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 (%)
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: instability

INSTABILITY OF ASSET PRICES

CYCLICALLY-ADJUSTED PRICE-EARNINGS RATIO
FOR THE US (Shiller)
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

CRISSES COME LIKE BUSES

Financial crises come in waves
Number of countries with banking crises in each year

Source: IMF Systemic Banking Crises Database © FT
2. Dangers of finance: crises

THE COSTS OF CRISSES ARE HUGE

They also create huge economic and fiscal costs

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

- Output loss*
- Increase in public debt**

Argentina (1980)
Uruguay (1981)
Mexico (1994)
Indonesia (1997)
Japan (1997)
S Korea (1997)
Thailand (1997)
Argentina (2001)
UK (2007)
US (2007)
Greece (2008)
Ireland (2008)
Spain (2008)

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 CRISIS ARE HUGE

The 2007 financial crisis hit the UK’s finances hard

UK public debt as a % of GDP

Source: Bank of England
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2. Dangers of finance: secular stagnation

SECULAR STAGNATION

BANK OF ENGLAND LENDING RATES SINCE 1694
2. Dangers of finance: deglobalisation

GLOBALISATION STALLS

FINANCIAL ASSETS AND TRADE (as a per cent of GDP)
(Source: BIS)

External financial assets and liabilities (major economies)
Trade openness (all countries)
2. Dangers of finance: debt hangover

ADVANCED COUNTRY DEBT STABILISES

ADVANCED COUNTRY DEBT OVER GDP (per cent)(IIF)

- Households
- Non-financial corporations
- Government
- Financial corporations
2. Dangers of finance: debt hangover

ADVANCED COUNTRY DEBT STABILISES

ADVANCED COUNTRY DEBT OVER GDP
(per cent)(IIF)

Households
Non-financial corporations
Government
Financial corporations

01/03/1999
01/03/2004
01/03/2009
01/03/2014
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 (Bank of England rate)
- Japan (Bank of Japan uncollateralized call money)
3. Dangers of finance: unemployment

CREDITORS WIN

UNEMPLOYMENT RATES (per cent)


France Germany Greece Italy Portugal Spain
United Kingdom United States
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 area? 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.