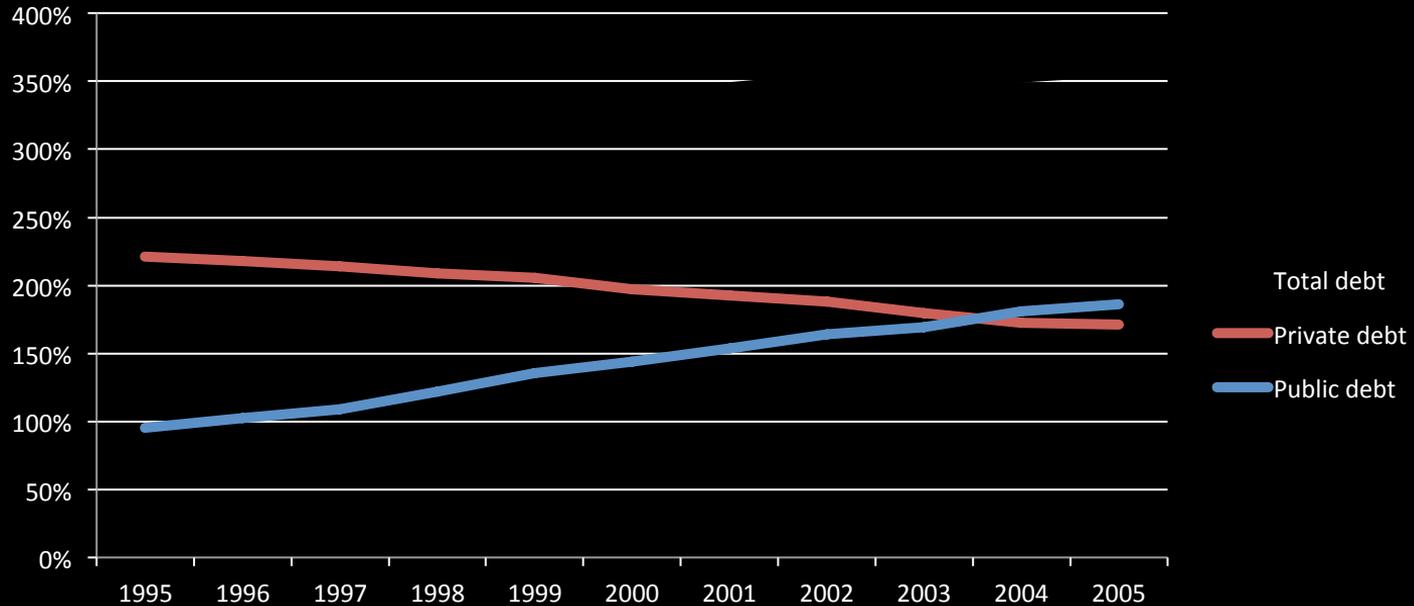


Sources- GDP- BEA; Public debt- US Treasury; Private debt- Federal Reserve

# Deleveraging after Japan's 1990s Crisis

## Japan debt to GDP

1995-2005



Sources- UN data, BIS, IMF

# How Has Deleveraging Been Achieved Historically?

Comprehensive Review of 47 Countries

91% of Global GDP

- 92 Instances since WWII at 10 percentage points in 5 years
- Deleveraging has occurred in three ways
  - Offsetting leverage – Faustian bargain
  - Very high inflation – High level of pain
  - Very high net exports
    - Creates imbalances
    - If large country, creates contention
    - Never occurred at necessary magnitude in U.S. history
- Could, but did not occur through growth

# Deleveraging of more than 10% points in 5 years

	Occurrences	Offsetting debt	High Inflation	High Net Exports
PUBLIC DEBT TO GDP	42	33	8	1
PRIVATE DEBT TO GDP	40	24	8	8
BOTH	10	-	6	4

# A Need For New Deleveraging Strategies

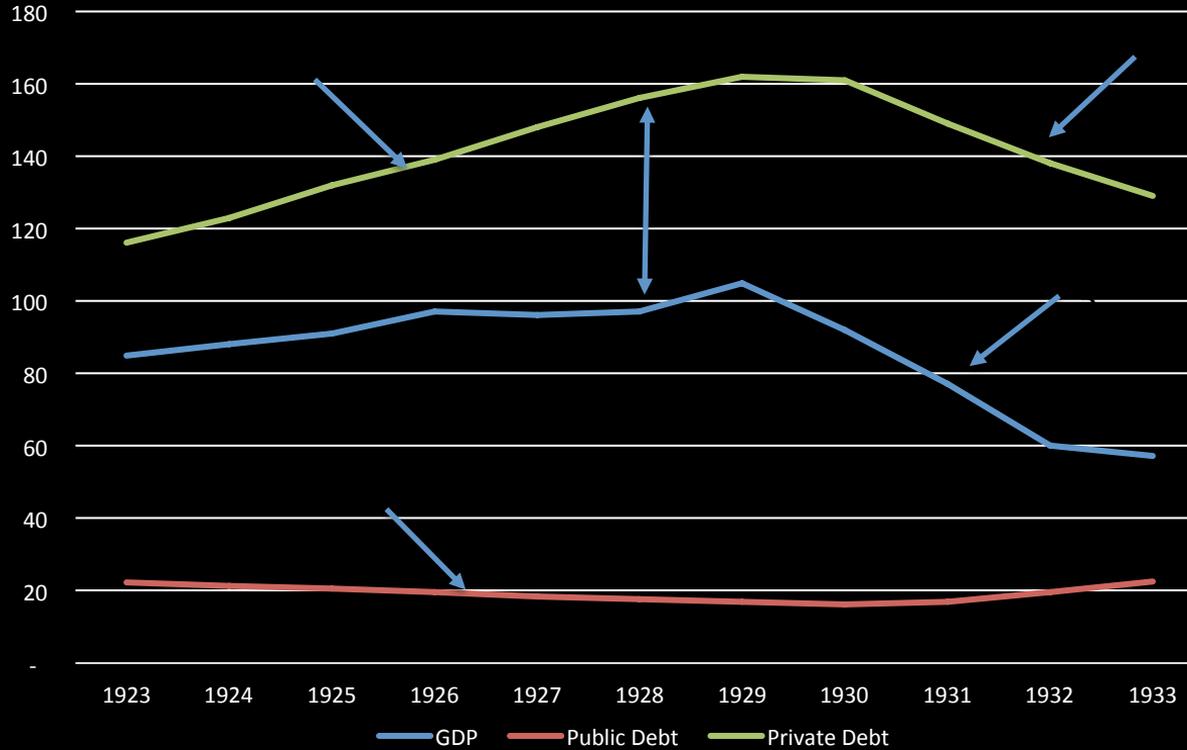
- Underwater Mortgages
- Restructure at level below CMV
- Borrower cedes part of future gain
- Lender dispensation to write off loss over 30 years
- “Debt for equity” approach

# Conclusion

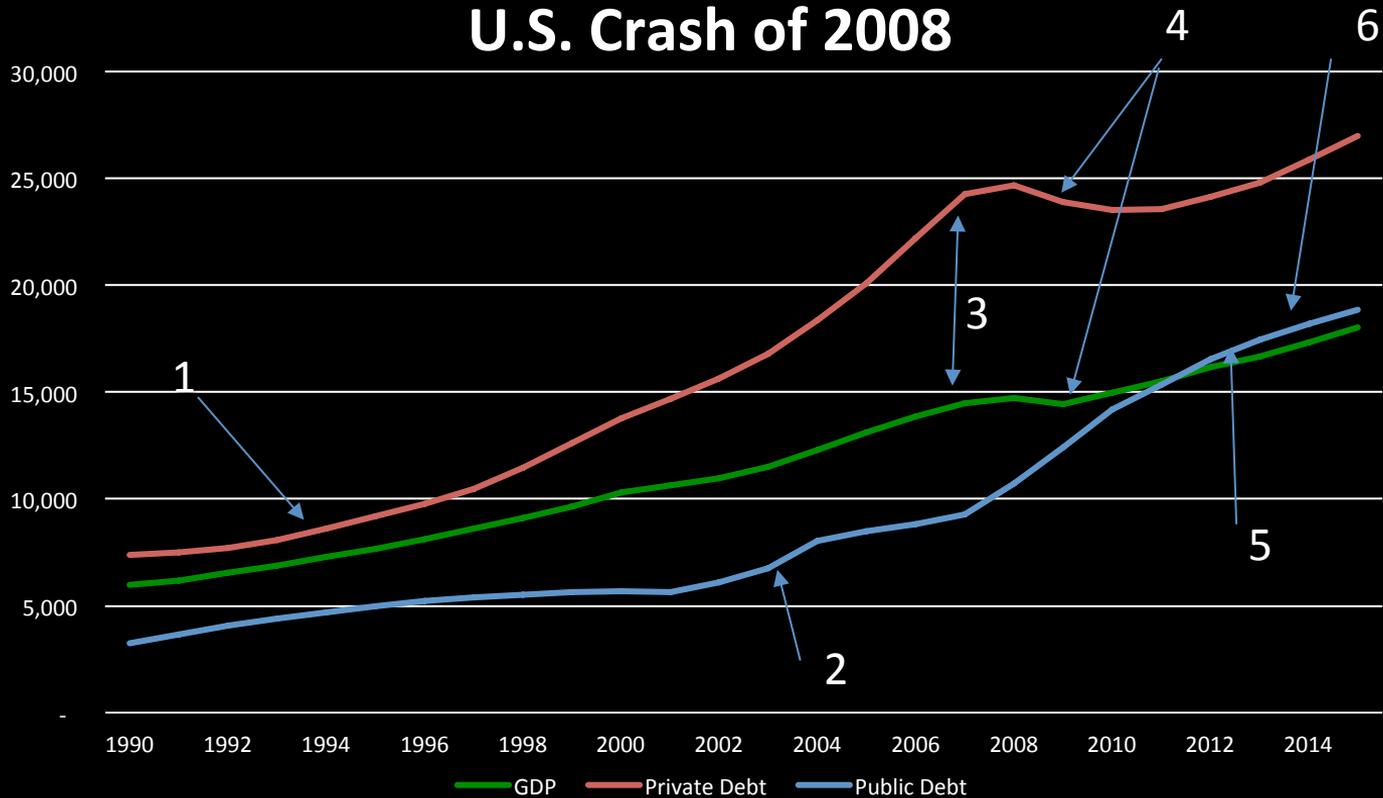
Not a panacea, but if high private debt ratio is central to the slow growth problem, and conventional methods of deleveraging are problematic, we need more substantive thinking about new approaches to private debt deleveraging.

# Appendix

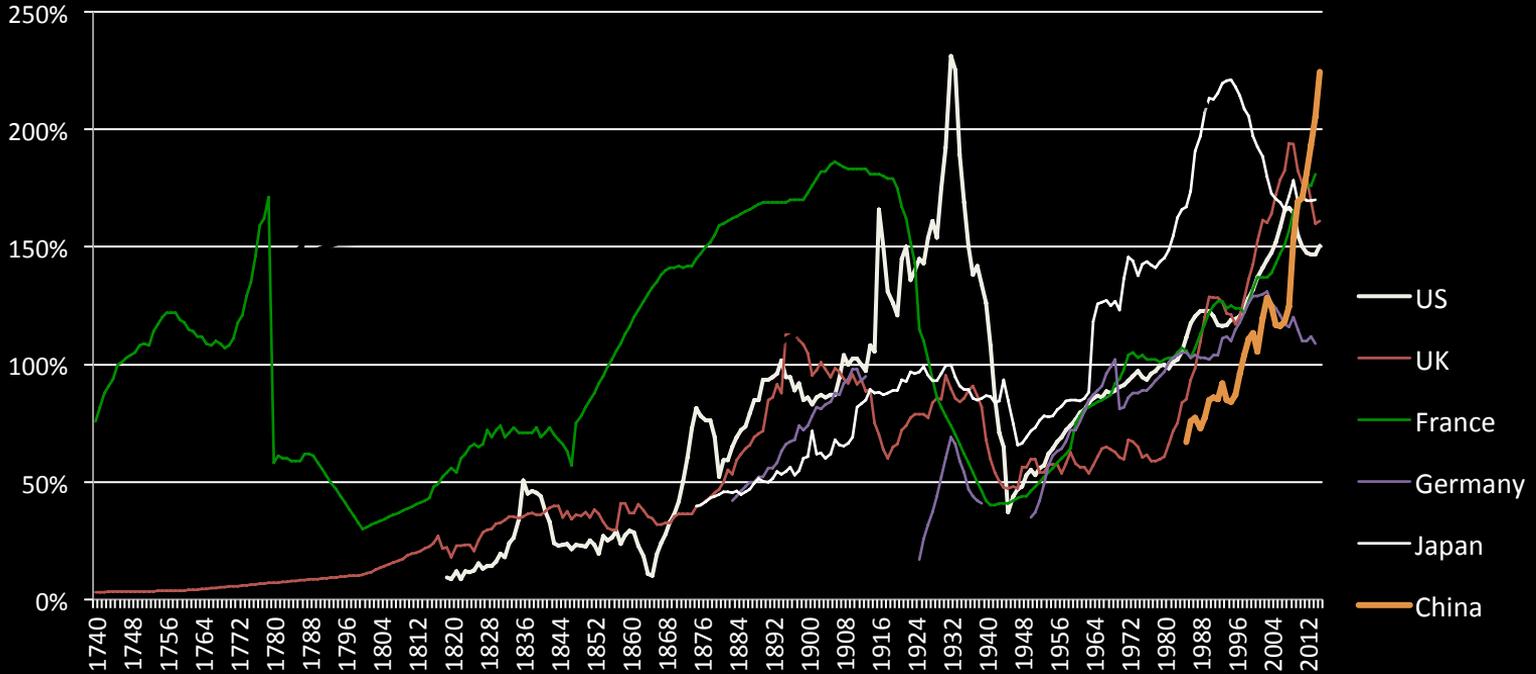
# U.S. Crash of 1929



# U.S. Crash of 2008



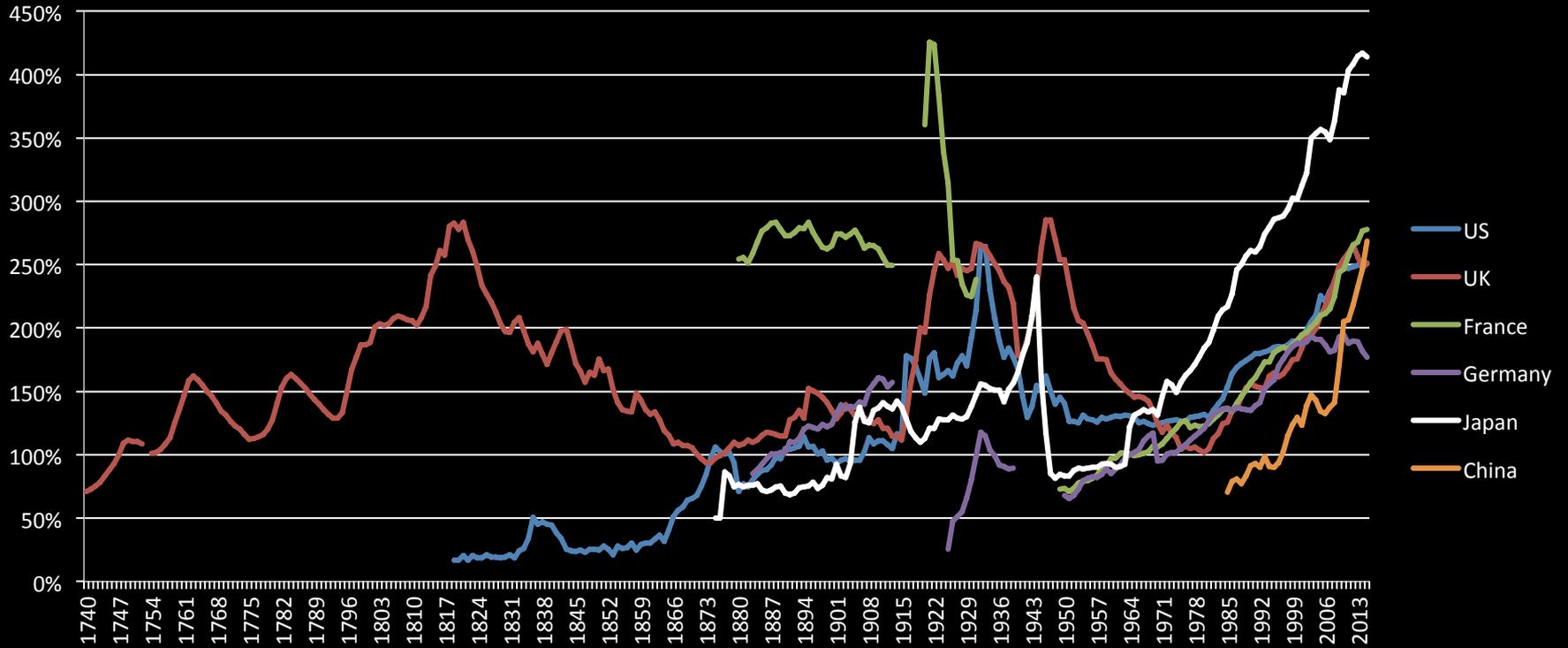
# Private debt to GDP 1740-2015



Sources- GDP- US Treasury; Mitchell; Measuringworth.com; UN data; Piketty&Zucman- Capital Is Back: Wealth-Income Ratios in Rich Countries 1700-2010, Oxford University Press; Goldsmith; World Bank.

Private debt- US Census; Goldsmith; BEA; Federal Reserve

# Total debt to GDP 1740-2015



Sources- CarmenReinhart.com, IMF, US Treasury