Eppur si muove
Inflation and the Great Recession

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Unemployment and inflation still preoccupy and perplex economists, statesmen, journalists, housewives, and everyone else

(Tobin, 1972)

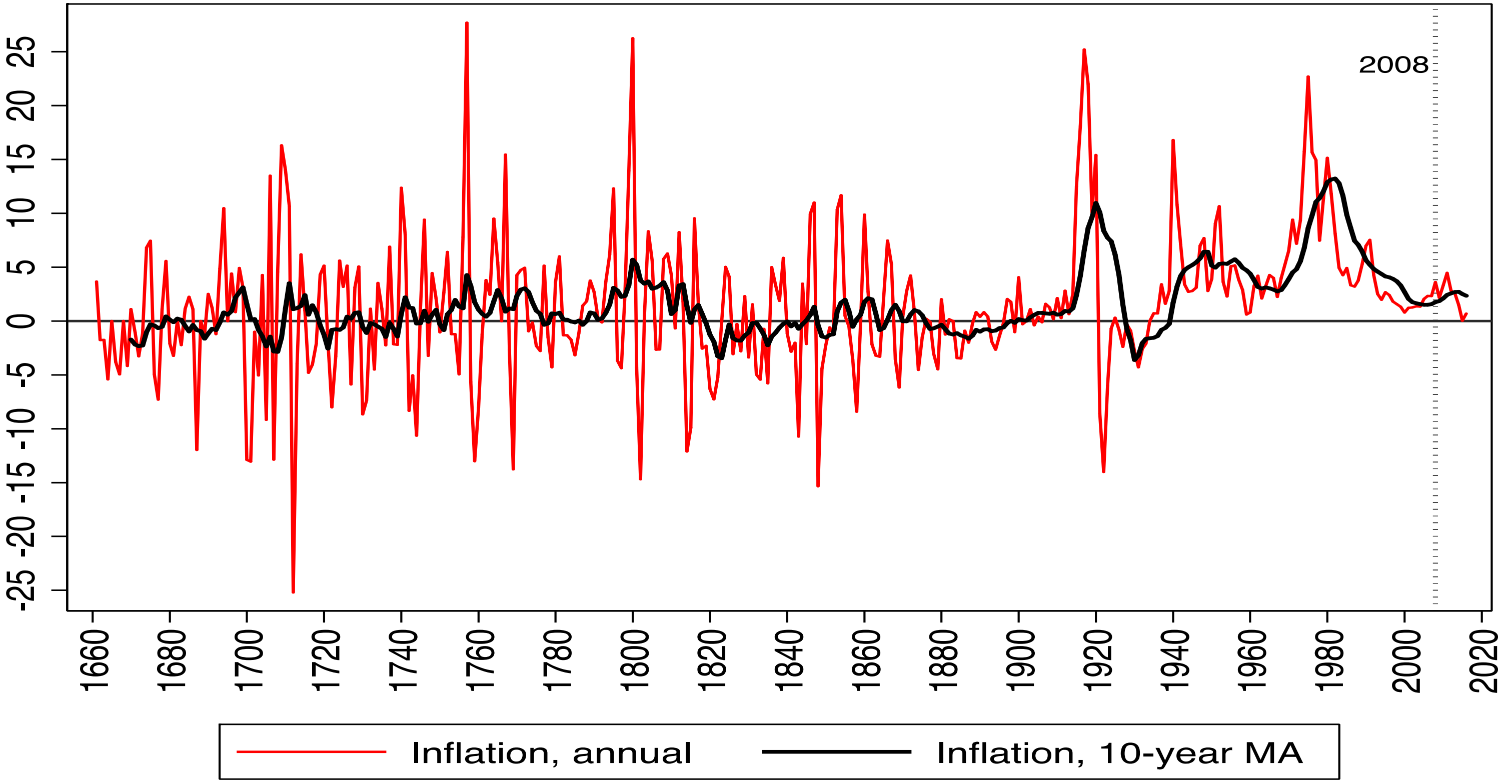
…but

- over the past ten years, inflation has been low and stable for almost all developed countries, in spite of the largest downturn in economic activity since the 1930s
- Opinion polls suggest that inflation is far from the main concerns of the public

History of inflation

UK: 1660-2016
Average: 1.5%, Std. Dev: 6.5%

Gold Standard	WW1 & WW2	Bretton Woods	Up to EMS crisis	Great Mod.	Post GFC
(1717-1913)	(1914-1945)	(1946-1973)	(1974-1993)	(1994-2008)	(2008-2016)
μ=0.5%	μ=3.6%	μ=4.8%	μ=8.7%	μ=1.9%	μ=2.2%
σ=6%	σ=8.8%	σ=2.7%	σ=5.6%	σ=0.7%	σ=1.4%



Our view

- Inflation **moves** and it is the job of central banks to keep it under control
    - There is nothing inherent to advanced economies that guarantees low and stable inflation.
- The modern era of central banking has delivered two decades of low and stable inflation and this is a **remarkable achievement** and inflation outturns over the last ten years should be viewed as **being pretty good**
    - Given the severity of the financial crisis, the scale of the subsequent recession, the prolonged disruption in the supply of credit, and the high volatility in commodity prices, for inflation in nearly all developed countries to barely go negative and stay only a few decimal points below target is a good inflation outcome
- This was a mix of good luck and good policies

Back to 2010

If asked in 2010, what would have been your guess about the stability and volatility of inflation in the coming years?

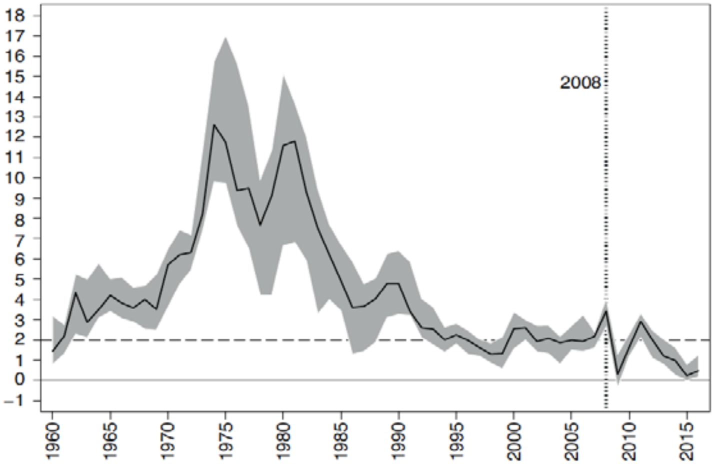
Challenges in 2010

1. Backward-looking expectations, Phillips curve, and economic history point to deflation
2. Interest rates and unanchoring
3. Monetary base explosion
4. Untested policies, new goals, high debt

Simple versions of dominant economic theories, or **superficial** readings of economic history, would have all pointed to the conclusion that inflation should have at least been volatile, and possibly drifted up or down

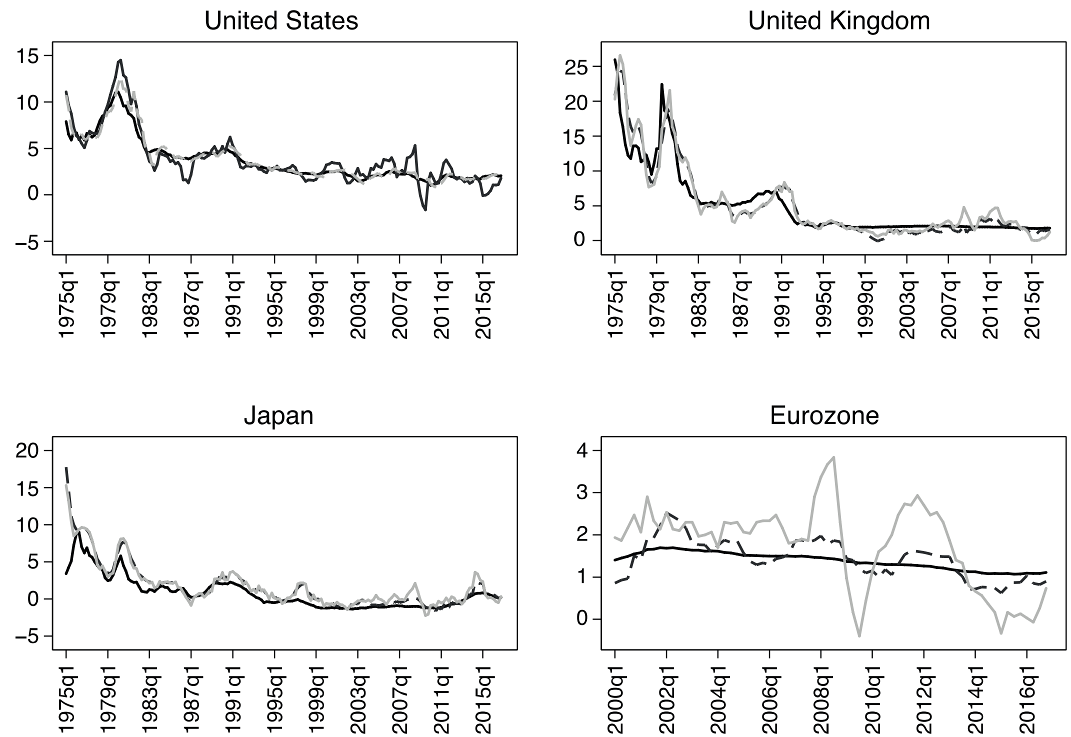
What happened? Low and stable inflation, no break

Figure 1.2 Inflation in advanced economies, 1960-2016



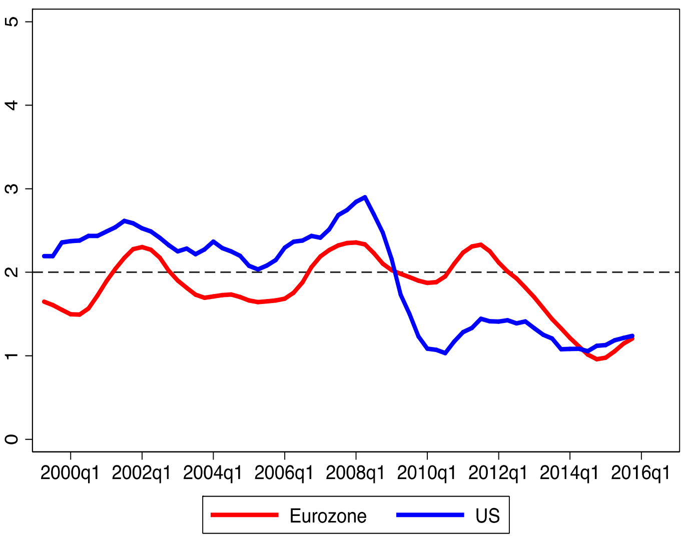
Note: The black line is the median value of inflation for a sample of 19 advanced economies; the shaded area is the interquartile range

Figure 2.3 Inflation and trend inflation



Notes: The solid black lines measure trend inflation estimated with the UC-SV model, the solid grey lines measure headline inflation, and the dashed black lines core inflation.

Pure Inflation



- It is **remarkable** that the volatility of inflation remained so low, in spite of new policies and many shocks

Why?

- Flatter Phillips curve
- Commodity price shocks
- Anchoring of expectations
- Central bank balance sheet

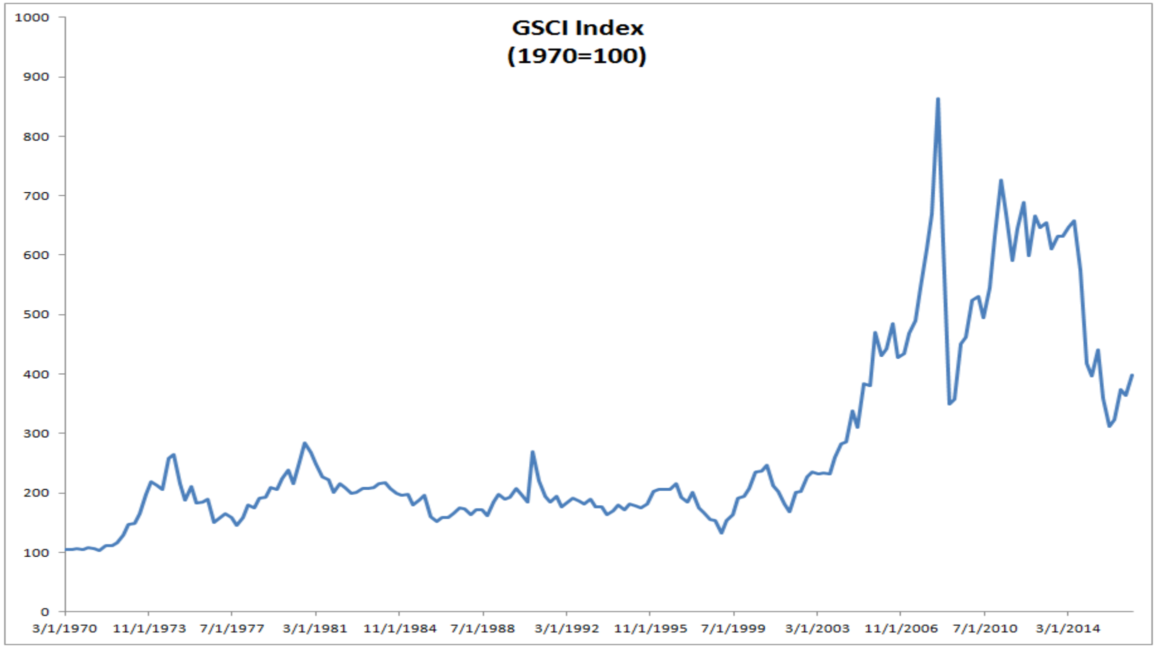
Good luck or good policies?

- Inflation over past 10 years does not conform closely to simple models.
- So was it largely luck inflation was relatively stable and hardly dipped negative at all?
- Four issues
  - Were inflation expectations anchored?
  - Did commodity prices save the day?
  - Were downward rigidities beneficial?
  - Was the policy mix right?

Inflation expectations

- The summary:
  - High credibility going into crisis
  - Some weakening of credibility of hitting targets, except in the UK
- The verdict:
  - Good policies, but work to do

Commodity prices



High commodity price inflation helped keep inflation and inflation expectations up

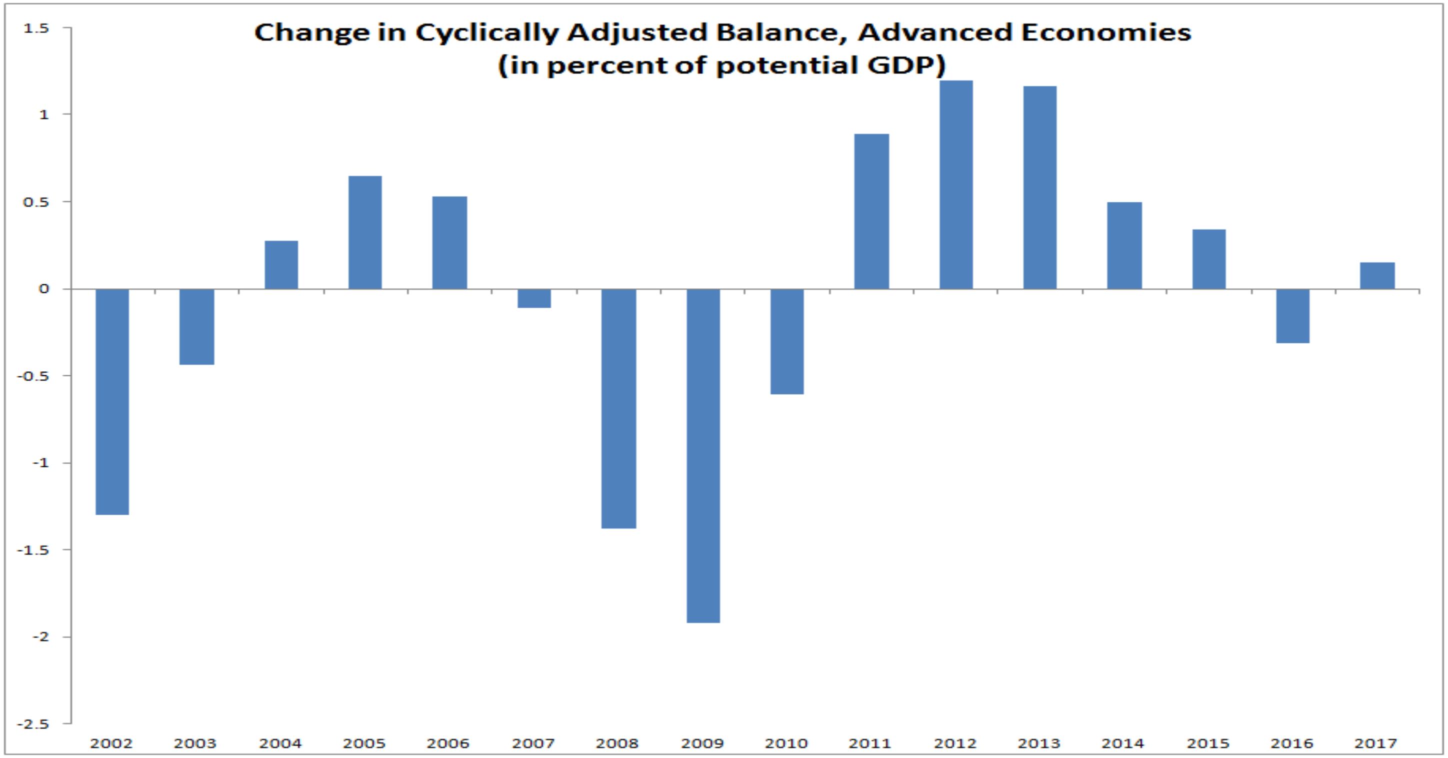
- To some extent the bounce back in prices in the aftermath of the crisis may have reflected policies adopted…
- But a very big dose of good luck

Downward rigidities

- The summary:
  - Rigidities in wages and markups. This was actually quite helpful.
  - But, we may be paying the price right now
    - Trade deeper and shorter adjustment for shallower and longer.
- The verdict:
  - Mostly good luck.
  - More flexibility not always better?

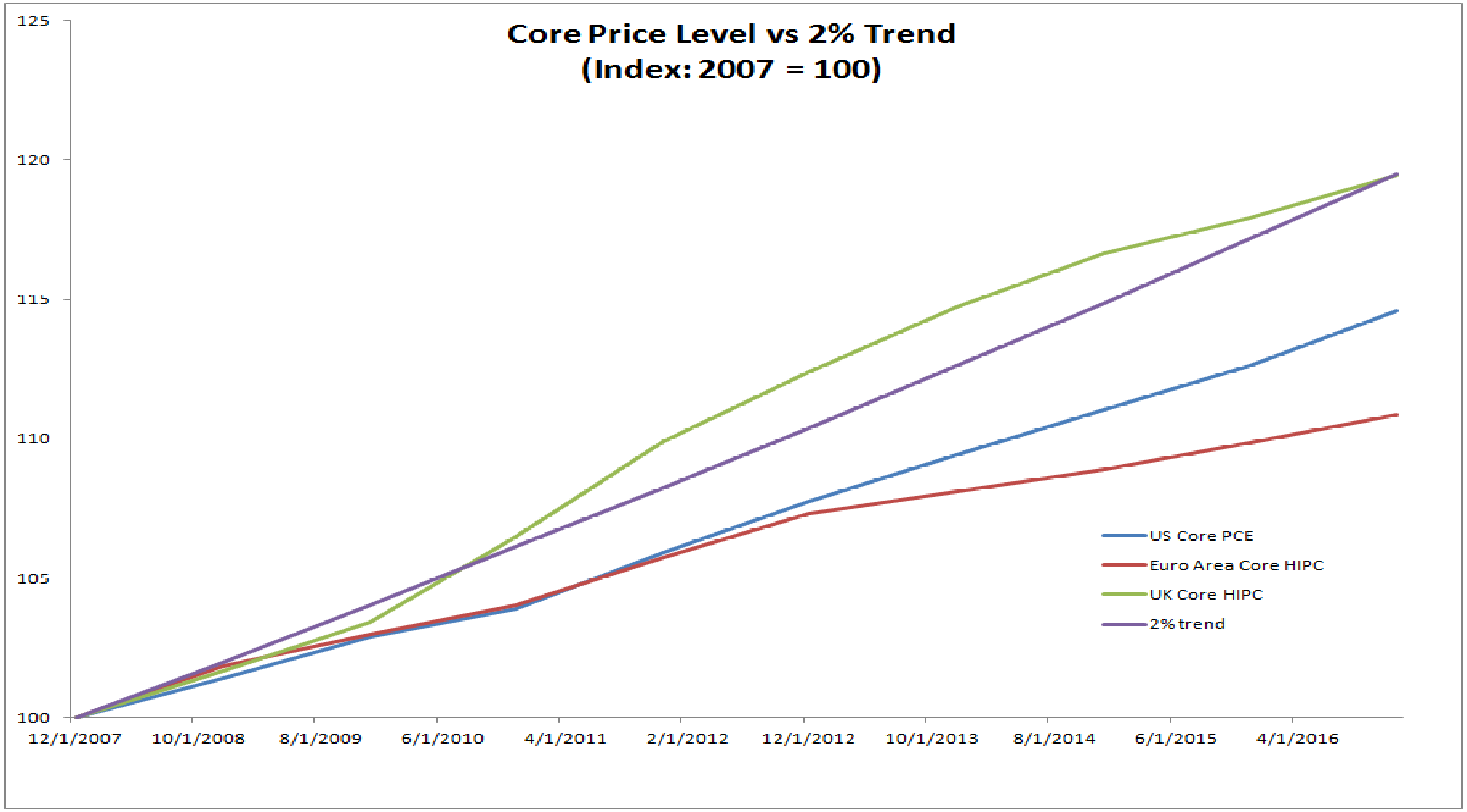
The policy mix

- Activist and effective monetary policy
  - But sometimes a second late and a penny short and too focused on cost and exit though actual exit delayed.
- In several countries, fiscal less helpful



The future

- The starting point: no complacency allowed



A higher inflation target?

- Low r* reduces easing margin => could generate negative expected output gap
- Costs
  - Price dispersion?
  - Credibility?
    - Japan and New Zealand
- Do you prefer π mostly around 4 or occasionally r = -2?
- Can alternative policies work at ELB?
- Process: Periodic review of π*

Should central banks have large balance sheets?

- Yes
  - Interest on reserves allows for any balance sheet size
  - Zero cost additional tool to manage financial stability
- Could reserves “escape” and trigger inflation?
- Hold shorter maturity assets

Too much focus on inflation?

- No
- Has flexible inflation targeting worked?
  - Yes
- Proposition: Monetary policy for price stability, macroprudential and regulation for financial stability
  - Since 2007, the tightening of macropru and regulation has allowed zero rates and no financial instability

Muzzle over-mighty central banks?

- Central banks helped achieve something which was not at all guaranteed after the financial crash and which seemed very far from likely – and that was to avoid a protracted period of negative inflation.
- But to restrict the scope for central banks to respond to similar severe negative shocks on the grounds that recent inflation outcomes look, with the benefit of hindsight, relatively benign does not seem to us a good gamble to take.

Final thought

- In terms of inflation, over the past ten years, we were lucky – and even then it took a range of bold actions from central banks
- Next time we may not be so lucky so taking away the ability of central banks to act boldly would be a very bad idea

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