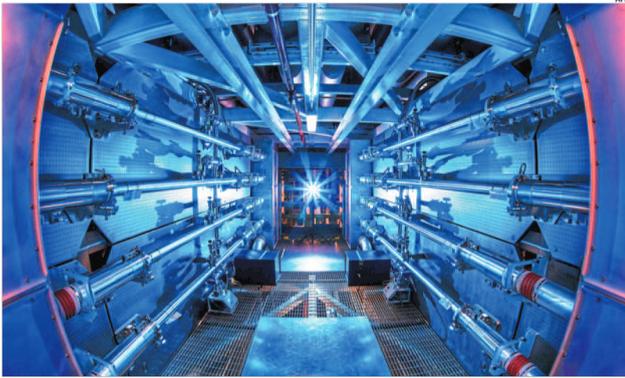


OUR VIEW

THEIR VIEW



# A civilizational pivot? Don't hold your breath

America's nuclear fusion success is a marvel for its energy yield. It brightens hopes of clean power, but won't spell climate relief anytime soon. We must keep the technology under study

Like sunshine bursting through a sky overcast by inflation, war and covid, US government scientists gave us—all humankind, no less—some good news on Tuesday. On 5 December, the US National Ignition Facility (NIF) successfully conducted a contained nuclear fusion that's said to hold the promise of nearly limitless, safe and clean energy. The world's largest fusion lab converged 192 laser beams onto a single peapod-size diamond-coated pellet of frozen deuterium and tritium (hydrogen isotopes) encased in a tiny gold cylinder. The lasers heated the fuel pellet to 150 million degrees Celsius (like at the centre of the Sun) to create a gas of free-moving negatively charged electrons and positively charged nuclei, a state of matter known as 'plasma'. For the first time, scientists were able to contain this plasma (an example of uncontained fusion is the hydrogen bomb), and, crucially, create more energy than was put in by the lasers. Amid much global awe of this "net energy gain", scepticism abounds—and rightly so. The laser shot of nearly 2.1 megajoules did yield about one-and-a-half times that input, but took more than 100 times that energy just to generate those laser beams in the first place. So financially-viable fusion reactors keeping our lights on remain a distant dream.

Still, NIF's nuclear merger has brightened the chance of fusion being deployed for energy generation someday. Scientists have struggled since the 1950s to get more energy out of fusion than put in, and what was achieved is notable, even historic. Like the use of nuclear fission—atom splitting—to make steam that drives turbines for power generation, fusion is carbon-free. But unlike fission reactors, fusion is also expected to be free of nuclear waste that stays

radioactive for centuries. Relieved of its high operational and disposal risks and costs, the global nuclear industry could ride to the planet's rescue as a climate solution. Right now, regular fission plants may beckon but remain controversial. Unfortunately, a sober and open debate on nuclear energy has never really taken place either in or out of Indian Parliament. Protests fuelled by local fears of radiation and radioactive waste leaching into the sea dominated the discourse over a nuclear power project in Kondakulam, Tamil Nadu, a decade ago, but they were faced down. India currently has plans to commission 20 nuclear power plants by 2031, adding nearly 15,000MW to our current capacity of 6,780MW across 22 plants (under 2% of total power). We didn't really ramp up nuclear capacity after an import path was cleared by a deal with the US (disaster liability was a sore point with foreign suppliers), but our scientific quest for fusion technology must see no let-up. India is among a handful of countries that are part of ITER, an international nuclear fusion project based in France that hopes to use an experimental 'Tokamak' machine instead of laser ignition to achieve net-positive energy from fusion. Experiments are scheduled to begin in December 2025.

The American achievement has been described as a "civilizational pivot" by some scientists, but we must moderate our expectations of what it can do to help the world achieve net-zero carbon emissions. Right now, we must let wind, solar and other sources lead the charge for clean energy. If anything else can chip in, like nuclear fusion, all the better. It will be cherry on the cake. In the meantime, Indian scientists must keep studying how we can clean up our energy mix cheaply and safely.

# Our promise of stable shores may shine after 2023's global storm

RBI is likely to pause rate hikes next year with monetary easing possible in the latter half of 2023-24



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Central bank governors have a lot in common with ship captains. Both need to assess the winds to forecast if a storm is on the way, and draw up the sails accordingly. In both cases, there is a perceptible lag between turning the wheel and the ship starting to change direction. And if you find yourself staring at an iceberg, then it's probably too late!

So, at the Reserve Bank of India's December meeting, markets were arguably more interested in RBI's forward guidance than its rate hike. On this front, the signals were pointedly hawkish. Markets picked up RBI's repeated mention of elevated core inflation, comment that the policy rate adjusted for inflation is still accommodative, and its "withdrawal of accommodation" stance, which signals more policy normalization to come.

Yet, between the lines, RBI's communication was actually far more nuanced. Governor Shaktikanta Das mentioned that future policy actions will take into account the 225 basis points of rate hikes already delivered and will be data-dependent, suggesting that policy is not on a preset path. In an uncertain environment, firm guidance by central banks can indeed be counterproductive, in our view, and data-dependence is wise: committing to a pause can prematurely ease financial conditions, but continuing to hike rates could risk overtightening, as monetary policy works with long lags

and the full impact of this year's hikes will materialize only in 2023-24. So, what does the growth-inflation outlook indicate about the monetary policy direction? Our estimates suggest dark clouds gathering over growth and gradual disinflation. With second-round effects in check and fading cyclical forces, we expect inflation to average around 6.8% this fiscal year and 5.0% the next, close to RBI's projections of 6.7% and 5.2% respectively.

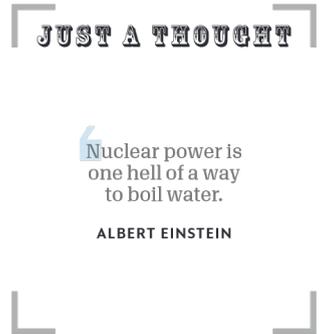
What does this macro backdrop mean for RBI? With the current policy rate at 6.25% and RBI's one-year-ahead inflation projection at 5.4%, the real policy rate is about 0.8%, still below the 1% psychological level that monetary policy committee (MPC) members have cited in the past. However, the softening of both inflation and growth, and lagged effects of monetary policy, mean that RBI could hang its boots on rate hikes soon. A 25 basis points rate hike at the February meeting is a close call, but even if it materializes, it is likely to be the final hike in this cycle. Beyond that, a long pause is likely, but we believe policy could turn towards easing in the latter part of 2023-24, especially as lower growth is likely to bring disinflationary pressures. We believe global monetary policy is also likely to pivot by the third quarter of 2023, with the US Federal Reserve likely to deliver its first cut in policy rates around September.

India will face a challenging growth backdrop in 2023, but this is largely due to global spillovers, while India's medium-term fundamentals look better. Better balance sheets, a young population, prudent policymaking and supply chains diversifying away from China mean that as global headwinds fade, the economy could be ripe for a V-shaped recovery in 2024-25, when we expect a rebound in GDP growth to 6.8%. India thus holds the promise of stable shores, which should attract more investors in the second half of 2023. For now, a tumultuous global storm is brewing and policymakers will need to stay vigilant.

A slowdown in domestic growth and capped global commodity prices should moderate core inflation in 2023-24. Easing supply-chain bottlenecks should also help, resulting in sharper goods' disinflation, relative to more sticky services inflation. With second-round effects in check and fading cyclical forces, we expect inflation to average around 6.8% this fiscal year and 5.0% the next, close to RBI's projections of 6.7% and 5.2% respectively.

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# Let the third crisis of capitalism concentrate our minds

ALOK SHEEL



is a former civil servant

The confluence is unfortunate, but most of these crises can be addressed with an existing toolbox. Other than climate change, they can be expected to dissipate over the short to medium term. However, some fundamental structural problems within capitalism await denouement.

Adam Smith and Karl Marx, products of the European Enlightenment, had described and analysed this system. Both pointed to its strengths and downsides. For Smith, its gains outweighed the disadvantages, whereas Marx foresaw major problems and peered ahead to see how it could be radically restructured. His remedies were utopian. He did not lay down a practical roadmap of how to get to the desired end point. His followers, such as Lenin and Mao, prescribed means by which the end point became even more elusive.

Humans are imperfect and cannot be expected to design a perfect society. Progress is nevertheless possible through identifying unintended consequences and piecemeal social engineering. The impulse to view such consequences as a failure of social institutions and signal for revolution usually leads to totalitarian regimes. On all major parameters—longevity, infant and maternal mortality, average prosperity, political freedoms, scientific and technical skills, etc.—we are far better

off than 100 or 25 years ago. In retrospect Marx asked the right questions, but we still don't have satisfactory answers. Social democratic and neoliberal variants of capitalism were tried and found wanting. Social democracy put unsustainable pressure on tax systems. Neo-liberalism worsened inequality.

Democracy arose on the back of a rising new middle class. The same class tends to turn its back on it and enable right-wing demagogues when it finds its economic prospects dim, as in Europe during the Great Depression, an inter-war period that saw the second major crisis of capitalism, and also after the Global Financial Crisis of 2008, which marked a third major crisis that's still on.

While long-term trends are a cause for optimism, the resurgence of a counter-revolutionary right that rejects Enlightenment values is on account of the kind of problems with capitalism that Marx foresaw: rising inequality and popular disaffection. Populist right-wing leaders in many parts of the world should alert us to the

urgency to get a fix on escalating inequality and growing popular discontent arising from it. Universities, business schools and thought leaders must engage with this failure, as it favours the rise of demagogues seeking to roll back the values on which modern civilization rests, such as democracy, humanism, individual liberty, rationalism and religious universalism.

In several ways, the poly-crisis is reminiscent of the early crisis of *laissez faire* capitalism in the 19th century that fired romantic poets like William Wordsworth, William Blake, and novelists like Charles Dickens. This was an existential crisis deriving from the loss of a way of life (Wordsworth's "The world is too much with us", and Blake's "dark satanic mills"), and absolute impoverishment of the new working class (Dickens' *Hard Times*). This crisis was resolved through a greater role assumed by the state through regulation and social welfare, and greater democratization through universal suffrage and labour organizations that provided correctives to capitalism.

The second crisis was resolved by the stimulus of a war economy and because Western societies were young with good growth prospects. Right-wing militias also met their match on the streets in strong left-wing parties. In the third crisis, the long-term prospects of growth in aged industrial economies are poor and the Left is in disarray.

Unlike the first two, this third crisis is not one of scarcity, but policy. There is a 'glut' of supply over demand. The speed of technological change holds the promise of a sustainable solution for climate change, while democratic values are also proving resilient in ageing societies, which are causes for optimism. However, the commitment of the middle class to liberalism and values of the Enlightenment in the world's younger fast-growing major emerging markets is unclear. They are set to play a bigger role in global affairs, but also seem more susceptible to demagoguery.

As citizens of one of the world's biggest emerging markets, we in India should be clear about the kind of values we wish to embrace, those of the forward-looking Enlightenment or a counter-revolutionary reversion to some elusive golden past. With the hope that we will resolve to always choose the former, here is wishing all readers a merry Christmas and happy new year!

**The first two were resolved but the third one is proving persistent in the face of our weak responses**