The background is a detailed Renaissance-style painting. On the left, a man with a dark beard and cap, wearing a blue robe, is looking down at a pile of gold coins on a green surface. On the right, a woman in a red robe and white headscarf is looking towards the left. An open book with a colorful illustration is visible in the lower right. A large, stylized hourglass is superimposed over the center of the image, with a light gray upper bulb and a yellow lower bulb.

"A masterpiece of history, analysis—and properly understated outrage."—James Grant

The
PRICE
of
TIME

The
REAL STORY
of
INTEREST

EDWARD CHANCELLOR

was asked whether central bankers were able to prolong the business cycle indefinitely. McTeer replied that:

the business cycle is being dealt with much better than it used to be. Policy makers are smarter. They've got a lot of mistakes that they can learn from ... In the early '30s when that episode started, there were a lot of bank failures that wiped out a lot of money ... *Today, every time we have a major emergency, you know, the first thing we do is get on the microphone and open up – you open up a spigot.*³⁰

PRICE STABILITY IS NOT ENOUGH

Not everyone was convinced that the Greenspan Federal Reserve's policy of focusing on consumer prices and ignoring other financial imbalances was quite the trick. Few dissenters, however, occupied exalted positions in monetary policymaking circles or enjoyed tenure at top universities. William White, the chief economist of the Bank for International Settlements – the central bankers' central bank – was an exception to the prevailing groupthink.

In a paper entitled 'Is Price Stability Enough?', the Canadian economist suggested that the achievement of stable prices might not be enough to avoid serious macroeconomic disturbances over the long haul. Like Hayek, White distinguished between good deflation that arises from productivity improvements and bad deflation that follows a credit bust. Past financial crises, White noted, had often appeared without any prior pick-up of inflation – the recent Asian crisis being a case in point. Credit growth, asset price inflation and large-scale capital inflows – in other words, the financial conditions then prevailing in the United States – were more reliable harbingers of a crisis.

White also questioned the policy, championed by Bernanke, of dealing with the aftermath of a bubble rather than forestalling it. An over-indebted economy might enter a liquidity trap, rendering it impervious to monetary stimulus. If capital was misallocated during the boom, then low interest rates after the bust might contribute to economic sclerosis, as Japan had experienced over the previous decade. Reducing interest rates after a bubble's collapse might discourage saving, thereby reducing the economy's growth prospects: 'If low rates are maintained for an extended period,'

White suggested, ‘they may or may not have the desired effect on aggregate demand, but they clearly have negative long-term effects with respect to aggregate supply.’ Finally, he predicted that low rates would drive a search for yield from insurance companies and defined benefit pension plans.

This brilliantly prescient paper, with its hints of Hayek’s critique of monetary policy in the 1920s, fell on deaf ears. Besides, by its publication date in April 2006, it was too late to change course. House prices at the national level had crossed the bubble threshold, and several regional housing markets were saturated with new supply.³¹ The US housing bubble was already past its peak and house prices were set to commence a multi-year decline. The US financial system was awash with complex mortgage securities that had yet to be tested in a market downturn. A few astute financial commentators observed that defaults on certain freshly minted subprime mortgages were rising at an alarming rate.

Countless books and articles (‘crunch porn’) have been written about the causes of the global financial crisis. Mainstream economists, who had been oblivious to any signs of financial fragility beforehand, were suddenly full of explanations. The provost of an American university lamented that he had ‘an entire department of economists who can provide a brilliant *ex post facto* explanation of what happened – and not a single one of them saw it coming.’³² Queen Elizabeth II, when visiting the London School of Economics in November 2008, made a similar comment. Chief among the non-seers, Bernanke inclined to the view that poor financial regulation was to blame for the credit excesses prior to the Lehman’s bankruptcy (this did necessitate taking some personal responsibility since the Federal Reserve, which Bernanke chaired from early 2006, was the chief US financial regulator). Among policymakers, the regulatory interpretation of the financial crisis won the day.

At the same time, the role played by monetary policy in the run-up to the crisis was downplayed: the Federal Reserve’s decision to take its policy rate to a post-war low and hold it there for eighteen months; keeping the Fed funds rate below the economy’s growth rate for five consecutive years; the extremely slow pace of tightening, with rates hiked at ‘baby steps’ so as not to scare the financial markets; the intentional stoking of the housing market and encouragement of households to get into debt; and the opening of the monetary spigots – all were conveniently forgotten. Bernanke denied that US monetary policy had been too loose from 2002, on the grounds that the

Fed's forecasts suggested a heightened deflation risk.^{fn5} Greenspan's replacement also repudiated the notion that easy money had inflated the housing bubble:

Economists [actually Federal Reserve economists, in his employ] who have investigated the issue have generally found that, based on historical relationships, *only a small portion of the increase in house prices earlier this decade can be attributed to the stance of U.S. monetary policy*. This conclusion has been reached using both econometric models and purely statistical analyses that make no use of economic theory.^{fn6}

Bernanke admitted that the decline in long-term US interest rates had improved mortgage affordability, thereby boosting house prices, but ascribed the fall in Treasury yields to a 'global savings glut' rather than the Federal Reserve's actions. There are alternative explanations for the decline in long-term US rates (discussed in a later chapter).^{fn7} Nevertheless, the savings glut hypothesis absolved monetary policymakers from blame for the subprime debacle and became a key part of mainstream explanations for the global financial crisis.

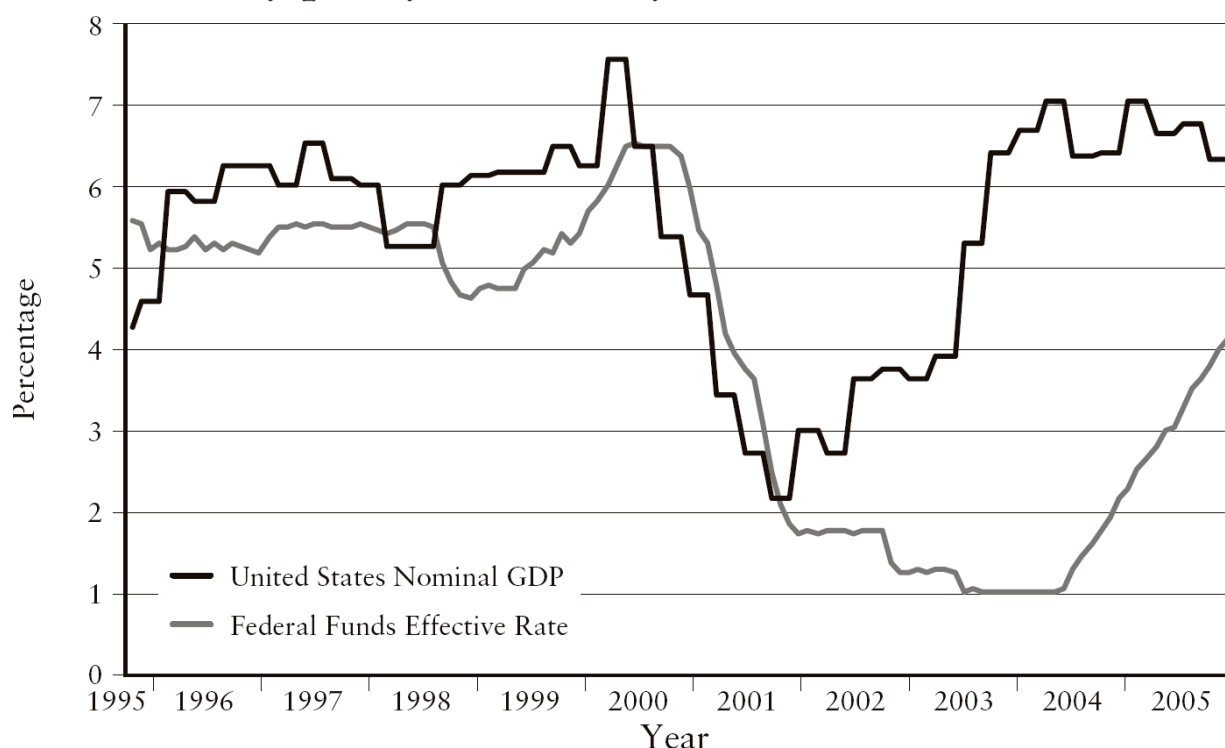
Yet Bernanke's analysis ignores the fact that the riskiest subprime loans were priced off short-term rates, including the option of adjustable-rate mortgages with their negative amortization feature (in which interest was rolled up with the principal). It was only after the Fed's easy money policy was launched that credit growth picked up, financial leverage soared, housing markets bubbled, underwriting standards declined and the repackaging of subprime mortgage debt into collateralized debt obligations took off. Low interest rates fed the demand for credit, while financial innovation increased its supply. The explosive growth of the market for complex mortgage securities was driven in large part by a desperate search for yield at a time when interest rates were at multi-decade lows.

Long after the financial crisis, economists at the Federal Reserve continued to deny that house prices were affected by monetary policy.³³ A handful of American central bankers, however, admitted that errors had been made. William Poole, President of the St Louis Federal Reserve, acknowledged that low interest rates had fuelled the housing boom. Poole told a meeting of the Fed's rate-setting committee in 2007, a year before

Lehman's bankruptcy: 'We had a boom driven by a period of very low interest rates. The period really got started when we were holding the Fed funds rate at 1 per cent. Then you had a lot of financial innovations and subprime mortgages that added to a sector that hadn't traditionally been there.'³⁴ Likewise, Poole's counterpart at the Kansas City Fed, Thomas Hoenig, found 'strong supporting evidence' for the argument that negative real interest rates between 2002 and 2004 had contributed to the housing and credit boom.³⁵

Some leading economists concurred. Anna Schwartz, who had earlier extolled the goal of price stability, now pinned responsibility for the subprime crisis on the Fed: 'the basic underlying propagator [of the crisis] was too-easy monetary policy and too-low interest rates that induced ordinary people' to borrow and speculate.^{fn8} Professor John Taylor of Stanford University, author of the 'Taylor Rule', a central banker's rule of thumb for setting interest rates (based on inflation expectations and estimates of spare capacity in the economy), suggested that 'monetary excesses were the main cause of the boom and the resulting bust'.³⁶

US monetary policy in the early 2000s



[7.](#) In the aftermath of the dotcom bubble, the Greenspan Fed took interest rates to a postwar low. It was at this time that the US house prices started to take off.

The American political scientist Mancur Olson warned against an appeal to ad hoc explanations for economic events not supported by testable theory. A multiplicity of causal forces, Olson suggested, can make a false theory seem true and a true theory appear false.^{[37](#)} Yet most accounts of the financial crisis draw on such a multiplicity of causal forces – by claiming that the crisis arose due to the proliferation of complex debt securities, unreliable credit ratings, flawed risk models, a pass-the-parcel approach to mortgage debt, poor regulation, animal spirits, excessive global savings, and so forth.

Such accounts overlook the fact that financial practices and regulations differed from one country to another. American banks may have originated dodgy mortgage debt instruments in order to distribute them, but in Spain mortgage bonds (*cédulas*) remained on banks' balance sheets. The Bank of Spain even demanded that banks increase their capital reserves during the boom. Yet despite these safeguards, Spain suffered a worse financial shock than the United States and the near total collapse of its local savings banks (*cajas*). Since the crisis was global, it seems reasonable to suppose that its

origins were also global. Subprime mortgages couldn't fill the bill as they were an American affair. However, losses on complex mortgage securities, issued in the United States but owned in large quantities by European banks, were sufficient to set off a chain reaction that spread rapidly throughout the global financial system.

Why were the credit systems of so many different countries, from Australia to Iceland, so vulnerable at the time? The unifying factor appears to be the low-interest rate policy of the Federal Reserve at the turn of the century, which, owing to the special position of the dollar as the global reserve currency, created the conditions for a credit boom that engulfed much of the world's economy. Prior to the crisis, global interest rates were negative in real terms and far below the growth rate of the world's economy. Even countries with relatively high interest rates enjoyed no respite, since they were inundated with foreign capital flows.^{fn9} There's no need to appeal to ad hoc explanations: easy money produced the boom and the boom was followed by the inevitable bust.

The closed community of central bankers and monetary economists remained obdurate to monetary explanations for the crisis. They had invested too much time and effort in their economic models and were reluctant to jettison them. Their canonical model assumes that an economy is only knocked off course by random or 'exogenous' shocks, such as the 1973 oil crisis. It has no place for money and credit. Interest rates are given and errors in monetary policy are revealed by instability in consumer prices but not asset prices. Speculative bubbles and irrational exuberance are not countenanced. Instead, the model posits a world filled with rational actors possessed with perfect foresight. But it doesn't remotely describe what actually happens on Wall Street or any other stock market. No wonder the academic economists in charge of what James Grant called the 'PhD Standard' were blindsided by events.

Institutional factors contributed to this state of cognitive dissonance. The Federal Reserve is the world's largest employer of finance PhDs and has deep connections with economic journals that specialize in monetary matters. It is telling that, in a 2010 survey, a large majority of academic economists believed that low rates caused, or at least greatly contributed to, the housing bubble, but most economists specializing in monetary policy continued to side with the Fed's view.³⁸ If Bernanke, as head of the Federal Reserve, held that the crisis wasn't a failure of 'economic science' but one

of economic management (regulation), it was only to be expected that the Fed's own research team should follow their chief's lead.³⁹ They occupied an echo chamber in which existing beliefs were reinforced and uncomfortable questions ignored.

'Bernanke's Fed,' concludes historian Philip Mirowski, 'has evaded suffering any consequences for its intellectual incompetence' in the lead up to the crisis. Instead of being hounded from office, Bernanke was credited with saving the world from another Great Depression and anointed *Time* magazine's 'Person of the Year' in 2009. His exercise in denial meant that the Fed learned little from the crisis. Besides the odd tweak, monetary policymakers saw no need to change their flawed models. If low interest rates hadn't caused the crisis, there would be no problem in taking them even lower in future.

INFLATION TARGETING

The financial crisis revived the threat of deflation – the kind of debt-deflation identified by Irving Fisher that occurs after credit booms when people, having taken on too much debt, seek to pay it off. After 2008, fear of deflation – what Harvard economist Martin Feldstein called the 'deflation bogeyman' – obsessed policymakers. Deflation was the 'world's biggest economic problem', according to *The Economist*.⁴⁰ The head of the International Monetary Fund, Christine Lagarde, said deflation was an 'ogre' that could 'prove disastrous to recovery'. Bank of Japan Governor Haruhiko Kuroda deemed it a 'chronic disease'. Deflation was to be kept at bay through the strict enforcement of inflation targeting: price stability was to be achieved at any cost.

The 1990s had witnessed the widespread adoption of official inflation targets by central banks. The Reserve Bank of New Zealand was the first central bank to adopt an explicit target in 1990 – coincidentally, the same year in which Japan's bubble started to deflate. Canada did the same in 1991. Six years later, a newly independent Bank of England was given an inflation target. In 1998, the European Central Bank opened for business with a treaty-mandated target. Although the Fed under Alan Greenspan eschewed a formal target, it pursued a similar approach.⁴¹ Despite the fact that the widespread adoption of inflation targets had provided no protection against the financial crisis, the roll-out continued after 2008. In early 2012,