IS INDIA HEDGED AGAINST SYSTEMIC RISK? AN ATTEMPT AT AN ANSWER

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Acknowledgement: ISI, and my family

PREFACE

“... requirements for purity ... severely limit the questions that can be addressed, not to mention what can get published. Adhering to a purist position in the name of “science” makes economics irrelevant....”

(Gorton, Gary B., 2012)

“... the competition for reputation as "realists" works toward a condition in which students of society are loath to take a minority position.”

(Philbrook, 1953, “Realism” in policy espousal, AER)

“Overall, 86 per cent of the crises in emerging economies are crises with multiple *domestic* vulnerabilities…”

(Kaminsky, The New Palgrave Dictionary of Economics, vol 2, 2008, p. 347, emphasis ours)

- Work in progress
- Extensive but not comprehensive
- Brief on each aspect, and coverage is uneven
- Policy work based on basic secondary data (some shown here)
- It is analytical and not quantitative work; theoretical discussion minimized here
- Long-term policy suggestions - in isolation and in entirety
- Disproportionate reference to my own research

PLAN

- Risks (familiar and unfamiliar)
  (1) Asset markets (stocks, real estate and gold)
  (2) Banks
  (3) Fiscal deficit
  (4) Current account deficit
  (5) Inflation

- Mitigating factors
  (a) Financial repression in banks (costly)
  (b) Unanticipated jumps in inflation rate (costly)
  (c) Somewhat regular bail-outs (costly)
  (d) Misplaced confidence (unreliable 'hedge')
  (e) Growth (camouflage)

- Policy (old and new)

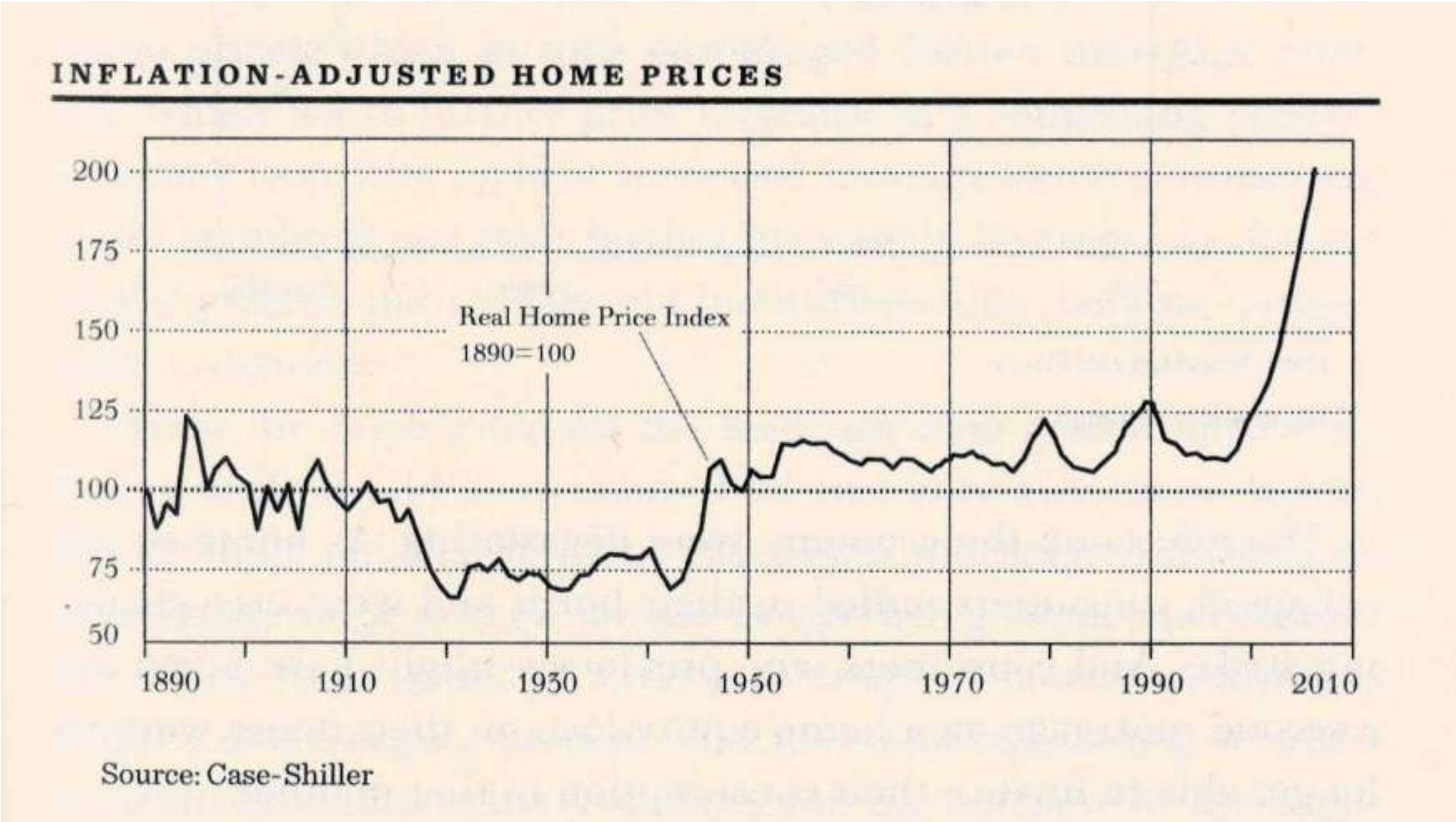
THE STOCK MARKET

Trailing P/E = 17
Forward P/E = 13.5
Trailing P/B = 3
Market cap/GDP = 0.64
Dividend yield = 1.54

and given other data (including *leverage*) for the present and the past,

the stock market prices on average appear ‘stable’ at present from the viewpoint of systemic risk

some concern
(a) operational risk
(b) possible pull-out by FIIs (more later)


INFLATION-ADJUSTED HOME PRICES
200
175
150
125
100
75
50
Real Home Price Index
1890=100
1890
1910
1930
1950
1970
1990
2010
Source: Case-Shiller

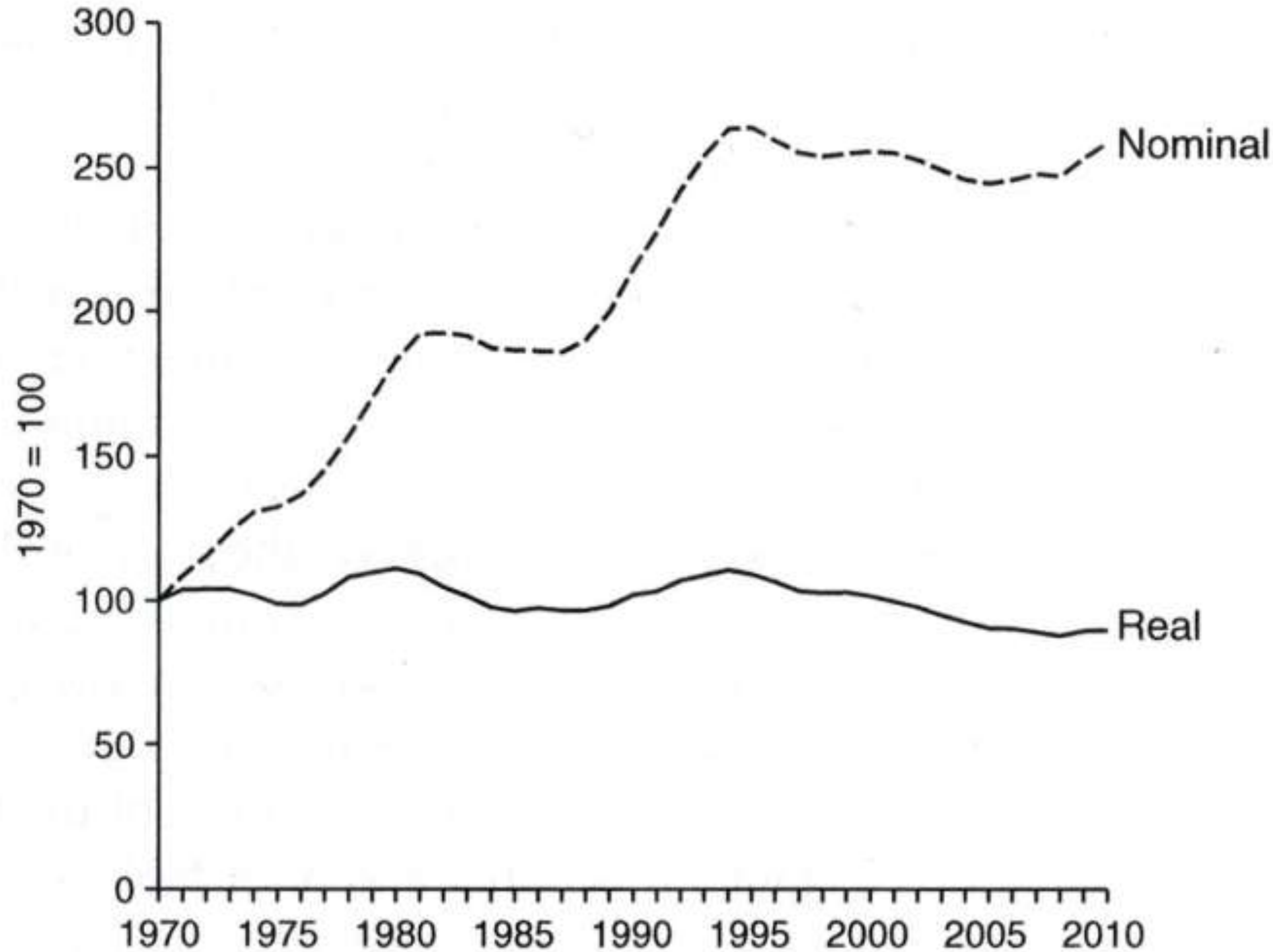


Figure 7.2. Nominal and real German house prices, 1970–2010.
Data source: OECD.

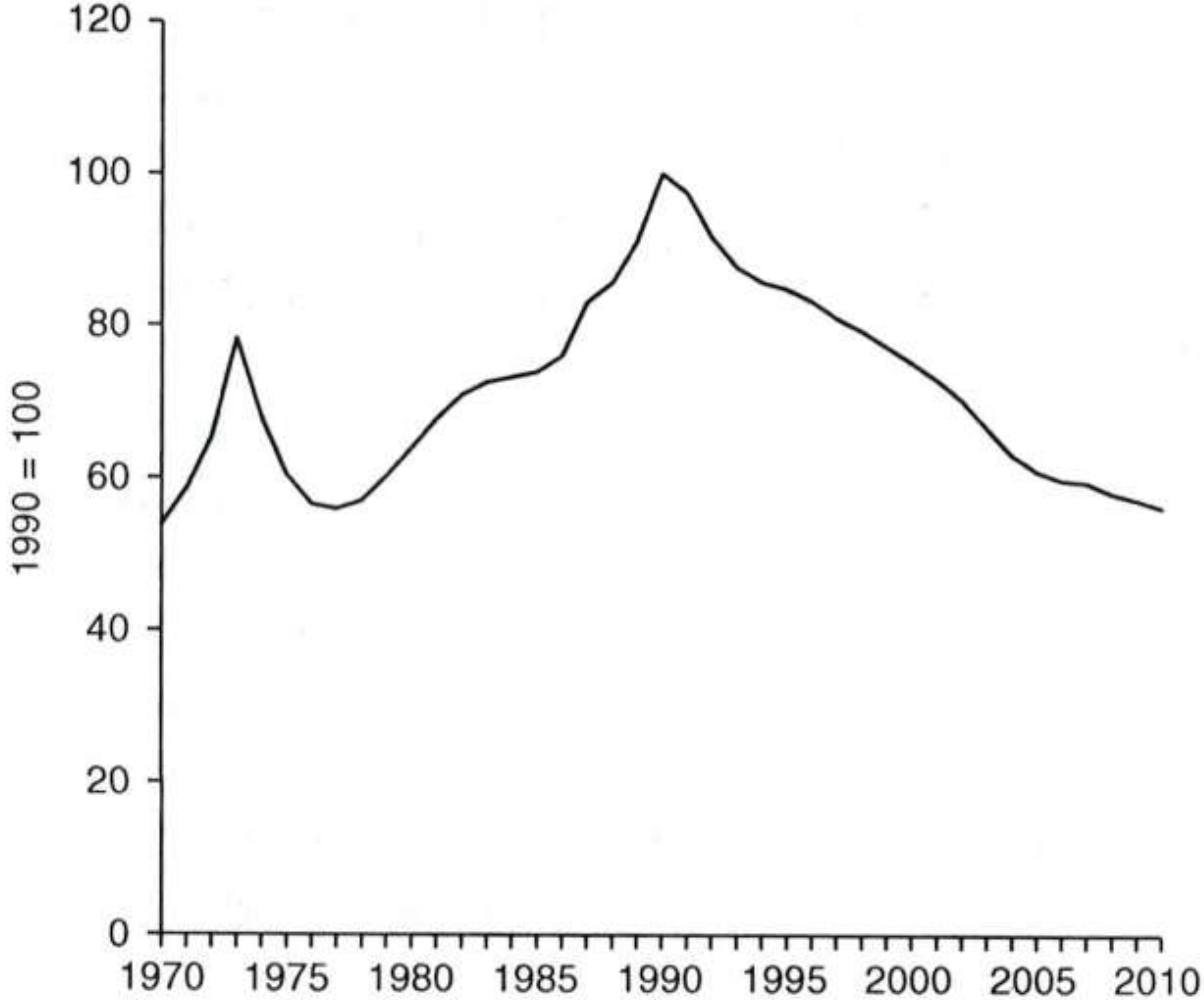


Figure 8.1. Real house prices in Japan, 1970–2010.
Data source: OECD.[3]

REAL ESTATE MARKET

- ‘Housing is the largest part of a household’s portfolio.’ (Haliassos, 2008)

  Ratio of house price to (cost of construction + opportunity cost of land)

  after adjusting for location

- Real estate prices seem to be high in some parts of India relative to

  (a) ‘fundamentals’,

  (b) prices in other parts of India, and

  (c) prices in many parts of the world.

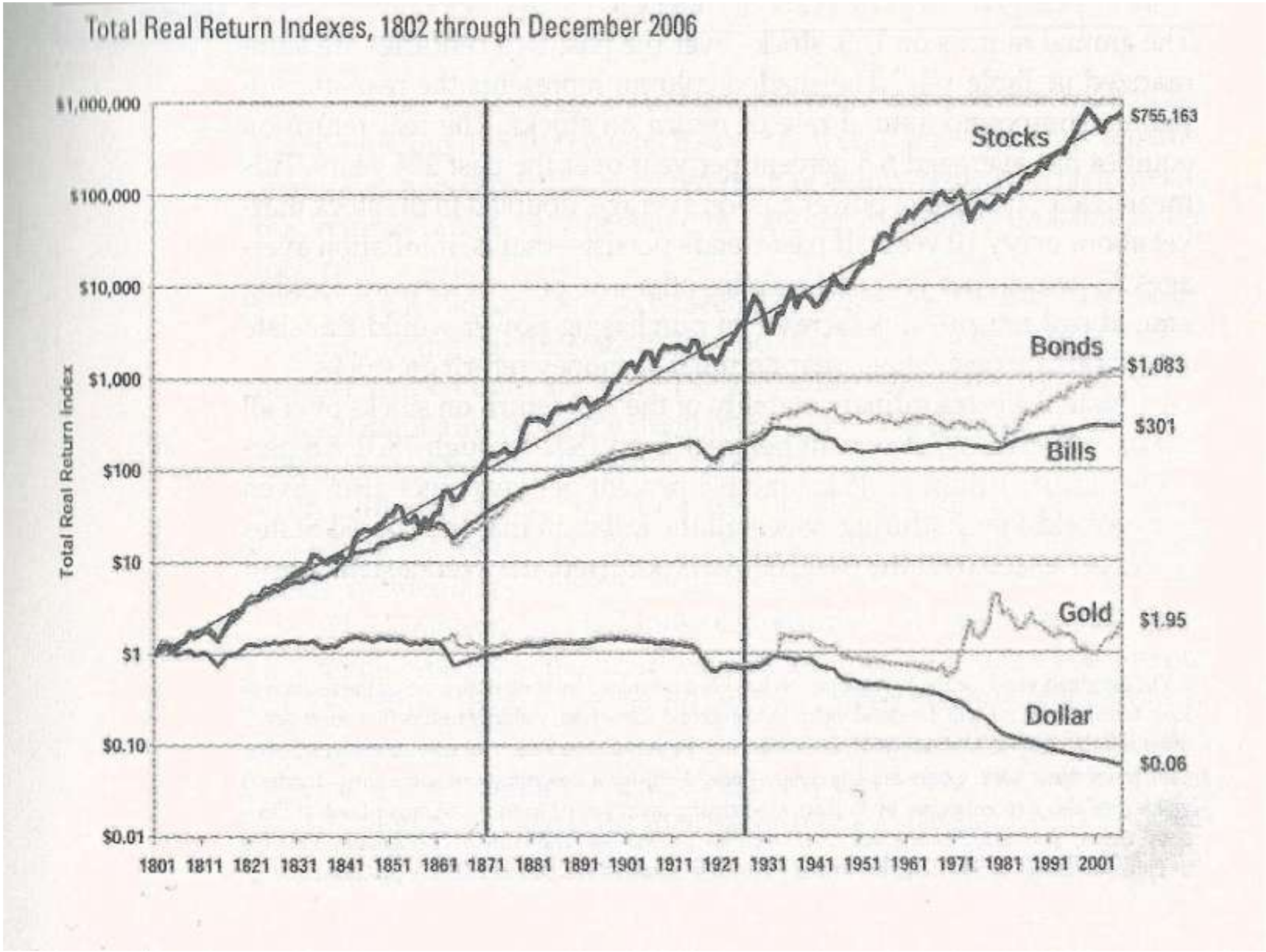
- Little diversification

GOLD DEMAND IN INDIA

Gold - an important asset in India

'…households' gold holding … matches the total savings … in the Indian banking sector' (Purfield, 2007)

RBI purchased 200 metric tonnes of gold from IMF during October 19-30, 2009 for Rs 31,490 crore ($6.7 billion)


Total Real Return Indexes, 1802 through December 2006
Total Real Return Index
$1,000,000
$100,000
$10,000
$1,000
$100
$10
$1
$0.10
$0.01
1801 1811 1821 1831 1841 1851 1861 1871 1881 1891 1901 1911 1921 1931 1941 1951 1961 1971 1981 1991 2001
Stocks
$755,163
Bonds
$1,083
$301
Bills
Gold
$1.95
Dollar
$0.06

BANKS

- Banks – NPAs (and low ratings of banks)
- About 24-29% of bank funds in government bonds with low rating

  (Moody's rating: Baa3, outlook negative)

  However, the risk in G-secs is often not recognized. So bank capital actually inadequate.

- If government defaults, possible banking crisis
- If government redeems with RBI help, possible inflation crisis

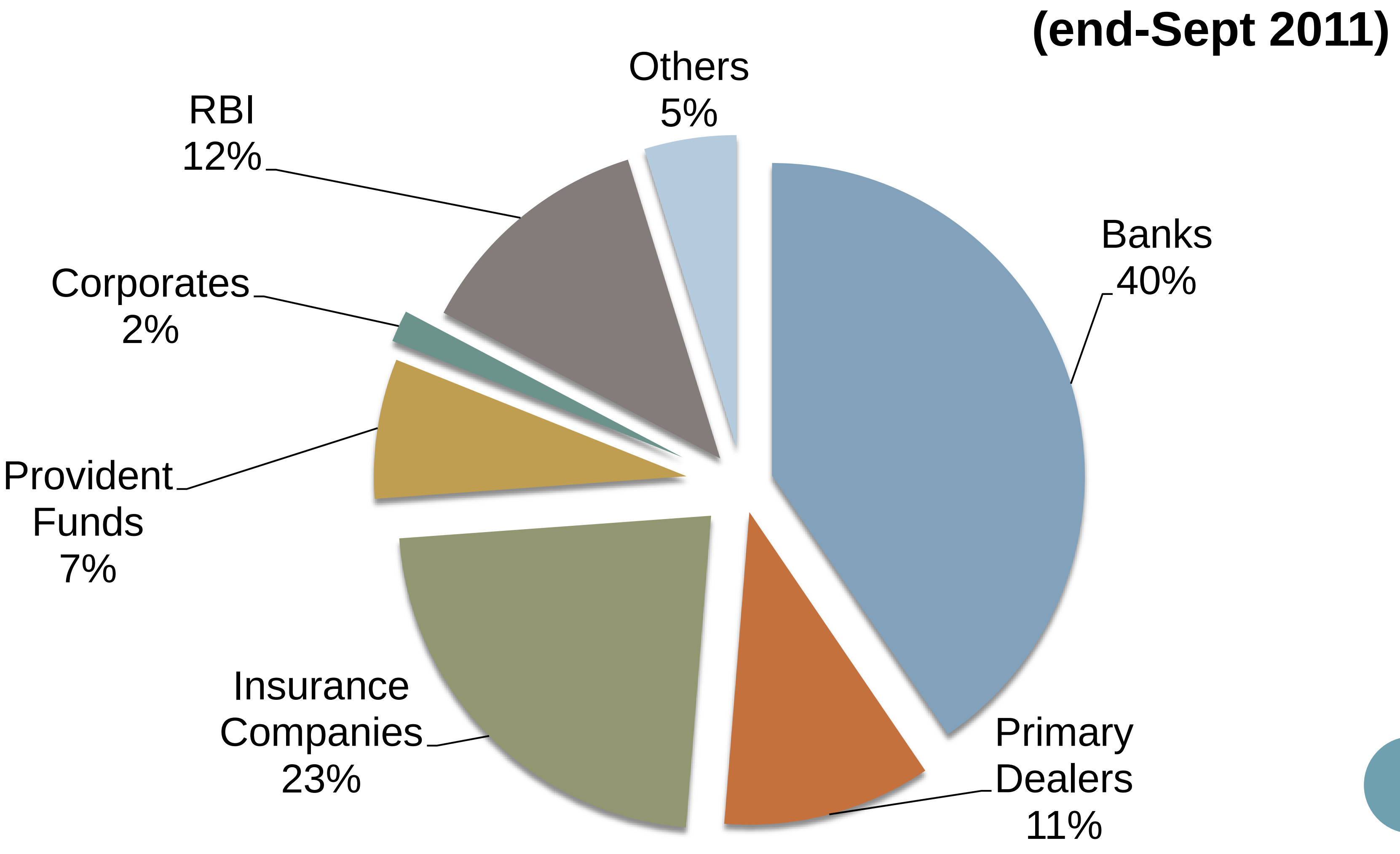
  (Cochrane (2010) in the US context)

GOVERNMENT-BACKED BANKS, AND BANKS-BACKED GOVERNMENT

- Government-backed banks –
  government deposit insurance,
  government capital in banks,
  government control of many banks, and
  regulation and supervision of banks.

- Banks-backed government –
  SLR requirement (implicit in Gupta et al., 2010)*.*

Holding Pattern of G-Sec



Stylized bank balance sheet

Assets	Liabilities
Loans	Deposits
Cash	Capital (private)
Government bonds	Capital (government)

FISCAL SITUATION

- Deficit/GDP ratio high
- Debt/GDP ratio not alarming

- However, other measures (Reinhart-Rogoff, 2009)
  debt/revenue ratio is quite high
  deficit/revenue ratio is quite high

Early 2010

	Greece	India
Debt-GDP ratio	1.08	0.60
Tax-GDP ratio	0.335	0.177
Debt-tax ratio	3.23	3.40

INFLATION RISK

- Given the past record, hardly any serious high inflation risk in India

  (above 20% pa cut-off (Reinhart and Rogoff, 2009))

- However, amongst ‘inflation sensitive’ nations, inflation is high and variable in India
- Implications for financial and non-financial savings, and insurance

Current account deficit

- Current account deficit is high
- Capital account surplus is partly due to volatile capital inflows by FIIs
- Volatile capital flows are 81.3% of reserves in June, 2012 (RBI FSR, December, 2012, p. 10)

- Though FII pull out is unlikely, it cannot be ruled out.

Mitigating factor I: Banks: Protection and Repression

- Good policies
- Public sector banks (PSBs) stable in 2007-09 but PSBs had guarantee from government (Acharya et al., 2010)

- The SLR requirement provides a captive market for government bonds

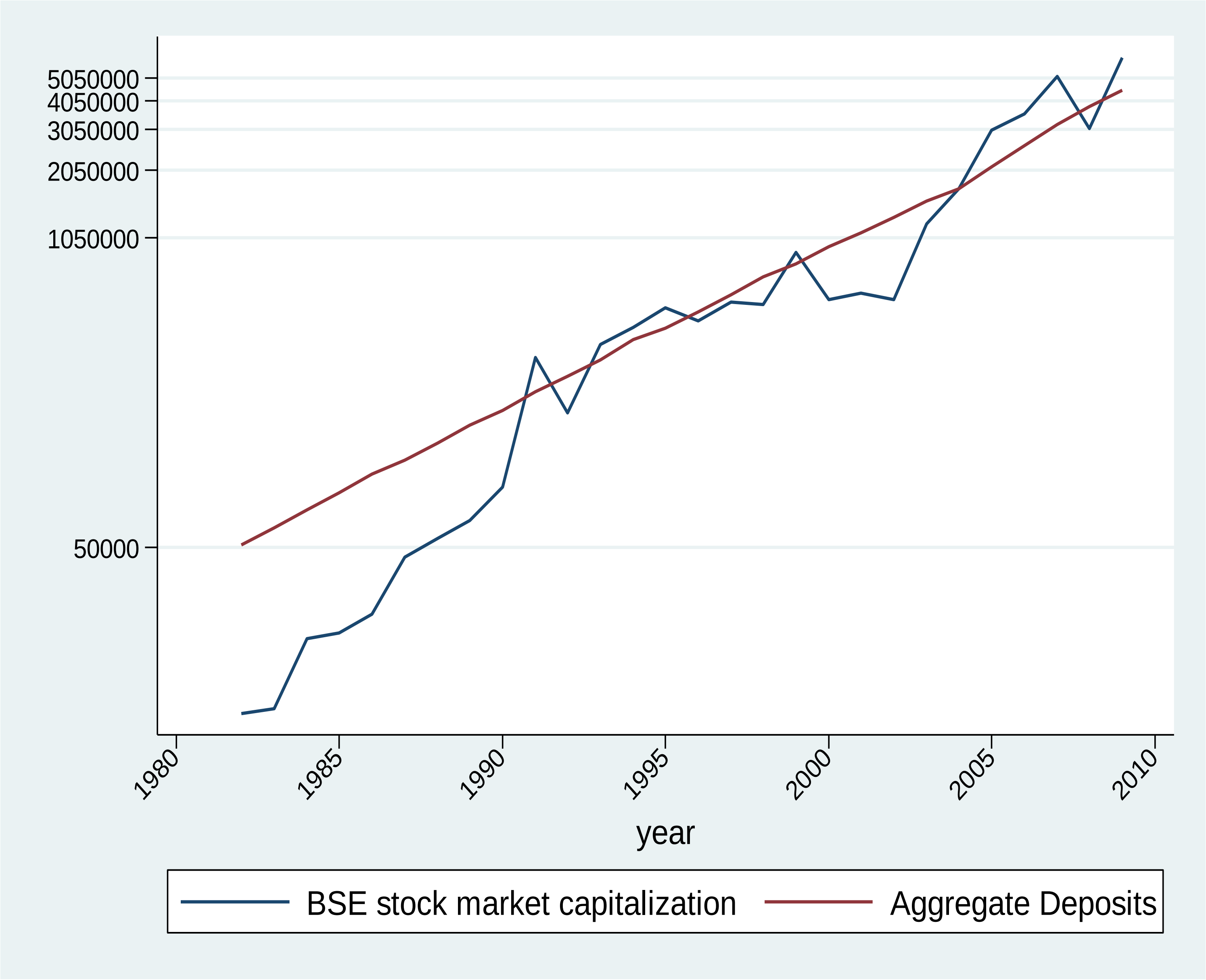
- Interest rate on GOI bonds is not truly market determined.

- However, the SLR requirement has a persistent cost as

  (1) bank credit shrinks, and emerging firms lose (less growth)

  (2) capital market acquires greater role (more volatility)

  (3) real assets acquire importance (less productive)


5050000
4050000
3050000
2050000
1050000
50000
1980
1985
1990
1995
2000
2005
2010
year
BSE stock market capitalization
Aggregate Deposits

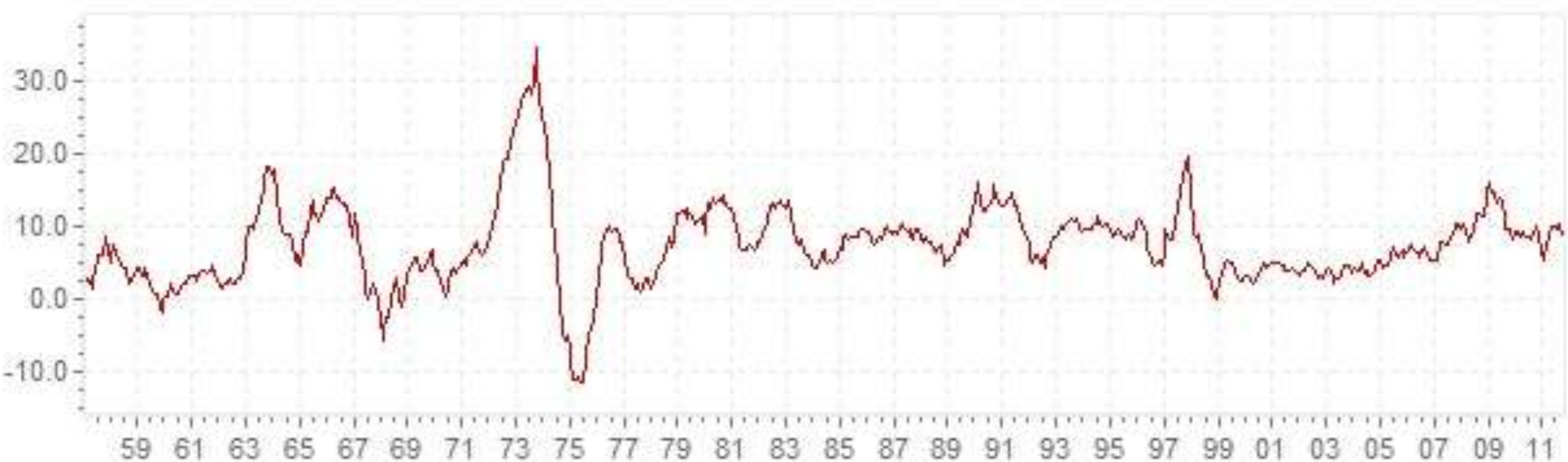
Mitigating factor II: Inflation

- Unanticipated jumps in inflation

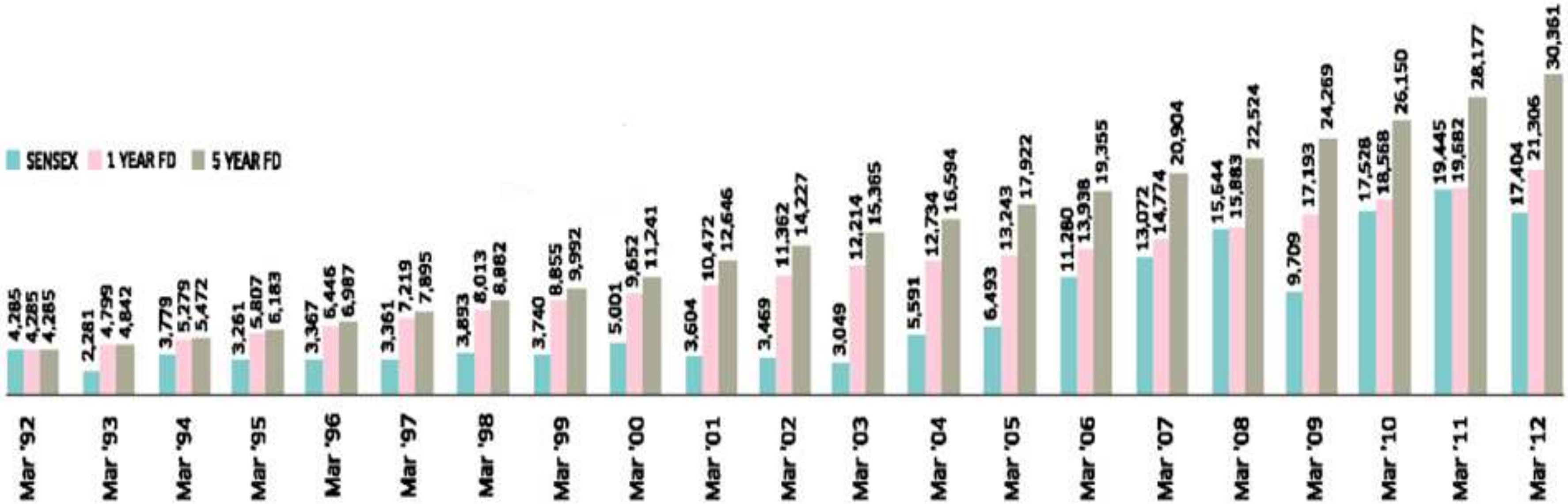
  1963-64, 1973-74, 1979-80, around 1990, 1997-98, around 2009

- Default on debt in real terms due to jump in inflation

Historic CPI inflation India (yearly basis)



Source: http://www.inflation.eu/inflation-rates/india/historic-inflation/cpi-inflation-india.aspx



Source : Economic times

Mitigating factor III: 'Ex-ante' bail-outs

- Airline companies (so a GM kind of situation does not arise)
- Loan waiver (so foreclosure kind of situation does not arise)
- LIC buys shares of public sector undertakings (PSUs) (so stock market crash related to PSUs pre-empted)
- restructuring of bank loans (this shows up as less NPAs)
- barriers to entry into banking (more profits for existing banks)

- These kinds of bailouts pre-empt financial crises but these have an opportunity cost.

Mitigating factor 4: Misplaced confidence

- There is considerable confidence in banks in India due to government backing.
- However, the general public does not ask whether or not the government itself is financially strong. So misplaced confidence.
- Though confidence useful for macro-financial stability, it is not a reliable ‘hedge’ against systemic risk.

Mitigating factor IV: Economic growth

- The growth rate is high in India by international and historical standards. This helps.

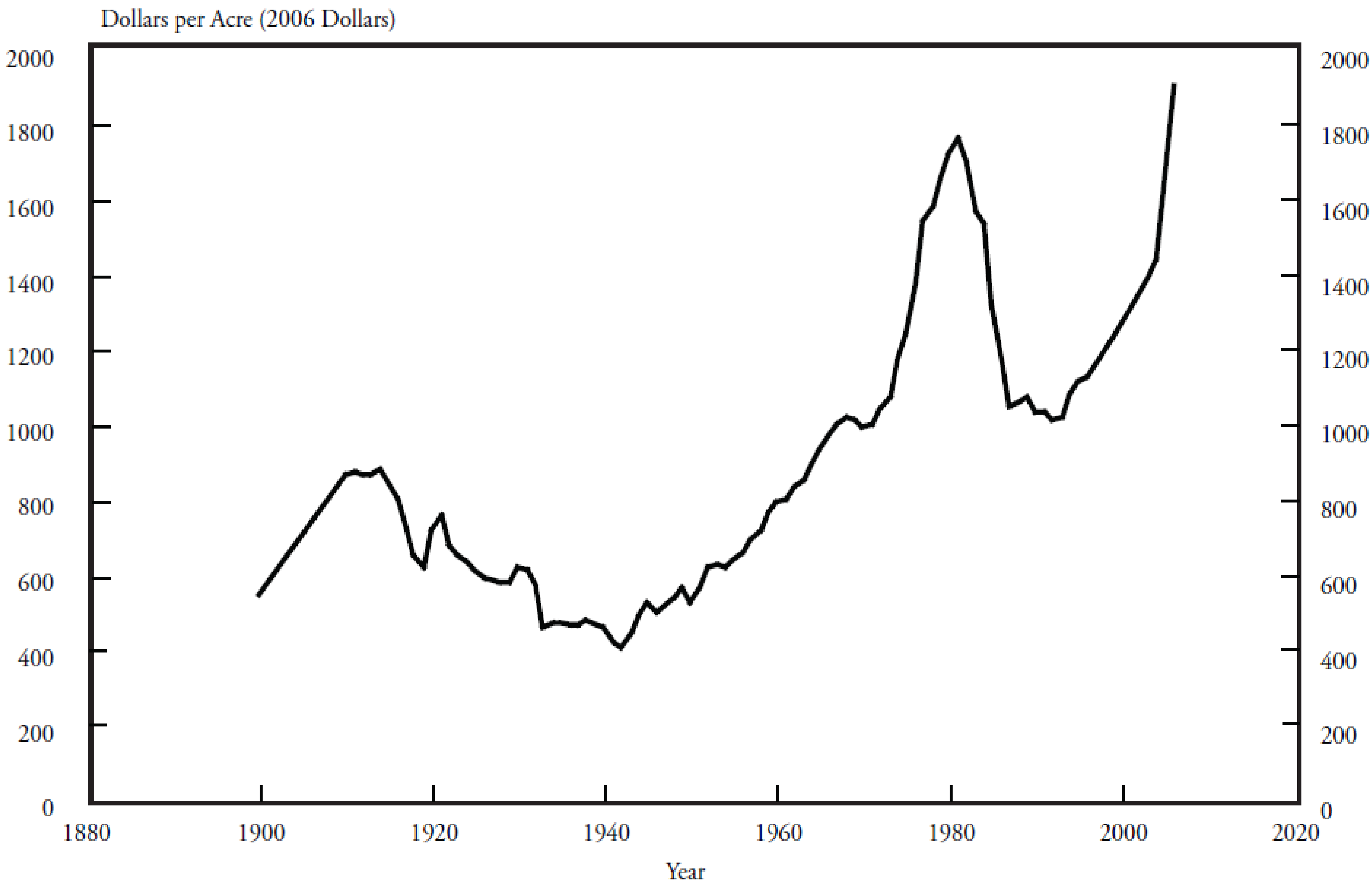
  e.g. growth can lower debt/GDP ratio over time

- Growth can be a camouflage for weaknesses.
- However, if growth rate drops, there can be a vulnerability.
- In any case, growth can be higher still in the absence of vulnerabilities and the need to take care of these

POLICY – ASSET MARKET

- Behavioural finance (Keynes (1936), Shleifer (2000), and so on)
- Sentiment of ordinary investors directly or indirectly
- A new paradigm - *prescription portfolio choice* (Singh (2009), Basu (2010))
- An analogy – medicine
- Patients obtain a prescription from *medical practitioner*
- Similarly, investors can be required to obtain *prescription* from competent, independent, qualified, and licensed *finance practitioners*
- Need to expand and improve finance education in India
- Financial inclusion of (a) the poor, and (b) the wary.

Real farmland values, in U.S. 2006 dollars, per acre, decadal 1900-1910, annual 1911-2006



Policy - Gold

- Let the RBI set an example, not buy gold, and even sell gold
- Education, and public awareness – a long term campaign
- Do away with some practices e.g. gold, silver and bronze medal
- Indexed bank deposits, indexed government bonds and gold bonds

Policy – real estate

- “Given inelastic supply, real estate prices rise due to
  rising population,
  rising incomes,
  rising urbanization, and
  rising black money.”

- This argument is exaggerated, if not incorrect.

Home Prices and Local Land-Use Regulation

Policy – real estate (supply side)

- Urban land area accounts for only 2.6% of total land area in the US.' (Shiller, 2009, p. 73)

- Need to build entirely new large urban centres

- It is possible to increase supply in the medium to long run with

  (1) investment in infrastructure,

  (2) increase in licenses for more projects, and

  (3) relaxation of requirements such as FAR (at least in the new projects),

  (Glaeser and Gyourko(2008), Shiller (2009))

- Prices can stop rising and can even fall gradually in some places.

Fiscal policy and macroeconomic stability

- Check tax exemptions and tax evasion (black money at 30% of GDP, Report (2012))
- Improved targeting of subsidies for priority sectors

  (this over time reduces the need for *priority sector lending* by banks)

- Reduce deficit
- Increase tax/GDP ratio and have a meaningful welfare state
- This can reduce the need for other forms of mixed economy

  (PSUs, PSBs, licensing, and direct intervention in several markets)

- Gradually create 'fiscal space'
- Use *extended fiscal policy* for macro-financial stability

  This includes overcoming zero lower bound on interest rate (Singh, 2012)

- Gradually lower SLR
- Government can borrow in a truly free market

Monetary policy

- Given *extended fiscal policy*, meaningful to have *narrow monetary policy*

- Inflation targeting
- Take care of financial stability

POLICY – CURRENT ACCOUNT

- Large current account deficit and volatile capital flows by FIIs

  Need for appropriate policy

  Check insider trading by FIIs
  Allow Indians to invest through foreign funds
  Expand and improve finance education in India
  Meaningfully allow Indians to invest abroad
  Reduce corruption and other scary events
  Encourage Indians to buy, if FIIs panic and leave suddenly

  Buy a credit line (Singh, 2012)

POLICY - BANKS

- Capital

  Phase out *ordinary capital* from PSBs, *and*

  bring in ex-ante *contingent capital* explicitly to all banks (Kashyap et al., 2008)

- Liquidity

  At present, the RBI acts as the lender of last resort to *banks*.

  Possibly *constructive ambiguity*.

  Alternatively, RBI can

  sell a credit line to *all financial institutions* for a fee,

  examine ex-ante and monitor continuously and

  unambiguously provide funds in a crisis.

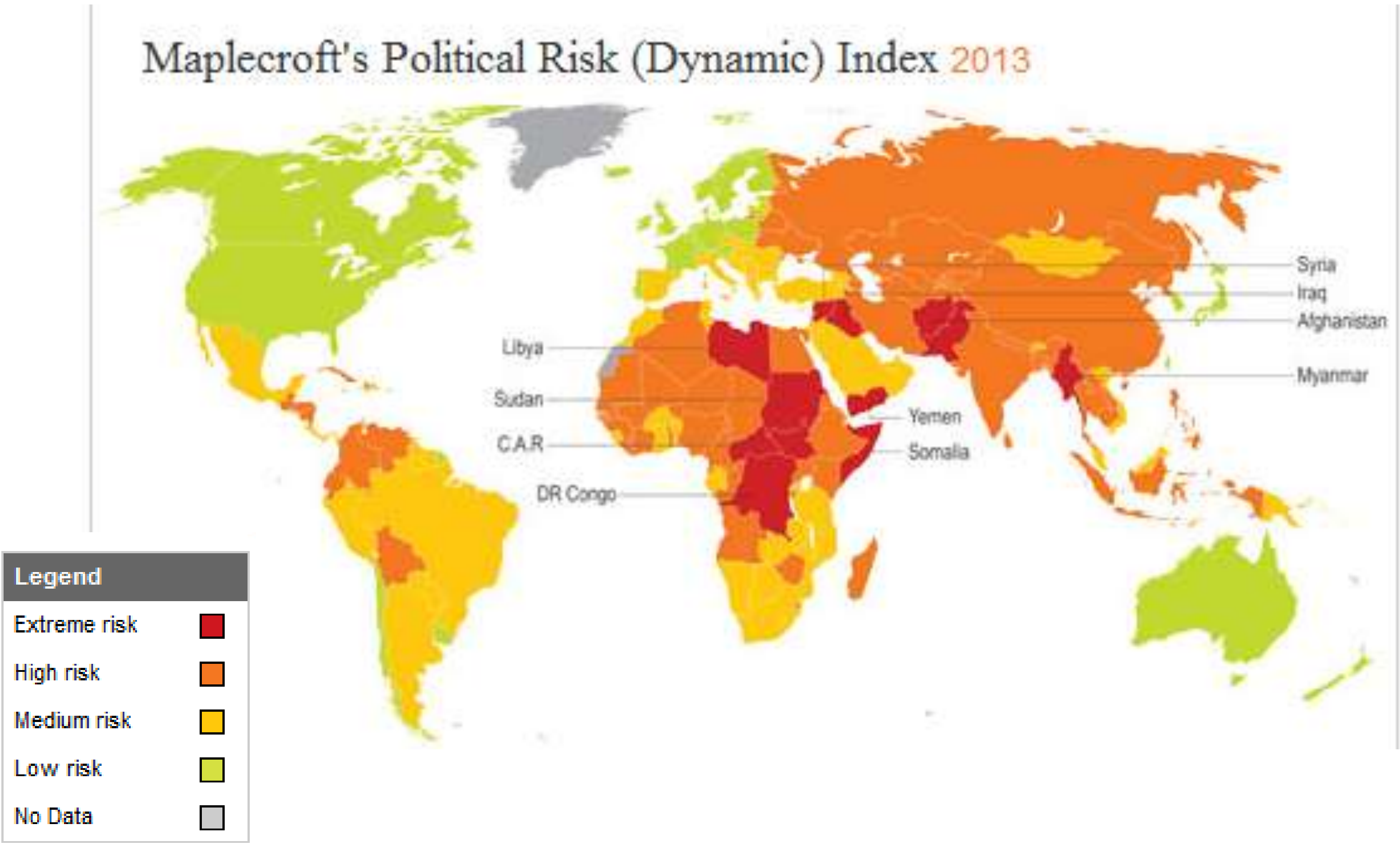
Appropriate regulation in banks

	Regulation needed	Regulation not needed
Regulation in place		Financial repression
Regulation not in place	Lacunae in regulation	

Decrease
(1) SLR, given a better fiscal situation,
(2) CRR, given capital adequacy, and credit line from the RBI, and
(3) priority sector lending, given subsidies for the priority sector.

Increase
Bank licenses (for non-industrial business houses).

POLITICAL RISK



SUMMARY ON ECONOMIC POLICY

- Fiscal correction
- Phasing out financial repression in banks
- Credit line from the IMF or elsewhere
- Reducing license-permit-quota raj in real estate
- Prescription portfolio choice
- Low and stable inflation rate
- Phase out regular bailouts

- Strengthen and expand macro-finance education and research

Concluding remarks

- Macro-financial stability in India over last 20 years or so
- There is a need to move to macro-financial stability without
  (1) financial repression
  (2) jumps in inflation rate
  (3) frequent explicit or implicit bailouts

- Need for resistance to a change in
  (a) confidence
  (b) fall in growth rate

Thank you ☺