



Perils of Pauline:

How to Prevent the Economy from Blowing Up Finance
and Finance from Blowing Up the Economy

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Perils of Pauline

We have met the enemy
and they are us

Perils of Pauline

Stability destabilises

This is the key idea of Hyman
Minsky

Perils of Pauline

- An uncertain world
- Dangers of finance
- Reducing fragility

1. An uncertain world

- The distinction between risk and uncertainty

- The world has a bit of both, but in important respects, it is uncertain rather than merely risky

- That is to say, the world is, in important respects, not amenable to computation

- Three areas of risk

- Risks in the outside world

- Risks in the outside world caused (or partly caused) by humanity

- Risks within human-created systems

1. An uncertain world

- Risks in the outside world:
 - Meteor strikes, earthquakes, volcanic eruptions, natural climate change, and so forth
- Risks in the outside world caused by humanity:
 - Pandemics; over-exploitation of natural resources (e.g. climate change)
- Risks within human-created systems
 - Industrial accidents, nuclear power, pharmaceuticals, etc
 - Financial crises, recessions and depressions
 - Social breakdown, conflict, war (some of this due to

1. An uncertain world

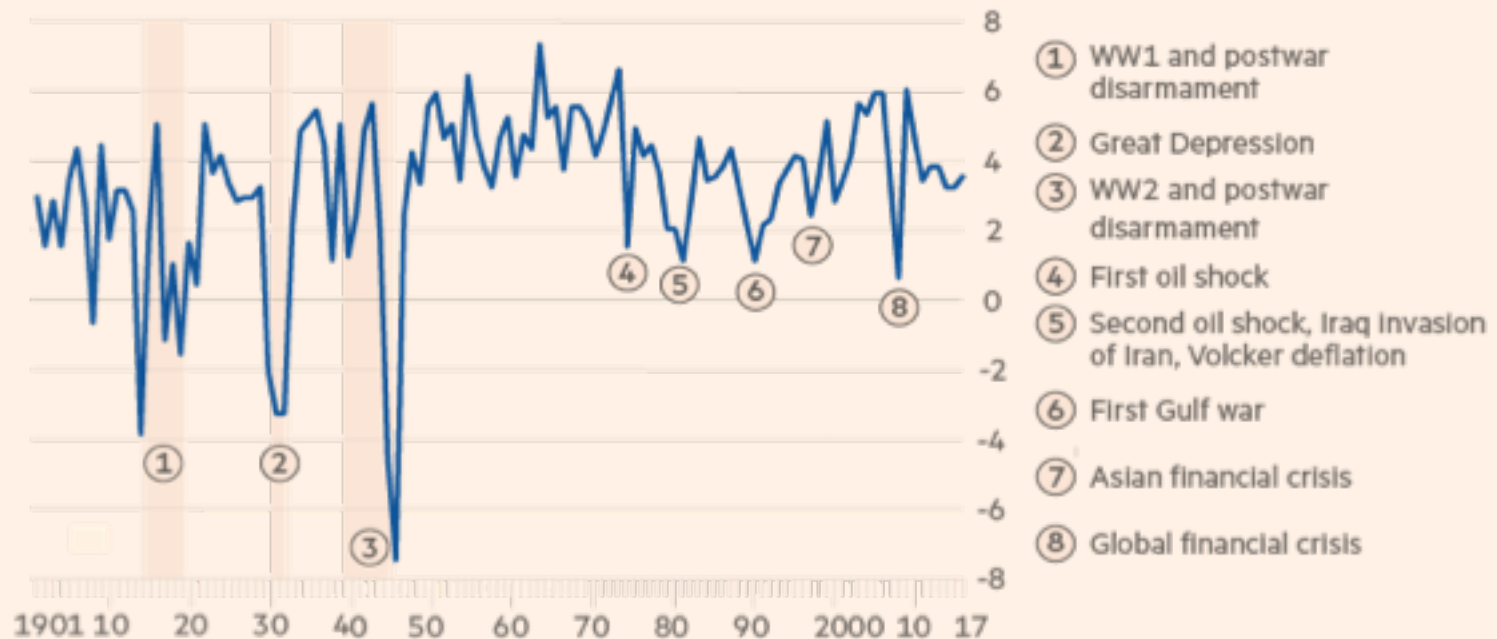
- The second two categories are the major threats today
- In other words, we need to look in the mirror when we talk about risks and uncertainty
- Since 1900, only two sorts of events have had a large effect:
 - Wars - the two world wars and the first and second oil shocks of the 1970s
 - Financial crises - especially the Great Depression and the Great Recession
- Other large risks may be human-caused natural disasters, such as pandemics and climate change and the latter also affects financial risks

1. An uncertain world

WHAT HAS A BIG ECONOMIC EFFECT

Big disruptions have been rare since WW2

Growth in world GDP at purchasing power parity (%)



Sources: Angus Maddison; Conference Board
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2. Dangers of finance

- Financial crises are among the biggest threats to our economies. They are frequent and devastating
- Crises are due to the inherent fragility of complex debt-based financial systems, particularly ones with highly-leveraged intermediaries (notably banks)
- More important still, the system creates cycles endogenously
- Financial instability is *not* just a consequence of economic shocks; it is a *cause* of economic shocks

2. Dangers of finance

- 147 individual national banking crises occurred between 1970 and 2011
- These crises were colossally expensive, in terms of lost output, increased public debt and, not least, political credibility.
- Within just three years from 2007, cumulative output losses, relative to trend, were 31 per cent of gross domestic product in the US.
- In the UK, the recent crisis imposed a fiscal cost only exceeded by the Napoleonic war and the two world wars.

2. Dangers of finance: crises

CRISES COME LIKE BUSES

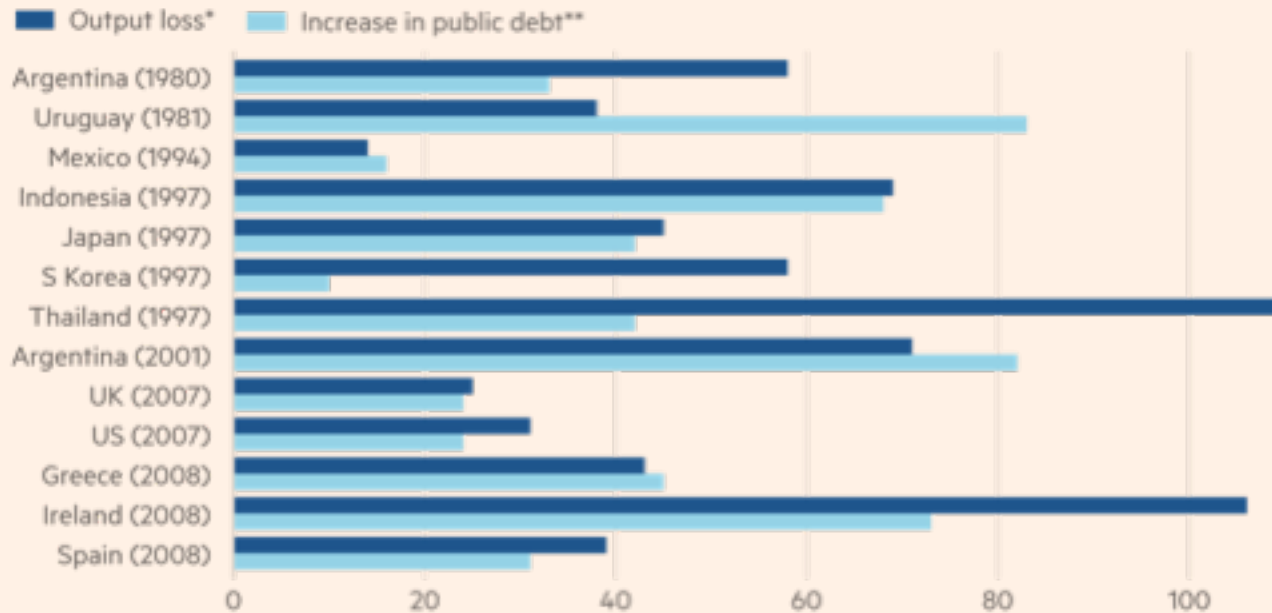


2. Dangers of finance: crises

THE COSTS OF CRISES ARE HUGE

They also create huge economic and fiscal costs

Change in output and debt after banking crises (% points of GDP)



Start of crisis in brackets * Cumulative difference between actual and trend GDP, three years after start of crisis ** Change between year prior to crisis and third year after the crisis

Source: IMF Systemic Banking Crises Database

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2. Dangers of finance: endogenous risks

- Minsky financial cycle:

- displacement, boom, euphoria, profit taking, and panic (the Minsky moment)

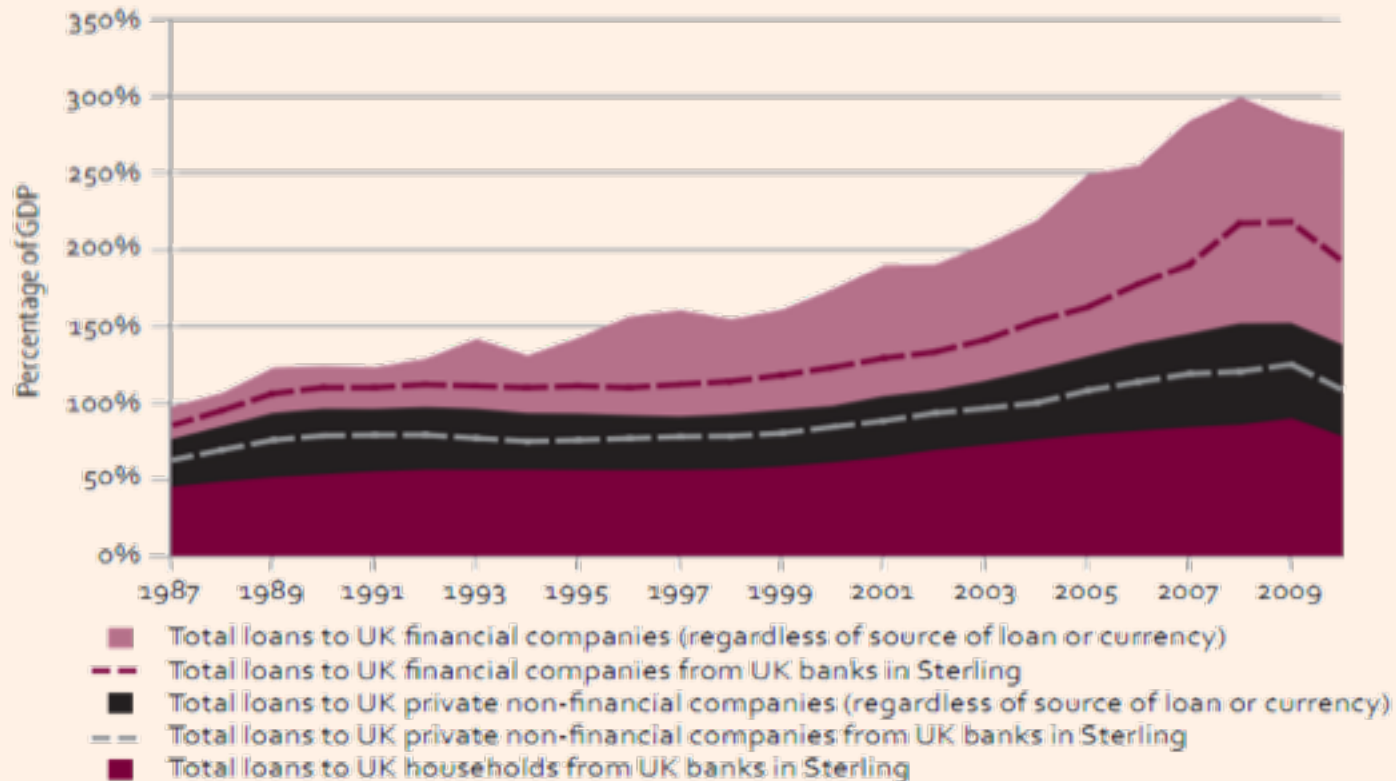
- Minsky borrowing cycle:

- Hedge finance: the borrower can afford to repay both the initial principal and the interest.
- Speculative finance: the borrower can only afford to pay the interest. Usually this loan is against an asset which is rising in value.
- Ponzi finance: banks make loans to firms and households that can afford to pay neither the interest nor the principal. Again this is underpinned by a belief that asset prices will rise.

- Crucially, the financial sector creates credit. This is particularly true of the banking system, which creates money as a by-product of lending – and money is ultimately protected by the state (mainly via the central bank)

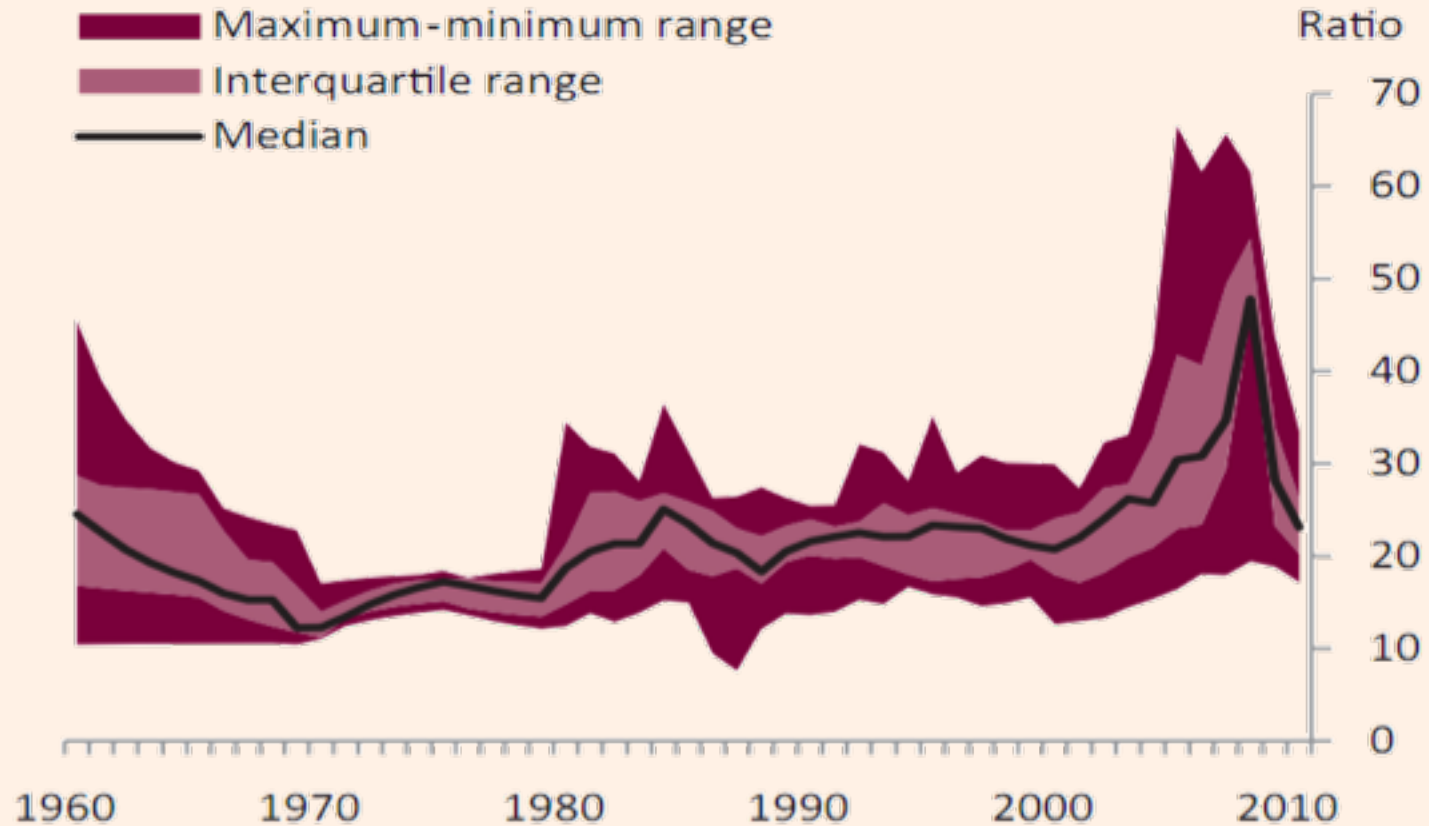
2. Dangers of finance: rising leverage

Loans to Different Sectors (as a per cent of UK GDP)



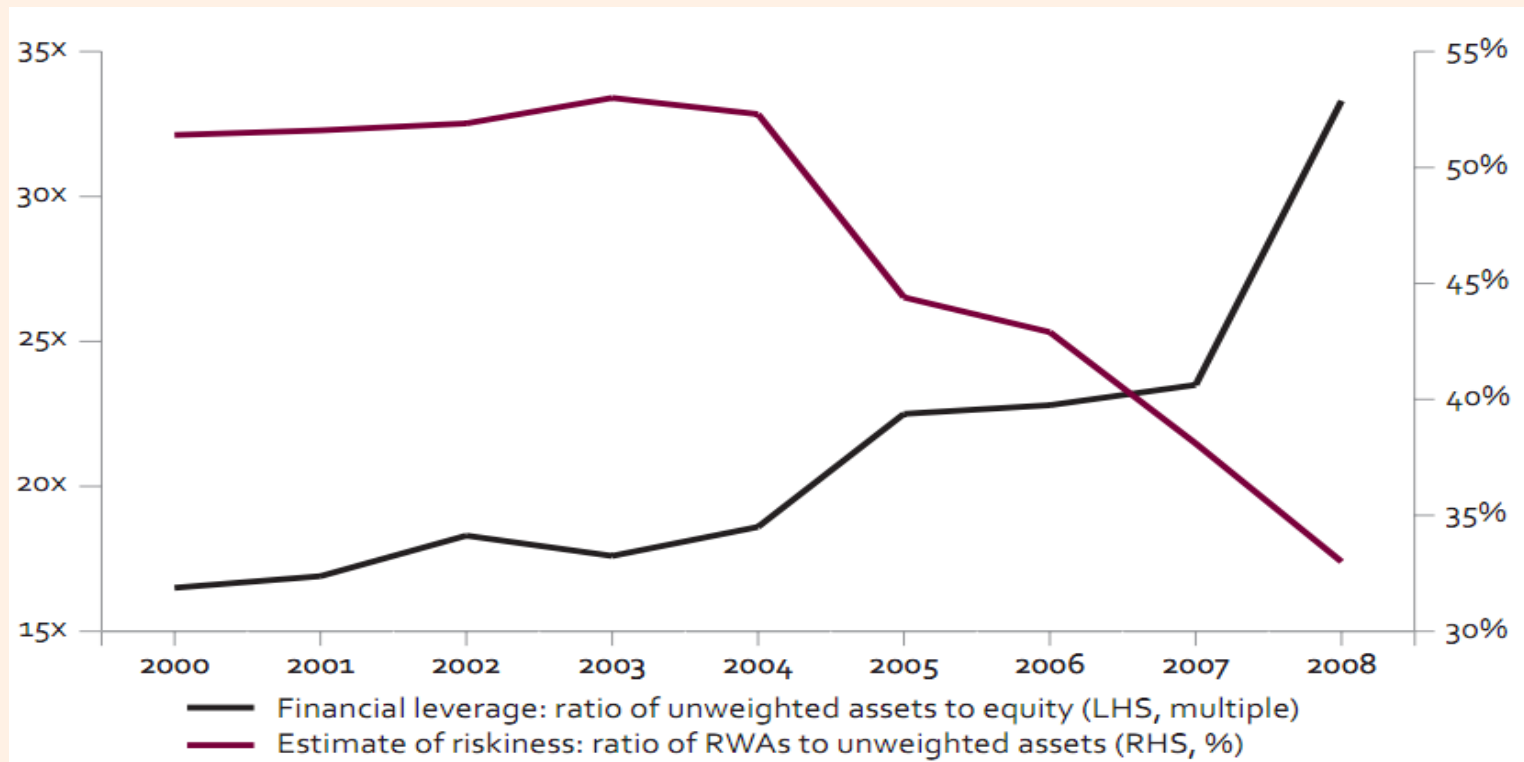
2. Dangers of finance: financial sector leverage

Ratio of Total Assets to Shareholders' Claims – UK banks



2. Dangers of finance: endogenous riskiness

Ratio of Risk-Weighted Assets to Unweighted Assets Falls as Financial Leverage Increases (aggregate for four largest UK-headquartered banks)



2. Dangers of finance: fiscal costs

THE COSTS OF CRISES ARE HUGE

The 2007 financial crisis hit the UK's finances hard

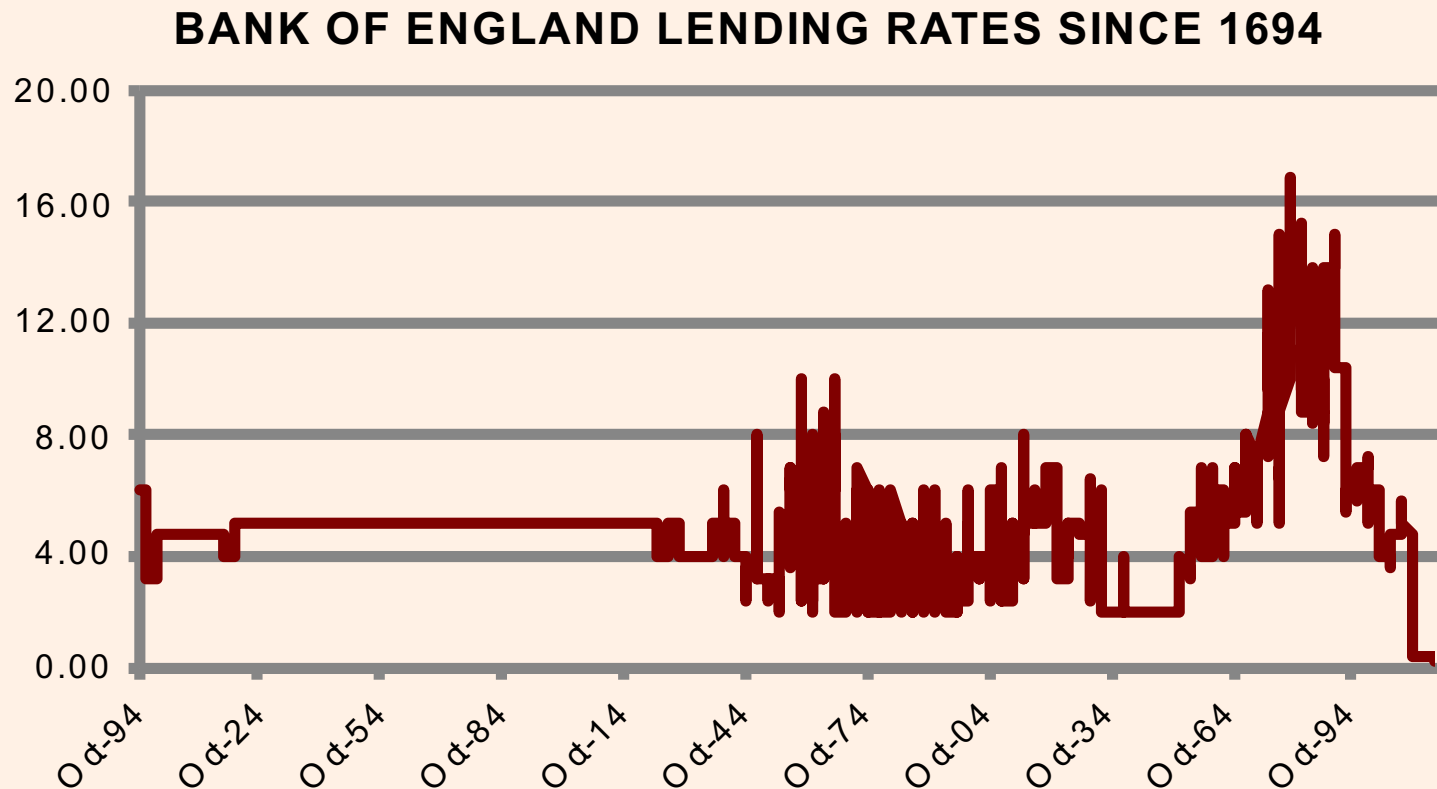
UK public debt as a % of GDP



Source: Bank of England
© FT

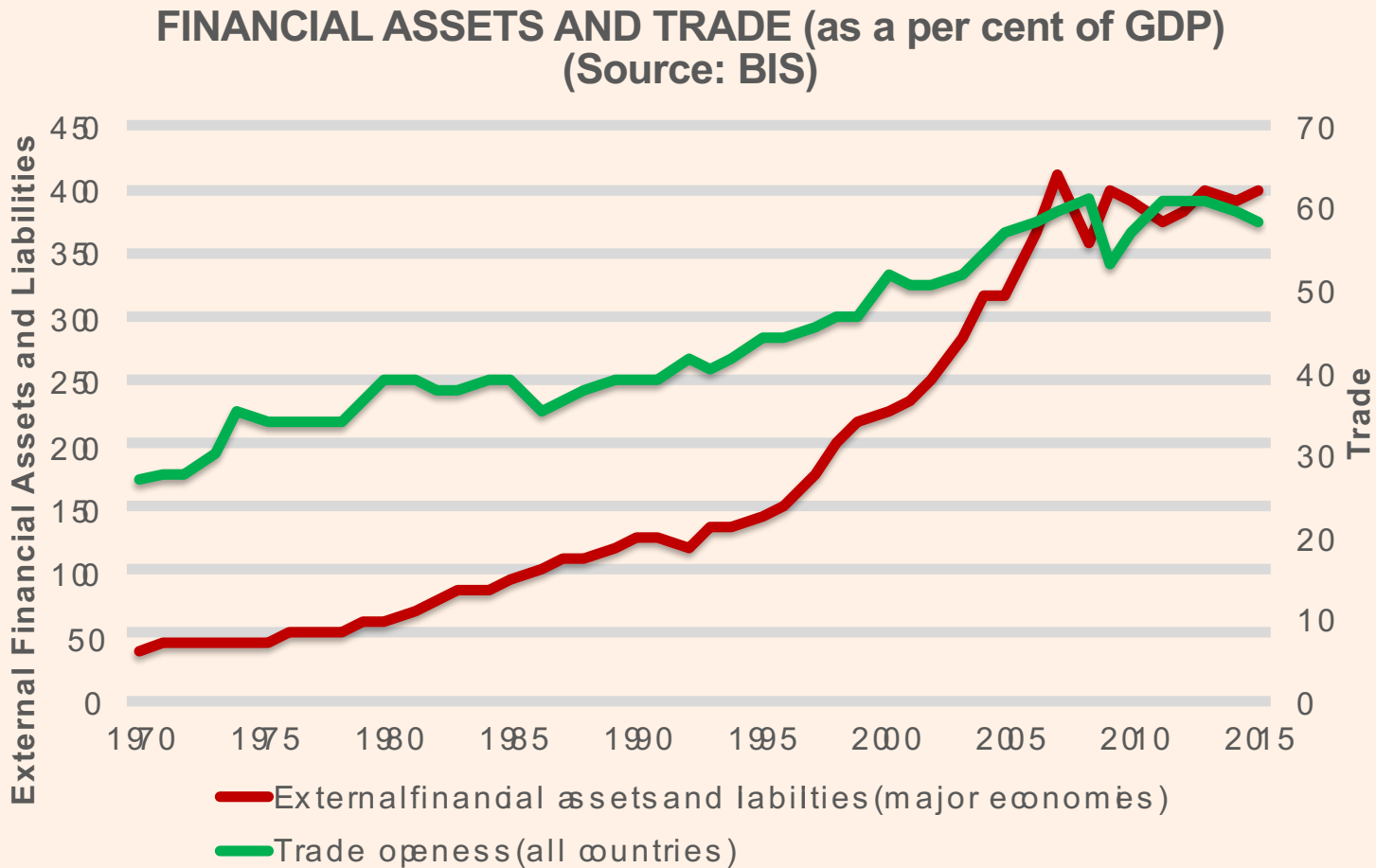
2. Dangers of finance: secular stagnation

SECULAR STAGNATION



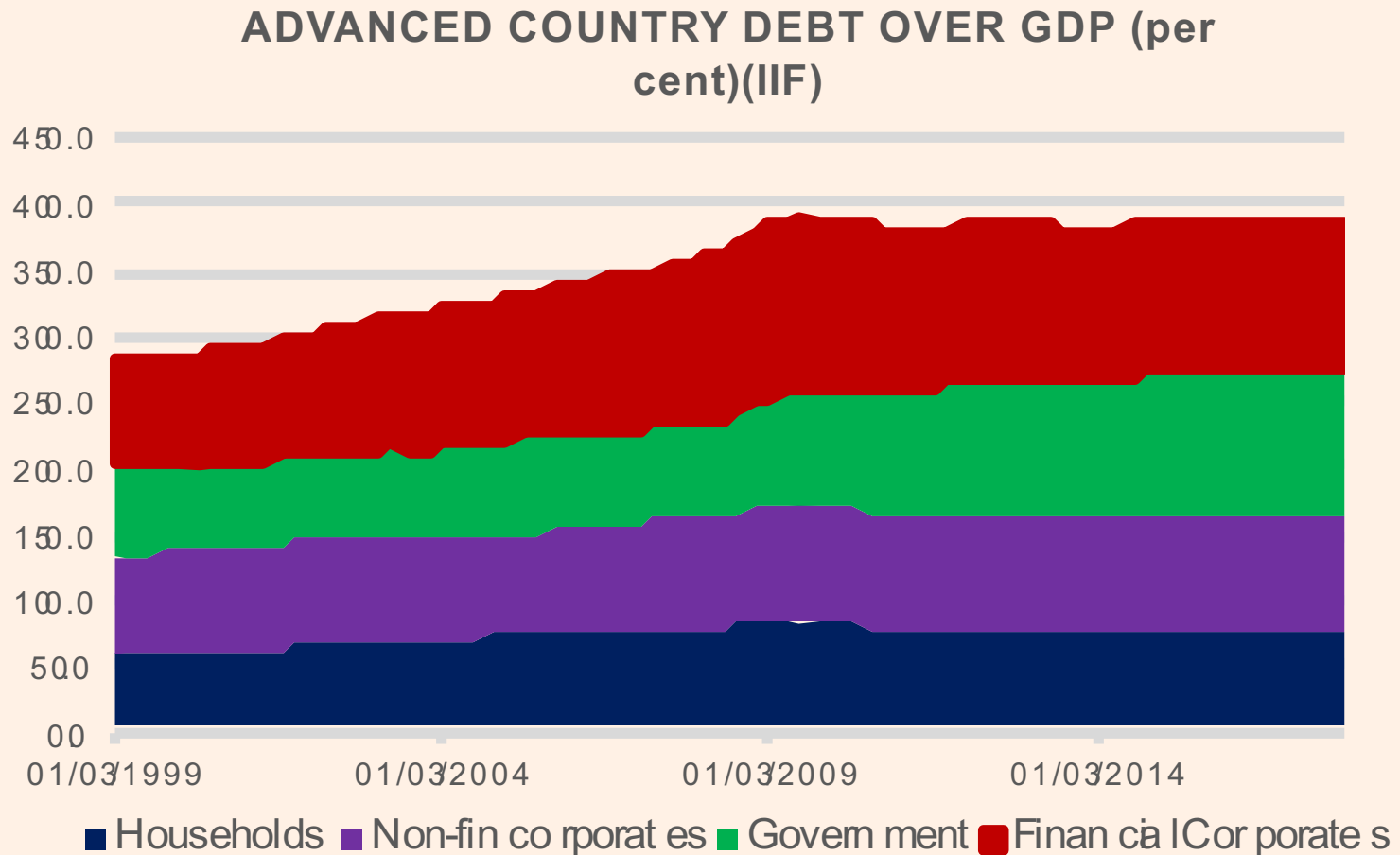
2. Dangers of finance: deglobalisation

GLOBALISATION STALLS



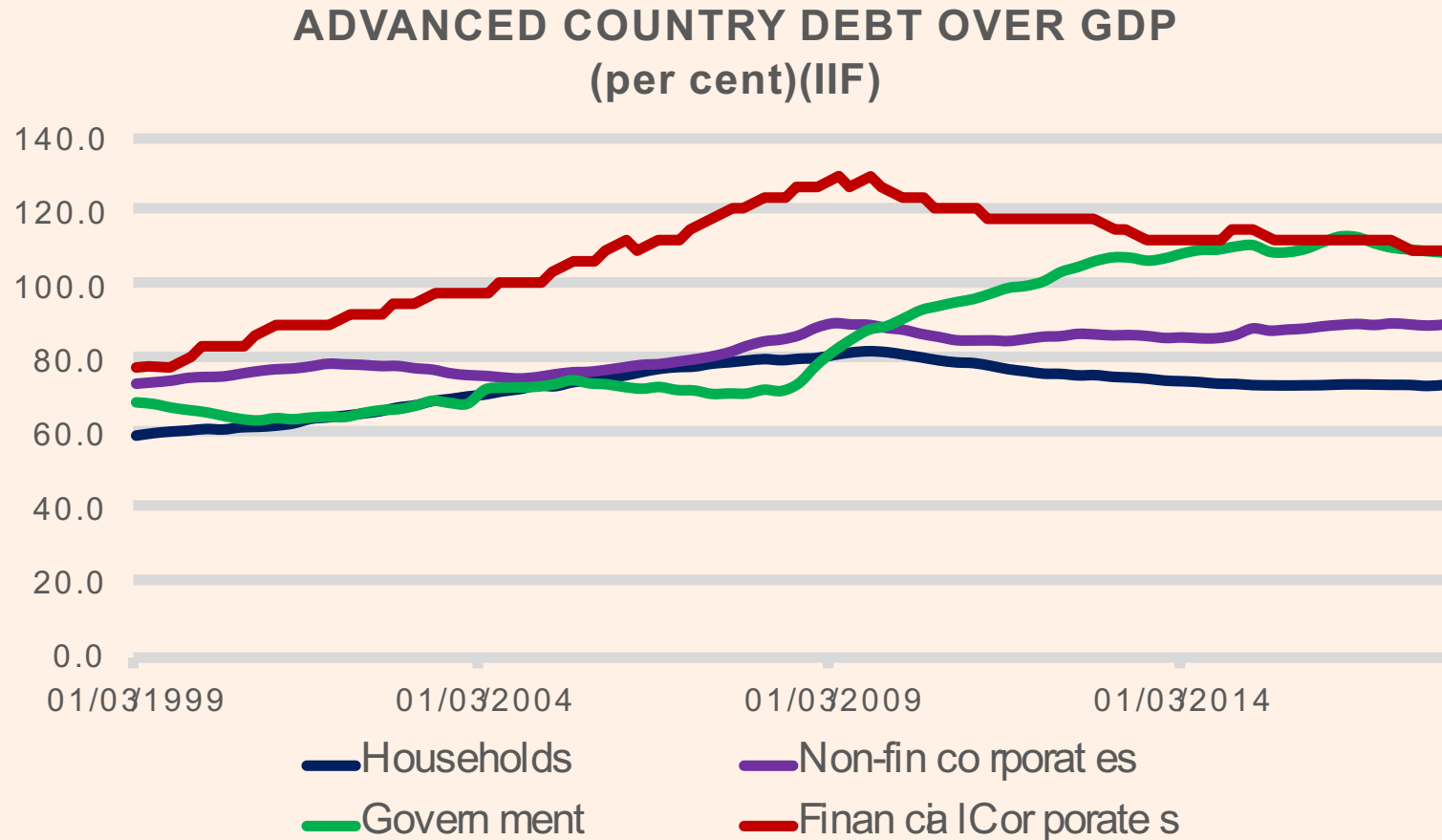
2. Dangers of finance: debt hangover

ADVANCED COUNTRY DEBT STABILISES



2. Dangers of finance: debt hangover

ADVANCED COUNTRY DEBT STABILISES



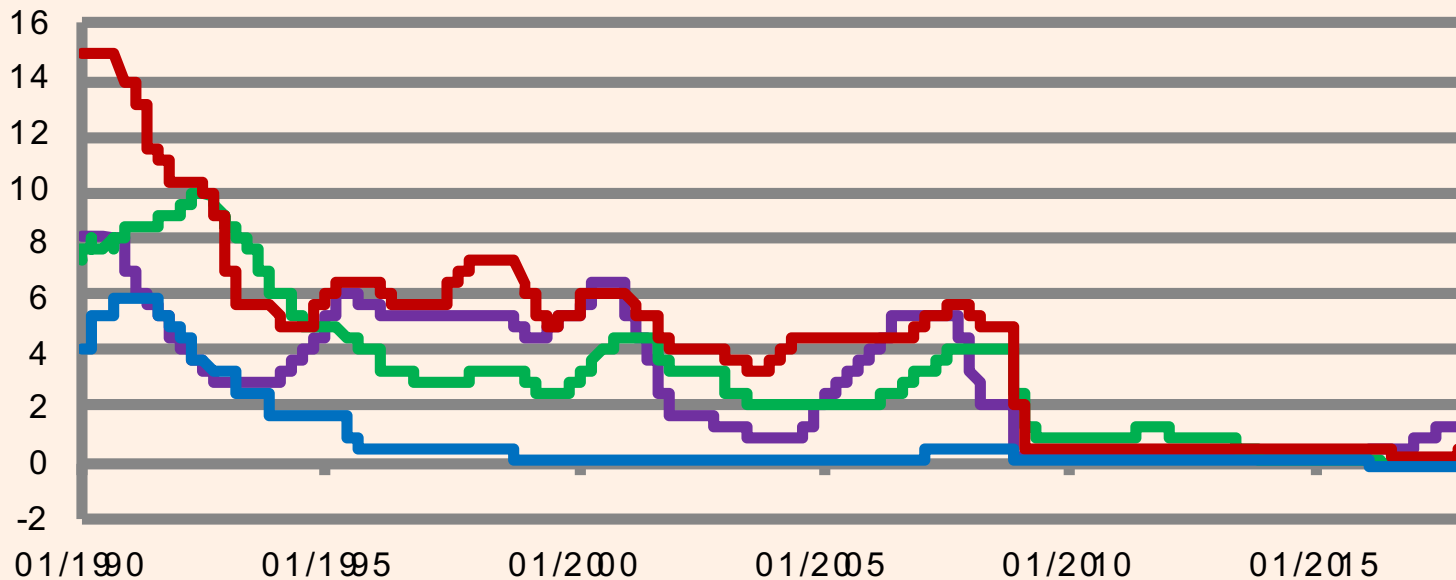
2. Dangers of finance: endogenous risks

- Once debt has been created, it is very hard to get rid of it or manage it
- Interest rates need to remain low for a very long time, perhaps creating new risks
- Government debt needs to rise, to offset deleveraging in the private sector
- Low growth and “austerity” creates a political backlash
- Political stability is threatened

2. Dangers of finance: secular stagnation

THE GREAT REFLATION

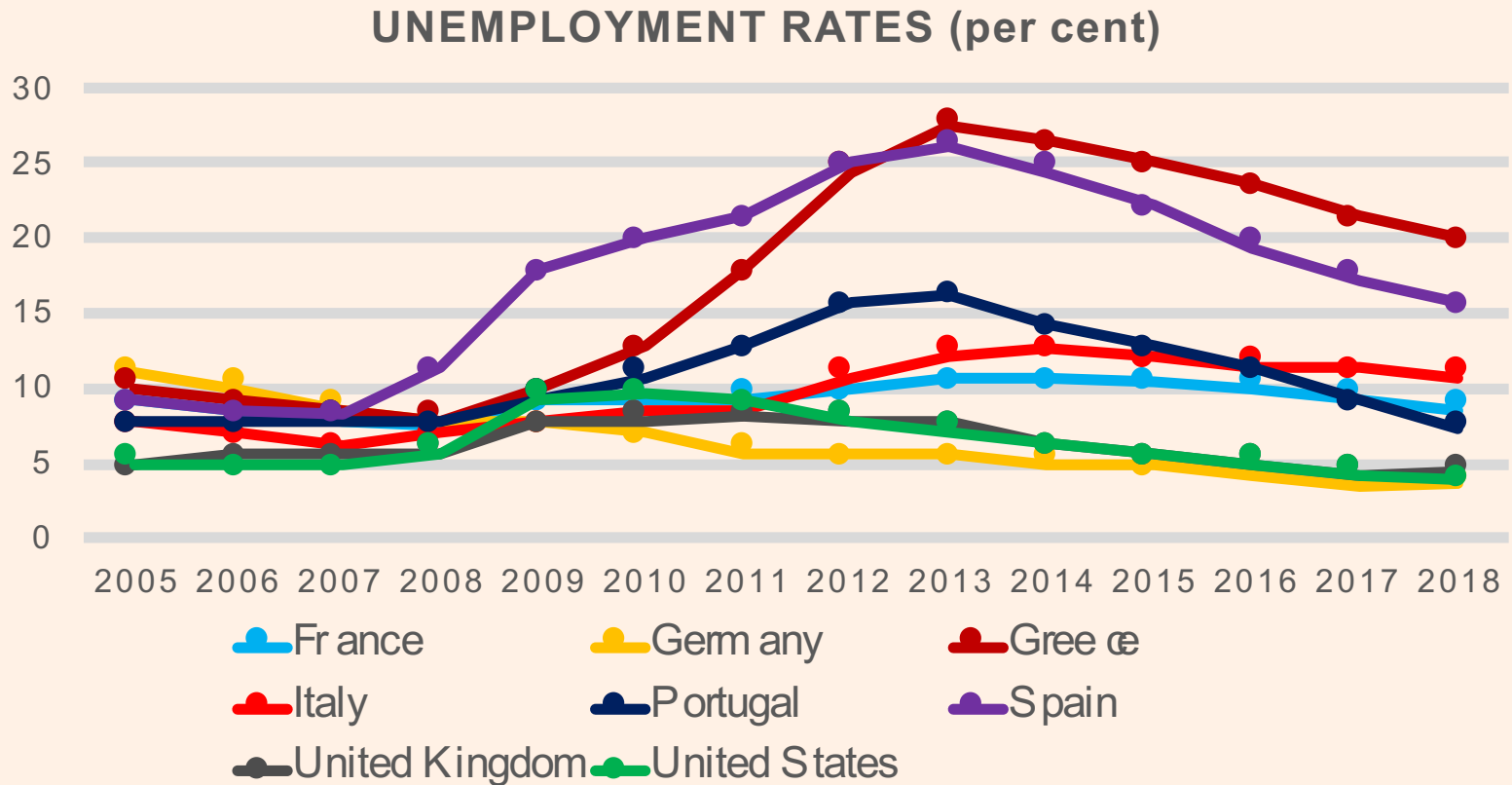
CENTRAL BANK POLICY RATES



- US Fed funds
- Europe (Bundesbank repo/ECB repo)
- UK (BoE bank rate)
- Japan (BoJ uncollateralized call money)

3. Dangers of finance: unemployment

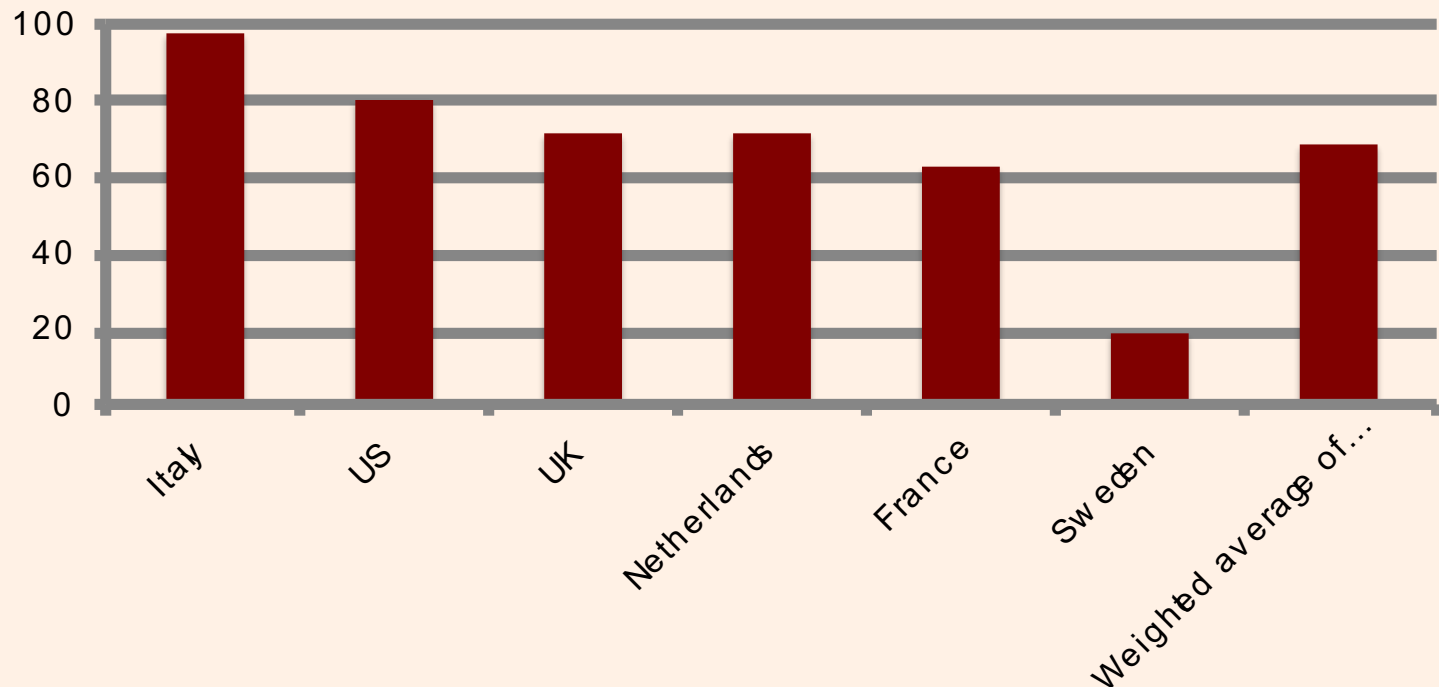
CREDITORS WIN



2. Dangers of finance: echo of the 1930s

A DECADE OF STAGNANT REAL INCOMES

**PROPORTION OF HOUSEHOLDS WITH FLAT OR FALLING REAL INCOMES FROM WAGES AND CAPITAL
2005-14 (Source: McKinsey)**



3. Reducing fragility

- Reducing fragility is obviously a challenge in all areas
- But what about the financial are? Here are the options:
 - Option 1 – the “wise people” option: tighten up regulation via higher capital and liquidity requirements, closer supervision and macro-prudential regulation
 - Option 2 – the structural reform option via:
 - ring-fencing
 - Separation of money from intermediation system via “sovereign money” or 100 per cent reserve banking, thereby eliminating the ability of commercial banks to create money
 - Deleveraging all intermediation, transferring risks to the ultimate owners via mutual funds
 - Option 3 – the deleveraging of economies option via
 - Replacing debt with equity
 - changing debt contracts into automatically restructurable contracts

4. Conclusions

- Most of the risks we live with are ones we have created, partly because our modern world is so complex and partly because we destabilise our environment
- The financial sector is a very important part of our risk-creation system: it is essential, but destabilising and, worse, those instabilities are endogenous: the financial sector creates its own risks
- The more stable the environment, the more risk we take on and the bigger and more intractable the crisis and its aftermath
- We have NOT sorted out the aftermath of the 2007-12 crises yet
- We have been very conservative in response to the crisis and hope we can regulate/restructure the existing system into manageability
- I doubt this will work