



INNOVATION IS POWER. AS CHINESE PRESIDENT XI JINPING PUT IT IN 2013, "ADVANCED TECHNOLOGY IS THE SHARP WEAPON OF THE MODERN STATE."

The 21st century will be defined by the technological race between China and the US.

If financial markets are to be believed, the US has a big lead: an AI-enabled disinflationary nirvana lies ahead for America; for China, a balance-sheet recession without end. This future is not the one we expect: a new more volatile and inflationary regime, posing potent threats to capital preservation. Could we be wrong?



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WHICH HISTORY AND WHICH FUTURE?

History is a critical lens through which we try to make sense of our infinitely complex world, where past, present and future are interlinked in mysterious but fundamental ways.

What society has recently experienced – the global financial crisis (GFC), ten years of squeezed living standards, pandemic lockdowns and the ensuing inflation surge – shapes how we perceive the world and make the decisions that will drive our economic and financial future. The experiences of previous generations informed their decisions, too. The Great Depression and the Second World War

moulded the post-war policy environment. Rapid growth and financial stability under the Marshall Plan and Bretton Woods led to elite complacency during the 1970s. And that decade's economic malaise and geopolitical turmoil spawned the neoliberal world order.¹

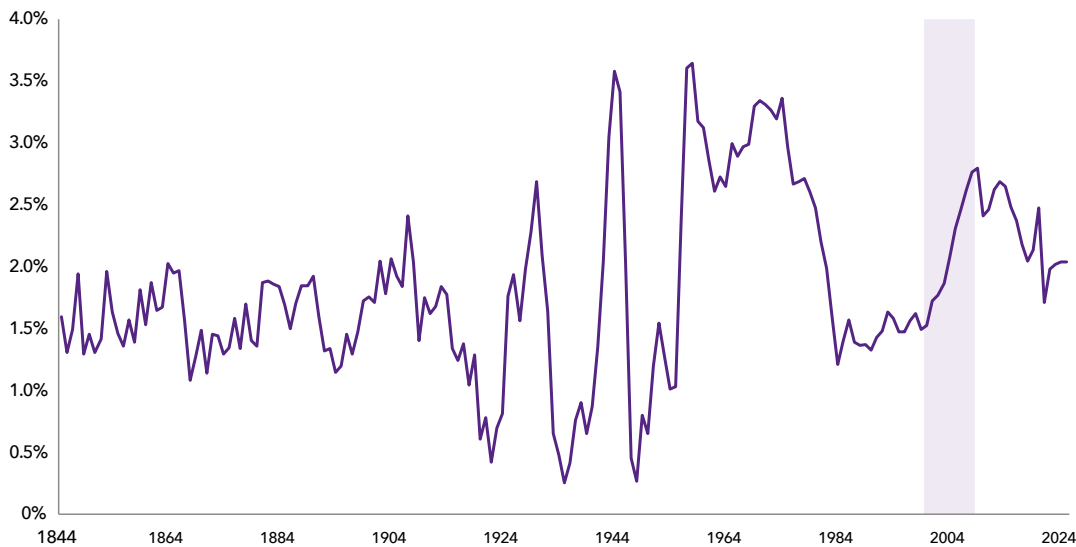
That world order – US-led, globalising, respectful of the rule of law, technocratic and with left and right increasingly aligned on economic policy – has now become our history. To be replaced by a future that is not yet known. We are leaving one regime, which we dubbed the deflation machine, of low and stable inflation.² And we believe we are entering a new one, far more hostile to the owners of capital. Inflation will be higher on average and there will be

greater macroeconomic volatility. Since the absence of inflation risk was a critical driver of cross-asset dynamics in the dying regime, its return will upend the rules the casino plays by.³

THE DEFLATION MACHINE REVISITED

In 2003, Mervyn King, then governor of the Bank of England, called the preceding ten years the nice (non-inflationary consistently expansionary) decade. He was talking about Britain's experience. But the world economy enjoyed an even nicer period, with per capita real GDP growth accelerating markedly (Figure 1).

Figure 1
UNDERLYING RATE OF PER CAPITA GROWTH IN GLOBAL ECONOMY SINCE 1830



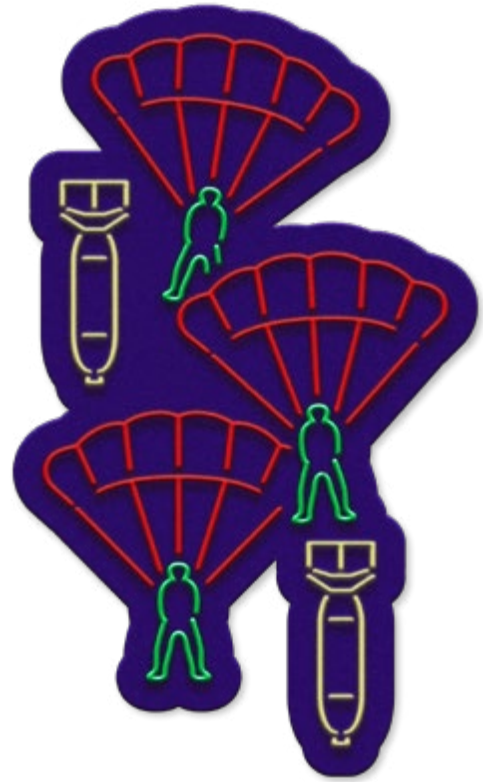
Source: PPP-adjusted where possible. Conference Board alternative China GDP and ICT-adjusted series used, Maddison dataset used before 1950. IMF forecasts for 2024, 10 year moving average

1 Gerstle (2022), *The rise and fall of the neoliberal order for a detailed account of the historical underpinnings of the post-1980 environment of globalised markets, capital and labour*
 2 Dannhauser (2020), *Globalisation and the deflation machine*, Maxey (2020), *Dismantling the deflation machine*, Dannhauser (2022), *Taking back control?*
 3 More detail at ruffer.co.uk/2025-further-reading

It coincided with low, stable inflation and buoyant asset markets. The world's economic speed limit must have risen. The deflation machine combined beneficial supply-side economic tailwinds, with geopolitical, social and electoral dynamics that reinforced and prolonged these tailwinds. They laid the foundations for profound institutional change: Europe's Economic and Monetary Union, China's accession to the World Trade Organization, the arrival of technocratic independent central banks with formal inflation targets etc.

Two grand geopolitical bargains defined the liberal world order. The first was between the US, the reigning hegemon, and China, its challenger. The second was between the EU, the world's second biggest economy, and Russia, the second largest producer of hydrocarbon energy. On these geopolitical foundations was the deflation machine built.⁴

“Since the absence of inflation risk was a critical driver of cross-asset dynamics in the dying regime, its return will upend the rules the casino plays by.”



Over the last ten years, both bargains have been shredded. A new cold war has begun between the US and China, centred on tech and military power rather than ideology.⁵ Meanwhile, Europe's relationship with Russia faces what the German establishment has dubbed *Zeitenwende* (historic shift). Zero-sum great power politics is back with a vengeance.

THE SEEDS OF ITS OWN DESTRUCTION

Liberal technocracy was the lubricant that made the deflation machine function smoothly. If its breakdown has been apparent for some time, has the demise of the disinflationary regime also been highly predictable?

4 Thompson (2022), *Disorder: Hard Times in the 21st Century*
5 Chartres (2020), *Cold War II*

It started sputtering long before this geopolitical reset began. Arguably, the return of great power politics was more consequence than cause, the defining legacy of the GFC. But this crisis cannot be understood without reference to the powerful overlapping supply-side tailwinds that spawned the Great Moderation.⁶ They changed the dynamics of the economic system, allowing extreme fragilities to build in the financial network. Past, present and future locked together in complicated ways.

Eventually, those tailwinds started to ebb and the inflationary side-effects of China's capex-heavy, FX-distorting mercantilist model became more apparent – most obviously, in the 2003-2007 commodity price surge. Central bankers were forced to react, but by then the credit structure was too fragile to remain standing.

There was immediate damage to the economic system. But the crisis also rewired domestic politics,⁷ reshaped social attitudes to liberal technocracy⁸ and shifted the balance of power within the global order.⁹ These spilled back into the economic realm, not least by blowing apart the existing economic policy orthodoxy.

The Great Moderation was the high point for inflation targeting and conventional monetary policy. Fiscal weapons were deployed to deliver sustainable public finances and promote

a more flexible supply side: sound money plus Thatcherite economics.

Since then, the Overton window – the range of politically acceptable monetary and fiscal policies – has expanded dramatically. Policymakers are ready to deploy unconventional weapons when the economy just looks to be heading for the rocks. During the pandemic, all levers of power were used to support the economy when depression loomed.

For their part, voters are demanding from Leviathan far greater protections. Vote-maximising politicians of all hues have embraced this, shifting economic policymaking markedly leftwards.

APPROACHING THE (DEFLATIONARY) SINGULARITY?

But what if inflation is the wrong malignancy to worry about? Might a return to secular stagnation – structurally weak growth and low inflation – be immediately ahead of us? Or could there be a more optimistic future, with rapid advances in digital technology unlocking a major leap forward in productivity? Might this even bring a return to liberal technocracy, as improving living standards undermine both the populist cause domestically and great power politics on the global stage?

“Financial markets, especially US ones, are priced for the first future – a disinflationary nirvana of AI-driven hyper-scaling and Trump-enabled deregulation.”

6 Borio (2014), *The international monetary and financial system: its Achilles heel and what to do about it*
 7 Eatwell & Goodwin (2018), *National populism: the revolt against liberal democracy*, Goodhart (2017), *The road to somewhere: the new tribes shaping British politics*,
 Krastev (2020), *The light that failed: a reckoning*

8 Goodwin (2023), *Values, voice and virtue: the new British politics*

9 IMF World Economic Outlook, GDP data



10 Suleyman & Bhaskar (2023), *The coming wave: technology, power and the 21st century's greatest dilemma*
 11 Brynjolfsson & McAfee (2016), *The second machine age: work, progress and prosperity in a time of brilliant technologies*
 12 Suleyman & Bhaskar

Specific developments are pushing the economic system in a more disinflationary direction. And they might be powerful enough to overwhelm the inflationary headwinds that have already started to gust.

What are they? There are benign forces which could reassert themselves, after the hiatus of the 2010s. If so, the deflation machine might be resurrected, propelled by a distinct wave of AI-enabled innovation.

The next few years could also be deflationary for malign reasons, with the economy trapped by demand weakness (as in the 2010s). This would mean asset price deflation and financial disruption.

Financial markets, especially US ones, are priced for the first future – a disinflationary nirvana of AI-driven hyper-scaling and Trump-enabled deregulation. In this future, the tech optimists are proved right.

They argue we are on the cusp of radical breakthroughs in digital technologies;¹⁰

that these innovations will spill over quickly into industries that have long seemed impervious to the productivity gains enjoyed by manufacturing.¹¹

We agree that we are in the midst of a technological revolution of profound importance. Once it's complete, the world will look radically different, wealthier and healthier.

Mustafa Suleyman, co-founder of DeepMind, is probably correct when he says: 'AI is far deeper and more powerful than just another technology. The risk isn't in overhyping it; it's rather in missing the magnitude of the coming wave.'¹²

However, technology does not march forward unconstrained by social and political forces. Down that blind alley lies technological determinism. Taken to its extreme, this perspective sees the political system bending completely to the will of tech revolutionaries in Silicon Valley. The 'end of history' liberalism that dominated

the 1990s and 2000s also bought into the myth that globalisation and the erosion of national sovereignty were inevitable consequences of the digital technology revolution. They were not.

One cannot – as tech optimists do – ignore the long-simmering tensions in domestic politics, the strains in the social fabric and the great power competition between the US and China. The advance of digital technologies will be shaped by these forces, as much as – or possibly more than – the AI revolutionaries who are developing them. The great power struggle of the 21st century is a race to control the coming wave

of AI innovation. For the next few years, techno-nationalism will do more than anything to shape this technological wave.

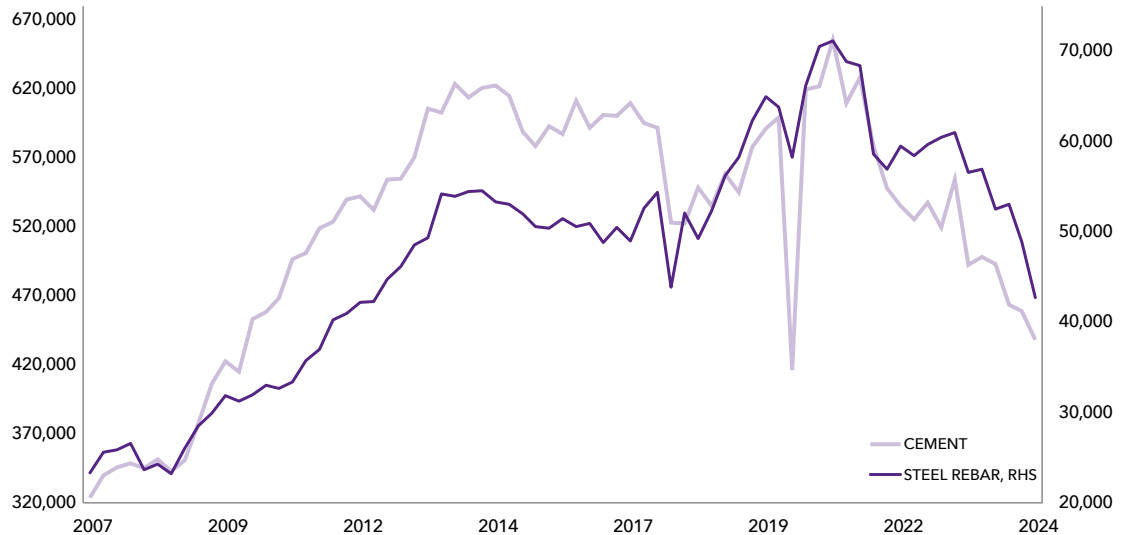
No technology has ever offered such a first-mover advantage.¹³ If innovation is power, this is a race neither the US nor China can afford to lose. And big tech has reached the same conclusion: it is no longer survival of the fittest but survival of the biggest AI budget.

The coming AI wave can only worsen the geopolitical relationship between the US and China.¹⁴ It will also further erode societal trust and democratic politics. Each technological revolution has a period of crisis, a turning point between the divisive and disruptive installation phase and the benign deployment phase. Markets are betting that the deployment

“If innovation is power, this is a race neither the US nor China can afford to lose.”



Figure 2
PRODUCTION OF CEMENT AND STEEL REBAR IN CHINA, K TONS



Source: National Statistics Bureau, seasonally adjusted quarterly data

phase has started. But it cannot begin until the crises that occur during the turning point have refashioned the financial and political systems, leading to a new social contract and new incentive structures needed for the start of the productivity-boosting deployment phase.

The political and geopolitical environments remain too hostile, and the policy backdrop too antagonistic, for the rapid technological diffusion typical of past deployment phases.¹⁵ Meanwhile, financial market developments are too reminiscent of previous investment bubbles to ignore. And bubbles and busts are characteristic of the painful but cathartic interregnum that signals the transition to the benign phase. For now, we remain mired in the disruptive, inflationary phase of the fifth technological revolution.¹⁶

THE JAPANIFICATION OF CHINA

Whilst the productivity benefits of Suleyman's coming wave could be dramatic over the long term, they will not arrive quickly enough to offset the structural inflationary headwinds of the post-pandemic world. There are, though, other deflationary forces to consider – most obviously from China. The mechanism? A deflationary and uncontrolled balance sheet recession, as China's egregious real estate credit excesses finally come home to roost (Figure 2).

Now in its fourth year, China's property bust has been a slow-moving car crash. Beijing has successfully used its extensive financial levers to prevent a disorderly unwinding of leveraged balance sheets.¹⁷ It remains to be seen whether Xi can maintain this economic balancing act with a combative tariff-wielding president in the White House.

¹⁵ Perez (various), carlotaperez.org

¹⁶ Ibid

¹⁷ The four large state-owned banks, the policy banks and the People's Bank of China have combined assets of 250tn renminbi (\$34tn)

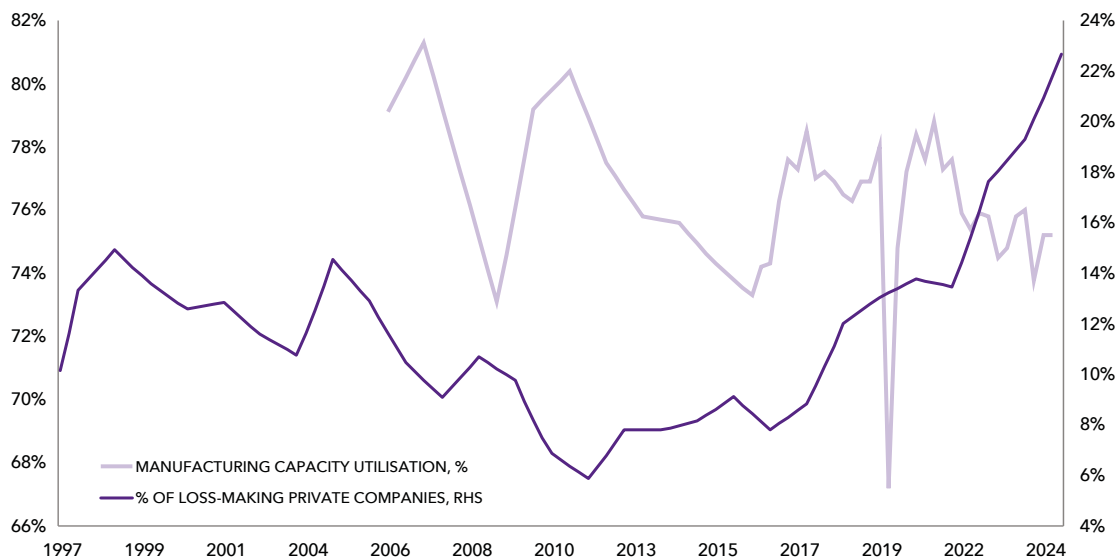
The ‘Japanification’ – or worse – of China is certainly a risk we are alive to. Financial markets are too, given collapsing Chinese bond yields and the dire multi-year performance of Chinese equities. Yet some version of the ‘China exporting deflation’ view has long been a feature of the market narrative.

Beijing has been cleaning up credit market excesses for years. Property market activity has fallen a long way – on some measures, residential investment’s share of GDP has already returned to the norms before the boom began in the mid-2010s. So China may be through the most perilous phase of its repair job.¹⁸ Meanwhile, in

prioritising balance sheet repair, Xi has left himself plenty of ammo to fire up aggregate demand. A steady flow of announcements over recent months suggests the Chinese ship of state is, after many years, heading in that direction.

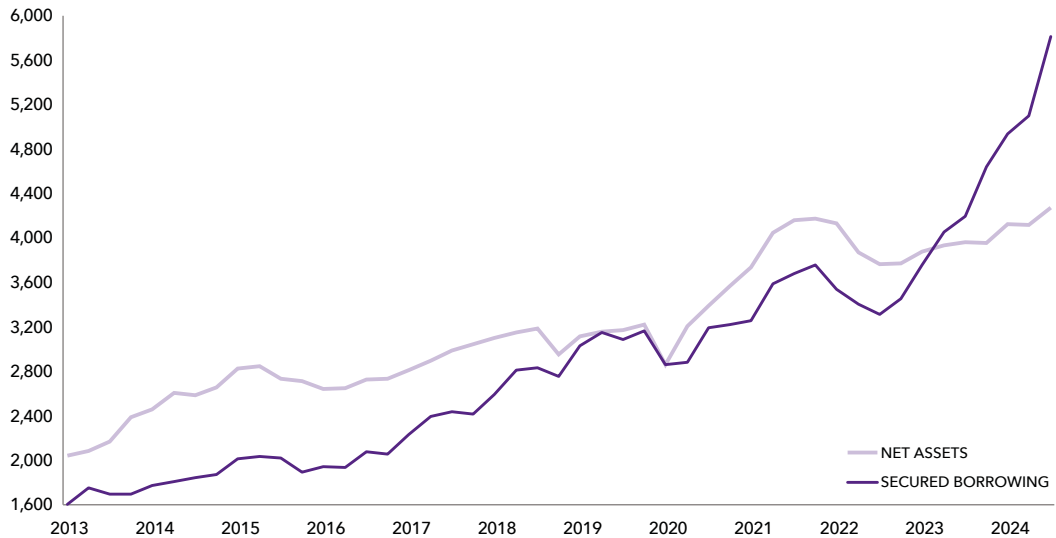
But accidents do happen. Maybe Beijing’s ability to stem the tide of capital that wants to leave the country is more precarious than we think. China’s slow-burn balance sheet recession (Figure 3) could morph into something more violent and uncontrolled – which, given China’s economic scale and decade-long credit boom, would unleash a potent deflationary shock on the rest of the world.

Figure 3
EXCESS CAPACITY IN CHINA’S INDUSTRIAL SECTOR



Source: Chinese National Bureau of Statistics

Figure 4
BORROWING AND NET ASSETS OF US HEDGE FUND SECTOR



Source: Office of Financial Research, Securities and Exchange Commission

19 Maxey (2019), *Behind the illusion of stability*, Cole (2017), *Volatility and the alchemy of risk*
20 Maxey (2024), *Something new under the sun*

This would be geopolitically intolerable, provoking inflationary retaliation from the US and its allies. It would surely convince Western central banks to loosen policy aggressively and encourage governments to open the fiscal spigots. So an initially deflationary China shock would provoke policy responses that set the system up for another inflationary wave. Inflation volatility, not deflation.

VOLMAGEDDON?

In previous Ruffer Reviews, we have focused on the systemic risks hidden in the rewired, avalanche-prone financial ecosystem.¹⁹ Throw into this mix the

extreme valuations in US risk asset markets, an explosion of hedge fund leverage and carry trades financed via the repo market (Figure 4) and the absence of any meaningful adjustment in portfolio allocations to structurally higher cash rates. You have the perfect set-up for a highly correlated gap down in markets if volatility unexpectedly spikes up.²⁰

Is there not a contradiction between such concerns, which have kept the Ruffer portfolio on a defensive footing for a while, and our thematic view about a new more inflationary regime? No, because politics and central bank reaction functions have changed a lot. We cannot stress this point

enough. Regulators believe the system is far more robust than it was a decade ago. An outsized and violent drawdown in asset prices would take them by surprise. The monetary policy response would be swift and material. Donald Trump reportedly regards the US stock market as the single most important barometer of his political success. We can be sure he would pull the fiscal lever aggressively, however much Scott Bessent and Elon Musk might prefer otherwise.

“Western central banks tried zero interest rates and quantitative easing for a decade, with scant success. Why would Trump triumph where his predecessors failed?”



TRUMP, MAGA AND THE ‘SEISMIC RUPTURE’

Hang on a minute. After the GFC, it was China’s vast money-financed fiscal pump-priming that saved the day. Western central banks tried zero interest rates and quantitative easing for a decade, with scant success. Why would Trump triumph where his predecessors failed? After all, in the intervening 15 years, the two balance sheets that had the capacity to support the post-GFC recovery – China’s and Western governments’ – have now been trashed.

A decade ago, Claudio Borio, chief economist of the Bank for International Settlements, noted the risk of ‘an epoch-defining seismic rupture in policy regimes.’ It was a stark warning – and prescient. As Borio feared, ‘an era of trade and financial protectionism’ has started. But will it lead to ‘stagnation, combined with inflation’, as he suggested, or deflationary collapse?

Milton Friedman famously remarked that ‘inflation is always and everywhere

“Are the political pressures now so burdensome and the intellectual failings so entrenched that monetary excess is the path of least resistance?”

a monetary phenomenon.’ In many ways, this is a trite comment, as Friedman acknowledged.²¹ What interested him were the sufficient conditions for monetary excess to be kept in place – and these, in his mind, were always political, institutional and intellectual.

Borio’s seismic rupture is the denouement of a process of governmental and democratic breakdown that accelerated after the GFC. To judge whether such a rupture will be inflationary, we must, like Friedman, look at the political system – and how it has refashioned the behaviour of the apolitical technocrats with their hands on the tiller. Trump’s return brings this seismic rupture into sharp focus, because his rhetoric and policy agenda are so antagonistic to the existing economic and political order. Operationally independent technocratic bodies are in the firing line, the Federal Reserve (Fed) most obviously.

VOLCKER RESURRECTED?

Which way will it turn? Are the political pressures now so burdensome and the intellectual failings so entrenched that monetary excess is the path of least resistance? That was Friedman’s diagnosis of the inflationary 1970s. It was also how Arthur Burns (Fed chairman 1970-1978) came to view the decade’s stagflation.²²

The Fed may operate independently, but its huge influence over the economy and financial sector makes it deeply political. Trump’s nominations for key posts in his administration suggest he will use Leviathan to drain the swamp. Apolitical technocrats are prime targets.

Fed Chair Jerome Powell has a year and a half to cement his legacy as a fine public servant who guided the US economy away from the biggest inflation surge in 50 years whilst avoiding a recession. With Trump in the White House, not being remembered as Arthur Burns II is paramount.

Our belief in a more inflationary regime is a judgement on the future of independent central banks: their powers will be slowly degraded by the political and social forces working to upend liberal technocracy.



At one level, this is all too pessimistic. After a slow start, the technocrats proved up to the task during the post-lockdown inflation surge. Tight money was electorally tolerable. Perhaps central bank independence will survive long enough to usher in the golden age of AI-enabled productivity gains. Trump and his court loyalists may try, but in the end fail, to mould the Fed in their image.

BACK TO THE (INFLATIONARY) FUTURE

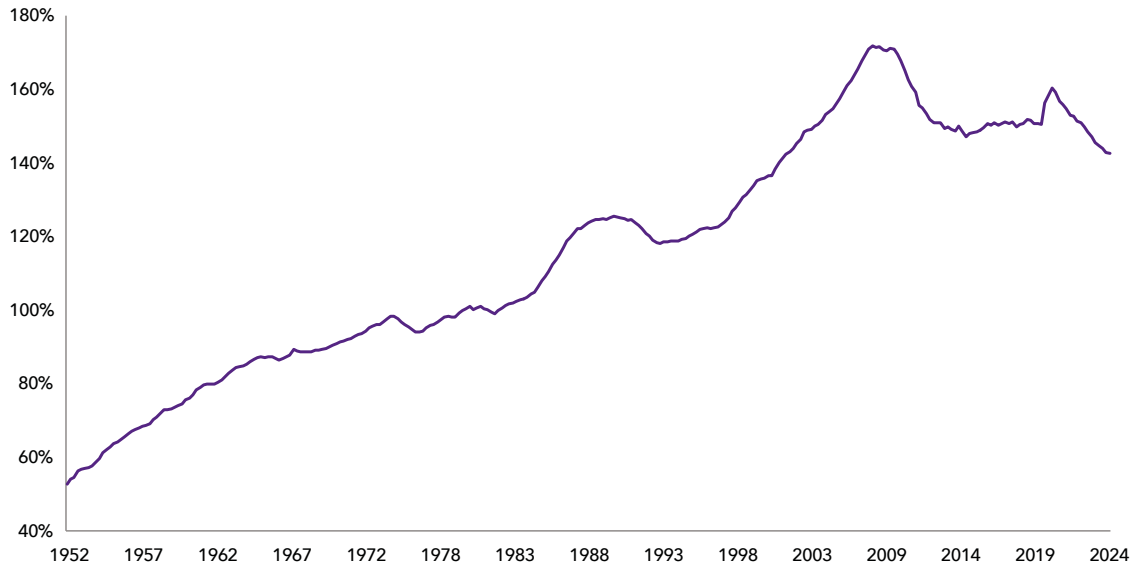
At another level, though, an inflationary future is all too plausible. “The future is not set. There is no fate but what we make for ourselves.” So said that leading philosopher of the 20th century, John Connor (of “Terminator 2” fame). Human agency matters. No coherent judgement about the future can be made without considerable reflection upon the social, political and geopolitical forces at work. They move slowly, which is why investors ignore them. Yet they underpin everything happening in the economic and financial systems.

These forces are not celestial, obeying well-defined physical laws. They emanate from human decision-making, as we try to navigate a world of infinite complexity. Our guide is the past. Past, present and future interwoven.

The more inflationary and volatile macroeconomic regime we have entered is the inevitable progeny of the

“Politically, inflation is the path of least resistance. Not because Western society wants it, but because the alternatives are even more intolerable.”

Figure 5
US PRIVATE NON-FINANCIAL SECTOR DEBT, % OF GDP



Source: Federal Reserve Board Flow of Funds, BEA

deflation machine. Not because it was pre-ordained. Quite the opposite – because a combination of technological advances, institutional changes and political decisions created a world that full-franchise representative democracy could not accept. Politically, inflation is the path of least resistance. Not because Western society wants it, but because the alternatives are even more intolerable.

AI, machine learning and synthetic biology may well lead us into another golden age of rapid productivity growth. But not any time soon. This is not a judgement on the underlying technologies. It is an acknowledgement that they are at the centre of a zero-sum power struggle that will define the 21st century.

This struggle is happening in a global economic system deprived of its traditional shock absorbers. For 15 years,

policymakers have kept the economy in suspended animation (Figure 5). Political forces have prevented the necessary repair of the economy's structural flaws. Central bankers acquiesced via easy money. New fragilities have emerged. These structural defects will likely get exposed – with deflationary consequences.

But only initially. Electorates have seen what protection Leviathan can offer them. They remain scarred by the financial disruption and high unemployment of the 2010s. They will not tolerate them again. Sound money governments and technocrats won't stand a chance against insurgent populists raging from the extremes. Populists in government will not bite the electoral hand that feeds them by tacking back to the centre ground. The end game won't be deflationary. Politically, it cannot be. ●

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