Even on 'clear' days, the air can still be chemically toxic

The Hindu Bureau

Governments and scientists often judge air quality by the amount of fine particulate matter (PM2.5) in it. These particles can enter deep into the lungs and bloodstream and have toxic effects. New research from East China Normal University suggests, however, that this measure may not tell the whole story. Even when PM2.5 levels meet global safety standards, the air can still contain toxic particles that harm the lungs.

In the study, published recently in *Environmental Health*, scientists analysed PM2.5 levels in Shanghai in winter and spring 2025. Then they used a sensitive method called single-particle inductively coupled plasma time-of-flight mass spectrometry to identify the chemical makeup of each particle. They paid special attention to metal-containing fine particles (MCFPs), small fragments that include aluminium, silicon, iron, manganese, and lead. The scientists found that MCFPs made up about 80% of all metal particles in the city's air. They also used machine learning to determine the particles' origins and tested how they affected human lung cells.

The results were striking. Air samples collected on clean days, when the PM2.5 concentration was under 15 μg/m³, were often more toxic to lung cells than those collected on polluted days. The oxidative stress in cells, a sign of tissue damage, was up to 8.1x higher and cell death was up to 6.3x higher, even as the total particle mass was lower.

The main culprit was iron-rich MCFPs that carried other toxic metals such as manganese and lead. These combinations triggered strong chemical reactions inside cells, releasing free radicals that damaged DNA.

The team found that most of these iron-rich particles came from human activities, especially vehicle emissions and burning coal. On days with heavy dust or haze, the MCFPs were partly masked by larger mineral particles, which reduced their relative abundance. But on seemingly cleaner days, the proportion of these particles was much higher, rendering the air chemically more dangerous.

The study concluded that PM2.5 mass alone is a poor indicator of air safety. Even air that seems clear can hide particles small enough to evade the body's defences and persist in organs for years. The researchers suggested that air-quality monitoring and regulation should shift from measuring only total particle mass to identifying and controlling the specific toxic components, particularly iron-rich MCFPs from traffic and fuel combustion.

RRI technique yields certified randomness with one qubit

Researchers built simple quantum circuits on IBM's superconducting quantum computers, which are available on cloud; the experiments produced random numbers certified by quantum mechanics, and which classical randomness can't fake

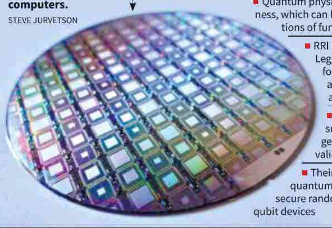
Vasudevan Mukunth

Randomness is essential today. From encrypting sensitive information to simulating biological systems, unpredictable numbers are indispensable. Yet most everyday random numbers aren't truly random. Conventional computers use algorithms called pseudorandom number generators to produce sequences that look random but are ultimately predictable if the starting 'seed' is known. For applications such as cryptography, this predictability is dangerous because attackers could exploit it.

Road to randomness

A study shows a new way quantum mechanics can benefit society today

A wafer of quantum computers.
STEVE JURVETSON



- Randomness underpins modern computing, encryption, and simulation but most random numbers are only pseudorandom
- True random number generators use physical noise, yet verifying their unpredictability remains technically and trust-wise difficult
- Quantum physics provides intrinsic randomness, which can be demonstrated through violations of fundamental mathematical limits
- RRI researchers used the Leggett-Garg inequality to test for randomness in one qubit across time rather than two qubits across space
- Using IBM's cloud-based superconducting qubits, the team generated certified random bits validated by quantum principles
- Their results show today's noisy quantum processors can already produce secure randomness and benchmark future qubit devices

True random number generators try to solve this using physical processes such as electronic noise or radioactive decay, which can't be predetermined. But these devices aren't free of problems either: they degrade over time like any hardware, and also need users to trust manufacturers to not have secretly inserted prerecorded numbers into the system. Certifying they are truly random is also difficult.

Quantum physics is especially powerful here. At its heart is a principle that some outcomes, such as the spin of an electron measured along a chosen axis, are fundamentally random. Physicists have long used quantum experiments to prove this intrinsic randomness, often by showing quantum systems can violate mathematical limits known as Bell inequalities. However, such tests require at least two entangled qubits to be separated by a large distance, making them impractical for a single quantum computer.

A different inequality, known as the Leggett-Garg inequality (LGI), provides an alternative. Instead of requiring spatial separation, it compares the outcomes of measurements performed at different times on the same system. If LGI is violated while satisfying the 'no signalling in time' condition, which ensures the two readings are completely independent, the results are certified as truly random.

To this end, Raman Research Institute researchers led by Urbasi Sinha asked a question: could modern quantum processors, like those available on the IBM Quantum platform, already be used to generate certified random numbers? If so, this would prove that even the current generation of quantum devices can perform tasks impossible for classical machines.

The team built simple quantum circuits on IBM's superconducting quantum computers, which are available on the cloud. Each circuit used only one qubit and a sequence of single-qubit gates representing rotations around chosen axes. They made measurements at three times and checked the results for whether the LGI was violated while still satisfying the 'no signalling in time' condition. By carefully varying the parameters and constraints in multiple tests, the team certified the randomness of the generated bits.

The experiments successfully produced random numbers certified by quantum mechanics. On IBM's Brussels backend, the team observed consistent violations of the LGI, although the measured values were slightly below theoretical predictions due to noise.

"The beauty of our implementation is that we have been able to show something as fundamental as certified randomness using a noisy intermediate scale quantum computer," Prof. Sinha, who heads the Quantum Information and Computing (QuIC) lab, said. "We have been able to do this through careful error mitigation techniques and ensuring that 'classical' errors are under control and the randomness is purely from the underlying quantum mechanical principles."

The study has several important implications. It demonstrates foremost that secure random numbers can already be generated on existing quantum computers without elaborate laboratory setups. Demanding only one qubit and shallow circuits, the protocol is feasible for end users who can access quantum computers through cloud platforms.

"There are still a few challenges to be overcome along the way but the fact that this certification is device-independent makes this a very promising avenue," Prof. Sinha said.

The work also shows how quantum mechanics can benefit society today. Classical randomness can't fake certified randomness, providing a layer of security for applications where unpredictability is paramount, including data encryption, secure communications, and scientific simulations.

The results highlight the importance of error-mitigation tools in making quantum hardware reliable. Techniques such as readout error correction improved the tests' agreement with theory and reinforced trust in the generated randomness, underlying how progress in circuit design can extend the capabilities of noisy devices.

The study also contributes to foundational physics: by confirming violations of the Leggett-Garg inequality on a quantum computer, it offers further validation of quantum theory in a new setting. The same methods could also be used to benchmark qubits individually, providing a tool with which to test future machines.

"We can use our method as a strong benchmark for new qubit registers as they emerge, which will prove how useful these systems are going to be in solving real-world problems," Prof. Sinha said.

The team's results were published in *Frontiers in Quantum Science & Technology* in September.

Fix your workflow before using AI tools

DECODED

John Xavier

In the world of work, there is always market for tools that increases productivity and reduces the time taken to complete tasks. That market has enabled creation of new apps, better planners, and faster devices. Now AI has entered the scene, promising to take things a step further.

AI tools can draft your emails, plan your week, summarize meetings, and even suggest when you should take a break. The companies shipping AI products are making an irresistible pitch: let the machine handle the mess so you can focus on the meaningful.

In my earlier column on decoded, I showed how AI alone can't solve your email problem. In this article I'll show how you should fix your workflows before deploying AI to complete tasks.

The simple truth is this: if your workflow is broken, AI won't fix it. In fact, it often makes the cracks bigger. Without clear systems, automation doesn't create clarity; it just moves chaos around faster.

Consider personal tasks like scheduling, note-taking, or managing to-dos. AI can quickly slot an appointment onto your calendar, transcribe a meeting, or sort tasks by priority. But if you haven't defined when you review your calendar, where you store your notes, or how you act on tasks, you'll still feel disorganized. The problem isn't the lack of AI; it's the lack of structure.

Simple truth is if your workflow is broken, AI won't fix it. REUTERS

This is why the starting point isn't "Which AI tool should I use?" but "Do I have a workflow worth automating?" Only once you've built a foundation can AI actually amplify it. Otherwise, you're giving a shaky system more moving parts.

So how do you create that foundation? One practical way is to follow a three-step framework that begins by *capturing* the information, followed by building a *process*, and then concludes in *executing* the rules consistently.

Firstly, decide where every type of information or data goes. Emails, notes, and ideas should have a single, trusted home. Scattered sticky notes, half-used apps, and random reminders on your phone only make AI's job harder.

Then, define how often and in what order you review information. For example, maybe you check your task list twice a day or review your calendar at the start and end of the week. A system without regular checkpoints is like a filing cabinet no one ever opens.

Lastly, choose clear rules for execution. Do tasks get done immediately if they take under two minutes? Do larger items get scheduled into time blocks? Without clear criteria for action, even the best AI prioritization will leave you staring at a list you don't trust.

Once this capture-process-execute cycle is in place, AI becomes a multiplier. A transcription tool doesn't just create a messy text file; it feeds into your note system where you already know how to tag, review, and use it. An AI calendar assistant doesn't just book time; it supports the way you already plan your week.

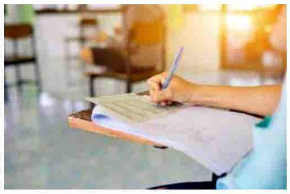
Think of it this way: AI is like adding horsepower to your car. If your wheels aren't aligned, you won't go faster. Instead, you'll skid off the road.

The temptation is to let AI shoulder responsibility for your personal productivity.

But the truth is, it's still on you to design a workflow you trust. Once that foundation is in place, AI isn't just impressive, but a genuinely transformative tool. Without it, you're just automating bad habits.

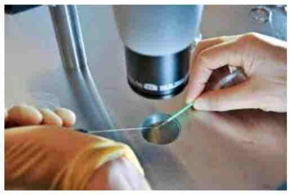
The question isn't whether AI can help you work smarter. It's whether you've created the systems that make "smarter" possible in the first place.

SNAPSHOTS



AI models team up to ace U.S. medical exam

Researchers from Malaysia, Pakistan, and the US have found that multiple large language models working together as a 'council' outperformed single models on the U.S. Medical Licensing Exams. A council was made of several GPT-4 instances that debated and reached consensus under the guidance of a "Facilitator AI". It did better than any single previous model on 325 questions. The study showed that response variability, usually seen as a flaw, can actually drive adaptive reasoning when AIs collaborate.



More harmful mutations in older men's sperm

Researchers sequenced sperm from 81 men aged 24-75 and found that sperm DNA gains about 1.7 new mutations per year, slower than blood cells, but that some mutations multiply within the testis. They identified 40 genes that were strongly positively selected, most linked to developmental and cancer-related disorders in children. The study showed that as men age, more of the sperm carries such harmful variants, increasing the risk of passing on genetic disorders.

European bats prey on migrating birds on the fly

Europe's greater noctule bats have been found hunting and eating small migratory birds while flying, a feat thought impossible for bats. Using high-resolution sensors, a team tracked 14 bats in Spain and found two instances of bats pursuing and catching birds above 400 m. In one chase, a bat captured a European robin and consumed it continuously in flight for 20 minutes. The bats used ultrasonic echolocation inaudible to birds and strong wingbeats to outfly their prey.

Question Corner

Unkindest cut

How does cutting onions make you cry?

When you pierce the skin of an onion, you are left with stinging eyes caused by chemicals released from the onion that affect your nerves in the cornea. And it seems the cutting technique may have a role to play as well.

Onions cut by steel blades of varying sharpness and speed matter, according to a study published in *Proceedings of the National Academy of Sciences*.

"Using high-speed visuals, we found that an onion does not release tear-triggering fluid in one burst. Instead, the blade first punches out a layer of high-speed mist, then slower fluids snap into drops," the authors wrote.

Blunter blades and faster cutting speeds release a larger number of droplets, "causing pressure to build under the onion's skin before the droplets were ejected. Refrigerating the onions prior to cutting produced an increased number of droplets of similar velocity, compared with the unchilled samples," it said.

Using sharp knives "not only reduces tears while cutting onions but may also reduce the number of potential pathogens released while chopping other raw foods".

Readers may send their questions / answers to science@thehindu.co.in

Why did MOFs pioneers win the chemistry Nobel?

How are metal-organic frameworks being put to use across different applications? Why are they significant?

Vasudevan Mukunth

The story so far:
For centuries, chemistry's main terrain was to craft ever more complex molecules but it soon became clear to scientists that they were all confined to their own boundaries. The Nobel Prize in Chemistry 2025 honours three scientists who expanded that horizon. Susumu Kitagawa, Richard Robson, and Omar Yaghi have been feted for developing metal-organic frameworks (MOFs), little molecular scaffolds with vast internal spaces where other atoms and molecules can move, react or stay.

What is an MOF?
MOFs are crystalline structures in which metal ions serve as nodes and organic molecules as connectors. The resulting structure can have enormous internal surface areas – thousands of square metres per gram – and their pores can be customised to attract or hold specific molecules. By carefully choosing the building blocks, researchers can control the size and shape of the cavities and the chemical environment within. MOFs are thus among the most versatile materials ever created.

What did Robson and Kitagawa achieve?
In the 1970s, Richard Robson at the University of Melbourne was preparing ball-and-stick models to show students how atoms connect. He realised that the positions of the holes drilled into each atom contained all the information needed to determine the molecule's shape. If that logic worked for small molecules, he wondered if it could be scaled up.

A decade later, Robson combined copper ions, which like to bond in a tetrahedral arrangement, with an organic molecule bearing four arms ending in nitrile groups. To everyone's surprise, instead of a messy tangle, the components self-assembled into a diamond-like crystal. This lattice wasn't dense like a diamond but full of empty cavities, each capable of hosting other molecules. Robson predicted that such "frameworks" could be tailored to trap ions, catalyse reactions, and sieve molecules by size.

An MOF called CALF-20 can efficiently capture carbon dioxide from factory exhaust and is already being tested in industrial plants

However, Robson's early crystals were fragile. Susumu Kitagawa in Japan made them stable and functional. Guided by his philosophy of finding "usefulness in the useless", Kitagawa pursued porous materials even when they seemed too delicate to matter. In 1997, he used cobalt, nickel or zinc ions linked by a bridging molecule called 4,4'-bipyridine to build a true three-dimensional MOF. When the material was dried and refilled, gases such as methane, nitrogen, and oxygen could flow in and out without damaging the structure.

Kitagawa also recognised that MOFs could be soft rather than rigid, with flexible molecular joints allowing them to expand, contract or bend around depending on temperature, pressure, and the molecules inside.

What was Yaghi's contribution?
Omar Yaghi in the U.S. gave MOFs their structural strength and reproducibility. Having grown up in modest circumstances in Jordan, Yaghi was fascinated by chemistry's ability to create new forms of order. At Arizona State University in the 1990s, he sought a way to build extended materials by design, not by chance, using metal ions as joints and organic molecules as struts. In 1995, he made the first two-dimensional frameworks linked by cobalt or copper ions that could host other molecules without collapsing. Four years later, he achieved a landmark with MOF-5, a robust three-dimensional lattice made from zinc ions and benzene-dicarboxylate linkers. MOF-5 was strong and, notably, just a few grams had an internal surface area comparable to a football field. It was also intact when heated to 300°C and emptied of all 'guest' molecules.

By the early 2000s, his team had built entire families of MOFs with the same underlying geometry but different pore sizes and functions.

Why are MOFs important?
Chemists can easily make use of them for different applications. An MOF called CALF-20 can efficiently capture carbon dioxide from factory exhaust and is already being tested in industrial plants. MOF-303 can harvest drinking water from arid desert air by absorbing vapour at night and releasing it in sunlight. UiO-67 can remove persistent forever chemicals (PFAS) from water. MIL-101 and ZIF-8 can speed up the breakdown of pollutants and recover rare-earth metals from wastewater.

In the energy sector, NU-1501 and MOF-177 can store hydrogen or methane safely at moderate pressure, a crucial step toward clean-fuel vehicles. Others serve as containers for toxic gases in semiconductor manufacturing and as drug-delivery capsules that release medicines in response to biological cues.

How is the immune system kept in check?

What did the three Medicine Nobel awardees discover and why is it important? How do regulatory T cells function? How does their work on regulatory T cells lay the ground for a new field of research leading to new treatments for cancer and autoimmune diseases?

Ramya Kannan

The story so far:
The Nobel Prize season for 2025 began with the announcement of the Physiology or Medicine Prize on October 6. The three awardees – U.S.-based researchers, Mary E. Brunkow and Fred Ramsdell, and Japan's Shimon Sakaguchi – were chosen for their "discoveries concerning peripheral immune tolerance." Their discovery enabled a fundamental understanding of how the immune system works – how it is regulated and kept in check. This has led to the evolution of several new potential treatment options, currently being tested, including for cancer.

What does their discovery mean?
Unless the body's immune system is kept in check, it can attack its own organs. In that case, why do most people not develop autoimmune conditions where the body turns on itself? U.S. and Japanese scientists, working independently, arrived at an explanation for how the immune system is kept in check. It is for their work in making discoveries concerning what prevents the immune system from attacking the body that the Nobel was awarded. The laureates identified the immune system's regulatory T cells which perform the precise task of preventing immune cells from launching an attack on the body.

Literally every day the immune system, a formidable army, is on guard, battling pathogens that try to invade the body. The question here is how do these cells "know what they should attack and what they should defend", as the Nobel Committee pointed out. "Their discoveries have been decisive for our understanding of how the immune system functions and why we do not all develop serious autoimmune diseases," said Olle Kämpe, chair of the Nobel Committee.

Research is on to make sure that the immune system does not attack its own body

High honour: The Nobel Committee Secretary General after winners of the 2025 Nobel Prize in Medicine were announced in Sweden, on October 6. AFP

What are regulatory T cells?
The story goes back to Sakaguchi when he was working at the Aichi Cancer Centre Research Institute, Japan, some four decades ago. All T cells have special proteins called T-cell receptors on their surface. These receptors can be likened to a type of sensor. Using them, T cells can scan other cells to discover whether the body is under attack. There are a vast number of T cells with different receptors that can detect invaders, including new viruses. But they also have receptors that can attach to human tissues. But then, intuitively, is there a switch mechanism that warns the T cells off body cells?

In the 1980s, scientists realised that when T cells mature in the thymus, a small gland located in the upper chest behind the breastbone and in front of the heart that plays a crucial role in the immune system, they are taught to recognise and eliminate the body's own proteins in a process called central tolerance. By the time Sakaguchi began his research into trying to understand this mechanism, his colleagues had already reportedly performed an experiment on newborn mice. They hypothesised that the mice would develop fewer T cells and have a weaker immune system if they removed the thymus. Instead, the immune system went into overdrive and ran amok, with the little mice developing several autoimmune conditions. This experiment might not have satisfied its primary goal, but in it was the idea for a Nobel that would come about 30 years later. Sakaguchi took off from where the experiment stopped. He injected these mice with T cells and it appeared that the T cells could protect the mice from autoimmune diseases.

Veering off from the current scientific wisdom of the time, Sakaguchi was convinced that the immune system must have some form of security guard – one that calms down T cells and keeps them in check; in this case, protecting the mice from the autoimmune condition. It took him over a decade, but in 1995, he presented to the world, a new class of T cells to the world, those that carried an extra protein called CD25 on their surface. This was called the regulatory T cell. But other researchers were not convinced yet of this idea.

It would take a second act, and efforts from Brunkow and Ramsdell, to concretely prove the experiment. A new set of mice, being studied since the Manhattan Project in fact, stood up to the occasion. In this instance, half of all the male mice were sickly and died in a few weeks, while the females thrived. It turned out the male's organs were being attacked by T cells that destroyed the tissues. The Nobel-winning pair, who were then working at a biotech company Celltech Chiroscience in the U.S., realised that the mice could provide important clues in their work. After years of study, at an age when molecular biology was at best infantile, with a great deal of patience, they narrowed down on the faulty, mutant gene and named it Foxp3. They finally had an explanation for why a specific mouse strain was particularly vulnerable to autoimmune diseases. They also showed that mutations in the human equivalent of this gene cause a serious autoimmune disease, IPEX.

Two years later, Sakaguchi and others could prove, this time, convincingly, that the Foxp3 gene controls the development of the regulatory T cells, being able to prevent other T cells from mistakenly attacking the body's own tissue, in a process that is called peripheral immune tolerance. Regulatory T cells also ensure that the immune system calms down after it has attacked invaders, answering Sakaguchi's initial question.

What are the specific uses in medicine?
While specific therapies are yet to hit the market, over 200 studies involving regulatory T cells are currently in progress, said Thomas Perlmann, secretary-general of the Nobel Assembly, while making the announcement of the prize on October 6. These stand testimony to the potential slew of new treatment modalities to address various conditions.

This includes work on cancer – dismantling the regulatory T cells so that the immune system can access the tumours and set to work on them; and on autoimmune disorders where researchers are trying to promote the growth of more regulatory T cells, inside the body, but also outside of it, in order to make sure that the immune system does not attack its own body.

It is also believed that this research will have far-reaching implications for organ transplantation by regulating organ acceptance. Clinical studies are afoot to test many of these pathbreaking treatment modalities.

What is macroscopic quantum tunnelling?

What did the three physics Nobel laureates conduct research on? How will their findings open the door to emerging technologies used to collect information? What can a circuit with a Josephson junction mimic? How will it help superconducting quantum processors?

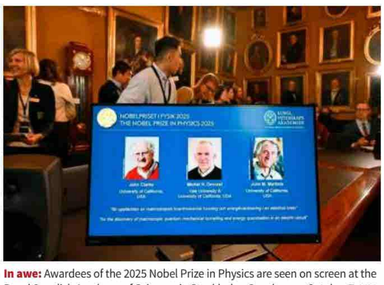
Vasudevan Mukunth

The story so far:
Particles can sometimes cross barriers they don't have the energy to climb, like boring through a mountain instead of scaling it first, as per quantum mechanics. This process, called tunnelling, is common in nuclear and atomic physics. The 2025 physics Nobel Prize laureates John Clarke, Michel Devoret, and John Martinis showed that such behaviour can occur not only in subatomic particles but also in an electrical circuit made of superconductors.

What is a Josephson junction?
The fundamental unit of the award-winning experiments the trio conducted is a device called a Josephson junction. Here, two superconductors are separated by a very thin insulator. The trio wanted to know if a parameter of the circuit as a whole, in this case the junction's phase difference, could behave like a single quantum particle. They came away from their experiments with a resounding 'yes', by observing both macroscopic quantum mechanical tunnelling and discrete energy levels in the circuit. In a superconductor, many electrons pair up and move without resistance. In a Josephson junction, the phase difference between the two superconductors measures how out of step the collective quantum wave of paired electrons is on one side compared with the other. This phase's value controls how easily the pairs can cross the insulating barrier. When this phase becomes trapped in an 'energy valley', quantum mechanics allows it to tunnel through to the other side, producing a small but measurable voltage across the junction.

The laureates' experiments provided a template to make reliable quantum measurements in solid-state devices

When the scientists sent a current through the Josephson junction, they found that if it was small enough, the flow of paired electrons was stalled by the insulator and the circuit produced no voltage. In classical physics, this state would never change: the electrons' flow would remain blocked. But in the quantum world, the current has a small chance of suddenly tunnelling through the insulator and flowing freely on the other side, creating that voltage.



In awe: Awardees of the 2025 Nobel Prize in Physics are seen on screen at the Royal Swedish Academy of Sciences in Stockholm, Sweden, on October 7. AFP

Why was the circuit fragile?
In the early 1980s, several groups searched for this tunnelling by varying the current and recording the value at which the junction produced a voltage. If the electron pairs were simply escaping to the other side due to thermal fluctuations – akin to being heated enough to jump across the mountain – cooling the device ought to steadily increase the amount of current required to produce a voltage. On the other hand, if the electron pairs were tunnelling through, the rate of crossing over would eventually stop changing with temperature. Simple though the setup was, the challenge was in keeping stray microwave radiation from affecting the circuit and producing data consistent with the temperature-independent behaviour. So the experimenters needed to reduce and characterise environmental noise with great care.

The team led by Clarke, working with Devoret and Martinis, solved this problem by redesigning their setup so stray signals couldn't interfere. They used special filters and shielding to block unwanted microwaves and kept every part of the experiment extremely cold and stable. Then they sent in faint yet precisely tuned microwave pulses to gently test how the circuit responded, allowing them to measure its electrical properties accurately. When they finally cooled the system to very low temperatures, they saw that its behaviour matched the exact patterns predicted by quantum tunnelling theory.

How did the circuit show quantum effects?
The researchers also wanted to find out if the circuit's trapped state behaved like a quantum system with distinct energy steps – a hallmark of a quantum state – instead of a smooth range. They shone microwaves of different frequencies onto the junction while adjusting the current. When the frequency exactly matched the gap between two allowed energy levels, the circuit suddenly escaped more easily from its trapped state. The higher the level, the faster this escape happened. These patterns showed that the circuit's overall state could only receive or emit fixed packets of energy, which is also how a single particle following the rules of quantum mechanics would behave. In short, the circuit as a whole behaved like a quantum particle.

Put together, the results revealed two facts. First, a macroscopic electrical circuit – one that you could see with the naked eye – could display quantum behaviour when sufficiently isolated from its environment. Second, a relevant macroscopic variable in that circuit could be understood using the standard tools of quantum mechanics. These experiments also pointed to a practical path for controlling and 'reading' macroscopic quantum states – in this case using a bias current, weak microwaves, and sufficient protections to shield from external radiation – one that gave the field a template to make reliable quantum measurements in solid-state devices. Subsequent work extended these ideas, developing superconducting qubits, embedding them in microwave resonators, and improving their coherence.

What are the applications of this work?
The technological applications flow from the same physics. A circuit with a Josephson junction can be made to mimic the quantised energy levels of an atom; microwaves could drive the circuit to jump between these energy levels; and carefully coupling the circuit to a resonator could allow an operator to measure changes in the circuit without disturbing it. This architecture, known as circuit quantum electrodynamics, is the foundation of many of today's superconducting quantum processors (The resonator is like an echo chamber for microwaves. When the circuit is coupled to a resonator, the two can exchange energy in a controlled way, allowing scientists to measure the circuit's state indirectly by observing changes in the resonator's behaviour).

Superconducting circuits that exploit macroscopic quantum effects are central to several emerging technologies. They are quantum amplifiers that boost extremely weak signals without adding noise – a useful ability in diagnostics as much as searches for dark matter. They are used to measure current and voltage with extraordinary precision. They can be microwave-to-optical converters that link quantum processors to fibre-optic networks. They are components in quantum simulators used to model complex materials or even chemical reactions atom by atom.

Maduro's foe, Trump's friend

Maria Corina Machado

The right-wing politician, who has supported U.S.-led sanctions against Venezuela, has been awarded the Nobel Peace Prize at a time when Washington is building up troops in the southern Caribbean Sea after declaring the government in Caracas a 'narco-terror cartel'

Srinivasan Ramani

The Norwegian Nobel Committee has honoured the prominent Venezuelan Opposition leader Maria Corina Machado with the Nobel Prize for 2025 at a time when U.S.-Venezuela relations have hit a new low.

The honour to Ms. Machado, one of the strongest critics of controversial President Nicolas Maduro, comes at a time when the Donald Trump administration has upped the ante against Venezuela. It has ordered a major build-up of U.S. naval forces in the southern Caribbean Sea, outside Venezuela's waters, leading to speculation that the ties are headed towards a military confrontation. Mr. Trump has, without basis, declared that Mr. Maduro's government is a "narco-terror cartel" and Mr. Maduro a "terrorist-cartel leader", with the naval mission targeting boats ostensibly operated by the cartel.

Known in Venezuela, among her supporters, as the "Iron Lady", Ms. Machado is the leader of the right-wing Vente Venezuela party. An industrial engineer with a Master's degree in finance, she made her first foray into politics as a leader of a volunteer group called 'Sumate' in 2002. The group sought to oppose the rule of then President Hugo Chavez by organising a referendum to recall Chavez from office. The repercussions from this activism, branded 'treason' by Chavistas – supporters of Chavez's leftwing populist movement – led her to send her children abroad.

The award of the Nobel Prize to Ms. Machado has to be seen in this context of her long opposition to the Venezuelan government. For more than a decade, Ms. Machado has been a leading conservative critic of Mr. Maduro's regime and his governance, where there has been a concentration of executive power in his presidency. This has occurred even as the country has gone through a major economic downturn under his leadership.

In this period, which followed Chavez's populist rule featuring redistribution and improvement in several socio-economic indicators in Venezuela, an estimated 7.7 million citizens fled the country. They left amid hyperinflation and severe food shortages due to a persisting economic crisis that eased only lately. This crisis was largely due to Venezuela's over-dependence on its petroleum extraction sector – with crude oil constituting 95% of its exports in 2014. The sector suffered a major blow due to a crash in global oil prices in that period. Later, U.S. sanctions, first imposed by President Barack Obama, followed by the EU and later tightened by Mr. Trump in his first term, exacerbated the Venezuelan economic crisis. The sanctions made Mr. Maduro more unpopular but he remained in power due to the enduring base of support among Chavistas and his control of state institutions.

Anti-Chavista activist

Ms. Machado, a staunch anti-Chavista activist, has been more steadfast and persistent against Mr. Maduro's rule than other Opposition figures such as Juan Guaido. Mr. Guaido claimed the interim presidency in 2019 based on his leadership of the National Assembly, a year after Mr. Maduro won the 2018 presidential election, and sought international legitimacy. He later went into exile and discredited himself in the process.

Ms. Machado, on the other hand, focused on unifying the Opposition through the electoral process from within Venezuela. She was expected to be the Opposition candidate against Mr. Maduro in the July 2024 election after having won the Opposition's presidential primary with 92% of the vote. She was subsequently disqualified from running in the election by the Supreme Court. She, however, backed former diplomat Edmundo Gonzalez Urrutia to be the main Opposition candidate and campaigned for him. Mr. Maduro prevailed in an election result that was widely disputed.

The National Election Council (CNE) declared him the winner with nearly 52% of the vote despite failing to release detailed electoral tally sheets from polling stations that could verify the results. The Opposition, led by Ms. Machado and others, meanwhile, asserted that Mr. Urrutia had won the

ILLUSTRATION: R. RAJESH

election. They claimed that he had won two-thirds of the vote in the 83% of the tally sheets that they had access to. Mr. Maduro and his supporters disputed these claims, leading to repression against the Opposition and Mr. Urrutia fleeing the country. Ms. Machado has, however, stayed put, in hiding in Venezuela, and keeps her critique of the regime intact.

Neoliberal voice

Ms. Machado, while campaigning against the concentration of power in the Chavez presidency, has also been a strident proponent of neoliberal economic reforms. She has supported the privatisation of Venezuela's publicly owned petroleum extraction company, PDVSA, that has served as the vehicle for policies of economic redistribution by the Chavistas. She has also closely aligned with Washington on its Opposition against Chavez and his successor, Mr Maduro. This has led to Chavistas such as the Venezuela-based academic Steve Ellner calling her a "reactionary international" politician with ties to far-right parties such as Spain's Vox Party.

The Norwegian Nobel Committee, however, described her work as "tireless...promoting democratic rights for the people of Venezuela and for her struggle to achieve a just and peaceful transition from dictatorship to democracy". It lauded her as a "brave and committed champion of peace... a woman who keeps the flame of democracy burning amid a growing darkness". The award is as much an indictment of Mr. Maduro's rule and presidency, which has led to what the Committee calls Venezuela's evolution from a "relatively democratic and prosperous country to a brutal, authoritarian state" stuck in a humanitarian and economic crisis.

Unifying figure

The Committee also highlighted her commitment to non-violence and her role as a "key, unifying figure in a political opposition that was once deeply divided". It noted her personal resilience in "resisting the militarisation of Venezuelan society" and in her support for a "peaceful transition to democracy".

Critics of the Nobel Peace Prize in the past when it was awarded to controversial figures such as former U.S. Secretary of State Henry Kissinger have argued that the Prize, in certain cases, has honoured those who align with Western geopolitical interests. Ms. Machado has a more fraught legacy in Venezuela. She has supported international sanctions by the U.S and other governments that critics say have worsened the economic crisis in Venezuela. She faced treason charges for signing the Carmona Decree during the 2002 coup attempt, though she maintained she was unaware of what she was signing and the charges were never proven.

She has been accused by Chavistas of aligning with controversial Opposition tactics, including support for Juan Guaido's claim to the interim presidency, even as she has chosen the path of confronting Mr. Maduro's government through democratic means as asserted by the Committee. This context, at a time when Venezuela is now under direct military pressure by the U.S., cannot be ignored while evaluating the choice of the Committee to honour Ms. Machado.

THE GIST

Maria Corina Machado was expected to be the Opposition candidate against Nicolas Maduro in the July 2024 elections after having won the Opposition's presidential primary with 92% of the vote

She was subsequently disqualified from running in the election by the Supreme Court

Ms. Machado backed former diplomat Edmundo Gonzalez Urrutia to be the main Opposition candidate and campaigned for him but Mr. Maduro prevailed in an election result that was widely disputed

Master of melancholy

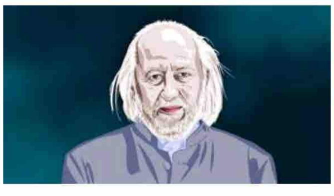
Laszlo Krasznahorkai

In the works of the Hungarian novelist, who won the Nobel Prize for Literature for 2025, a central theme is the fleeting and precious nature of human life

Sudipta Datta

At a "very very difficult time for earth", the Nobel Prize for Literature for 2025 has been awarded to Hungarian writer Laszlo Krasznahorkai "for his compelling and visionary oeuvre that, in the midst of apocalyptic terror, reaffirms the power of art".

In his first comments after the win, the 71-year-old author, screenwriter and musician said he was very sad to think of the state of the world now, and yet he felt that the "bitterness" could be an inspiration for writers. Talking to Jenny Rydén of the Nobel Prize, Krasznahorkai hoped writers could "give something for the next generation, somehow to survive this time because these are very, very dark times and we need much more power in us to survive". Krasznahorkai grew up in Soviet-era Hungary, wrote his first novels under difficult circumstances, and through his experimental prose, imagination of fantasy and philosophical searching, transported his readers to an unsettling world. "I've said a thousand times that I always wanted to write just one book," he had told *The Paris Review* in 2018. He considers his quartet of novels – *Satantango*, *The Melancholy of Resistance*, *War and War*, *Baron Wenckheim's Homecoming* – as one book. A keen observer of life around him, his novels are peopled with myriad characters, some defenceless against a harsh world. Think Estike in *Satantango*, or that "soft creature, Valuska" in *Melancholy*, the Baron in *Homecoming*, all inspired by a character Krasznahorkai admires, Myshkin of Dostoevsky's *The Idiot*.



English readers were first introduced to him through *Melancholy* (1989), translated by George Szirtes in 1998. It begins with a group of passengers waiting for a train in a small town at the Carpathian foothills. The train is late, and may not arrive at all, but to tell the truth, "none of this really surprised anyone any more since rail travel, like everything else, was subject to the prevailing conditions", that of "all-consuming chaos which rendered the future unpredictable". In this town where life is "so haphazard" comes a circus, carrying a giant carcass of a whale. It sets off all sorts of reactions. "Who has time for entertainment now, when we're in a state of anarchy?" rues one resident.

Existential struggle

His masterly debut novel, *Satantango*, about the existential struggle of a collective farm on the eve of the fall of communism, came out in 1985, though it was only translated into English in 2012. Three years later, he would win the Man Booker International Prize. *Baron Wenckheim's Homecoming*, translated from the Hungarian by Ottilie Mulzet, was published in 2019. In it, there is a recluse, a Professor, who holds forth on life: "The world is nothing more than an event, lunacy, a lunacy of billions and billions of events... and nothing is fixed, nothing is confined, nothing graspable, everything slips away if we want to clutch onto it."

In a world where nothing is making sense, Krasznahorkai wishes that writers – and readers – "get back the ability to use their fantasy, because without fantasy it's an absolute different life". Reading, he says, "gives us more power to survive". Just like he did. Franz Kafka was in his pocket, and he admired Samuel Beckett, William Faulkner, Herman Melville, Dante, and Homer.

With no writing desk, Krasznahorkai would frame sentences in his head, adding words as they came along, and writing them down only when he thought they had reached a natural end. The experimental prose with its long sentences flow from his mind. In the 2000s, he ventured out to the east, to Japan and China, writing contemplative novels such as *Seiobo There Below* and *A Mountain to the North, A Lake to the South, Paths to the West* and *A River to the East*. In all his works, one of the central themes is that human life is fleeting and precious. He has collaborated with filmmaker Béla Tarr to adapt several of his books to the screen.

With the Nobel Prize, the demanding works of Krasznahorkai are sure to find new readers. One of the Hungarian great's favourite reads happens to be Dostoevsky's *White Nights*, which is the rage on BookTok.

Madam conservative

Sanae Takaichi

The first woman leader of Japan's ruling party and the likely next Prime Minister comes from the hard-right bloc of the Liberal Democratic Party

Purtika Dua

ILLUSTRATIONS: SREEJITH R. KUMAR

When the Liberal Democratic Party (LDP) elected Sanae Takaichi as its new leader on October 4, it marked a watershed moment in Japanese politics. For the first time, the ruling party entrusted its helm to a woman, and in doing so made her the frontrunner to become Japan's first woman Prime Minister.

But Ms. Takaichi's ascent is more than symbolic. It also highlighted the LDP's shift back toward a hard-right, security-oriented posture after recent electoral setbacks.

A veteran politician with more than three decades of experience in politics, Ms. Takaichi has earned a name for herself as one of the country's most recognisable conservative figures. Over the years, she has held key ministerial portfolios, including multiple terms as Minister for Internal Affairs and Communications. She also served as Minister of State for Economic Security under Prime Minister Fumio Kishida from 2022-24.

Within the LDP, she has served as chair of both the Policy Research Council and the Public Relations Headquarters – positions that expanded her influence in party policy-making and communication strategy.

Ms. Takaichi was born on March 7, 1961, in Nara Prefecture. She earned a degree in Business Administration from Kobe University in 1984 and later studied at the Matsushita Institute of Government and Management. In the late 1980s, she spent time in the U.S. as a congressional fellow, working in the office of U.S. Representative Patricia Schroeder, before returning to Japan to work as a legislative analyst and broadcaster.

Her entry into politics came in 1993, when she won a seat in the House of Representatives as an independent before joining the LDP, where she became aligned with the party's conservative wing and formed a close association with former Prime Minister Shinzo Abe. Over the decades, Ms. Takaichi's administrative experience and political tenacity helped her consolidate her position within the party, leading to her election as LDP president on October 4, 2025.

Crisis investment

Ms. Takaichi's ministerial record and public statements outline policy priorities centred on economic resilience, industrial competitiveness, and national security. She has described her economic approach as one of crisis investment, advocating for targeted government spending to support strategic sectors such as advanced technology, semiconductors and infrastructure. Her economic stance is broadly consistent with the principles of Abenomics (Shinzo Abe's policies), avouring state-led stimulus and innovation-driven growth.

In security policy, she has expressed support for revising Article 9 of Japan's Constitution to formalise a more proactive defence posture for the Self-Defence Forces, while backing closer strategic coordination with allies. Regionally, she has underscored the need for deterrence amid growing tensions in East Asia.

Ms. Takaichi's social and cultural positions align with the LDP's traditionalist wing. She has opposed the introduction of separate surnames for married couples, resisted reforms to allow female succession in the Imperial Household, and stated her opposition to same-sex marriage, while maintaining that discrimination based on sexual orientation should not exist.

Her incoming administration faces immediate constraints. The LDP, which has ruled Japan for most of its post-War era, and its coalition partner, Komeito, split up on Friday over a political funding scandal. Japan's structural challenges, an ageing population, high public debt, and slow productivity growth further constrain fiscal agility. Regionally, her visits to the controversial Yasukuni Shrine, which commemorates Japan's war dead, and her conservative rhetoric have drawn scrutiny from neighbouring countries.

With Komeito gone, Ms. Takaichi's immediate challenge would be to form another coalition. Offering stable governance in a period of political and economic uncertainty itself would be a tall ask for the conservative leader.

Across THE AISLE

P CHIDAMBARAM
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Up the down staircase

In my view, the war may stop finally, the hostages (or their remains) may be released shortly, and humanitarian aid may reach the hapless residents of Gaza, but Gaza itself will be a virtual colony under an 'apolitical committee' supervised by a 'Board of Peace' consisting of the likes of Mr Trump and Mr Blair. The Palestinian dream of statehood is virtually dead

IT WAS unusual for prime minister Narendra Modi to lavish praise on an individual, not once but twice, in the space of four days, but he did. The object of the praise was President Donald J. Trump. The subject was the 20-point 'Peace Plan' that Mr Trump had proposed "to bring the war between Israel and Hamas to an end".

On September 30, 2025, Mr Modi called it a "comprehensive plan to end the Gaza conflict. It provides a viable pathway to long-term and sustainable peace, security and development for the Palestinian and Israeli people, as also for the larger West Asian region". Mr Modi also took the extraordinary step of issuing the statement in seven languages — Arabic, Chinese, English, French, Russian and Spanish, as well as Hebrew and, of course, Hindi. On October 4, Mr Modi said, "We welcome President Trump's leadership as peace efforts in Gaza make decisive progress."

As I write, Hamas and Israel have agreed to the first phase of the plan. Hamas will release the hostages and Israel will cease fire — it is not clear when, but shortly. Celebrations brought people to the streets in both Gaza and Israel. Hamas has not yet accepted several aspects of the plan, especially on ceding control to an external authority.

OMINOUS BEGINNING

Naturally, questions have arisen on why Mr Modi showed extreme anxiety to praise and please Mr Trump when the latter has only heaped injury and humiliation on India since he assumed office on January 20, 2025.

In his first term as President (2017-2021), Mr Trump targeted India and other countries by imposing tariffs on steel (25 per cent) and aluminium (10 per cent), and terminated GSP benefits to India. In 2020, he suspended several categories of visas that were used by Indians, especially H-1B. Yet, at a rally in Houston, Texas on September 22, 2019, Mr Modi made the infamous declaration *'Abki Baar, Trump Sarkar'*.

In the nine months of his second term, Mr Trump has imposed the highest tariffs on India (and Brazil) virtually halting India's exports to the United States of steel, aluminium, textiles, gems and jewellery, sea food, pharmaceuticals, footwear, furniture, cars and toys. He accused India of "funding the war against Ukraine" by buying Russian oil, and imposed an additional 25 per cent tariff on Indian goods. His close ally, Senator Lindsay Graham, told India that the U.S. will "tear up the hell out of you and we're going to crush your economy" if India continued to buy Russian oil. Mr Trump called India the 'Tariff King' and his trade adviser Mr Peter Navarro said worse. Slamming India-Russia ties he called both "dead economies". He also slapped a humongous fee of USD 100,000 on applications for H-1B visas and tightened the rules for issuing student and spouse visas. In February-May 2025, over a thousand Indians, allegedly illegal immigrants, were deported to India with handcuffs and leg chains in military aircraft.

TRUMP FAVOURS PAKISTAN

Despite Pahalgam and India opposing the largesse, in May-June 2025 Pakistan received billions of dollars of assistance from the IMF (USD 1 billion), ADB (USD 800 million) and World Bank (USD 40 billion) with crucial support from the United States. Mr Trump claimed, despite Indian denials, that he had mediated to bring the India-Pakistan war to an end, and continues to make the claim. The ultimate humiliation was when he hosted the Army Chief of Pakistan on June 18 to an unprecedented lunch at the White House. On September 25, Mr Trump held a joint meeting with the Prime Minister and the Army Chief where Pakistan's "great leaders" — Mr Trump's words — offered to supply critical rare earth minerals; sealed a trade deal with tariffs on Pakistani goods at 19 per cent; and invited the U.S. to build and operate a port on the Arabian Sea. Forgotten were 9/11, Osama bin Laden, Abbottabad, and the description of Pakistan as "a terrorist safe haven". Pakistan seems to have learned the art of riding two horses (America and China) at the same time.

There is not one thing that the U.S. has done since January 2025 that can be described as friendly to India. India-U.S. relations have been on an escalator marked 'Down'. And Mr Modi is desperately trying to walk up the down staircase.

KILLING A DREAM

The intriguing question is why did the prime minister of India jump to praise Mr Trump using the opportunity of an Israel-backed 'peace plan' that leaves Palestinians in despair. Point 19 reads: *'While Gaza re-development advances, and when the PA reform program is faithfully carried out, the conditions may finally be in place for a credible pathway to Palestinian self-determination and statehood'* (emphasis mine).

In my view, the war may stop finally, the hostages (or their remains) may be released shortly, and humanitarian aid may reach the hapless residents of Gaza, but Gaza itself will be a virtual colony under an 'apolitical committee' supervised by a 'Board of Peace' consisting of the likes of Mr Trump and Mr Blair. The Palestinian dream of statehood is virtually dead.

Apparently, for all the vain boasts, the prime minister has realized that India has few friends in the world and the Indian economy is not resilient enough to weather the storms raging around it. Flattery is no substitute for smart diplomacy and sound trade and investment policies.

Fifth COLUMN

TAVLEEN SINGH
Twitter @tavleen_singh

Who is to blame for the horror of Gaza?

IT SEEMED to me oddly appropriate that it was in this peaceful Swiss village where I have been for the past three weeks that I should learn that peace is breaking out in Gaza. For many days I watched the news about the latest 'deal in Gaza' with skepticism and a weary sense of déjà vu. We have been here before too many times. And then, at the very last moment, there has been some hitch that prevented the last living hostages from being released by the monsters who constitute Hamas. This time, they say, is different and Donald Trump plans to be in Jerusalem around the time you read this, so we must hope that it is. And that the hostages who remain alive will finally be released.

At a personal level, my deepest concern since the atrocities committed by Hamas' Islamic warriors on October 7, 2023, has been for the hostages. Often, I have thought of the babies that were taken down into those tunnels under Gaza. Often, I have wondered if they were separated from their parents. Often, I have wondered if there was anyone to explain to them why their innocent lives were plunged into darkness. And if there was someone to explain to them that it was not their fault that any of these things happened. When the tiny coffins of those two little boys were handed back by their Hamas captors, I felt as if children from my own family had died. Kfir Bibas was nine months old, and his brother Ariel was four. Among the 251 hostages abducted by Hamas, there were 36 children.

It is no longer politically correct to remember the suffering of the Israeli children who were taken hostage. It is the suffering of the thousands of children of Gaza that we are reminded of every day by the Western media. But this column has never been politically correct. I think what has happened to the people of Gaza in the past two years is one of the greatest tragedies ever and the men who stopped food and basic healthcare from entering Gaza are demons. But the thing we seem to forget is that this would not have happened if Hamas had just released the hostages.

There would not have been this horrible war if the hostages had been released. Gaza would not have been turned into a place of broken people and broken buildings if the hostages had been released. So why did Hamas not release them? Was it because they believed, as some of their leaders have admitted, that allowing their own people to be killed was a necessary sacrifice? Speaking for myself, I blame Hamas for almost all that has happened. More than Benjamin Netanyahu, although his name will be recorded in the annals of evil.

This column has been accused of Islamophobia before, so I do not hesitate to say that Hamas is a death cult, and its fanatical terrorists are motivated by an ideology that is, in my view, the Nazism of our time. This ideology does not have a name but can be called jihadism and we see too many people in our own country who subscribe to it. There are some fake liberals, and I think of myself as a true liberal, who like to expound upon the theory that jihadism is the same as Hindutva.

It is wrong to say this because there is not a religious book in the entire literature of the Sanatan Dharma that says killing non-believers is something God approves of. Islam does sanction the beheading of us idol-worshipping types and it is from this sanction that death cults like Hamas draw inspiration. On our sub-continent, there are jihadists who believe that killing 'kafirs' is a religious duty and there are those in the Middle East who believe killing Jews is a religious duty. One of the images that has engraved itself in my brain from the horrors of October 7, 2023, is of a Hamas warrior calling his father to tell him proudly that he had killed 10 Jews with his own hands. People who can talk like this are sick and it is time to say this loudly.

The point I am trying to make is that what has happened in Gaza has happened because of the sick ideology that Hamas believes in. No cause in the world justifies taking small children hostage and keeping them confined underground for months. To do that is barbarism. It is true that more than 67,000 people have been killed in Gaza, of which many were children and women, and that is truly tragic and very, very sad. But if the hostages are released by next week and a kind of peace breaks out in Gaza, it could be time for those who voted for Hamas to stop and think about the kind of people they chose to represent them.

There are too many 'moderate' Muslims who refuse to confront the truth that the ideology that has created death cults like Hamas is one that gets its sanction from Islam. If the Quran is, as Muslims believe, the final message of Allah, then it could be time for the Islamic clergy to say that this message has now been dangerously misunderstood by the men who believe that brutality in Allah's name is brutality that is for the good of humankind.

Raising boys to remain gentle is an act of resistance

How to RAISE A BOY

NEHA BHATT

EVER SINCE I became a mother 11 years ago, I've always found playgrounds fascinating places. What many dismiss as spaces meant only for children, have always felt to me like places meant for lingering, if only to watch tiny social experiments that speak volumes about how children learn power dynamics, empathy and fairness long before they even have the words for them, unfold.

After my son was old enough to manage swings on his own, I would remain in the background, stepping in only when required, quietly observing as my son absorbed his earliest lessons in negotiation. When he was a toddler, not yet two, we were at a park playing on the slide when a group of boys, about five or six years old, came in, shouting and pushing younger children aside. A few toddlers began to cry. The older boys, unsupervised as they often were, seemed unaware of how to share that space with others. I remember thinking how different that ordinary evening at an ordinary park might have been if a caregiver had been around to guide them. That day, I realised how these small, everyday lessons quietly add up as children grow.

It's also where boys and girls first begin to learn how to interact and share space. A few months ago, my son came home from his daily football game with an informal group of preteens, a mix of boys and girls, looking more animated than usual. The moment he walked through the door, the story came tumbling out. One of the boys in the group had started verbally abusing a girl who was defending her younger brother from his heckling. At first, she stood her ground, making reasoned arguments and asking him to lay off her brother. When he refused and began to call her gendered slurs, the others in the group stepped in, asking him to stop and apologise immediately. When he continued his tirade, the girl called a family member to intervene, who helped the boy understand why his behaviour was unacceptable, and let his parents know.

A few days later, it happened again. The group realised this was becoming a pattern that went against the spirit of their game. So they held a vote. The rule was simple: If the boy refused to change, he would not be welcome to play. Children are often capable of addressing sensitive issues on their own when they grow up in an environment where toxic behaviour isn't normalised as "boys will be boys" or "*bacche hain, shaitani toh karenge*". The work of raising boys free from patriarchal conditioning begins earlier than we realise, when they are toddlers already absorbing cues about what is acceptable and what isn't, what is normal and what shouldn't be, and how to navigate tricky situations while standing up for what's right.

After largely gender-neutral primary years, the middle years bring with them gendered spaces that are far more apparent: From birthday parties shrinking to become gender-specific, to the push and pull of various kinds of friendships. I realise there are some stages where you just go with the flow, without losing sight of the larger goal. This means supporting all forms of engagement that are neither hyper-masculine, nor gendered, without making a performance of it. It means to encourage friendships with all genders based on shared interests, to have honest conversations about gender biases and how to be sensitive to the unfairness of it, and what we can do to make it better, whenever the opportunity arises. It means to value the tenderness and gentleness of our boys while contextualising and offering tools to process rage, anger, fear, grief and disappointment.

In a world steeped in toxic masculinity, where everyday microaggressions chip away at the humanity of all genders, I have come to realise that our presence as parents matters most — to be the scaffolding during moments big and small, and even when nothing much is happening at all. What I savour the most, though, are the stories we share: Tales of my own childhood as a girl, the barriers I face from time to time, the work I do and why I do it, my feelings and ambitions, and fascinating and troubling stories from around the world. We talk about anecdotes from his day. He goes over similar beats with his father, his aunt, and his grandparents. From five-minute stories to conversations that stretch across days, these stories carry us from one day to the next. They take over bedtime after the books have been put to rest. As my words melt into the night and he closes his eyes, I think of how these luxurious stretches of time will shrink as he grows, but I know — or at least hope — that we will always have our little stories.

Bhatt is an author and independent writer who reports on gender, policy, public health and culture (How to Raise a Boy is a fortnightly column)

History HEADLINE

VIKAS PATHAK

Lalu's PM dreams and a phone call with I K Gujral

WITH BIHAR heading into a crucial Assembly election, it's instructive to revisit the turn of events that led to Lalu Prasad's exit as Chief Minister — an event that not only destroyed his prime ministerial ambitions, but led to the formation of the Rashtriya Janata Dal (RJD), one of the strongest regional forces in the state.

The year was 1996. With Janata Dal president S R Bommai's name coming up in the hawala scandal — diaries of the Jain brothers had indicated payoffs to politicians who were identified only by their initials — the party named Lalu Prasad, then Chief Minister of Bihar, as party chief.

It was also the time of great political instability in the country — the Congress was in decline. Wracked by factionalism and corruption charges, the party had faced setbacks in state elections and was losing ground to regional parties and the BJP. Lalu sensed an opportunity for himself — he began to dream of becoming Prime Minister.

Rabri Devi, wife of RJD chief Lalu Prasad, being sworn in as Bihar Chief Minster by Governor A R Kidwai at the Patna Raj Bhavan on July 25, 1997. *File/PTI*

LALU'S OPTIMISM

In his soon-to-be-released book, *Neele Aakash Ka Sach*, journalist Amarendra Kumar, the Jharkhand state bureau chief of *Dainik Bhaskar*, quotes Lalu as saying, "*Hawala ne Janata Dal ko hamare hawale kar diya* (the hawala scandal has handed over the Janata Dal to me)."

However, Lalu's optimism proved short-lived.

The fodder scam came to light in early 1996, and Lalu Prasad's name cropped up among the accused. With that, his relatively clean image until then — given that his name had not come up in the Jain diaries — took a beating.

The fodder scam involved charges that officials of the Animal Husbandry Department of then unified Bihar embezzled public funds to the tune of Rs 950 crore through fraudulent withdrawal of government money on the pretext of purchasing livestock fodder.

In February 1996, Lalu gave an interview to Kumar, in which he said that the CBI should get a free hand in investigating the hawala scam, but added that since the Bihar government under him was already active in taking action on those behind the fodder scam, a CBI inquiry was not required into the latter.

"Those named in the hawala scam were frustrated that Lalu Yadav has not been named… So, they are making allegations against me. Had I been guilty, the public would not have spared me, but I have increased the stature of Bihar… Now I will take on the fodder mafia and set things right," Lalu said in the interview.

Lalu added that he would be willing to become Prime Minister after the coming elections, if people so desired.

DEVE GOWDA'S GAIN

The 1996 Lok Sabha elections — held in April and May, a few months after the fodder scandal came to light — threw up a fractured verdict. Atal Bihari Vajpayee's government lasted merely 13 days and he lost the vote of confidence.

But the fodder scam meant Lalu had lost his chance. Instead, H D Deve Gowda became Prime Minister. The CBI inquiry into the fodder scam that Vajpayee ordered continued under Deve Gowda, Lalu's colleague in the Janata Dal who did not quite like him.

It's a move that Lalu didn't take too kindly to. Kumar writes that it was Lalu who was responsible for the replacement of Deve Gowda with I K Gujral on April 21, 1997, miffed as he was on the CBI probe going on in full swing.

Lalu had convinced Congress president Sitaram Kesari — with whom he was close — to withdraw support to Deve Gowda, Kumar writes.

On June 17, 1997, Bihar governor A R Kidwai gave his approval for the filing of a chargesheet against Lalu.

Pressure mounted on Lalu from within the Janata Dal because of the allegations, and on July 5, 1997, he split the party to form the RJD.

A SUCCESSOR IS CHOSEN

However, he realised that he would have to step down as Chief Minister. On July 25, 1997, he called RJD MLAs to his residence to choose his successor.

A beaming Kanti Singh was chosen as the successor and garlanded, and news agencies started to flash the news. Lalu then decided to go to his room and call up then Prime Minister Gujral to inform him about the legislature party's decision.

"Why not Rabri Devi?" a surprised Gujral is said to have asked Lalu when informed about Kanti Singh.

"Only if Rabri Devi is Chief Minister will your rule be safe," Gujral is said to have told Lalu.

Lalu, Kumar recalls, immediately understood, and announced the name of his wife Rabri Devi as the next Chief Minister.

The writer is Deputy Associate Editor, The Indian Express

she SAID

SHALINI LANGER

Dance as my revolution

"IF I can't dance, it's not my revolution!" US political activist and anarchist Emma Goldman had declared, if not exactly in this T-shirt-slogan form.

It's that time of the year when I would settle for just dance, as my revolution.

Should you belong to or live in any area geographically or mentally close to 'the Punjab', you would know the pressure. We don't know of a celebration that doesn't involve the whole family merrily and loudly shaking a leg, among other parts. I remain in awe (long after age-addled wonder) of all the women who join in, as I look for corners I can disappear into.

Should you belong to or live in the aforesaid area, you would also know that someone or the other will find you and, but for the force of will, you will be among the swaying bodies — praying no one watching can tell one from the other.

The thing is, no one is really looking to judge. But even if my saner mind knows that, what do I do about my stubborn feet? Or my dreams, in which I am somehow smashing a dance floor?

I remember just one occasion when I absolutely let my hair down. The occasion was a wedding, the setting was close family only, and the song was *Chane ke khet mein*. It required some serious swirling of the upper half, and maybe it was all of the above, or just the dazzle of Madhuri Dixit's version overwhelming my other senses, I let abandonment take over. The family was thrilled, or maybe just surprised.

Not that I need to look far for inspiration. My sister, the extrovert, is a natural. And my mother doesn't need to be called twice to join the dancing melee, not deterred by the fact that she must do so now wobblingly, thanks to age, extra kilos and double knee-replacement surgeries.

Another time, another family occasion, I and a reluctant spouse were told we had to be part of a choreographed performance. Now the spouse belongs to that part of the country which proudly holds its distance from 'the Punjab'. But as anyone married into the region's sphere of influence knows, we as a people don't take no for an answer. So, there it was that we found ourselves gyrating to *London thumakda*. When it was our turn to go to the front of the stage and do that *thumka* (sorry, there is no English equivalent for that waist manoeuvre), I realised the spouse had seized his chance and disappeared.

If there is a video of that dance, and of course there is, I have blanked it out on the family WhatsApp group.

Increasingly, though, dance beckons you even outside family settings. Like neighbourhood Navratri/garba/dandiya nights. For a month leading up to the festive season, I can see women my age, and older and younger, rehearsing in the community hall. Come the night, they own the night, as I and others like me — and the men, completely bedazzled — see the women flying, dipping, rocking the stage.

Mothers-in-law, daughters-in-law, sisters-in-law — there are no hierarchies on that platform. When they jump and bounce to *Lungi dance* or sway to *Chaiyya chaiyya*, I feel my spirit leaving my body and joining Shah Rukh Khan's. The stage is then thrown open to everyone, but the flesh remains stuck to a sweaty plastic chair.

On a recent trip to Vietnam, in the centre of Ho Chi Minh, we came across another dance ritual. Every Sunday night, a square in its main market is cordoned off and, as music blares off boom boxes, anybody can join in and jive. We stood in the circle that had formed around the dancing area and couldn't peel our eyes away as ordinary people, old people, young people, tall men, short women, short men, tall women, enthusiastic tourists, and one wondrously spry and spiffy old man serenading his companion, kept stepping out to join the dancing middle.

Ho Chi Minh, you might say, has lived a revolution. And earned its dance.

I wait.

National Editor Shalini Langer curates the fortnightly 'She Said' column

MARKET WATCH

OIL PRICES DECLINE ON WEEKLY BASIS

Houston: Brent and US crude futures fell more than $2 a barrel on Friday. Brent crude futures settled at $62.73 a barrel, down $2.49, or 3.82%, the lowest since May 5. US WTI crude finished at $58.90 a barrel down $2.61, or 4.24%, the lowest since early May. **REUTERS**

BULLISH SENTIMENT ON AI ACCOMPANIED BY MONETISATION CONCERNS

AI-fuelled rally in US stocks could unwind, impending bust may singe global markets

ANIL SASI
NEW DELHI, OCTOBER 11

THE NOBEL Prize-winning economist Robert Solow famously said in 1987 that "the computer age was everywhere, except for productivity statistics". His aphorism summed up the perceived lag in productivity growth in the 1970s and 1980s, despite the computing revolution gaining strength.

The Solow Paradox was somewhat resolved in the 1990s when a few sectors — technology, retail, and general sales — led to an acceleration of US productivity growth. All the way up to the dot com bust.

Now, nearly 40 years down, the Solow Paradox has some resonance in another new technological breakthrough: Artificial Intelligence (AI). While there is little debate over the overwhelming transformative impact of AI on society, there are question marks over when this will distill down to actual productivity gains in the short term.

Meanwhile, in Silicon Valley, the debate over whether AI companies are overvalued has taken on a new impetus. There are questions being raised on the rapid rise in the valuation of AI tech companies, the use of "financial engineering" and "circular deals", and increasing comparison to the dot com crash.

Fears are being expressed of these tech companies being overvalued and that a bubble is building up. So, is there a stock market crash waiting to happen?

Valuations at record highs

On Thursday, the S&P 500 and the Nasdaq hit new records, while the Dow has surged about 10 per cent year-to-date, mostly on account of the relentless surge in the valuation of the so-called 'magnificent seven', the leading US tech companies — Nvidia, Microsoft, Apple, Alphabet, Amazon, Meta and Tesla.

The combined market value of these tech majors, at nearly $21 trillion, now exceeds the entire output of the European Union. The S&P 500's price-to-earnings ratio — P/E ratio that represents a company's share price to its earnings per share over a period and is used to estimate whether they are overvalued or undervalued — was around 23 times in end-September, according to inputs from data aggregator LSEG Datastream. That is well above its 10-year average of 18.7, and just short of the P/E ratio of around the 25 level in the early 2000s, the data showed.

The relentless rally in AI-focused tech stocks, while stretching valuations and threatening concerns over potential market excess, comes alongside at least two genuine worries:

■ That the potential application of AI tools is still some way off, and the monetisation potential looks further down the horizon. The surge is almost entirely driven by the relentless flow of capital into these company stocks, primarily in view of the future potential. The Solow Paradox is somehow not yet a factor at this point.

■ The market seems to be ignoring multiple looming threats, including the US President's assault on the global trading system, a massive drop in immigration into America, the attack on the US Federal Reserve's independence, institutional backsliding, the inflationary impact of Trump's actions, and worries over the US government's ballooning debt burden after his new spending bill. AI optimism has more than offset the serious structural problems lems looming in the horizon. Despite the fact that, like computers earlier, AI is not yet showing up in the productivity charts.

The market is pricing in a substantial boost to future productivity compared to what we have already seen in the last few years, but there could be a serious gap between the timeline of these expectations and when the productivity boost tangibly shows up on company books. It is precisely this gap that could be punctuated by a market crash, murmurs of which have gained traction.

'MURMURS OF A MARKET CRASH'

THE POTENTIAL application of AI tools is still some way off, and the monetisation potential looks distant. The surge is almost entirely driven by the relentless flow of capital into these company stocks, primarily in view of the future potential.

AI OPTIMISM has more than offset the serious structural problems looming in the horizon

THERE COULD be a serious gap between the timeline of expectations and when the productivity boost reflects in company books. It is this gap that could be punctuated by a market crash, murmurs of which have gained traction

The growing bubble

International Monetary Fund chief Kristalina Georgieva warned Wednesday about the potential risks to the global economy from likely corrections in stock market valuations. JPMorgan Chase CEO Jamie Dimon too warned of a heightened risk of a significant correction in the US stock market within the next six months to two years, the *BBC* reported.

Author and statistician Nassim Nicholas Taleb has also warned investors against being taken in by the stock market's record-breaking rally, because beneath the surface, a growing debt crisis could trigger a major reckoning, *Bloomberg* reported. Speaking at the Greenwich Economic Forum, Taleb, the author of *The Black Swan* (2007), urged investors to protect themselves from what he calls an obvious, looming threat, according to the report.

All of this sounds prophetic, quite like then US Federal Reserve chairman Alan Greenspan's December 1996 dinner speech, where he posed an ostensibly innocuous question: "How do we know when irrational exuberance has unduly escalated asset values?" Markets around the world, including in Asia, crashed in response. While there is no disputing the transformative potential of AI in the long term, there are question marks about when this will translate into monetisable figures. There is a serious cash burn as AI companies shift to inference, or the ability of AI models to decipher patterns and draw conclusions from information they were not trained on or have not yet encountered.

In any case, generating an answer to an AI query is perhaps 10 times more energy intensive that a regular search query. So, there is a cash burn happening, especially on data centres to power the AI surge in the inference stage and the electricity used to power the backend. On the front end though, there are financial reengineering deals that are now picking up in the AI ecosystem. One such measure, which is now partly fuelling this boom, is circular deals of the kind that Open AI and Nvidia entered into.

So, Open AI pledges billions of dollars to buy AMD's chips. AMD, in return, offers Open AI a minority stake in the company. Despite the fact that both the companies are already overvalued, investors simply love this new deal and plow in more money into both stocks, boosting valuations further. It's almost symbiotic, but with no real underlying reason for this exuberance.

"There is an element of FOMO gripping the markets. That is undeniable, given how fresh money is chasing the already high stock valuations. Also, this tends to ignore the fact that countries such as China or even India could be contenders to lead the application stage of AI, and not America," a Mumbai-based market analyst said.

While the US appears to be shrugging off fundamental concerns that could upend this investment boom, countries such as France and Japan are showing some signs of trouble in their bond market. According to Ruchir Sharma, head of Rockefeller Capital Management's international business, the deficit level in the US at this time exceeds that in France and Japan. But the reason why the US has lower yields than at the start of the year, is this implicit bet in the US bond market that America is going to see a big productivity miracle due to AI.

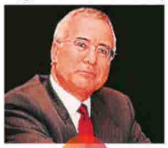
If the markets, at some point, were to decide that this is not coming through, it could trigger a potential crash. The renewed surge in investments in gold and silver are an indicator of sorts.

'No trade-off' between sustainability and growth, India can grow by 7.5-8%

THERE IS no trade-off between economic growth and moving to renewable sources of energy and India can even increase its GDP growth rate to 7.5-8 per cent from 6.5 per cent currently by aggressively investing in its green transition, according to **NICHOLAS STERN**, the IG Patel Professor of Economics and Government at the London School of Economics.

"…you still get that residual argument that somehow a developing nation will have to choose between sustainability and climate on the one hand and growth in incomes on the other. That's absolutely wrong… and it's very important we are very clear that there is no trade-off," he said in an interview with AANCHAL MAGAZINE and SIDDHARTH UPASANI.

Stern added that the path India takes to becoming a developed economy by 2047 will be crucial for the world and that it needs to increase its investment-to-GDP ratio by 5 percentage points, remove impediments to investment, get the incentives right to invest in modern technologies — particularly green technologies and artificial intelligence (AI). Edited excerpts:



THE EXPRESS INTERVIEW

NICHOLAS STERN
IG PATEL PROFESSOR OF ECONOMICS AND GOVERNMENT, LONDON SCHOOL OF ECONOMICS

Donald Trump's focus has been on tariff policies. But he is also undoing years of progress made in the renewables sector. Is that more dangerous than the chaos from trade disruptions?

Donald Trump has been disruptive in a number of directions. One, of course, is the tariffs and the structure of world trade. Another is health, where he's taking the US away from the World Health Organization (WHO) and attacking vaccinations. On security, he is backing off from the defence of Europe. Aid has been dismantled.

One important way forward for the rest of the world is to stay united on these issues. If the US is undermining WTO, which it is, then try to find trade agreements between nations which look quite similar. I think it would be very good if the EU trade agreement (with India) — which I think is coming — looks like the one with the UK. I hope there'll be more trade agreements with Asia. The more they look similar, the more we're sustaining the idea that trade should be symmetric and with minimal barriers because we all benefit from that.

In many ways, climate is similar (to health and trade) — we have the international fora where we can find agreements and carry on. At the same time, the cost of solar and batteries has fallen dramatically. If we compare with 1975, it's not that it has fallen by a factor of 100 — it's fallen by a factor close to 1,000, which is extraordinary. It is unambiguously the cheapest form of electricity generation.

How important are the next 20 years?

What we've learnt in the last 20 years is that the science is ever more worrying and that the imperative for speed goes up. So, the fact we're changing is good. But the next 20 years are enormously important. And if you think of the infrastructure India will have in 2047, well over half of that will be built between now and then. What's that infrastructure going to look like? If it looks like the old one, India and the world are in deep trouble.

If India grows to be a developed nation by 2047, its economy will be a huge part of the world economy, and thus India's emissions will be, potentially, a huge part of the world's emissions. So, in the past we could have said India's per capita emissions have been very low. But could we say that 20 years from now? I hope so. And it's quite possible because India understands the issues very well.

There is no horse race between climate action, biodiversity action and growth. In fact, the kinds of investments we're talking about — clean, productive, efficient infrastructure like metros — is about development and getting clean, strong, efficient, and reliable infrastructure. This is a growth story and one that can last not 5-10 years, but the 21st century. This is very important because you still get that residual argument that somehow a developing nation will have to choose between sustainability and climate on the one hand and growth in incomes on the other. That's absolutely wrong… and it's very important we are very clear that there is no trade-off. There are big choices; this new path is not necessarily easy. You have to invest a lot. We are talking about raising India's investments as a share of GDP by a full 5 percentage points. And India can do that — it was 4-5 percentage points higher not so very long ago.

There is a hesitancy from India to shutter its fossil fuel infrastructure as quickly as some might want. There's a question about energy security.

Well, you have to build the new (infrastructure) very quickly; you don't shut down the old until you've built the new. But you can build new (infrastructure) very quickly. And India is actually moving very fast on renewables. Renewables give you more security.

India spends around 5 per cent of its GDP on oil and gas imports. That's energy insecurity. If you want energy security, use what's for free — the sunshine, the wind. And India's dependence on imported oil and gas has been a problem, both in terms of cost and security. The cost of coal-fired (power) generation — round-the-clock solar can compete with coal, particularly if you count the damage that coal does. A lot of air pollution comes from combustion engines and coal, and you are killing people and stunting the growth of children through the use of coal. That's a cost to anybody's calculation. So, what we're talking about is a cheaper, better way of doing this. That means better growth.

Do you think India can move faster in the shift to renewables?

Yes, I do. But India can move faster on growth as a whole. India can increase its growth rate from around 6.5 per cent now to close to 7.5-8 per cent. It really can.

The immediate forces will be investment and the efficiency of investment. India does need to invest more, maybe 5 percentage points of GDP extra… A big part of that will be investment in clean and efficient infrastructure like metros and electricity generation. India will probably need five times the capacity it has now of electricity by mid-century.

This is a story where you can see how India can raise its growth rate and make it a very different kind of growth. But you've got to invest to get there and you've got to remove the impediments to investment and get the incentives right to invest in the technologies of the 21st century, particularly green technologies and AI.

FULL INTERVIEW ON www.indianexpress.com

BRIEFLY

D-Mart's Q2 profit up 3.8% to Rs 685 cr

New Delhi: D-MART parent Avenue Supermarts Ltd on Saturday reported a 3.85 per cent year-on-year rise in Q2 net profit to Rs 684.85 crore, from Rs 659.44 crore. **PTI**

Policy shielded economy from shocks: Das

New Delhi: India is set to contribute about one-fifth of the world's GDP growth backed by robust domestic demand and prudent macroeconomic and financial sector policies, which shielded it from "external shocks", said PM's Principal Secretary-2 Shaktikanta Das. **PTI**

PM Modi meets CEOs of Anthropic, Qualcomm; dicusses AI, innovation

AGENCIES
NEW DELHI, OCTOBER 11

ANTHROPIC CEO Dario Amodei on Saturday met with Indian Prime Minister Narendra Modi, the AI company said in a post on X.

"We're looking forward to growing our Indian team and supporting India's AI ecosystem as it develops the next generation of dynamic companies," the company said.

Earlier this week, Anthropic, the artificial intelligence startup backed by Alphabet's Google, said it will open its first office in India next year, aiming to tap into the country's growing appetite for AI tools.

Prime Minister Narendra Modi also met US-based chip maker Qualcomm President and CEO Cristiano R Amin and discussed India's strides in Artificial Intelligence and innovation.

"It was a wonderful meeting with Mr. Cristiano R. Amon and discussing India's strides in AI, innovation and skilling," Modi said in a post on X.

"Great to see Qualcomm's commitment towards India's semiconductor and AI missions. India offers unmatched talent and scale to build technologies that will shape our collective future," he said. Amon met the prime minister at his official residence on Friday.

"Thank you PM @narendramodi for the great conversation on fostering a broader partnership between @Qualcomm and India in support of the IndiaAI and India Semiconductor Missions, as well as the transition to 6G," Amon said in a post on X on Friday.

Prime Minister Narendra Modi meets CEO and President of Qualcomm Cristiano Amon in New Delhi. *PTI*

"Great to see Qualcomm's commitment towards India's semiconductor and AI missions. India offers unmatched talent and scale to build technologies that will shape our collective future"

— PRIME MINISTER NARENDRA MODI

Bharat 6G Alliance, 9 global bodies endorse 6G

New Delhi: Government-backed Bharat 6G Alliance along with nine international bodies have signed the Delhi Declaration, which endorses principles for 6G ecosystem including the commitment to make it secure, open, resilient, inclusive, and sustainable by design.

The Delhi Declaration was announced at the International Bharat 6G Symposium 2025 held at India Mobile Congress 2025.

"As 6G research accelerates worldwide, this declaration underscores our collective responsibility to develop trusted technologies, open standards, and sustainable networks," Bharat 6G Alliance Director General R K Pathak said.

"India's leadership through Bharat 6G Alliance reflects our vision for an inclusive digital future. The Bharat 6G Alliance is proud to stand with global 6G alliances in endorsing these shared principles," he added. **PTI**

CBIC begins vigilance probe into allegations of bribery against Chennai Customs

New Delhi: The Central Board of Indirect Taxes and Customs (CBIC) on Saturday said a vigilance investigation is being initiated on the bribery allegations against Chennai Customs by Wintrack Inc, and has posted the accused customs officers out of their jurisdiction.

The CBIC said it has received the factual enquiry report from the Department of Revenue (DoR), which was mandated to undertake a fair, transparent and fact-based enquiry into the allegations made by Wintrack Inc regarding alleged irregularities in Chennai Customs.

"The report also indicates the possibility of cheating and private fraud by the importer's own agents and intermediaries," it said in a post on X. Licence of the Customs Broker Agent named in the report has been suspended pending probe outcome. **PTI**

THE CURIOUS CASE OF UNCOMMANDED DEPLOYMENT OF LAST-RESORT POWER SYSTEM ON AN AIR INDIA FLIGHT

DGCA probes incident faced on landing at Birmingham airport

SUKALP SHARMA
NEW DELHI, OCTOBER 11

THERE APPEARED nothing out of the ordinary with Air India flight AI-117 last week, flying from Amritsar to Birmingham in the UK, until it descended to an altitude of just 400 feet on its final approach into the Birmingham airport.

Then, strangely, the ram air turbine (RAT)—a last-resort emergency power system—of the Boeing 787-8 aircraft deployed on its own, even as all electrical and hydraulic parameters were found to be normal and the pilots did not spot any abnormality with the plane. The aircraft landed safely.

This extremely unusual incident of a seemingly unexpected and uncommanded deployment of the RAT has raised eyebrows and concerns about Boeing 787 aircraft, and comes less than four months after the catastrophic crash of an Air India Boeing 787 in Ahmedabad on June 12, which killed 260 people.

The RAT deploys automatically during grave emergencies. *File*

In modern aircraft, the RAT deploys automatically during grave emergencies involving total electrical failure, a debilitating hydraulic failure, or a rarest of rare dual engine failure. Pilots can also deploy it manually. But an accidental automatic RAT deployment in the absence of an emergency and while aircraft is an extremely unusual occurrence, and unheard of.

Aviation safety regulator Directorate General of Civil Aviation (DGCA) will be probing this bizarre incident. Meanwhile, pilot grouping Federation of Indian Pilots (FIP) urged the DGCA to inspect the electrical systems of all Boeing 787 aircraft operating in India, arguing that the RAT deployment points at electrical system issues with the Boeing 787s and that the incident serves as a pointer to the Ahmedabad crash.

How the RAT works on aircraft

The RAT, a critical system, is essentially a wind turbine stowed in a compartment in the underside of the fuselage of the Boeing 787, just behind the aircraft's wing. It deploys into the airstream to generate power only when primary and secondary power sources fail. Although aircraft are equipped with auxiliary power units (APUs) to provide the required power to critical aircraft systems in the event of a total engine failure, the RAT provides an extra layer of safety, making it the plane's last-ditch emergency power system when everything else fails.

It generates power from the airstream by injecting ram pressure, created by the forward motion of the aircraft, depending on the plane's speed. In the case of total power failure, the RAT powers vital systems such as flight controls, flight-critical instrumentation, navigation, and communication equipment. In the short period between the loss of power and RAT deployment, the plane's batteries keep the bare minimum essential instrumentation going.

The RAT is particularly useful at high or cruising altitudes, and high speeds, as the pilots get enough time and supportive power for the aircraft's essential systems and controls. The RAT, however, is not a substitute for engine power. According to Collins Aerospace, which is among RAT manufacturers, these turbines "are responsible for saving more than 2,400 lives over the past five decades".

EXPLAINED E.

As the Boeing 787 — registered VT-ANO — operating Air India flight AI117 from Ahmedabad was landing in Birmingham airport, the RAT unlock message came and it got deployed, even as the pilots did not report any related abnormality with the aircraft, it is learnt. At the time, the aircraft was at an altitude of just 400 ft, well into its landing trajectory. It landed safely at Birmingham, where it was grounded for checks. All checks and Boeing-recommended maintenance actions for uncommanded RAT deployment were carried out, and no discrepancy was observed, according to DGCA officials.

Fresh concerns over Boeing 787 systems

The incident has again raised concerns over the safety of the Boeing 787 aircraft in certain quarters, coming barely four months after the Ahmedabad disaster. The RAT was one of the points of focus in the days following the tragic crash. The doomed aircraft's RAT was deployed moments after liftoff, as the engine fuel control switches transitioned from 'RUN' to 'CUTOFF', which shutdown both the engines, as per the preliminary probe report. The detailed technical investigation into the crash is underway and the final investigation report is expected in a few months.

FULL REPORT ON www.indianexpress.com

India, Canada discuss ways to strengthen economic ties

New Delhi: Commerce and Industry Minister Piyush Goyal on Saturday held discussions with his Canadian counterpart Maninder Sidhu on ways to strengthen economic ties between the two countries.

"We discussed ways to find mutually beneficial opportunities for our businesses to capitalise on the complementarities offered by our two economies. I emphasised that economic, trade and investment ties between India and Canada should be grounded in the principles of mutual respect, trust and balance," Goyal said in a post on X.

"Together, we're exploring new trade opportunities in clean technology, AI, agriculture, critical minerals, and other key sectors," Canada's Minister of International Trade in a post mentioning that he spoke with India's Minister of Commerce and Industry. **PTI**

Well Being

SUNDAY, OCTOBER 12, 2025

PET YOGA

Alternative workout options like puppy yoga, or pet yoga, are getting popular in India. These sessions offer a mood-lifting and wholesome experience to participants while being surrounded by puppies or kittens which are let loose in the studio

Gymming should be fun, not fatal

Docs warn against extreme fitness routines, especially for beginners

SREYA DEB

AS GYM AND fitness culture continues to rise, promoted endlessly by social media, doctors warn that over exertion in the gym, or even gymming without the right know-how, may lead to irreversible health complications. "The gym is a dangerous environment with machines and weights, especially if one is not well versed with the right way to use the equipment," says Dr Ramneek Mahajan, chairman-orthopaedics, joint replacement and chief robotic joint replacement, Max Smart Super Specialty Hospital, New Delhi.

Myth: Overexertion equals results

"People think that over-exertion (in the gym) can help them achieve washboard flat abs and six packs within a short period of time," says Dr Mahajan, saying that the crash diets and 2-3 hour gym routines popularised by social media only serve to encourage this misunderstanding. Vaibhav Daga, consultant, sports medicine, Kokilaben Dhirubhai Ambani Hospital, Mumbai, agrees. "The popular fitness mantra 'No pain, no gain' wrongly convinces people that discomfort equals progress," says Daga, adding, "Many also equate excessive sweating with fat loss, though sweat is simply a cooling mechanism."

Daga goes on to say that social media intensifies the problem. "Fitness influencers highlight extreme transformations, often without showing the injuries, dietary compromises, or medical complications behind the scenes. This creates unrealistic expectations and pressures people to push beyond safe limits." He adds, "Overexertion in the gym can harm both the body and mind."

Dr Mahajan, speaking of the patients he observes, "In the quest of social validation, over exertion in the gym and unwarranted nutritional supplementations lead to multitude of problems, including renal failure and increased incidence of muscle tears. It is a common incidence among the younger generations as a part of the fad culture."

Risks of overgymming

Overexertion in the gym can most commonly lead to muscle and joint injuries such as sprains, ligament tears, stress fractures, and tendonitis, often from lifting excessive weights or poor form. However, for women there is also a risk of hormonal imbalances, says Daga, leading to menstrual irregularities, infertility and reduced bone density.

"Overtraining weakens the immune system, making one more susceptible to infections, while the cardiovascular system can also be affected with arrhythmias or, in rare cases, sudden cardiac events. Mental health issues like anxiety, irritability, and depression are also being increasingly reported due to extreme regimens," shares Daga, reiterating his point that such habits when maintained regularly will have an impact both physically and mentally.

He goes on to say that consistent overgymming can lead to irreversible health complications as well, including chronic musculoskeletal pain and degenerative conditions such as osteoarthritis on account of repeated joint strain.

"In some rare cases, overexertion may increase the risk of rhabdomyolysis (muscle breakdown) and cardiac events like heart attacks and arrhythmias (abnormal heart rhythms)," says Dr Mahajan. He says that extreme fitness habits can put fitness enthusiasts at the risk of long-lasting health complications like cardiovascular issues (like thickened heart walls due to excessive workout or overtraining), muscle and bone damage, chronic fatigue, and serious mental health issues as well like eating disorders or exercise addiction. "Hence you are advised to focus on balanced, sustainable and moderate fitness habits," he stresses.

Recalling his experience with patients who wind up with health complications due to extreme fitness regimes, Dr Mahajan says he has treated shin splints progressing to fractured tibias from marathon runners; back sprains with or without intervertebral disc prolapse from people who do deadlifts without an abdominal harness; tendon ruptures in people who do excessive bench presses and bicep curls; and acromioclavicular arthritis, superior labral tears with shoulder impingement in gym goers who undertook overzealous overhead weight training.

Speaking of hormonal imbalances in women, Daga shares, "Young women sometimes present with amenorrhea (absence of menstrual periods) due to overtraining combined with low-calorie diets, which are often accompanied by stress fractures or overuse injuries." In his experience, he has also encountered endurance athletes who developed irregular heart rhythms after years of intense, unregulated workouts. "These cases highlight how pushing the body without proper guidance can cause long-term setbacks instead of progress," he says.

What to watch out for

"Overexertion-induced injuries can present with foreshadowing symptoms such as muscle soreness, joint pain, increased fatigue, shortness of breath, a racing heart, and mood changes," says Dr Mahajan. According to him, regular gym goers are advised to commit to at least 5-10 minutes of warm-up exercises before they start their routine sets. Daga adds that persistent fatigue, excessive muscle soreness, reduced athletic performance, mood changes, sleep disturbances, irregular menstrual cycles, or frequent infections can also be red flags of overtraining.

He shares from his expertise in sports medicine, "Include rest days to allow recovery and avoid training the same muscle group on consecutive days. Follow global exercise guidelines: about 150 minutes of moderate activity or 75 minutes of vigorous activity per week unless under supervision." Both specialists advise the adoption of balanced diets and avoidance of heavy meals right before a workout.

They also advise the supervision of a gym trainer, for the untrained just beginning to use the gym for workouts. "A trainer helps customise the kind of training that one desires for a specific body type with some trainers certified for nutritional advice as well," says Dr Mahajan.

As for Daga, he strongly recommends hiring a trainer, especially for beginners. "These trainers are also equipped to identify early signs of overtraining. However, independent gymming is possible once individuals are educated, disciplined, and self-aware," he added. "Those who choose to exercise alone must progress slowly, monitor their health, and ideally undergo periodic medical check-ups."

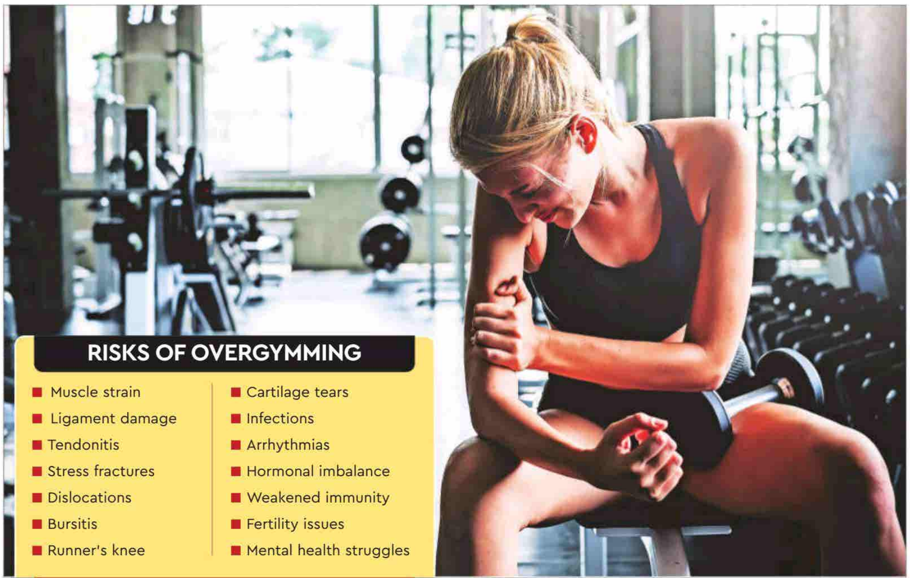
Last month, the news of the death of Priyajit Ghosh, a rising cricketer from West Bengal was reported, revealing that he died of a heart attack in the middle of a gym session. Ghosh had made a name in the Under-19 district cricket circuit and had been eyeing the Ranji Trophy and eventually the national team. In July, a 52-year-old man passed away after experiencing a heart attack while exercising in a gym in Faridabad, which sparked discussions on extreme workout regimes and how appropriate they are for middle-aged gym goers.

In another incident last month, a 37-year-old man in Pune died of a cardiac arrest while exercising in the gym.

Awareness on the pitfalls of indiscriminate gymming and extreme fitness routines and diets is not growing at the same rate as the fad of fitness culture. With gyms, big and small, around every corner in urban cities, it has become doubly easier for people to purchase memberships and visit the gym for a few hours every day before or after work. However, as doctors and specialists are increasingly pointing out, gymming cannot exist without corresponding lifestyle changes as well.

"To achieve a healthy body, it is essential to have a holistic approach. Focusing on the physical aspects of the body with training in the gym is just one part of it," insists Dr Mahajan.

"Other aspects involve meditation, good nutrition, and achieving flexibility. Physical activities to improve cardiopulmonary reserve include exercises other than gymming like pursuing an outdoor sport, cycling, swimming which work on the body as a whole rather than part of it," adds Dr Mahajan.



RISKS OF OVERGYMMING

- Muscle strain
- Ligament damage
- Tendonitis
- Stress fractures
- Dislocations
- Bursitis
- Runner's knee
- Cartilage tears
- Infections
- Arrhythmias
- Hormonal imbalance
- Weakened immunity
- Fertility issues
- Mental health struggles

WARNING SIGNS

- Muscle soreness
- Joint pain
- Increased fatigue
- Shortness of breath
- Racing heart
- Sleep disturbances
- Irregular menstrual cycles
- Frequent infections

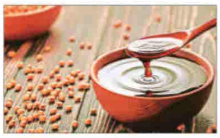
Health CAPSULES

Drink coffee, tea and water for a longer life

A study in the *British Journal of Nutrition* revealed that replacing a part of the daily water intake with tea and coffee may lead to a longer life. Researchers found that people who had 7-8 drinks a day, and a combination of coffee, tea and plain water, had a 28% lower risk of death from any cause than those who drank fewer than 4 drinks a day

Have 5-min 'exercise snacks' twice a day

Two short five-minute bursts of exercise in the day may reduce risk of heart and lung disease. A study published in the *British Journal of Sports Medicine* speaks of 'exercise snacks', referring to short periods of exercise, which have been linked to better heart and lung function, particularly for people who are otherwise physically inactive



Take fermented soy to sharpen your memory

A study published in *Nutrients* revealed that fermented soy can significantly improve memory in older adults. Researchers discovered that a daily dose of fermented soy could sharpen memory in older adults, especially in women over 70, hinting at a simple, diet-based way to support brain health with age

A clove a day for heart health and cholesterol

A single clove a day can be instrumental in supporting heart and health and cholesterol. Researchers say that a regular intake of cloves can aid in maintaining healthy blood lipid levels, reducing inflammation, and protecting against oxidative stress, all of which contribute to better cardiovascular function and overall heart wellbeing

That unknown rash

Know how to deal with unknown allergies

FE FEATURES

Dr DM Mahajan

A SUDDEN RASH for no known reason can pinpoint to an allergy. But the cause often remains anonymous. Tests also usually do not reveal anything, and patients are left to try hit and trial on screening allergens. Dr DM Mahajan, senior consultant, dermatology, Indraprastha Apollo Hospitals, says: "Allergies that appear as sudden rashes and itching can have many hidden triggers. Common causes include food items (like nuts, dairy, shellfish), insect bites, medicines, dust, pollen, pet dander, or even certain soaps and detergents. Sometimes, the body reacts to temperature changes, stress, or infections, leading to skin rashes. When the exact reason is not clear, it is called an idiopathic allergy. Because the immune system is highly sensitive, even harmless substances can trigger such reactions. Tracking when and where symptoms appear can help narrow down possible causes and avoid repeated exposure to triggers."

How to diagnose unknown allergies?

When the cause of allergy is unclear, doctors often recommend a process of elimination. Keeping a symptom diary of food, environment, and exposure helps identify patterns. Allergy tests such as a skin prick test or blood test (IgE test) can detect possible allergens. Sometimes, a patch test is used if skin contact allergies are suspected. Doctors also review medical history and may stop or change medications to rule out drug-related reactions. Diagnosis may take time as allergies can be unpredictable, but systematic testing and observation usually help find the root cause. Consulting an allergist or dermatologist is very useful.

What medications to take and does a simple antihistamine work?

For most allergic skin reactions, simple antihistamines are the first line of treatment. They block the effect of histamine, the chemical responsible for itching, redness, and swelling. Over-the-counter antihistamines often bring relief, though drowsiness can be a side effect with some types. In more severe cases, doctors may prescribe stronger antihistamines, corticosteroid creams, or oral steroids to reduce inflammation. If symptoms include breathing difficulty, immediate emergency treatment is needed. It is important not to self-medicate long-term without guidance. Antihistamines usually work well for mild to moderate rashes, but persistent or severe reactions need medical evaluation and proper prescription.

> SEASONAL ALLERGIES ARE USUALLY PREDICTABLE, BUT FOOD OR CHEMICAL ALLERGIES CAN OCCUR AT ANY TIME

Is it season specific?

Yes, some allergies can be seasonal. For example, pollen allergies are common in spring, while dust and mold allergies may flare up during the monsoon or winter when ventilation is low. In such cases, people may notice skin rashes, sneezing, or itching at certain times of the year. However, not all allergies are linked to seasons-food or chemical allergies can occur any time. Seasonal allergies are usually predictable, so preventive measures like keeping windows closed during high pollen days or using air purifiers indoors can help. Identifying patterns in flare-ups is the key to seasonal allergy management.

What are some home remedies for skin allergies?

Mild skin allergies can sometimes be managed at home for relief. Applying a cool compress or taking a cold shower reduces itching and swelling. Natural soothing agents like aloe vera gel, coconut oil, or oatmeal paste calm irritated skin. Wearing loose cotton clothes helps the skin breathe and prevents further irritation. Avoid scratching, as it can worsen rashes and cause infections. Drinking enough water and keeping the skin moisturised maintains skin health. Also, avoiding scented soaps, detergents, or creams during an allergy flare-up is important. Home remedies provide comfort, but medical care is necessary if rashes persist or worsen.

Opinion

SUNDAY, OCTOBER 12, 2025

Is Thai food the secret sauce for great golf?

FAIRWAY FILES

Rahil Gangjee

THERE'S SOMETHING BREWING in Thailand — and it's not just Tom Yum soup. The Mercuries Taiwan Masters wrapped up recently, and guess what? Out of the top eight finishers, six were Thai golfers. Six! I don't know what they're putting in their curries, but it's clearly working better than my protein shake.

While I was busy missing the cut and contemplating my life choices over a soggy sandwich, the Thai brigade was out there playing precision golf like they were slicing mangoes at a Bangkok street market — calm, confident, and ridiculously consistent. It got me thinking — is there some mystical connection between Thai food and golf? Could Pad Thai be the new power fuel? Is green curry secretly laced with birdie energy? Or maybe there's a Zen-like calmness that comes from eating sticky rice with your fingers that translates to steady putting hands.

I've been on tour long enough to notice patterns — and the Thais dominating leaderboards isn't a new one. You've got young guns, veterans, and guys who look like they just rolled out of a beach resort, all firing in the 60s. The rest of us are trying to figure out our swing path, while they're just... smiling, chewing calmly, and dropping putts from everywhere.

I'm starting to believe their secret isn't in the swing — it's in the kitchen.

Theory 1—The power of spice: Let's face it — no one who eats Thai chili regularly is afraid of anything. If you can down a plate of fiery som tam (papaya salad) without crying, a downhill 4-footer for par is child's play. Maybe that's why they all look so relaxed. You and I would be sweating bullets over a six-iron approach; they're already heat-trained. I once tried to keep up with a Thai player during dinner in Hua Hin — bad idea. He ordered "medium spicy," and I thought, *how bad could that be?* By the second bite, I was seeing swing thoughts from 2008. The waiter offered me coconut milk, and my opponent just smiled politely and said, "Extra chili, please." The next day he shot 66. I three-putted four greens. Coincidence? I think not.

Theory 2—The zen of Thai golfers: Ever notice how calm Thai players are? You could tell one he's in the water hazard, and he'd just bow, smile, and chip in for par. I've yet to see a Thai golfer throw a club. Maybe it's the Buddhist calm that flows through them — or maybe it's because they know there's a bowl of noodles waiting at the clubhouse. They play golf the way monks might meditate — smooth rhythm, no fuss, no theatrics. I, on the other hand, play like a Bollywood drama — passion, heartbreak, and occasional self-dialogue.

Theory 3—The coconut connection: There's something about hydration too. Forget fancy electrolyte mixes — these guys just drink coconut water straight from the shell. Maybe the key to a fluid swing is literally being full of fluid. The last time I tried coconut water mid-round, I spilled half of it on my glove, slipped on the next tee box, and still shot over par. Clearly, it's not just about drinking it — you've got to *live* it.

Theory 4—The team spirit: Thai golfers travel like a family — sometimes literally. You'll see them sharing meals, helping each other read greens, and probably gossiping about who needs a new driver. They have that easy camaraderie that makes golf less lonely and more like a picnic.

Meanwhile, I'm the guy in the corner calculating carry distances on Google Earth. Maybe that's where I'm going wrong. I should be joining the Thai table, picking up a forkful of fried rice, and absorbing whatever mojo they're sharing.

Theory 5—The home advantage... everywhere: Here's the weird part — even outside Thailand, they seem to find home-cooked comfort. No matter the country, there's always a Thai restaurant nearby. I'm beginning to think they plan their schedules based on cuisine proximity. At the Taiwan Masters, while I was scouting yardages, they were probably scouting the best green curry in town. And judging by the leaderboard, that strategy clearly paid off.

Back to the Mercuries Masters

Let's give credit where it's due — Rattanon Wannasrichan took the title at -5, followed closely by Sarit Yongcharoenchai, Wang Wei-Hsiang, and a bunch of other tongue-twisting surnames that make the leaderboard sound like a karaoke lineup. But the golf? Flawless.

The Thai players played the windy, tricky Taiwan course like they owned it. Compact swings, soft hands, no drama. It's like they all graduated from the same temple of tempo.

Me? I was in the parking lot by Friday evening, wondering if I should switch to golf commentary. But then again, how do you compete with a nation whose pre-round breakfast probably involves basil chicken, jasmine rice, and a smile?

A quiet Thai touch on Indian turf

You know, this Thai wave didn't just appear overnight — it's been quietly brewing for decades. Thongchai Jaidee won the Indian Open back in 2001, and Thaworn Wiratchant claimed it twice, in 2005 and 2012. That's three Indian Opens out of 58 editions going to Thailand — not bad for a nation better known for mango sticky rice than masala.

Clearly, our spice levels don't scare them either. Maybe there's something about Asian courses — the heat, the humidity, and the patience it demands — that just feels like home to them.

So what's next?

I'm genuinely considering a *Thai Golf Diet Plan.*

- **Breakfast**: Coconut water and sticky rice.
- **Lunch**: Green curry, but only if I birdie the front nine.
- **Dinner**: Tom Yum soup for detox (and humility).

Add a few minutes of meditation and a polite "Khop Khun Krap" before every tee shot — and maybe I'll find that same peaceful precision.

Or maybe I'll just burn my taste buds and lose focus entirely. But hey, at least I'll smell like lemongrass.

Moral of the story

Golf teaches you to respect what works — and right now, Thai golf is *working*. They're humble, hardworking, and in incredible form. But beneath all that, there's a cultural magic — a blend of calmness, discipline, and joy. They don't fight the game; they flow with it.

Maybe the rest of us need a bit of that — less protein powder, more Pad Thai.

As for me, I'll head back to the range with renewed purpose (and possibly a takeout box from the nearest Thai restaurant). Who knows — the next time you see me on a leaderboard, it might just say "Gangjee — fuelled by Green Curry."

And if it doesn't... well, at least I'll be smiling while I miss the cut.

Next stop: A new week, a new event, and maybe a new spice tolerance. Until then, *Sawadee krap*!

Rahil Gangjee is a professional golfer, sharing through this column what life on a golf course is like

ACROSS THE AISLE

P Chidambaram

In my view, the war *may* stop finally, the hostages (or their remains) *may* be released shortly, and humanitarian aid *may* reach the hapless residents of Gaza, but Gaza itself will be a virtual colony under an 'apolitical committee' supervised by a 'Board of Peace' consisting of the likes of Mr Trump and Mr Blair. The Palestinian dream of statehood is virtually dead

Activists burn effigies of US President Donald Trump and Israeli Prime Minister Benjamin Netanyahu to express solidarity with Palestine, in Kolkata, West Bengal

PTI

Up the down staircase

IT WAS UNUSUAL for Prime Minister Narendra Modi to lavish praise on an individual, not once but *twice*, in the space of *four* days, but he did. The object of the praise was President Donald J Trump. The subject was the 20-point 'Peace Plan' that Mr Trump had proposed "to bring the war between Israel and Hamas to an end".

On September 30, 2025, Mr Modi called it a "comprehensive plan to end the Gaza conflict. It provides a viable pathway to long-term and sustainable peace, security and development for the Palestinian and Israeli people, as also for the larger West Asian region". Mr Modi also took the extraordinary step of issuing the statement in *seven* languages — Arabic, Chinese, English, French, Russian and Spanish, as well as Hebrew and, of course, Hindi. On October 4, Mr Modi said, "We welcome President Trump's leadership as peace efforts in Gaza make decisive progress."

As I write, Hamas and Israel have agreed to the *first phase* of the plan. Hamas will release the hostages and Israel will cease fire — it is not clear when, but shortly. Celebrations brought people to the streets in both Gaza and Israel. Hamas has not yet accepted several aspects of the plan, especially on ceding control to an external authority.

Ominous beginning

Naturally, questions have arisen on why Mr Modi showed extreme anxiety to praise and please Mr Trump when the latter has only heaped injury and humiliation on India since he assumed office on January 20, 2025.

In his first term as President (2017-2021), Mr Trump targeted India and other countries by imposing tariffs on steel (25%) and aluminium (10%), and terminated GSP benefits to India.

In 2020, he suspended several categories of visas that were used by Indians, especially H-1B. Yet, at a rally in Houston, Texas on September 22, 2019, Mr Modi made the infamous declaration *'Abki Baar, Trump Sarkar'.*

In the nine months of his second term, Mr Trump has imposed the highest tariffs on India (and Brazil) virtually halting India's exports to the United States of steel, aluminium, textiles, gems and jewellery, sea food, pharmaceuticals, footwear, furniture, cars and toys. He accused India of "funding the war against Ukraine" by buying Russian oil, and imposed an additional 25% tariff on Indian goods. His close ally, Senator Lindsay Graham, told India that the US will "tear up the hell out of you and we're going to crush your economy" if India continued to buy Russian oil.

Mr Trump called India the 'Tariff King' and his trade adviser Mr Peter Navarro said worse. Slamming India-Russia ties he called both "dead economies". He also slapped a humongous fee of $100,000 on applications for H-1B visas and tightened the rules for issuing student and spouse visas.

In February-May 2025, over a thousand Indians, allegedly illegal immigrants, were deported to India with handcuffs and leg chains in military aircraft.

Trump favours Pakistan

Despite Pahalgam and India opposing the largesse, in May-June 2025 Pakistan received billions of dollars of assistance from the IMF ($1 billion), ADB ($800 million) and World Bank ($40 billion) with crucial support from the United States. Mr Trump claimed, despite Indian denials, that he had mediated to bring the India-Pakistan war to an end, and continues to make the claim. The ultimate humiliation was when he hosted the Army Chief of Pakistan on June 18 to an unprecedented lunch at the White House. On September 25, Mr Trump held a joint meeting with the Prime Minister *and* the Army Chief where Pakistan's "great leaders" — Mr Trump's words — offered to supply critical rare earth minerals; sealed a trade deal with tariffs on Pakistani goods at 19%; and invited the US to build and operate a port on the Arabian Sea. Forgotten were 9/11, Osama bin Laden, Abbottabad, and the description of Pakistan as "a terrorist safe haven".

Pakistan seems to have learned the art of riding two horses (America and China) at the same time.

There is not one thing that the US has done since January 2025 that can be described as friendly to India. India-US relations have been on an escalator marked *'Down'.*

And Mr Modi is desperately trying to walk up the down staircase.

Killing a dream

The intriguing question is why did the prime minister of India jump to praise Mr Trump using the opportunity of an *Israel-backed* 'peace plan' that leaves Palestinians in despair. Point 19 reads:

'While Gaza re-development advances, and when the PA reform program is faithfully carried out, the conditions may finally be in place for a credible pathway to Palestinian self-determination and statehood' (emphasis mine).

In my view, the war *may* stop finally, the hostages (or their remains) *may* be released shortly, and humanitarian aid *may* reach the hapless residents of Gaza, but Gaza itself will be a virtual colony under an 'apolitical committee' supervised by a 'Board of Peace' consisting of the likes of Mr Trump and Mr Blair. The Palestinian dream of statehood is virtually dead.

Apparently, for all the vain boasts, the prime minister has realised that India has few friends in the world and the Indian economy is not resilient enough to weather the storms raging around it. Flattery is no substitute for smart diplomacy and sound trade and investment policies.

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FIFTH COLUMN

TAVLEEN SINGH

Who is to blame for the horror of Gaza?

IT SEEMED TO me oddly appropriate that it was in this peaceful Swiss village where I have been for the past three weeks that I should learn that peace is breaking out in Gaza.

For many days I watched the news about the latest 'deal in Gaza' with skepticism and a weary sense of déjà vu. We have been here before too many times. And then, at the very last moment, there has been some hitch that prevented the last living hostages from being released by the monsters who constitute Hamas.

This time, they say, is different and Donald Trump plans to be in Jerusalem around the time you read this, so we must hope that it is. And that the hostages who remain alive will finally be released.

At a personal level, my deepest concern since the atrocities committed by Hamas' Islamic warriors on October 7, 2023, has been for the hostages. Often, I have thought of the babies that were taken down into those tunnels under Gaza. Often, I have wondered if they were separated from their parents. Often, I have wondered if there was anyone to explain to them why their innocent lives were plunged into darkness. And if there was someone to explain to them that it was not their fault that any of these things happened. When the tiny coffins of those two little boys were handed back by their Hamas captors, I felt as if children from my own family had died.

Kfir Bibas was nine months old, and his brother Ariel was four. Among the 251 hostages abducted by Hamas, there were 36 children.

It is no longer politically correct to remember the suffering of the Israeli children who were taken hostage. It is the suffering of the thousands of children of Gaza that we are reminded of every day by the Western media.

But this column has never been politically correct. I think what has happened to the people of Gaza in the past two years is one of the greatest tragedies ever and the men who stopped food and basic healthcare from entering Gaza are demons. But the thing we seem to forget is that this would not have happened if Hamas had just released the hostages.

There would not have been this horrible war if the hostages had been released. Gaza would not have been turned into a place of broken people and broken buildings if the hostages had been released. So why did Hamas not release them? Was it because they believed, as some of their leaders have admitted, that allowing their own people to be killed was a necessary sacrifice? Speaking for myself, I blame Hamas for almost all that has happened. More than Benjamin Netanyahu, although his name will be recorded in the annals of evil.

This column has been accused of Islamophobia before, so I do not hesitate to say that Hamas is a death cult, and its fanatical terrorists are motivated by an ideology that is, in my view, the Nazism of our time.

This ideology does not have a name but can be called jihadism and we see too many people in our own country who subscribe to it. There are some fake liberals, and I think of myself as a true liberal, who like to expound upon the theory that jihadism is the same as Hindutva.

It is wrong to say this because there is not a religious book in the entire literature of the Sanatan Dharma that says killing non-believers is something God approves of. Islam does sanction the beheading of us idol-worshipping types and it is from this sanction that death cults like Hamas draw inspiration.

On our sub-continent, there are jihadists who believe that killing 'kafirs' is a religious duty and there are those in the Middle East who believe killing Jews is a religious duty.

One of the images that has engraved itself in my brain from the horrors of October 7, 2023, is of a Hamas warrior calling his father to tell him proudly that he had killed 10 Jews with his own hands. People who can talk like this are sick and it is time to say this loudly.

The point I am trying to make is that what has happened in Gaza has happened because of the sick ideology that Hamas believes in. No cause in the world justifies taking small children hostage and keeping them confined underground for months.

To do that is barbarism. It is true that more than 67,000 people have been killed in Gaza, of which many were children and women, and that is truly tragic and very, very sad. But if the hostages are released by next week and a kind of peace breaks out in Gaza, it is time for those who voted for Hamas to stop and think about the kind of people they chose to represent them.

There are too many 'moderate' Muslims who refuse to confront the truth that the ideology that has created death cults like Hamas is one that gets its sanction from Islam.

If the Quran is, as Muslims believe, the final message of Allah, then it could be time for the Islamic clergy to say that this message has now been dangerously misunderstood by the men who believe that brutality in Allah's name is brutality that is for the good of humankind.

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Mind & Games

SUNDAY, OCTOBER 12, 2025

A new way to navigate if you lose north star

How a pair of familiar constellations can help a person find a way through the world in the darkness when all other methods fail

JOSHUA SOKOL

LONG BEFORE GPS and magnetic compasses, written maps or even writing, people oriented themselves under the cosmos using rules of thumb. Orally transmitted knowledge has repeatedly shown that indigenous peoples all over the world have sophisticated understandings of the stars. And in early literature like Homer's *Odyssey*, the nymph Calypso teaches Odysseus how to sail home by keeping the Great Bear constellation to his left. By now, it should seem like there is nothing new under the billions of suns that make up the night sky that could help people navigate in the dark. But a British author, Tristan Gooley, writes in a new book about following environmental signs throughout the year, "*The Hidden Seasons*," that he has identified a new pair of hacks to find one's way through the world by starlight. The book is published by the independent publisher The Experiment and comes out on October 21.

Gooley, a proponent of what he calls natural navigation, preaches attention to common patterns in nature like a sommelier describing wine, the shadows cast by the sun here, the tree angled there, the moss greener on this side of the rock. As part of that work he has invented, or perhaps reinvented, a couple of wayfinding methods.

For example: After sunset in midwinter in the northern hemisphere, dress warm and go outdoors to a spot where you have a relatively unobstructed view to the south. Rolling up to the sky from the southeast, you will see a letter "V" made up of bright stars in the constellation Taurus.

THESE METHODS COULD BE USEFUL IF THE STARS TYPICALLY USED TO POINT NORTH ARE OBSCURED

When two particular stars in that "V" are stacked in an invisible vertical line, let that line drop down to the horizon, where it will point due south. Or suppose it is a midsummer night instead. You can perform the same kind of trick with a pattern of stars that resemble a teapot inside the constellation Sagittarius. When two of these stars, Ascella and Kaus Media, align horizontally in the sky, you're in business.

These methods aren't meant only for survivalists, although they could be useful in a pinch if the stars typically used to point north are obscured by weather or terrain. They aren't cutting-edge astrophysics either, even if they might have been in 5,000 BC. They aren't even the periodic celestial events — like meteor showers, comets or eclipses — that send people gawking upward these days.

Instead, these are the sorts of things that happen night after night within the clockwork of the cosmos and that, once noticed, can make the entire world click into a new alignment.

Gooley's ideas use the same principles as the most famous star compass of all. Since at least the 1500s, sailing manuals have described how to follow an invisible line between Dubhe and Merak, two stars in the Big Dipper's pouring end. That line leads to the star, Polaris, which currently marks the celestial north pole. Drop a line down from Polaris to the horizon and pat yourself on the back: That's due north.

Another way to understand what makes these arrangements of stars special is that they happen to align with an imaginary but helpful grid of coordinates that ancient Greek thinkers stamped onto the sky along with a matching system of longitude and latitude coordinates for the Earth.

For example, Dubhe and Merak overlap nicely with a line of celestial longitude, an imaginary arc across the sky that connects the north and south celestial poles. Gooley's new methods also use stars on these celestial grid lines. But there's a wrinkle that makes finding south from the stars in the northern hemisphere a bit complicated. While Polaris is always above the horizon if you stand in places like north America and Europe, the southern celestial pole is permanently hidden underneath you.

The geometry is simple at only one time. All stars move from east to west, and when constellations like Sagittarius and Taurus cross the middle of the sky — when they are neither east nor west — they must be on the "meridian" line that runs north to south overhead. Find these stars at that moment, and you can follow that line straight south through the horizon.

Gooley has published other south-finding methods using the constellations Leo, Scorpius and Orion — when Orion's sword hangs straight down, you've again found south. He has stumbled on many of these methods simply by searching the sky for any bright, easily teachable star patterns with the same properties.

"It is exciting, it is euphoric," he said. "The classic treasure hunt."

It isn't clear whether his methods have already been discovered in other periods. Western maritime navigation began to transition away from these strategies as early as the 1400s, said Patricia Seed, a historian at the University of California, Irvine. When Portuguese captains traveled down the coast of Africa, relying on magnetic compasses and other instruments, they complained about losing their old-fashioned methods.

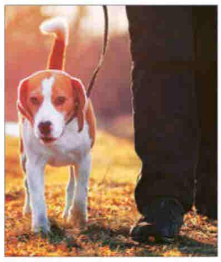
"They're going, 'Why can't we just learn from the people who came back and did these trips like we used to do in the Mediterranean?' Well, you can't," Seed said. "Not if you want to come back alive." Six centuries later, even fewer people rely on older styles of wayfinding. Gooley says he isn't against modern navigational technology, which has created a much safer world. But he compares natural navigation with farm-to-table meals, and the way their revival aims to reconnect us with cultural ties to food production.

"In the last 24 hours, I'll wager that you've eaten something, drunk something, slept — and navigated," he said. "Nobody has really understood how fundamental it is. It is one of the things that makes us human." —NYT

In a toxic world, pets could be vital health watchdogs

A better understanding of how pollution affects pets could benefit humans

EMILY ANTHES



ON A FRIGID February night in 2023, a freight train carrying toxic chemicals derailed in East Palestine, Ohio. For days, the train's hazardous contents spilled into the surrounding soil, water and air. It was an environmental and public health catastrophe, and efforts are underway to monitor the long-term health effects on the people of east Palestine.

But one team of scientists is focused on a different group of local residents: the dogs. After the derailment, the researchers recruited dog owners in and around east Palestine, asking them to attach chemical-absorbing silicone tags to their pets' collars. The preliminary results, which have not yet been published, suggest that dogs living closest to the crash site were exposed to unusually high levels of certain chemicals. The researchers are now analysing blood samples from the dogs to determine whether the chemicals may have triggered genetic changes associated with cancer. "This is what we should be doing in the wake of any of these disasters," said Elinor Karlsson, a geneticist at UMass Chan Medical School and the Broad Institute, who is leading the research. "The pets that live in our homes are being exposed to the same things we're going to be exposed to."

Our pets breathe the same air, drink the same water and often sleep in the same beds that we do. And yet, there is relatively little research on how environmental toxins and pollutants affect our animal companions. That is an enormous missed opportunity, experts said. "I do like to use the analogy of the canary in the coal mine, with this one distinction, which is that canaries were sacrificial," said Dr Audrey Ruple, a veterinary epidemiologist at Virginia Tech.

The air out there

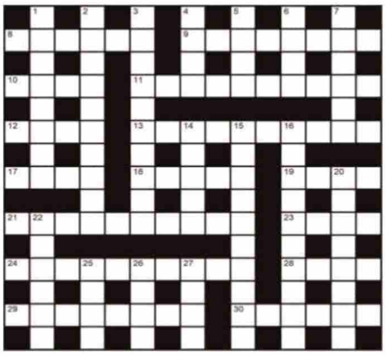
In 2020, California experienced a record-setting wildfire season, one that often left the skies filled with smoke. On particularly bad days, Stephen Jarvis, a graduate student in the Bay Area, found himself with headaches, irritated eyes, shortness of breath and even chest pains.

He also noticed the effects in his partner's asthmatic cat, Manolo. Last week, Jarvis, now an assistant professor at the London School of Economics, published a paper suggesting that Manolo's breathing problems were not a one-off. He and his colleagues reviewed five years of veterinary data from across Britain, alongside data on the levels of airborne fine particulate matter, which is one of the pollutants and a well-known human health hazard.

When air pollution rose, so did the number of veterinary visits for cats and dogs, the researchers found. "When we are considering how to protect ourselves from unhealthy air, we should also be thinking about our pets and wildlife," said Olivia Sanderfoot, an ecologist at Cornell who studies the effects of smoke on wild animals. Smoke inhalation can cause an array of respiratory problems in animals, including coughing and shortness of breath. Pets have shorter lives than people, and are more likely to live them out in a single geographic location, making it easier for scientists to tease out some of these subtle effects. Plus, the devotion of pet owners helps facilitate data collection, experts said.

"People are worried about their pets," said Karlsson, who leads Darwin's Dogs, a large community science project that aims to identify the genetic and environmental contributors to canine health and behavior. "And as a scientist, that's an opportunity. Because if people are concerned about it, then they're going to help us with the work." And the dogs, in turn, can give back, helping scientists identify chemicals that put both humans and animals at risk. After all, Dr Ruple noted, the word "sentinel" refers to someone whose job is keeping watch. "That's what we have always used dogs for," she said. "Guardians of our livestock, guardians of our family, guardians of our homes." And in a toxic world, perhaps, guardians of our health. —NYT

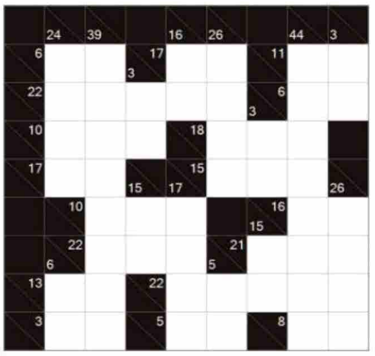
CROSSWORD



ACROSS
8 Oilseeds traded on commodities market (6)
9 Business houses, companies, etc. of our country - collectively (5,3)
10 For. Exch. Mgmnt. Act (4)
11 Raj Bahadur M S Oberoi's famous hotel company (3,7)
12 The footwear people (4)
13 Where Rajasthan Atomic Power Station is located (10)
17 Glass brand from Alembic Glass Industries Ltd (4)
18 Kingdom north of India; now under Chinese dominion (5)
19 Indo ___ Corporation Ltd : company of Aditya Birla Group of Industries (4)
21 Pharmaceutical multinational (5,5)
23 A tube or pipe for liquid to flow through (4)
24 Retire - with a golden handshake, maybe (7,3)
28 ___ over : be worried or concerned about? (4)
29 Planning; conniving (8)
30 ___ off : said or recited very rapidly? (6)

DOWN
1 A drink (8)
2 Bangalore based financial institution (6,4)
3 Profaned, diverted from a sacred to a common use (10)
4 Wealthy (4)
5 Steamed South Indian dish (4)
6 Its capital is Bamako (4)
7 Consume (6)
14 Streaming video continuously downloaded from the Internet (3,2)
15 SUV from Tata Motors (4,6)
16 Founder of the popular Playboy magazine (4,6)
20 Made fewer, decreased (8)
22 A business that serves other businesses (6)
23 ___ through : ooze out ? (4)
25 Leave out (4)
26 ___ through : ooze out ? (4)
27 Government of India company responsible for oil exploration (4)

KAKURO



In Kakuro sum puzzles, the numbers in the black squares refer to the SUMS of the digits, which you are to fill into the empty spaces directly below or to the right of the black square containing the number. No zeroes are used here, only the digits one through nine. An important point: A digit cannot appear more than once in any particular digit combination.

BIZ QUIZ

1. Which organisation has launched a pilot project for UPI payments on ChatGPT?
2. How much did LG Electronics' IPO attract in record bids?
3. Which two parties recently signed a Gaza ceasefire agreement?

BUZZ WORD

The Buzz Word is a substitution cipher in which one letter stands for another. If you think that X equals O, it will equal O throughout the puzzle. Single letters, short words and words using an apostrophe give you clues to locating vowels. Solution is by trial and error.

Today's clue: WEB equals QUO

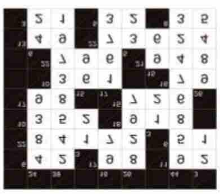
Dih qhcndi bo z shhdycn pyxhx gydi dih xwezph bo dih cesmhp bo ahbaqh aphxhcd. - Pbmhpd J. Sehqqhp

ANSWERS

1. NPCI 2. ₹4.4 lakh crore 3. Israel & Hamas

The length of a meeting rises with the square of the number of people present. - Robert K. Mueller

SOLUTIONS



BRIDGE BOUTS L SUBRAMANIAN

ONE STEP FURTHER

Today's deal is from a match-point event. The bidding was fantastic, and the play was brilliant. Enjoy the deal.

Partner opens 1S first-in-hand. You respond 2C with **S** K-T-5 **H** A **D** T-9-8 **C** A-K-J-5-4-3. Opener rebids 2H. Since you play two over one as forcing to game, you bid 2S! Opener bids 3D as a cue-bid, to show a better than minimum hand, for he would have jumped to 4S as fast arrival, with a balanced minimum You launch into 4NT, RKC. Opener bids 5S, to show two key cards with the trump queen. You waste no time and jump to 7S! The N-S hands are:

Dlr: South
Vul: None

S KT5
H A
D T98
C AKJ543

N
S

S AQJ98
H 8532
D AK5
C Q

S	N
1S	2C
2H	2S
3D	4NT
5S	7S
pass	

Contract: 7S by south, west leads a trump. You play the ten from dummy, and RHO follows. Plan the play.

How my partner played: She led a club to her queen at trick two, both defenders following. Entering dummy by **S**K, she ruffed a small club! east pitching a heart. She drew trumps next, and claimed the balance, **H**A serving as the entry to the established clubs, for a 100 % score. The full hand is:

S KT5
H A
D T98
C AKJ543

S 3
H QT76
D J74
C T8762

N
S

S 7642
H KJ94
D Q632
C 9

S AQJ98
H 8532
D AK5
C Q

Discussion: The key bids in the auction were, 2S by north, suggesting slam and 3D by south, accepting partner's slam try.
Most declarers would draw trumps at once, unblock the **C**Q from hand, enter dummy in **HA**, and play clubs from top, relying on a 4-2 or a 3-3 break. Needless to say, they will receive the jolt of their life. You should appreciate that my partner went one step further and established he club suit by ruffing a small club, thereby providing for a 5-1 division of the suit. A lesson hand indeed! We won the event because of this board, edging out the second placed by half a match-point!

LEXICON

ANECDATA

■ *n.* Anecdotal evidence used as data in an attempt to prove a hypothesis or make a forecast.

But some social scientists who make a study of criminal behavior reject what Richard J. Gelles, director of the Family Violence Research program at the University of Rhode Island calls the "anecdata" of women's advocates. "The trouble is the real scientific data doesn't bear out the anecdotes," said Gelles.
—William Hamilton, "Crimes of Passion Spark Intense Debate," *The Washington Post*, August 14, 1994

EU Grills Apple, Snapchat, YouTube over Child Risks

Brussels is analysing whether to set bloc-wide limits on minors' access to platforms with 25 of 27 EU countries coming out in support of studying such a measure

AFP

Brussels: The EU Friday demanded digital giants, including Snapchat and YouTube to explain how they are protecting children from online harm, as all but two member states signalled openness to restricting social media access for minors.

The European Union has stringent rules regulating the digital space, including what children should be able to see, but there is increasing concern that more needs doing.

Inspired by Australia's social media ban for under-16s, Brussels is analysing whether to set bloc-wide limits on minors' access to platforms — with 25 of 27 EU countries coming out Friday in support of at least studying such a measure.

Europe's biggest weapon for ensuring platforms tackle illegal content and keep children safe online is the Digital Services Act, which has sparked censorship claims from the US tech sector and retaliation threats from President Donald Trump.

Now, as part of "investigative actions" under the DSA, the European Commission has sent a request for information to Snapchat about what steps it is taking to prevent access for children under 13.

The commission has also asked Apple's App Store and the Google Play marketplace to provide details on measures taken to prevent children downloading illegal or harmful apps — for example, those with gambling services or sexual content.

The EU wants to know in particular how Apple and Google stop children downloading tools to create non-consensual sexualised content — so-called "nudify apps" — as well as how they apply apps' age ratings.

"Privacy, security and safety have to be ensured, and this is not always the case, and that's why the commission is tightening the enforcement of our rules," tech chief Henna Virkkunen said before EU ministers met in Denmark.

A request for information can lead to probes and even fines, but does not in itself suggest the law has been broken, nor is it a move towards punishment.

MULTIPLE PROBES

Regarding Snapchat, Brussels wants to know how the messaging app stops users from buying drugs and vapes.

A Snapchat spokesperson said the company was "deeply committed" to ensuring safety on its platform and would provide the information requested. Snapchat said the company had already "built privacy and safety features" to reduce "risks and potential harms".

Brussels also wants YouTube — owned by Google parent Alphabet — to provide details on its recommender system, "following reporting of harmful content being disseminated to minors", the commission said.

Google said it had "robust controls for parents", and "security and protections for younger users", adding it would keep expanding its efforts.

Separately, the EU is investigating Meta's Facebook and Instagram, as well as TikTok, over fears they are not doing enough to combat the addictive nature of their platforms for children.

'PRESSING NEED'

In a parallel push on child protection, EU telecoms ministers discussed age verification on social media and what steps they can take to make the world online safer for minors.

European Commission chief Ursula von der Leyen personally supports such a move, and Brussels is setting up an experts' panel to assess what steps could be taken at the EU level.

Twenty-five of the EU's 27 countries alongside Norway and Iceland signed a declaration backing von der Leyen's plans to study a potential bloc-wide digital majority age, and on the "pressing need" to shield minors online.

Belgium and Estonia did not sign the statement. A Belgian diplomat said the country was committed to protecting children online but wanted to keep an open mind about what tools to use.

Estonia was more outspoken, saying it prioritised "digital education and critical thinking over access bans".

Denmark is planning to introduce a ban on social media for children under the age of 15, which France has also sought to do.

Power Minister Stresses on Importance of Climate Finance

Our Bureau

New Delhi: Power minister Manohar Lal on Saturday called for climate justice, stressing the importance of climate finance and technology transfer commitments under the Paris Agreement at the G20 Energy Transitions Ministerial Meeting hosted in KwaZulu-Natal, South Africa.

Lal emphasised that energy security remains one of the most pressing global challenges particularly for the Global South, calling for strengthened G20 cooperation.

India's Nationally Determined Contribution (NDC) target of 50% non-fossil fuel capacity was achieved five years ahead of schedule in 2025 itself, he said.

Lal also outlined India's ambitious clean energy goals, of establishing itself as a global hub for green hydrogen production and achieving 100 GW of nuclear power capacity by 2047.

The minister reaffirmed India's support for Africa's Mission 300, an initiative to connect 300 million Africans to electricity by 2030.

BULK DEALS

'Sebi Overhauled Surveillance to Keep Fraudulent Trade in Check'

Our Bureau

Mumbai: The Securities and Exchange Board of India has revamped its market surveillance system to detect fraudulent trades in bulk deals, its chief Tuhin Kanta Pandey said on Saturday.

"On the surveillance front, we are moving from reactive supervision to predictive oversight. We have revamped our data warehouse system to develop new rule-based alerts to identify 'Pump and Dump' patterns and to detect fraudulent trades in bulk deals," Pandey said at an event organised by the Bombay Stock Exchange Brokers' Forum.

He said algorithmic and high-frequency trading has witnessed significant growth and such trades currently account for significant volumes in the equity and derivatives market.

"We will constantly update our regulatory framework in this regard to ensure a fair, transparent and resilient market," the Sebi chairman said.

His comments come at a time when Sebi battles Jane Street in the Securities Appellate Tribunal. Sebi had accused the US-based trading firm of manipulating India's derivatives market.

PREDICTIVE OVERSIGHT

We have revamped our data warehouse system to develop new rule-based alerts to identify 'Pump and Dump' patterns

TUHIN KANTA PANDEY
Chairman, Sebi

Pandey said the regulator will be coming out with revised guidelines for the cybersecurity framework.

"A cyber incident at one institution can destabilise the entire ecosystem…Guidelines for Air Gap (it ensures that market infrastructure institutions' core activities remain operational even if the external-facing network is breached), a key component of this framework, will be issued" in consultation with these institutions, he said.

Market infrastructure institutions (MIIs) are being stress-tested with live disaster recovery drills, he said.

"We have even implemented a redundancy model for our clearing corporations (CC), where if one CC is down, its operations can continue using the services of another CC. We are also examining implementation of a safety net in case of outage at a depository participant, as done for stockbrokers," he said.

He said governance standards in MIIs such as stock exchanges have been strengthened to ensure public interest is prioritised over commercial interests.

"MIIs will now have to appoint two executive directors to their governing board to mitigate the key-man risk of the managing director overseeing the regulatory and operational verticals," Pandey said.

WINTRACK ALLEGES IRREGULARITIES

CBIC Launches Vigilance Probe against Chennai Customs Officials

Our Bureau

New Delhi: The Central Board of Indirect Taxes and Customs (CBIC) has launched a vigilance investigation into allegations of irregularities made by Chennai-based importer M/s Wintrack Inc against officials of Chennai customs. The inquiry, based on prima facie findings, is expected to be completed in 4-6 weeks.

To ensure a fair probe, CBIC has relieved the officers named in the preliminary report from their current responsibilities and transferred them out of the jurisdiction. The licence of the customs broker agent mentioned in the complaint has also been suspended pending the outcome of the investigation.

As part of corrective measures, CBIC is constituting a task force under member (customs) to review all pending cases to ensure consistent, transparent and legally sound application of regulations, with particular focus on MSMEs and small-scale importers.

A police complaint has been filed against unauthorised intermediaries suspected of cheating and private fraud, including those allegedly linked to the importer's own agents.

CBIC said it is also reinforcing safeguards to prevent misuse of authority and retaliation against complainants. Measures include maintaining complete anonymity in faceless assessments, tightening access to customs locations and strengthening grievance redressal mechanisms.

"These measures underscore the government's commitment to ensuring integrity in customs administration, strengthening systemic processes and facilitating seamless trade and commerce," CBIC said in a post on X.

The finance ministry had on October 2 ordered the probe following a series of social media posts by Wintrack Inc alleging harassment and bribery demands by Chennai customs officials. The company claimed its operations had been disrupted twice this year and announced plans to suspend all import and export activities in India from October 1.

DETAILED INQUIRY

To ensure a fair probe, CBIC has relieved the officers named in the preliminary report from their current responsibilities

Chennai customs had earlier denied the allegations, stating that the issue pertained to misdeclaration and misclassification of goods — including undeclared USB charging cables — and the company's failure to provide the required Extended Producer Responsibility certification under the Battery Waste Management Rules.

BPCL-Reliance BP to Jointly Sell CNG

Our Bureau

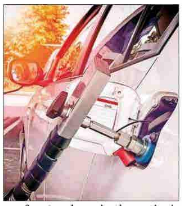
Mumbai: State-run Bharat Petroleum Corporation and Reliance BP Mobility (RBML) have agreed to collaborate in the city gas distribution (CGD) and compressed natural gas (CNG) sales segments.

RBML is an equal joint venture between UK's BP Plc and Reliance Industries in the mobility segment.

"It is crucial that the end customer receives our molecule, aligning with the broader vision of promoting a gas-based economy," said Rahul Tandon, business head for gas at BPCL. "This partnership will enhance our progress towards this national objective."

In a press statement, the companies said their collaboration will advance access to cleaner and more affordable fuel alternatives throughout India.

"It supports the government of India's ambition to raise the share of natural gas in the nation's energy mix from the current 6% to 15% by 2030 — highlighting the joint dedication of both organisations to promote sustainable mobility and the adoption of cleaner energy," the companies said.



RBML CEO Akshay Wadhwa said: "RBML outlets attract higher footfall, which will drive increased CNG sales in the area, thereby contributing to the overall goals of India's gas-based economy."

AP

Weekend Race

The pack rides past the Madonna del Ghisallo church during Il Lombardia, in Como, Italy on Saturday

REGULATOR SEEKS EXTENSION IN PROCEEDINGS

SEC Case Against Adani Stalled by US Shutdown, Delays in New Delhi

Our Bureau

Mumbai: The US Securities and Exchange Commission's (SEC) case against Gautam Adani has run into a double delay — with India's law ministry yet to serve the summons to the billionaire industrialist, and the US government shutdown forcing SEC staff off work.

The SEC on Friday informed a US court that it last contacted the Indian ministry on September 14, but the summons had still not been effected.

With most of its personnel furloughed due to lapsed federal funding, the SEC has sought an extension in the proceedings.

The agency noted that the counsel assigned to the Adani case has been furloughed and is "unavailable to work on this matter," as federal law bars furloughed employees from volunteering. Citing 31 U.S.C. §1342, the SEC requested that the next status report be filed 60 days after funding resumes, effectively pausing the case until Washington reopens.

ET has reviewed the court documents.

The update follows a series of procedural filings this year on the SEC's attempts to serve summons and complaints on the Adani Group and related defendants in India. The regulator said the defendants are "located in India and the SEC's efforts to serve them are ongoing," including a request to Indian authorities under the Hague Service Convention.

Despite repeated correspondence — most recently on September 14, 2025 — "those authorities have not yet effected service," the SEC said, adding it "will continue communicating with the India MoLJ (law and justice ministry) and pursuing service via the Hague Convention."

The SEC's November 20, 2024, complaint accuses Gautam Adani, Sagar Adani, and others of violating US federal securities laws by "making false and misleading representations about Adani Green Energy Ltd in connection with a September 2021 debt offering."

WAITING FOR RESPONSE

SEC on Friday informed a US court that it last contacted the Indian ministry on September 14, but the summons had still not been effected

Because the defendants are in India, service falls under Rule 4(f) of the Federal Rules of Civil Procedure, allowing the SEC to serve them "by any internationally agreed means reasonably calculated to give notice."

The furloughs of SEC personnel follow the Trump administration's October 1 shutdown, which halted non-essential federal operations. Enforcement and litigation, including the Adani case, are frozen, leaving one of the most closely watched cross-border proceedings stalled until US funding resumes.

China's Aggressive Embrace of Clean Energy is Powering Its Electric Cars, High-Speed Trains

And very few residents along the path of these lines object, even though the lines emit static electricity

NYT

Guquan, China: In China, the longest ultrahigh-voltage power line stretches more than 2,000 miles from the far northwest to the populous southeast — the equivalent of transmitting electricity from Idaho to New York City.

The power line starts in a remote desert in northwest China, where vast arrays of solar panels and wind turbines generate electricity on a monumental scale. It snakes southeast, following an ancient river between mountain ranges before reaching Anhui province near Shanghai, home to 61 million people and some of China's most successful electric car and robot manufacturers.

That's a single power line. China has 41 others. Each is capable of carrying more electricity than any utility transmission line in the United States. That's partly because China is using technology that makes its lines far more efficient than almost anywhere else in the world. The feat is owed to China's ambitious national energy policies and the fact that few residents along the path of these lines dare object — even though the lines emit static electricity that local people said they could feel when holding a metal fishing pole.

"As long as you don't fish directly underneath the wires and keep the fishing line from getting tangled in the wires, it's basically fine," Shu Jie, an air conditioning repairman, said matter-of-factly, showing off a 6-inch fish he had just caught.

China's aggressive embrace of clean energy technologies, at a faster pace than even its own government expected or planned, has left it with an unquenchable thirst for electricity. Half the country's new cars are battery-powered, and the 30,000 miles of high-speed rail lines run on electricity. Wind and solar energy provided over a quarter of China's power in April, a milestone that few other countries can brag about.

But much of that clean energy is produced in the country's sunny, windy western and northern regions, far from most of its people and factories. More than 90% of China's 1.4 billion people live in the east, where cloudy days, windless nights and sluggish rivers limit the potential for clean energy. So to move the electricity to where it is needed most, China is urgently upgrading its power grid.

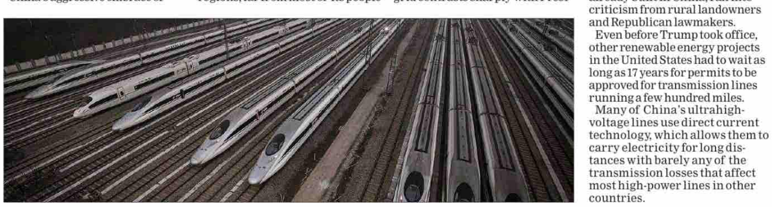
Beijing's central planners, having underestimated the country's swift adoption of solar and wind energy, are building the world's first nationwide grid of ultrahigh-voltage power transmission lines.

Beijing's expansion of its power grid contrasts sharply with President Donald Trump's "Drill, baby, drill" approach of doubling down on fossil fuels and rolling back federal programs to spur greater use of clean energy.

In July, the Energy Department terminated its commitment to provide a $4.9 billion loan guarantee for construction of the Grain Belt Express power line to take wind power from Kansas to cities in Illinois and Indiana. That 800-mile ultrahigh-voltage line, which would have covered a shorter distance than dozens of lines already built in China, ran into criticism from rural landowners and Republican lawmakers.

Even before Trump took office, other renewable energy projects in the United States had to wait as long as 17 years for permits to be approved for transmission lines running a few hundred miles.

Many of China's ultrahigh-voltage lines use direct current technology, which allows them to carry electricity for long distances with barely any of the transmission losses that affect most high-power lines in other countries.



A Loaning Curve

After the Covid slump, affordable private schools in small towns are expanding and upgrading as lending institutions show a growing interest in the education sector

Lijee Philip

The year was 2020. The pandemic was spreading, a lockdown was underway and the once-busy streets of Naigaon, a suburb in Mumbai's Vasai-Virar belt, were silent—much like the world at the time. What also fell silent in the town was Melwyn Sequeira's state board school, Our Lady of Vailankanni, which used to be filled with the din of over 3,000 students. Kids dropped out, fee collections stopped and infrastructure upgrades were out of the question. Sequeira remembers the sleepless nights: "We were panicking. Online education needed mobile phones, laptops, a stable internet—most of our students couldn't afford that. We could barely hold things together."

At that time, it was not a unique predicament as the pandemic hit many such affordable schools harder than their elite cousins.

But five years on, Sequeira's school has not just bounced back—it's thriving. Thanks to a timely loan from Varthana, a Bengaluru-based non-banking financial company (NBFC) that gives financial assistance to schools, they built new classrooms, reopened fully and even renovated its library to include extracurricular learning spaces. He says, "We got our 3,000 students back—and we are stronger than ever."

Sequeira's story is not an exception. Across tier-2 and -3 towns in India, a quiet revolution is underway. The years since 2020 have triggered a new model of school growth—one that is geographically expansive, financially supported and increasingly tech-enabled.

AFTER COVID

The pandemic put a spanner in the works for many sectors, and schools were no different. With physical classes temporarily halted, the education infrastructure expansion came to a standstill. However, the demand has not only bounced back but also multiplied.

KV Srinivasan, CEO of Profectus Capital, an NBFC with exposure to the school finance segment, says the growth is due to aspirational parents. "They want English-medium education, holistic development and better outcomes—and they are willing to spend on it," he says. "We are seeing a shift from government to private schools, and even from state boards to ICSE or CBSE."

From Kolhapur to Karnal, schools are upgrading, expanding and evolving. Large private school chains are venturing into new states, leasing existing school buildings to save time and effort. Recently, a prominent Telangana-based school chain entered Rajasthan, by taking over a defunct school building on a long-term lease. With the help of Varthana Finance, the property owner revamped the infrastructure and handed over the keys to the southern contender.

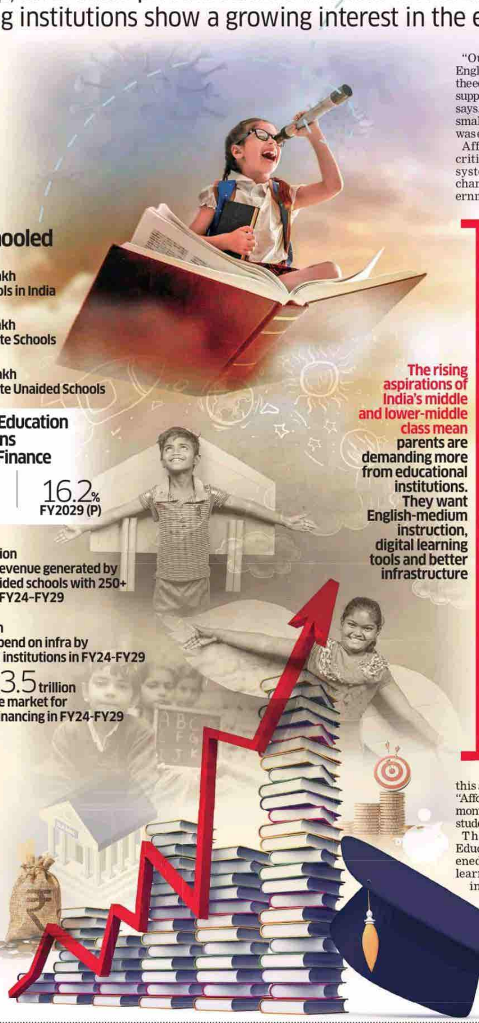
"It's a win-win for all," says Steve Hardgrave, vice-chairman of Varthana Finance. "The property owner retains ownership and receives a steady lease income. The school chain expands into a new geography. And we, as financiers, enable this transformation with capital support," says Hardgrave, an American citizen who is based in India since 2012.

Varthana, founded in 2012, has funded over 10,000 schools in semi-urban and rural markets and many have grown from just a few hundred students to thousands, says Hardgrave. "Some started with 300 students and now have more than 2,000," he says, adding that the biggest growth driver is the emerging middle class. Varthana mostly finances infrastructure—expansion of classrooms, construction of restrooms, labs, digital classrooms, etc. "What we don't finance is working capital," he says.

Given the fact that India has the world's largest school-going population—over 250 million children, according to an India Brand Equity Foundation (IBEF) report—schools are always in demand. The rising aspirations of India's middle and lower-middle class mean parents are demanding more from educational institutions. They want English-medium instruction, digital learning tools and better infrastructure.

Until recently, getting a loan to build or expand a school wasn't easy. Schools operate as societies or trusts—not companies—making them unattractive to traditional lenders. But that's changing, with education-focused lenders giving loans at interest rates ranging from 12.5% to 25%. The rates vary depending on the size of the loan, whether it is secured or unsecured, and the risk profile of the school.

In Kolhapur, Udaysingh Chavan, founder of BR Chavan English Medium School, faced a similar crisis to that of Sequeira's in Naigaon. During the pandemic, he saw the student strength dwindling. He says, "Now, we have doubled enrolment with children coming from 17 villages." What gave them a leg-up was a ₹45 lakh loan, from school funders, which helped Chavan add two floors to his building and even launch a junior college.



Get Schooled

14.9 lakh
No. of Schools in India

3.67 lakh
No. of Private Schools

3.36 lakh
No. of Private Unaided Schools

Share of Education Institutions Availing Finance

11.6%	16.2%
FY2024 (E)	FY2029 (P)

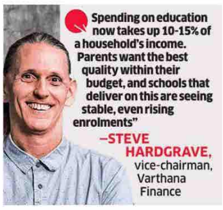
₹28 trillion
Estimated revenue generated by private unaided schools with 250+ students in FY24–FY29

₹7 trillion
Projected spend on infra by educational institutions in FY24-FY29

₹13-13.5 trillion
Addressable market for education financing in FY24-FY29

Source: Crisil

The rising aspirations of India's middle and lower-middle class mean parents are demanding more from educational institutions. They want English-medium instruction, digital learning tools and better infrastructure



Spending on education now takes up 10-15% of a household's income. Parents want the best quality within their budget, and schools that deliver on this are seeing stable, even rising enrolments"
—STEVE HARDGRAVE, vice-chairman, Varthana Finance

"Our kids are mostly first-generation English learners. But we have to ensure that the education is affordable and, with the right support, we can also make it high-quality," he says. Chavan says the transformation of his small-town school wasn't just physical—it was emotional.

Affordable private schools (APS) fill a critical gap in the Indian education ecosystem—between elite private schools charging lakhs of rupees a year and government schools that are often under-resourced. They also form the bulk of the country's 3.67 lakh private schools, offering quality education without the unaffordable price tag. APS—typically charging between ₹800 and ₹2,500 a month—serve more than 90 million children in India. These are schools started by local entrepreneurs, often run as family institutions or under trusts and societies.

"Spending on education now takes up 10-15% of a household's income," says Hardgrave. "Parents want the best quality within their budget, and schools that deliver on this are seeing stable, even rising enrolments."

Crisil estimates that 11.6% of educational institutions availed finance in FY24 and expects this to grow to 16.2% by FY29, driven by infrastructure loans and working capital needs. The addressable market for education financing—including loans for infrastructure and operations—is estimated to be ₹13-13.5 trillion between FY24 and FY29, according to Crisil. Private unaided schools, especially those with more than 250 students, are expected to generate ₹28 trillion in revenues during the same period. These numbers are a call for action. And financial institutions are geared up.

NBFCs like Varthana, Profectus Capital, Protium and Clix Capital and banks like DCB Bank and IDFC First Bank are actively courting schools with tailored loan products. They have developed specialised underwriting models for schools to assess student retention rates, fee stability and school management quality rather than just balance sheets. Srinivasan of Profectus sees this as the beginning of a long-term trend. "Affordable schools charging ₹2,000-5,000 per month and located within a 10 km radius of students are seeing robust demand," he says.

The central government's New Education Policy (NEP) has only strengthened this shift by encouraging holistic learning and sports, arts and technology integration in classrooms.

Praveen Kutty, MD and CEO of DCB Bank, says institutions that lost students and revenue during Covid are building back smarter. He says, "We are seeing increased loan demand for everything from constructing classrooms to buying school buses." DCB Bank's Educational Institute Finance programme covers all bases. Kutty says the sector is ripe for strategic expansion. "We have seen growing momentum, particularly in rural and semi-urban India," he says. "We aim to double our balance sheet every three years, and educational institution finance is a key part of that strategy."

We are seeing increased loan demand for everything from constructing classrooms to buying school buses"
—PRAVEEN KUTTY, MD & CEO, DCB Bank

LOANS & LESSONS

Still, industry veterans are proceeding cautiously. Srinivasan of Profectus says the boom time is still quite far. He says, "Large-scale capital expenditure is still slow. Many players chase only large schools. Capex will happen, but gradually."

Challenges remain in reaching small, hard-to-access schools. Most lenders prefer large institutions with strong track records. Meanwhile, direct selling agents (DSAs), intermediaries who connect potential customers with financial products, often lack the deep-sector focus required for educational underwriting. Hardgrave says, "DSAs are often not focused on this niche. We need more players willing to invest in the tough parts—smaller schools, remote areas, loan size of ₹30-40 lakh."

Change is coming. For institutions that are willing to adapt and grow, support is now more accessible than ever—because the demand is clearly visible. Ramesh Iyer, former MD of Mahindra Finance, who is on the board of financial institutions, says, "Education is one of the few sectors where demand is tied directly to aspirations. It's no longer just about reading and writing. It's about preparing kids for a future—and schools need capital to deliver that."

Education is one of the few sectors where demand is tied directly to aspirations. It's no longer just about reading and writing. It's about preparing kids for a future"
—RAMESH IYER, former MD, Mahindra Finance, who is on the board of financial institutions

With over 300,000 affordable private schools serving 90 million students, the sector is no longer on the sidelines. As India urbanises and incomes rise, education is becoming top priority for families across income groups. Experts contend that this quiet education movement—powered by banks, NBFCs, and visionary school founders—is only likely to grow. And that will be one interesting chapter.

lijee.philip@timesofindia.com

Wanted: A Doctrine for Drones

As drones transform warfare, India needs to develop clear manufacturing and military policies regarding them

Major (Retd) **AMIT BANSAL**

Even a couple of decades ago, the idea of an unmanned "bird" flying thousands of miles to scout, identify and destroy a target with pinpoint accuracy would have been laughed at. Even 10 years ago, drone swarms being the determining force in a war would have been the stuff of science fiction.

Yet here we are.

Drones have transformed warfare. They are cheap, widely available and easy to produce at scale. Their modular designs and accessible tech have made them indispensable and, with the integration of AI, they are becoming unbelievably lethal.

Rustom 1.2, a medium-altitude long endurance UAV, at DRDO's aeronautical test range in Karnataka

In today's conflict zones, drones handle a staggering array of tasks: reconnaissance, intelligence gathering, terrain mapping, target selection, precision strikes, damage assessment, logistics, medical evacuation, electronic warfare, communication, deception, psychological operations and even suppression of enemy air defence (SEAD) missions.

Their greatest strength is that they minimise risk to human lives while offering a low-cost, high-impact and result-oriented alternative. This shift has prompted nations to redirect resources away from conventional military systems. Iran stands out as a prime example, leveraging drones to project its power and influence. Countries ignoring this trend risk being left behind.

FLYING MARKET

The global market for unmanned military vehicles (UMVs) tells a story of explosive growth. Between 1995 and 2010, it fluctuated between $1 billion and $3 billion. By 2015, it surged to $8 billion and, by 2020, it crossed $20 billion. As of June 2025, the global UMV market is roughly $40 billion, which is about 20% of global arms trade.

Mind you, this figure doesn't account for illicit arms transfers by countries like Iran, Turkiye and China to various state and non-state actors. If current trends continue, the UMV market, including its related industries, could easily surpass $100 billion or 50% of global arms trade by 2030.

US leads in market value, commanding nearly 60% of the global share, with Israel close behind. However, when it comes to sheer numbers, affordable drones from Iran, Turkiye, Russia and China dominate. Interestingly, while no Chinese company ranks among the top 15 drone suppliers, China exports nearly 70% of the world's drone electronics, underscoring its critical role in the supply chain.

The Indian drone industry is still in its infancy, contributing less than 4% to the global market, and is rather fragmented. A handful of public sector undertakings (PSUs) control over 60% of the market, while more than 200 private players, mostly startups, compete for the rest.

But it currently faces a whole bunch of problems.

A lethargic approach, lack of accountability, babudom and red tape within defence PSUs have delayed critical projects. For instance, DRDO's Rustom I and II (also known as Tapas BH-201), high-altitude long-endurance (HALE) programmes and swarm technology, as well as Hindustan Aeronautics Limited's (HAL) unmanned combat aerial vehicle CATS Warrior, medium-altitude UAV and its drone swarm Alpha S, are all running way behind their schedule. The counter-drone systems of Bharat Electronics Limited (BEL) have also lagged and, as a result, India's national security is being compromised.

India also struggles with insufficient manufacturing experience and outdated tech. One of the key solutions is seamless technology transfer between supplier and Indian industry, but that is not easy. The absence of a clear drone manufacturing policy creates obstacles for private players, stifling innovation and growth.

Startups face a severe lack of capital, with most struggling to secure adequate funding to scale operations. Today, nearly every drone startup is facing financial setbacks while government PSUs, where funding is available, are not delivering.

What complicates things is that India lags in developing propulsion systems for high- and medium-altitude UAVs. With China supplying 70% of global drone electronics, India relies on importing over 40% of its components, often supplied via indirect routes due to trade restrictions.

HAL's CATS Warrior

STRATEGIC DOCTRINE

While the Indian Air Force updated its doctrine in 2024 to include unmanned systems, a lot more needs to be done. India needs a national-level strategic drone doctrine which should integrate the capabilities of all services and account for the drone and counter-drone strengths of adversaries.

The wake-up call came with Operation Sindoor, which highlighted the urgency of prioritising drone warfare. Yet, the biggest roadblock remains the lack of a clear military drone doctrine, alongside slow progress in developing aerial, underwater, surface and land-based drones, as well as counter-drone measures.

The need of the hour is to develop two distinctive doctrines for the Indian strategic landscape, with the first one outlining the manufacturing approach. The government must take immediate steps in this direction as the incubation time for any industry may range from a few years to decades. India needs a comprehensive drone manufacturing policy with respect to military drones, which touches on:

- Standardisation of Requirements: Startups currently produce drones based on their own designs, with little guidance from the government. A unified directive would streamline efforts and ensure alignment with military needs.
- Industry-Academia Synergy: The government must foster collaboration between industry, academia (like IITs) and defence organisations to drive innovation on a unified platform.
- Subsidised R&D and Facilitation for Technology Transfer: Government-backed funding for research and development is critical to nurture cutting-edge technology. At the same time, there should be a broader facilitation for easy and timely tech transfer as well.
- Roadmap for Import Substitution: To reduce reliance on foreign components, India needs a realistic plan with clear timelines to achieve full indigenisation.
- Streamlined Regulations: Simplified approval processes, access to airspace, centralised testing facilities and certifications are vital to accelerate drone development.

INDIA'S PLAY

For India, surrounded by challenges and playing catch-up in the global drone race, the path forward demands urgency and clarity. Its strategic drone doctrine must be comprehensive, addressing both offensive and defensive needs across its armed forces, paramilitary and police.

Here are eight key elements this doctrine should incorporate.

- Drones are force multipliers, optimising other military assets while enabling direct operations. The doctrine must also incorporate counter-drone systems and smart munitions.
- India's diverse geography, including deserts, high-altitude regions, dense forests and maritime zones, requires specific drone solutions for each theatre of war.

TAPAS or tactical airborne platform for aerial surveillance

PHOTO: HAL

- With multiple agencies using drones and counter-drone systems, a unified grid for each theatre is essential, covering both soft-kill (jamming) and hard-kill (interception) systems.
- Lessons from Operation Sindoor underscore the need for layered drone deployments, complemented by air, ground and naval assets for high resilience.
- As India moves toward joint theatre commands, an integrated command-and-control system, like the Air Force's Integrated Air Command and Control System (IACCS), is critical for coordinating unmanned systems.
- Drones are vulnerable to jamming, so the doctrine must include robust electronic counter measures (ECM) and electronic counter-counter measures (ECCM) to neutralise enemy systems.
- With threats from Pakistan, China, Bangladesh and the Indian Ocean, India must maintain strategic drone reserves, ensure sufficient stockpiles and integrate manufacturing into the supply chain for rapid replenishment.
- There were instances during Operation Sindoor where certain civilian drones caused panic and false alarms in conflict zones. The doctrine should regulate their use, by including mapping, ownership records and direct communication with owners, to prevent misuse by adversaries or terrorist groups.

The writer retired from the Indian Army. Views are personal.

Jaideep Unudurti

The Queen's Gambit

Grandmaster Vaishali Rameshbabu is readying for the Candidates, which could pave the way for the ultimate prize in chess. Mentoring her is former world champion, Anand, at the WACA school

Since my victory at the Women's Grand Swiss, the Candidates is the only thing that is running on my mind"
—VAISHALI RAMESHBABU, Chess Grandmaster

Pawn to g4. Indian Grandmaster Vaishali Rameshbabu had just come off a disastrous tournament in her hometown Chennai, finishing dead last.

Now the 24-year-old was in Samarkand, Uzbekistan, playing the first round of the FIDE Women's Grand Swiss 2025. The winner of the tournament would qualify for the Candidates, and the winner of that event would qualify for the ultimate prize, a chance to play against the reigning Women's World Champion Ju Wenjun and, who knows, earn a place in history.

It is a brutal, multi-year-long marathon. But first Vaishali had to win the first game of this tournament, and her opponent, Gulrukhbegim Tokhirjonova, was a strong local favourite.

After a Vienna opening, and some initial manoeuvring, Vaishali threw the pawn in front of her king. A gambit.

After losing seven games in a row in the previous tournament, wasn't it unsafe?

"That's how I like to play chess" she says with a laugh. "That is what I enjoy doing, I was not thinking about anything else. In that position I thought g4 should be the best move. I calculated some lines and everything looked convincing. So I went for that."

Her opponent, instead of accepting the proffered pawn, launched her own strike, trying to blast open the central phalanx that Vaishali had built up. A wild melee broke out.

"After the 40th move, I was a pawn up and it was very clear that I was winning. In the last few moves we were playing under time pressure," she recalls.

Her opponent resigned after Vaishali marched her pawn up, reincarnating as a queen. "It was a convincing game," she says. "It was very important that I start with a few wins as they were crucial for my confidence, especially where I was coming from. Those kept me going."

She was so disappointed after the Chennai Grand Masters that she hadn't wanted to go to Samarkand. Her brother, Grandmaster R Praggnanandhaa, the current World No. 5, pushed her, saying, "There is nothing worse that can happen after Chennai."

"I did not have the courage to call Vaishali after Chennai," says Viswanathan Anand. Vaishali is part of a cohort of bright players mentored by the legend, as part of the WestBridge-Anand Chess Academy (WACA). In the last few years, Indian chess has all been about historical records and unprecedented achievements. And WACA, which was set up by Anand and WestBridge Capital cofounder Sandeep Singhal, has been one of the key players behind the scenes, with the reigning world champion D Gukesh being one of their alumni.

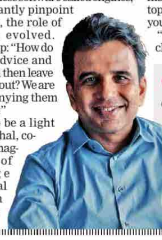
"But I had mentioned to the students my story after Chennai and before Khanty-Mansiysk [Anand lost the title in Chennai in 2013 and then went on to win the Candidates the next year in the Russian city] and I hope somewhere this idea lurked in her mind," says Anand.

COACHING 2.0

With powerful chess software called engines, which can instantly pinpoint the best moves, the role of coaching has evolved. Anand sums it up: "How do you transmit advice and experiences and then leave them to figure it out? We are really accompanying them on their journey."

This seems to be a light touch, but Singhal, cofounder and managing partner of WestBridge Capital, a global investment firm that supports entrepreneurs in India and US, explains: "Think of it as some kind of finishing school. All of them have individual coaches. But it is about that last 1% actually—people who get it don't even realise they have got it. What makes the difference between being in the top 10 or the top 50 is that last 1%." How do you get that?

"It means figuring a set of people who can challenge you, who can open your mind and bring a set of complementary assets to refine you with that last 1%," he says.



Vaishali has shown multiple times that if you persevere, you can turn around something that is not going well. Many times, people tend to give up or don't bring that kind of energy, which can turn things around"
—SANDEEP SINGHAL, cofounder of WestBridge Capital and WACA

Singhal talks about his own experience: "This happens in business: out of 100 startups, one succeeds, but the other 99 are as good. Some interventions have a kind of catalytic, last-mile effect that helps one transition and be confident on the global stage."

He adds: "These are all small inputs. It isn't like 10 hours of coaching every day for a full month. It might be just three hours of coaching in a month on a subject, exposing you to world-class trainers, finding a world-class coach."

Most of the work is online, through sessions with top coaches like Boris Gelfand and Sandipan Chanda. The classes are tailored for each participant. "If you are starting anything remotely like the Botvinnik academy in this century, this is what it's going to look like," says Anand.

Mikhail Botvinnik, known as the patriarch of the Soviet School of Chess, founded a chess academy in the 1960s that went on to produce world champions like Garry Kasparov and Vladimir Kramnik, as well as a host of top players across multiple generations. A former student, Vladimir Akopian, said it was for "the kids who were the strongest in the Soviet Union back then". Each participant would "demonstrate 4 games: two wins, one draw and one loss. We studied for 3 hours in the morning and 2.5 in the evening, and when it was getting close to bedtime we'd simply talk. All in all, the whole day was devoted to chess".

WACA could be described as the Botvinnik school with desi tadka. Unlike the Soviet centralised planning, its ethos is more like that of a startup. Says Singhal: "It is a bottom-up revolution that is happening because Indian households value achievements where faculty of mind is used. And chess has been easily welcomed. There is a lot of groundswell."

This led to a tidal wave of talent who did very well, especially at the junior level, but found it hard to get the kind of glory that Anand had achieved. "And for that you needed what Anand put together in WACA," says Singhal.

So what exactly do they do? Chess preparation may seem opaque to an outsider. Even before a single move is played, chess players work out the possible ways of making the first moves, anticipate their opponent's response and so on.

"It stems from a desire to understand things, to have a headstart and control different aspects of the game," says Anand. Yet, he adds, it also stems from "our failure to do so, because the game turns out to be richer and deeper than we assume".

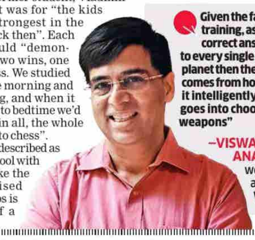
Botvinnik, known as the patriarch of the Soviet School of Chess, founded an academy in the 1960s that produced world champions. WACA could be described as the Botvinnik school with desi tadka. Unlike the Soviet centralised planning, its ethos is more like that of a startup

This desire to work out as many possibilities at home and then execute these premade plans over the board exist in a delicate balance. "People have been studying chess at home and playing at the board, and there is this constant back and forth between the two," says Anand.

In this way, chess has, over the centuries, acquired a thick layer of history, what we call theory, the most optimal ways of moving the pieces and pawns in the opening.

"And, of course, now it is mapped out much more thoroughly than earlier," says Anand.

With everyone having access to computers and chess software, how does one have an edge? Anand says, "Given the fact that the best training, as far as giving a correct answer, is available to every single person on the planet then the differentiation comes from how you can use it intelligently—a lot of study goes into choosing your weapons."



Given the fact that the best training, as far as giving a correct answer, is available to every single person on the planet then the differentiation comes from how you can use it intelligently—a lot of study goes into choosing your weapons"
—VISWANATHAN ANAND, former world champion and cofounder, WACA

CHESS & BUSINESS

WACA began in 2020, after Anand had gone to the West-Bridge centre in Bengaluru to give a talk on the linkages between chess and business. A conversation developed. Now, five years on, what are the connections that you have seen? Says Singhal: "There are a lot of parallels between chess and business. At the end of the day, building a business worth billions of dollars is a series of moves that the company has to make from the opening."

Of course, the "game is much longer and goes on for many, many years", he says, adding, "Our world is not as deterministic as chess. The number of possibilities is infinite." But it is all about "pattern recognition, knowing when to be aggressive, knowing when to be defensive, knowing your competitor's weaknesses and marshalling your resources well".

Vaishali, during the Grand Swiss, had a setback in Round 8 when she lost to a strong Kazakh player. At that moment, the tournament teetered for her. She says, "I'm proud I didn't collapse, I kind of recovered." The reigning champion managed a draw in the next round and then went on to beat the top Ukrainian player Mariya Muzychuk in a wild rook endgame. "I was very lucky," says Vaishali, who showed extreme mental toughness right when it mattered.

Vaishali went on to defend her title at the Grand Swiss, clinching the joint first place with Russian GM Kateryna Lagno, and qualified for the Candidates.

NEXT MOVE

Says Anand: "I have seen it with Vaishali, she can have very good comebacks." Agrees Singhal: "Vaishali has shown multiple times that if you persevere, you can turn around something that is not going well. Many times, people tend to give up or don't bring that same kind of energy, which can turn things around." He says this is applicable in business as well: "What I have learnt is that you may be down in the dumps, that doesn't mean you can't turn it around. When I go to businesses that are not doing well, I tell them to turn their game around."

Both Anand and Singhal are bullish about the future. "Don't be surprised if, in a decade, 8-10 out of the top 20 players are from India," says Singhal.

Anand sees Turkiye as an emerging threat but is confident about India, pointing to young stars like nine-year-old Sarbartho Mani.

As for Vaishali, she has a more immediate goal at hand. The Candidates is about six months away. Its date and venue have not yet been announced. But is she already thinking of her approach, her gameplans for different opponents, her opening strategies?

She says, "Since my victory, (the Candidates) is the only thing that is running on my mind."

Unudurti is a writer and chess enthusiast

Kanika Saxena

Will You Buy a Ravi.AI Varma?

AI art is making its presence felt, sparking an intense debate about art, creativity and its value

NEW PAINT BRUSH

AI ART GENERATORS	NO. OF IMAGES CREATED
STABLE DIFFUSION	12.6 bn
WOMBO DREAM	1.5 bn
ADOBE FIREFLY	1 bn
MIDJOURNEY	964 mn
DALL-E	916 mn

Source: Market.us

Just as Husain, Raza, or Picasso created works that reflected and shaped their era, if AI-generated art captures something relevant to our time, then it deserves to be collected in the same spirit"
SHALINI PASSI, founder, MASH

AI doesn't create in a vacuum. There's always human imagination guiding it... If an artist uses AI as a tool to push the boundaries of their vision, then the creativity still belongs to them"
VAISHNAVI MURALI, founder, Eikow Art Gallery

ISTOCK

In October 2018, the auction house Christie's sold *Edmond de Belamy*, a portrait generated by an algorithm, for $432,500. The work, created by the French collective Obvious, used AI trained on 15,000 art works. That single sale triggered a debate ranging from the philosophical—can a machine make art?—to the commercial—should it be valued alongside a Picasso or a Husain?

The auction houses Sotheby's and Phillips have since tested the waters with generative and AI-linked works. The launch of dedicated platforms like Sotheby's Metaverse shows that digital art has moved beyond novelty into commerce.

Yet collectors are split. These moves signal openness, but not consensus. Observers at the time described the art establishment as "both excited and terrified"—excited by new possibilities, but wary of what it could mean for authorship and value.

Some see these works as speculative curiosities, while others regard them as heralding a new epoch in creativity. The art world is grappling with whether AI can ever build the provenance and legacy that give art its value, or whether it will fade like NFTs.

As more artists integrate AI into their workflows, the boundary between human and machine creativity could blur further.

GLOBAL PRECEDENT

The numbers underscore the scale of the experiment. Since 2022, the AI art market has been valued at around $674 million, with projections of $1.4 billion by 2027, according to Gitnux, a Bengaluru-based market research firm. An estimated 35% of fine art auctions globally now include AI-created works, according to US-based market statistics firm Market.us Scoop.

An AI artist, Botto, has pulled in over $5 million through auctions since 2021, with one piece going for as high as $276,000. One of Botto's creators, German artist and computer programmer Mario Klingemann, was quoted by *New York Post* as saying, "The recent advancements in artificial intelligence, deep learning and data analysis make me confident that in the near future machine artists will be able to create more interesting work than humans."

For Obvious, the Christie's sale was less a stunt and more a provocation to rethink art's definitions. "It was not designed to shock for its own sake, but to move the discourse forward. In 2018, it was indeed a provocation to the art world: who is the artist when you are using AI?" the group told **ET**.

INDIAN LANDSCAPE

India, where collectors traditionally prize provenance and masters, is more circumspect. Delhi-based collector and art patron Shalini Passi is cautiously open. The founder of art-design collective MASH, Passi recalls displaying an AI work by lens-based artist Ryan Koopmans in 2023 and says it depends on whether the piece carries "originality and depth" rather than being a derivative of an existing artist's style.

For Passi, zeitgeist matters: "Just as Husain, Raza, or Picasso created works that reflected and shaped their era, if AI-generated art captures something relevant to our time, then it deserves to be collected in the same spirit."

Others aren't sure. Akshitta Aggarwal, gallery director of Bruno Art Gallery, Delhi, makes it clear she would not exhibit AI art alongside contemporary or traditional works. "The idea behind our gallery is to honour the years of practice, skill and creativity that artists put into their work. AI skips over that deeply human process," she says.

For her, the absence of lived experience and authorship disqualifies AI from being taken seriously in a curatorial context. Patrons, she adds, buy into the artist's story as much as the object.

Between these poles lies a more pragmatic view. Vaishnavi Murali, founder of Eikowa Art Gallery, believes the market will ultimately judge AI art the way it has judged every other medium. "AI doesn't create in a vacuum. There's always human imagination guiding it — someone deciding, refining, shaping. If an artist uses AI as a tool to push the boundaries of their vision, then the creativity still belongs to them," he says.

She likens the moment to the early days of photography, when many dismissed it as mechanical, or to the NFT wave, which briefly caught attention but fizzled.

According to private family office-style lifestyle management firm CribLife, curiosity exists. CEO Vijaya Eastwood notes that early on, many thought of it as an investment category because of the headlines. "Today, it feels more like a curious, wait-and-watch space. Nobody I work with says it isn't art, but they want to see proven value cycles and to know who the credible names are before making significant allocations."

WHO OWNS THE BRUSHSTROKE?

For artists and curators, the debate cuts deeper than market trends. It strikes at the heart of what art means. Aggarwal insists authorship is inseparable from human struggle, while Murali views AI as a tool that can extend imagination rather than replace it.

Here again, Obvious offers a perspective: "The authorship mainly lies in the intent of the creator: using a tool to produce a visual result. AI is a powerful instrument, not an autonomous artist." They stress that authorship is reinforced when artists invent and train their own models.

Some contemporary artists have begun experimenting with AI. Turkish American artist Refik Anadol uses machine learning to transform data sets into immersive installations, while Klingemann treats algorithms like pigments or brushes.

If machines can mimic brushstrokes, colours and even stylistic quirks of a master, does the essence of art lie in its form, or in the humanity that produced it?

For Obvious, context matters. "If the intent is to fool people into believing the work is a real Picasso, that's imitation. If it's part of a homage or thematic show, it can be valid as such."

Obvious frames it as part of a larger arc. "AI is a major change in the course of human history... it seems logical that it will have an important impact on art and art history as well," they say.

Perhaps the answer lies not in whether AI can replace artists, but in the new possibilities it opens. Just as the camera didn't erase painting but transformed it, AI may create space for new forms that coexist with tradition. The risk, however, is that in an age of automation and speed, depth and struggle, the slow work of becoming an artist may lose ground to instant outputs.

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Fugitive Rashid Cablewala, an aide of Hashim Baba, detained in Azerbaijan

Rajshekhar.Jha
@timesofindia.com

New Delhi: Notorious fugitive gangster Rashid Cablewala, who has been linked to several murders in Delhi, was detained in Azerbaijan on arriving from Istanbul, sources confirmed, with Indian intelligence agencies now gearing up to bring him back, reports Rajshekhar Jha. It is unclear whether he was imprisoned there or kept under surveillance post-bond.

Cablewala, who is on the 'most wanted' list, was detained by immigration authorities at Baku's Heydar Aliyev International Airport due to "anomalies in his travel documents", a relative said. A senior cop confirmed the developments and said they would share details of his criminal history and dossier through appropriate channels.

Cablewala is a close associate of jailed gangster Hashim Baba and was handling operations for the gang. He is also linked to the Lawrence Bishnoi syndicate.

His name emerged in the killing of businessman Nadir Shah in Greater Kailash-I in Sept last year. He was then accused of a double murder in east Delhi on th e night of Diwali in Oct 2024.

When his name cropped up again, in the killing of businessman Sunil Jain in east Delhi's Krishna Nagar last Dec, Cablewala became one of Delhi Police's most sought-after fugitives.

Speaking with **TOI** from an undisclosed location in Dec 2024, Cablewala claimed that Jain's murder was "retribution" for the twin murders reported from the same area in Oct but denied his involvement.

Cablewala told **TOI** that Sachin alias Golu was one of the assailants who had accepted payment from two parties to kill another individual. "Jain was not the target. The target was this man named Virat and he will be eliminated...," he had revealed. Sources said Sachin was still on the run and may have fled abroad too.

Authorities said Hashim Baba and Cablewala shared an extensive history. They initially gained notoriety when they, along with their former associate Nasir, eliminated Akil Mama during a funeral in 2013.

Following Nasir's imprisonment, Hashim Baba and Cablewala assumed control of the gang. They eventually separated and established their individual operations.

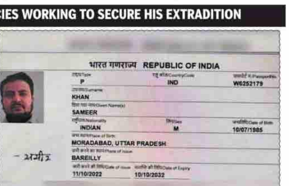
A history-sheeter linked to multiple homicide cases, Cablewala carried a reward of Rs 1 lakh before his arrest in 2018. At the time, he was apprehended while attempting to escape to Saudi Arabia. He established a garments enterprise in Riyadh and was expanding into Thailand. This, investigators said, was to launder illicit proceeds.

In 2019, he was charged under MCOCA by the crime branch. In 2020, he was apprehended again by the special cell. He escaped using a forged passport in early 2022.

HISTORY-SHEETER WAS ON MOST-WANTED LIST

INDIAN INTELLIGENCE AGENCIES WORKING TO SECURE HIS EXTRADITION

Details of Detention
Arrived from Istanbul, **Cablewala** was held at Baku airport due to discrepancies in his travel documents



Criminal Background: Arrested in 2018 while trying to flee to Saudi Arabia, and again in 2020 by special cell.

Absconding: Escaped using a forged passport in 2022.

High-Profile Murders
Wanted for alleged involvement in several murders, including:
- Businessman Sunil Jain's killing in 2023.
- A double murder in the same area.

CRIME SCENE

GANGSTER PROFILE
- A close associate of jailed gangsters Lawrence Bishnoi and Hashim Baba
- Faces charges under Maharashtra Control of Organised Crime Act (MCOCA)
- Rashid Cablewala's rise to notoriety is tied to his association with Hashim Baba
- Together, they gained infamy for eliminating rivals, including the murder of Akil Mama in 2013
- After Baba's imprisonment, Cablewala took charge of the gang's operations

REWARD: Cablewala carried a reward of over ₹1 lakh for information leading to his capture

Too tired and lonely to do the things you love? Peer groups can help

To help readers cope with their anxieties in these stressful times, TOI's ***Talk it Out*** *series brings expert counsellors to answer your mental health queries. This week's advice is from psychologist* ***Tanuja V***


Image: AI

I am 21 years old. I wake up some days and feel like I'm moving through fog. I want to laugh, write and go out, but my energy is gone, and my thoughts keep looping. Living away from my family and without close friends has made everything heavier. I often feel alone even when the world is full of people. I'm anxious about small things, and I feel stuck. I want to change, but I don't know how to begin. I love writing, and I miss the days I could put my feelings on paper easily. I am lost somewhere in the darkness where no one is with me.

— Anonymous

It's really great that you want to do things you enjoy, like laugh, write and go out, even though some days it feels exhausting and your thoughts keep looping. Feeling stuck and alone, especially while living away from family and close friends, can make everything feel heavier. Your feelings are valid, and it's understandable to feel anxious, drained or lost. A gentle way to move forward is to focus on one small goal each day, suited to your energy. If writing brings you joy, try dedicating even a short time to write one page in any form, whenever inspiration comes. Staying connected with loved ones through video calls at convenient times can help ease isolation. Building a simple daily routine can provide structure, which supports your energy and focus. You could join communities or peer groups with similar interests or attend workshops and meetups through platforms to build connections. If things ever feel overwhelming, seeking professional help is a strong step. This phase will pass, and with small, consistent actions, you can gradually reconnect with your energy, creativity and joy!

I am a 38-year-old unmarried man. In 2008, I had an accident that led to a forehead injury. I have schizophrenic symptoms after the accident. Now I am not doing a high-paying job, and my father and mother are also retired. I have one elder brother who is settled with his family. Should I think of marriage as I am not earning enough, or remain unmarried for the rest of my life?

— Anonymous

It is truly admirable that you are navigating life and thinking about your future despite the challenges of your accident and ongoing symptoms. Managing your mental health while supporting yourself and your family shows resilience and strength. Remember, stability is not only about income. It also includes your health, daily routine, and the support around you. Right now, it can help to gently evaluate your priorities. Think about what matters the most: whether building financial security, focusing on your well-being or exploring relationships. Understanding your needs can guide your decisions with clarity and self-compassion. When considering marriage, focus on finding a partner who understands your situation, including your income, health needs and daily life. Open and honest communication is essential. If financial stability is a priority, set clear goals using smart planning. Small steps like learning a skill, freelance work or part-time opportunities can gradually increase security. Supportive communities or peer groups for people with similar experiences can also help you navigate relationships with confidence. Remaining unmarried is also a valid choice if it brings peace and fulfilment.

I'm a 17-year-old girl studying in the science stream in class 12. Everybody in my family is an engineer, so I chose that option. Now, with only three months left for JEE exams, I regret not taking biology. I wish someone had suggested that option to me. In class 10, I got 88% and nobody was happy with my results; they were busy comparing it with my sister's result. Now I'm struggling to study and barely scoring. I just want somebody to believe in me, instead of mocking and making fun of me because I scored "just" 88.

— Anonymous

It must feel really hard to see no one happy with your results and to be compared to your sister. Feeling disappointed, frustrated, or even regretful about your choices is completely understandable. Your marks, like the 88% you got in class 10, reflect your effort, and that effort deserves recognition, even if others don't acknowledge it. It's normal to question your decisions, especially with the pressure of upcoming exams. Remember, you made choices based on the information and guidance you had at the time. In the present, it would help to take small, realistic steps to move forward. Creating a daily study routine, even for 30 to 60 minutes, and gradually building from there can help. Listing your strengths and past successes can also remind you of what you are capable of. It can help to talk to someone who believes in you, like a friend, teacher or mentor, so you feel supported rather than judged. Seeking professional help if things feel overwhelming is also a strong step. You are immensely capable, and it's not too late to make steady progress. Focus on your own growth and celebrate every step you take!

TalkitOut

WANT SOME ADVICE?
Sharing can help your recovery so write to us at **talkitout@timesofindia.com** with your question, name and place. But if you wish to stay anonymous, do indicate that in your email.

You can also visit bit.ly/TOITalkItOut or scan this QR code to send in your concern.

Husband away at work, woman dies by suicide

Gurgaon: A 21-year-old woman died by suicide on Friday afternoon in the Kasan area of Manesar.

According to police, the woman, Himanshi from Etah in UP, was suffering from mental health issues and had been married for two years, and her husband was at work when the incident occurred.

Police said Himanshi's body was found hanging from the ceiling fan in her residence. Her husband, who was at work at the time alerted the cops when he returned home.

"Family members informed the police that Himanshi had been struggling with mental health issues for some time. They stated that she had been under stress, although the exact reasons for her distress remain unclear," an officer said. TNN

₹30L ornaments stolen, 1 held

Khushi.Bhuta
@timesofindia.com

A businessman said he had left his residence around 1 pm on Sept 20. When he returned, the businessman found that the main entrance's latch was broken and the house ransacked

New Delhi: A 52-year-old man has been arrested for allegedly burgling a businessman's house in southeast Delhi's Bhogal. He had earlier served a 13-year jail term min Bengaluru for killing his wife.

A complaint was received regarding the house burglary on Sept 21 at Hazrat Nizamuddin police station. According to the businessman, he had left his residence around 1 pm the day before. When he returned, the man found that the main entrance latchwas broken and the house ransacked.

Several gold ornaments worth Rs 30 lakh had been stolen. This included four gold sets, two chains, 15 rings, four-five pairs of earrings, five pendants and a pair of bangles. The businessman alleged that he had 1600 Qatari Riyals and other documents, including his passport and jewellery bills.

A case was registered under sections 305 (theft in a dwelling house, or means of transportation or place of worship, etc), 331 (punishment for house-trespass or house breaking), 317 (stolen property) and 3 (5) (common intention) of BNS.

"Police found that two men were seen entering the man's premises in CCTV footage," said DCP (southeast) Hemant Tiwari. "Following the trail of CCTV, the team zeroed in on one of them in Daryaganj."

The man was identified as Mohammad Nazran, a resident of Ajmeri Gate in Old Delhi. He was apprehended from Jama Masjid.

He confessed to the burglary with an associate. A gold locket, which was part of the stolen jewellery, was recovered from him. The two had given the stolen gold to his associate's brother-in-law, who is a goldsmith in Gokalpuri, for melting and disposal.

Differently abled woman reunited with family

New Delhi: A 21-year-old differently abled woman was reunited with her family on 7 Oct, 37 days after she was found abandoned and pregnant in Seemapuri. According to police, the woman, a permanent resident of Tikamgarh in Madhya Pradesh, was discovered on Sept 1 and admitted to a hospital. DCP (Shahdara) Prashant Gautam said, "The woman gave birth to a premature baby girl on Sept 7, which passed away during treatment." TNN

Tuition teacher 'beats' 16-year-old boy, held

TIMES NEWS NETWORK

New Delhi: A 16-year-old boy was allegedly beaten with fists and sticks by his tuition teacher in south west Delhi's Munirka after he failed to complete his homework. Police apprehended the accused teacher.

According to police, a complaint was received on Oct 9 from the Class XI student, who alleged that the incident took place on Oct 6 around 8 pm during a tuition class in Munirka.

The student told police that the tutor asked students about their incomplete homework. When the boy explained that he was unable to finish the work as he was away with his family, the teacher allegedly became enraged.

"He grabbed the student by the hair and assaulted him with fists and kicks on the head, neck, and chest. He then called for a stick and continued beating him on the back and legs," a senior police officer said.

When the boy tried to leave, the teacher allegedly locked the room, continued the assault, and threatened him not to tell anyone. The student later informed his parents after experiencing severe pain. He was taken to Safdarjung Hospital, where a medical examination revealed multiple bruises on his right arm, right calf, and back.

Based on the complaint and medical findings, a case was registered under sections 115(2) (voluntarily causing hurt) and 127(2) (wrongful confinement) of BNS at Kishangarh police station, and the accused teacher was apprehended.

In May, a five-year-old specially-abled student was allegedly subjected to abuse by a teacher in a private school in Greater Kailash-II.

Exhibition of paintings by tribal artists depicts what tiger means to communities

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Photos: Jatin Kumar

New Delhi: From a canvas bringing to life the story of Maya – the famed tigress from Tadoba-Andhari Tiger Reserve – to folklore surrounding the tigers of Kaziranga in Assam, Ranthambore in Rajasthan and Kamlang in Arunachal, where communities see the tiger as family, around 250 paintings made by 50 tribal artists living in and around the buffer zones of over 30 tiger reserves are up on display as part of an exhibition "Silent Conversations: From Margins to the Centre' at the India Habitat Centre in the Capital.

From the buffer zones of the tiger reserves where communities thrive amid nature while co-existing with wildlife, these paintings bring into focus the crucial role of communities in conservation efforts and how the tiger is a part of their existence.

Cited as a confluence of tribal art, culture and conservation, the exhibition is on till Sunday for Delhiites to experience. It has been organised by non-profit Sankala Foundation, with the support of the National Tiger Conservation Authority (NTCA), a statutory body under the ministry of environment, forest and climate change (MoEFCC), and the International Big Cat Alliance (IBCA).

Secretary General NHRC Bharat Lal, who is mentoring this exhibition, sees it as a medium to not just create awareness but also bring alive the oral history of the many tribes that thrive around tiger reserves. The stories have been presented in various art forms, including Gond, Warli, Bhil, Sohrai, Patachitra, Pithora and Lohakam. The exhibition, held like an annual event, is in its fourth year this time.

According to the Sankala Foundation team, to encourage the artists – mostly tribals – and support the cause of conservation, these paintings are up for sale, for visitors and organisations to make the tiger and the folklore of communities a part of their homes, offices and life experience.

As this correspondent walked past the artwork, 27-year-old Maroti Tekam, who hails from Gond tribe in Chandrapur, smiled radiantly, sharing that three of his paintings were on display and showcased stories based on his lived experiences in the Tadoba-Andhari Tiger Reserve in Maharashtra. The one captioned 'The Love of a Mother in Nature' is a striking pen picture of the famed tigress Maya, who ruled her territory with grace. "She led her cubs with discipline and knew how to protect her territory. Through my painting I have tried to show her as a symbol of a nurturer, keeping a watchful eye on her cubs while being vigilant to the dangers the jungle presents," Tekam said.

Focussing on co-existence, a 15-year-old artist has highlighted the importance of vultures. Aasawari Aoswale, a class 10 student who lives in Pench Tiger Reserve, shared that her painting depicts how nature creates balance, with vultures being crucial for removal of carcasses of animals that in earlier times were picked up and left on a designated land by villagers.

Similar stories abound. Narayan Nayak, an artist from Kaziranga Tiger Reserve, puts out a strong message through his "stripes of resilience" – a painting that shows a crow peeling off the stripes of the tiger and the stripes being removed bearing signs of deforestation, encroachments and other factors leading to a reduction in tiger population. On the other hand, there is also a flower of hope that carries stripes of change: afforestation, conservation efforts, awareness drives and research to protect tiger reserves.

The final word, however, came from Sareng Rangmang, a 23-year-old artist from Kamlang Tiger Reserve from Arunachal Pradesh. "We believe the tiger and we humans are like a family and therefore there is no fear. The tiger is our very own and that is what my painting showcases," she said with a smile.

To encourage the artists and support the cause of conservation, these paintings are up for sale

11-yr-old boy hit by dumper, dies

Times News Network

New Delhi: An 11-year-old boy died after being hit by a dumper truck while riding his bicycle in South Delhi's Sangam Vihar on Saturday.

The deceased was identified as Manish, who lived with his family in Sangam Vihar. Police received a PCR call reporting the accident at H Block, Sangam Vihar. At the scene, authorities found the dumper and Manish's bicycle, but the driver fled the spot.

Manish was rushed to the hospital, where he was declared brought dead. According to police, his head was severely crushed under the rear wheel of the dumper.

"Manish was riding his bicycle near H Block when the dumper hit him as they crossed paths. The driver abandoned the vehicle and fled the scene," police said.

Manish's father works as a vegetable vendor while his mother is employed as a domestic help.

A case was registered under Sections 281 (rash driving or riding on a public way) and 304A (causing death by negligence) of the Bharatiya Nyaya Sanhita. Efforts are underway to identify the absconding truck driver

Deposit Used Toys & Books At These Units

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New Delhi: New Delhi Municipal Council has made its four reduce, reuse, and recycle (RRR) centres fully operational and also developed a few more micro collection centres. The civic body has urged people to make use of these facilities to deposit reusable items, such as clothes, footwear, books and toys, and recyclables to promote sustainable waste management.

The initiative, aligned with the Solid Waste Management Rules, 2016, seeks to streamline the handling of specific waste streams through collection, segregation, safe disposal. The RRR centres, converted from traditional dhalaos, function as upgraded material recovery facilities (MRFs), encouraging people's participation in circular waste practices.

"An RRR centre serves as a one-stop collection point for citizens to donate or deposit used items," an NDMC official said. "These centres promote waste reduction and a circular economy by ensuring materials are reused or recycled instead of ending up in landfills."

The four RRR centres are at Chanakyapuri, Bharti Nagar, Aradhana Colony and Bapu Dham. Eight micro material recovery facilities (MMRFs) have been set up for e-waste and household hazardous waste collection at Khan Market, Dharam Marg, Lodhi Road, Bengali Market, Kautilya Marg, E Block Connaught Place, HC Mathur Lane and Dhyan Chand Stadium. An MMRF functions as a compact, localised centre that sorts, compresses and processes e-waste, hazardous waste and recyclables. The council also provides doorstep collection services.

The revamped site near the parking area at Khan Market has separate collection boxes for various categories — paper, mixed plastic, batteries, stereos, keyboards, tablets, wires, phones and chargers. A plastic bottle compressor is also installed.

"Collected items are segregated and transferred to registered processing units," said a representative of Chintan, the NGO managing the unit. For instance, e-waste collected at the centre is sent for recycling once it reaches two tonnes, with an average of 338kg being deposited every month.

Similarly, footwear is cleaned by staff, repaired weekly by cobblers and redistributed under Chintan's Barefoot Warrior campaign at the Todarmal Lane centre. Over 1,472 pairs of shoes have been refurbished since June. At the Dharam Marg centre, 1,378 garments have been collected, sorted by women workers and scheduled for post-Diwali distribution.

Paper, plastic, metal and other recyclables are sent to authorised recyclers while upcycled fabric and plastic waste are transformed into cloth bags, benches and daily-use products under CSR collaborations.

12 RRR CENTRES & MMRFs FUNCTIONAL IN NDMC AREAS

WHAT IS RRR CENTRE?

An RRR centre is a 'reduce, reuse and recycle' centre, which acts as a one-stop collection point for citizens to donate used items like clothes, shoes, books, toys and plastic

Locations: Chanakyapuri, Bharti Nagar, Aradhana Colony and Bapu Dham

WHAT IS MMR FACILITY?

A micro material recovery facility (MMRF) is a small, localised and solar-powered centre that sorts, compresses and processes specific waste streams like e-waste, household hazardous waste and other recyclables

Locations: Khan Market, Dharam Marg, Lodhi Road, Bengali Market, Kautilya Marg, E Block Connaught Place, HC Mathur Lane and Dhyan Chand Stadium

AVERAGE WASTE COLLECTED DAILY

- Each RRR centre or MMRF collects at least 50 kg per day of reusable or recyclable material
- During awareness drives, festive seasons and Swachhata campaigns, the collection volume increases significantly

HOW MATERIAL IS COLLECTED?

RRR or MMRF centres receive material through multiple structured channels

1. **Citizen drop-offs** Walk-in donation at all RRR centres/MMRFs
2. **Doorstep collection by Chintan** Operated every Friday, Saturday and Sunday in designated areas
3. **Fixed donation timings in Anupam Colonies** Citizens drop reusable/recyclable items between 9 am and 2 pm at D1-D2 Chanakyapuri, Bharti Nagar, Bapu Dham and Aradhna Colonies on all working days
4. **On-call pickup via NDMC 1533 toll-free number & 311 app** Citizens can request doorstep collection of items, especially for bulky donations

MONITORING AND ACCOUNTABILITY FRAMEWORK

- Each centre is geotagged and supervised by designated sanitation circle inspectors/officers
- Daily inflow/outflow is recorded in on-site logbooks
- Since many staff are waste pickers with limited literacy, monitoring happens through images and audio updates shared in real-time via WhatsApp groups, enabling transparent tracking
- Regular field inspections are undertaken by officials and partner NGO supervisors

HOME SERVICE/DOORSTEP COLLECTION FACILITIES

On-call pickup via NDMC's 1533 toll-free number

- Scheduled donations for RWAs, institutions and bulk waste generators
- Pilot "donate from home" service for senior citizens and immobile residents
- Mobile RRR vans deployed during community drives and outreach camps

In Loving Memory of
Shri Ramautar Gupta

10 April 1936 – 30 September 2025

With deep sorrow, we share the sad demise of our beloved father, Shri Ramautar Gupta, who departed for his heavenly abode on 30.09.2025.

Tervi: Sunday, 12th October, 2025

Brahmbhoj: 11:00 AM
Prasadam: 12:30 PM
Prayer Meet and Rasam Pagri: 2:00 PM- 3:00 PM

Venue: ISKCON Temple, Sanskar Bhawan, Sector-33, Noida

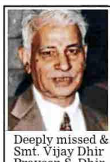
In deep sorrow:
Neelam & Akhilesh
(Daughter and Son-in-law)
Rajeev & Sunita
(Son and Daughter-in-law)
Sanjeev & Sapna
(Son and Daughter-in-law)
Kanupriya, Priyanka, Saumya, Sakshi, Rachit, Gauri & Gaurav
(Grand Children)

REMEMBRANCE
SHARING MEMORIES

Your 90th B'day Daddy
S.Awtar Singh Vedi H/o
Late Gurmeet Kaur

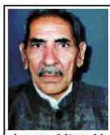
12 Oct 1935-21 Feb 2013

We lost you years ago. Memories never fade, they always grow. From the heavenly abode, keep blessing us with your benign grace.I wish you were here today. Beloved dad, your teachings & words of wisdom will always stay. Family & Friends. 9811045089



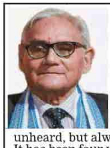
20th Death Anniversary
Sh. Randhir Singh Dhir
12 Oct 2005 (Shivom)

We feel your presence around us every moment we remember the love, care, affection & blessing you showered on us.
Deeply missed & remembered by:
Smt. Vijay Dhir
Praveen S. Dhir, Anubhav S. Dhir, Naresh, Jyotika, Geetanjali, Vijeta, Abhishek, Lamitr, Lavitr, Lakshin & Bhuvneesh.
All Relatives & Friends.
Ph: 9810160702, 7011828147



In Loving Memory of
Sh Ghananand Bhadola's
11th Death Anniversary

He was one who knew the way, went the way & showed the way. You will forever remain in our hearts. Missed by Sharda Entr. Sharda Const Co. & all Family members & Staff.
B-73, Katwaria Sarai, Ph-1, 9810058537



In Loving Memory of
Late DR R. N. Gupta
(19.8.1932 – 12.10.2021)

4th Death Anniversary
"Those we love don't go away, They walk beside us every day… unseen, unheard, but always near."
It has been four years since you left us for your heavenly abode, yet your presence continues to live in our hearts and memories. Your gentle smile, loving nature, and guiding wisdom are forever cherished. On this solemn day, we bow our heads in remembrance and gratitude for all that you gave us.
Fondly Remembered by
Mrs. R.B Gupta (Wife),
Deepak, Saroj, Vivek, Reena & all Family Members.

"And come he slow or come he fast, It is but Death who comes at last."
- Sir Walter Scott

Gold-plated kalash stolen

New Delhi: A gold-plated urn valued at Rs 30 lakh was stolen from the spire of a Jain temple in North East Delhi's Jyoti Nagar.

The theft came to light on Saturday morning when the temple was reopened after being closed on Friday evening, as per routine.

CCTV footage reviewed by the temple authorities shows that around 11.45 PM on Friday, an unidentified man arrived outside the premises and sat near the entrance for nearly three minutes. He then climbed onto the temple roof using electric wires and made his way to the spire, from where he removed the urn and escaped.

A case was registered based on a complaint. TNN

DDA to transform capital's parks into creative hubs, hold theatre-based & learning activities

Vibha.Sharma
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New Delhi: To make Delhi's green spaces more engaging and vibrant, Delhi Development Authority is going to introduce Rangbaag, a first-of-its-kind initiative in the city in collaboration with National School of Drama (NSD) that will transform the city's parks into creative hubs.

Theatre-based and experiential learning activities, such as acting and movement workshops, storytelling sessions and improvisation exercises, will be conducted for the public by NSD-trained faculties under the programme.

To mark the launch of the initiative, NSD presented Nanha Scientist, a performance celebrating the curiosity and imagination of young minds, on Thursday. A formal MoU will be signed between NSD and DDA soon to start the programme for the public.

The pilot phase will begin with a three-month certificate course featuring weekly workshops at Baansera Park opposite the Sarai Kale Khan ISBT. If successful, the concept will be expanded to more parks across the city for participants from all age groups, including senior citizens, to foster a stronger sense of community through art and performance.

"Following lieutenant governor VK Saxena's direction to recreate and reimagine these green hubs to make them more engaging, we conceptualised the Rangbaag programme. What makes the concept unique is its aim to take theatre beyond formal institutions and bring it into open, natural environments where children and young people can learn through play, movement and imagination," said an official.

By blending DDA's vision for vibrant public spaces with NSD's expertise in performing arts, the programme seeks to create a platform for community engagement and youth development rooted in accessibility and joy.

"In the past, we added several features at green spaces along the floodplain, such as green cafes, musical fountains, sculptures, seasonal plants and proper lighting, to ensure people feel comfortable coming to these areas," said the official. During the coming winter, when footfall anyway increases in such spaces, these workshops can draw many participants, he added.

NSD, through its Theatre in Education Co., runs multiple educational programmes for young people to learn about artistic expression and storytelling. "The collaboration will bring the theatrical pedagogy and experience to the masses. We will get technical support in implementing the programme from Primus Partners, a management consulting firm," said DDA.

UTHAONI

SHRI NARENDER KUMAR JAIN

With profound grief we inform the sad demise of Shri Narender Kumar Jain S/o Lt. C.S. Jain and Lt. Vidyawati Jain

Uthaoni will be held on 12 October 2025 from 11 am - 12 noon at Chinmaya Mission, Lodhi Road, New Delhi.

In Grief:
Alka Jain (Wife)
Anirmesh Jain and Aditi Jain (Son & Daughter in Law)
Abhishek and Reena Jain (Son & Daughter in Law)
Nandini, Arjun, Siddhartha, Viraj (grandchildren)

9811832777, 9899947888

DTC drivers to be trained with emphasis on safety

AlokKNMishra@timesofindia.com

New Delhi: Delhi Transport Corporation (DTC) is set to launch a large-scale refresher training programme for over 10,000 drivers operating the city's public transport fleet.

The programme will include sessions on safe lane driving, adherence to traffic rules and driving techniques aimed at reducing accidents and improving road discipline. Special emphasis will be placed on passenger-friendly behaviour—including proper halting at designated bus stops, courteous interaction with commuters and attentiveness towards senior citizens and passengers with special needs.

Officials said the training will be conducted in phases, covering drivers of both DTC and cluster scheme buses, which together operate over 5,000 buses across the city.

The need for this initiative arose as the city's bus transport system has, in recent years, transitioned to a wet lease model—where private operators supply the buses and staff, including drivers, and are responsible for maintenance. Delhi govt, on the other hand, provides depots and compensates operators on a per-kilometre basis. As a result, most drivers today are not direct DTC employees but are hired by private agencies. Delhi govt, therefore, has no direct role in their recruitment or performance evaluation.

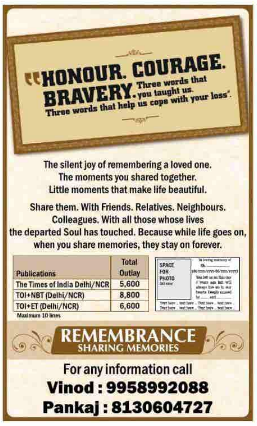
DTC officials said that this training will therefore enhance driver skills and reinforce best practices to ensure consistent service quality, road safety, discipline and improved passenger care.

In addition to skill development, DTC will also conduct medical examinations to assess the health and fitness of all drivers. This initiative aims to identify early signs of fatigue-related issues and ensure that drivers are medically fit to handle long shifts.

> **DTC officials said that the training will ensure consistent service quality, road safety, discipline and improved passenger care**

Public bus services in Delhi are jointly managed by the DTC and the Delhi Integrated Multi-Modal Transit System (DIMTS) under the cluster scheme, where private operators run buses under the supervision of the nodal agency. DIMTS handles the planning and management of cluster buses, while DTC manages the fleet directly under its control.

As of Sept 2025, Delhi has a total of 5,267 buses, including 2,917 electric buses—2,517 operated by DTC and 839 under DIMTS.



Dowry death: Bail plea of man rejected

New Delhi: Though scepticism prevails regarding offences related to dowry, there are cases that show why these laws remain necessary. The Delhi High Court has said this while dismissing the anticipatory bail of a man accused in the dowry death of his 20-year-old daughter-in-law.

"This is an unfortunate case where a young girl allegedly fell prey to the greed for dowry at the hands of her in-laws," Justice Neena Bansal Krishna observed while rejecting the anticipatory bail plea of Sunil Kumar Singh, father-in-law of the woman.

The court noted the grave allegation that the woman was "subjected to cruelty and forced to drink acid at her matrimonial home." The disclosure surfaced in her dying declaration, HC noted, adding that she died less than two years after marriage.

Sonam met her husband through social media. They married in March 2023 against her family's wishes.

According to the prosecution, Sonam consumed acid on Raksha Bandhan last year at her in-laws' house. The court said her helplessness and being a captive of circumstances were apparent as she initially told police she had consumed acid accidentally. TNN

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MADE IN NEW DELHI

Gaining from the SLB mechanism

PROFIT WISE. Detailing what goes into lending and borrowing shares from the exchanges

Venkatasubramanian K
bl. research bureau

GETTY IMAGES

Just prior to stepping down last week after his tenure as SEBI's whole-time member, Ananth Narayan spoke about how the market regulator was reviewing the SLB (stock borrowing and lending) mechanism. The idea was to see if any process or structural changes were needed to make SLB simpler and a more widely-used mechanism by market participants.

While SLB has been used by institutions for long, not many retail investors — barring a few savvy ones — may be fully aware of the process to lend or borrow stocks from other investors in the market.

The SLB mechanism allows investors to lend shares that are lying idle in their demat accounts to other investors and receive an interest-like payoff. Investors can also borrow shares from others for purposes such as short-selling, arbitrage, etc.

All these transactions are done via the exchanges and regulated well.

Read on for more on SLB, including how it works, the eligible amount/shares, transactional processes, settlement and also on what happens when there are corporate actions.

LENDING/BORROWING

There are shares that you as an investor may be holding for a long time and may continue to stay invested in as a part of your portfolio holdings. Such stocks, which you aren't looking to trade for quick gains, can be lent to other investors for short periods, usually a month and rolled over subsequently one month at a time.

For lending your shares, you will be eligible for an interest for the period. What's more, you get to fix the amount you wish to receive as payoff for the period of lending and if your requirement finds a matching borrower, the transaction is completed.

At the end of the borrowing period (one month or in multiples of one month if contract is rolled over), you get back the shares in your account and also the interest amount (payoff). You retain the ownership of the stocks even when you have lent them.

At the other end of the spectrum, there are multiple reasons why investors may want to borrow shares from others.

First, borrowers can short-sell shares they do not own (in this case they have borrowed shares) when they expect those shares to fall in price. They sell the borrowed shares at a higher price and buy the same stocks back after the fall, and pocket the difference.

The shares are then returned to the lender with the interest fee.

Second, borrowers can make gains from arbitrage between the cash and futures markets. If a stock in the futures segment trades at a discount to the spot market price, selling the (borrowed) stock in the cash segment and buying the futures would help generate an arbitrage income.

Later when the stock falls, it can be bought and returned to the lender at end of the contract period.

Third, investors may face settlement issues when they short-sell. What if the stock hits upper circuit and further buying becomes impossible? The settlement goes to the next trading day via auctions (discussed later).

This may result in huge cost implications and losses. To avoid delivery defaulting or settlement failure on short trades, sometimes investors borrow from the SLB mechanism.

Fourth, some investors choose to remain market-neutral by buying one company's shares they expect to go up and selling another company's stock that they expect to fall. In such cases, the shares that they wish to sell can be borrowed from the SLB mechanism.

KEY POINTS

- Lenders get a payoff for contract tenure
- Borrowers can use shares for multiple purposes
- Minimum ticket size can be high

ELIGIBILITY, PROCESS

Although NSE is the main exchange in the SLB mechanism, the BSE, too, offers the list of stocks to borrow and lend.

Companies that are part of the futures & options segment and index ETFs that are traded on at least 80 per cent of the days over the previous six months and whose impact cost over the past six months is less than or equal to 1 per cent are eligible for the SLB mechanism.

The list of stocks, the best bids, best offers and quantity for borrowing or lending are all available in the exchanges.

Settlement happens on a T+1 basis.

Brokerages tend to have a minimum criteria of ₹1-lakh worth of stock of a company for its shares to be allowed for lending and 500 shares of a company as the minimum order quantity in the case of borrowing investors.

Once you enable the SLB mechanism in your brokerage account, depending on whether you are a borrower or a lender, you can specify the quantity, payoff you want, the cost you are willing to pay and the tenure. The exchanges have mechanisms to match orders and execute the contracts. A margin deposit would be demanded for the transaction.

The clearing houses stamp the contract to the transactions to eliminate counter-party risks.

Now there are two series available in the SLB mechanism. In series A contracts, if there are corporate actions such as stock split, bonus issues, dividends etc., or an annual general meeting or extraordinary general meeting during the tenure of the contract, the contract is foreclosed and the positions are reversed.

In series B contracts, the lenders of shares would receive the benefits of dividends, stock splits, bonus issues etc. even as the borrower holds the shares.

Though a rarity, if there is a default (not being able to return the shares borrowed) on the date of expiry of the contract, then the borrower has to buy the shares of the same quantity via an auction designed for such purposes. The share bought from the auction route must then then be returned to the lender.

In case there is no seller available in the auction route, the borrower must give the cash equivalent of the shares to the borrower along with the payoff interest amount.

Only if these transactions make significantly higher profits than the total SLB transaction fees and amount payable to the lender, must a borrower consider the option.

FEES AND TAXES

For a lender or borrower of shares via the SLB mechanism, since there is no delivery of shares, the securities transaction tax and SEBI turnover taxes would not apply.

However, brokerages would charge a fees ranging from 15 per cent to 20 per cent of the best bid/best offer amount, depending on the transaction and a GST (18 per cent) would be applicable on this amount as well.

Any amount earned by lending shares in the SLB mechanism is treated as income from other sources and added to your overall income and taxed at the applicable slab.

For a borrower, there may be other short-term capital gains implications depending on the transactions.

Though not very risky from a lender's perspective, given its technical nature SLB is best suited for sophisticated market participants.

What yellow metal price means to gold loans

LOAN WISE. With gold prices ruling the charts, what you need to know before borrowing against your jewellery

Nishanth Gopalakrishnan
bl. research bureau

GETTY IMAGES/ISTOCKPHOTO

Gold has been on a long and strong bull run since late 2022 and last week it scaled an all-time high of about $4,060 per troy ounce. Indian households collectively hold over 25,000 tonnes of gold, according to a PwC report.

At current prices, this treasure trove could be worth over $3.2 trillion – even higher if expressed in rupee terms.

Gold loans have been the most accessible way of monetising gold holdings for Indians. Per an ICRA report, gold loan AUM in the organised market as of FY25 was worth about ₹12 lakh crore.

This is projected to reach ₹18 lakh crore by FY27 at a healthy CAGR of 22 per cent.

With gold at all-time high and gold loans finding solid traction, this is a good time to take stock of the implications that gold prices have on your gold loans.

LTV RATIO

LTV or loan-to-value ratio is the single-most important number when it comes to gold loans, as it decides key parameters such as the loan amount and interest rate. It is the result of dividing the loan amount by the value of the collateral (gold jewellery). Say, a person gets a ₹2-lakh loan for his jewellery worth ₹3 lakh, then the LTV ratio is 67 per cent.

Currently, per RBI norms, banks and NBFCs need to maintain an LTV ratio of 75 per cent – not only at the time of disbursement but throughout the tenor of the loan. This, despite fluctuations in the value of the collateral.

However, in June this year, the RBI came up with revised guidelines on LTV ratio. Banks and NBFCs need to adhere to these guidelines from April 1, 2026, or even earlier if they can. The new guidelines take the cap on LTV ratio to 85 per cent for loans up to ₹2.5 lakh, 80 per cent for those up to ₹5 lakh and 75 per cent for those above ₹5 lakh. Do note that the loan amount in the formula also includes interest payable.

RISING PRICES

In a rising price scenario such as the one we have today, the collateral rises in value, thereby bringing the LTV down. In the above example, if the collateral's value becomes ₹4 lakh, the LTV will fall to 50 per cent. Now, for a given amount of loan, lenders have more collateral than before, and this makes them more comfortable from a risk point of view.

TAKE NOTE

- In case of sharp declines in gold prices, lenders can call for additional collateral or demand part repayment

And lower risk means lower interest rates. This is true for most financiers, as they reduce interest rates (for fresh loans) to stay competitive.

If you are looking to borrow afresh, this is a good time. You can borrow more for the same jewellery now, than you could have, a year ago. Also, the RBI relaxing LTV cap will act in your favour.

If you already have a loan subsisting, with rising gold prices, your pledged collateral would have gained in value. Hence, the LTV ratio of your account would've fallen. You have two options. One, you can apply to your bank or NBFC for a top-up loan on your existing loan. Two, shop for offers from other lenders who offer lower interest rates.

If you do get attractive offers, contemplate prepaying your existing loan and getting a fresh loan at lower rates. More importantly, be mindful of any prepayment charges your existing loan's terms and conditions might stipulate and also of processing charges of your new loan. Ascertain whether the benefit from lower rates exceed the costs, before you proceed.

FALLING PRICES

Borrowers also need to be cautious, as the current rally cannot sustain forever. 2025 is the best year for gold in terms of yearly returns after 1979. If prices fall, the LTV ratio will expand, making lenders subject to higher risk than before.

At the time of underwriting, lenders, in general, will set aside a suitable margin to avoid the LTV ratio exceeding the cap. For example, a bank may lend at an LTV of 65 per cent, keeping a 10 per cent margin (75 minus 65). This can take care of small corrections in gold price.

However, in case of sharp declines, lenders can either call for additional collateral or demand part repayment to bring the LTV ratio to comfortable levels.

To avoid this, it is better to be prudent and set aside a sum to carry out the part repayment, in case you don't have access to additional jewellery to pledge as collateral.

TAX QUERY

SANJIV CHAUDARY

My CTC is ₹5 lakh. I trade in stocks and have made short-term gains of ₹15,268 via trading in stocks and dividends received is ₹7,412. I also play fantasy cricket and won ₹5 lakh (TDS is 30 per cent at the time of withdrawal). I will make more gains from short-term trades in stocks until March 2026 (maybe another ₹15,000). What would be the likely amount of tax I have to pay for the current financial year?.

Rohit

It is being presumed that ₹5 lakh of CTC is 'Income from Salary' for tax purposes after reducing deduction if any. If you add total short-term capital gain (STCG) of ₹30,000 (estimated), dividend of ₹7,412 and income from Winnings of ₹5 lakh, then gross total income would be ₹10,37,412.

STCG and Winnings are taxable at special rates, as stated hereunder:

* STCG of ₹30,000 (estimated) taxable at 20 per cent under section 111A of the Income-tax Act, 1961 (the Act) and tax payable will be ₹6,000.

* Winnings of ₹5 lakh would be taxable at 30 per cent under section 115BBJ of the Act. Tax Payable on such winnings will be ₹1.5 lakh.

* In addition to the above tax payable, 4 per cent health and education cess is also charged on the tax payable by the assessee.

Hence, the total tax payable by you at special rate incomes are ₹1.56 lakh (₹6,000 + ₹1.5 lakh). Health and Education cess on such tax at 4 per cent is ₹6,240 (₹1,56,000 * 4 per cent). Thus, total tax liability after reducing TDS of ₹1.5 lakh (₹5 lakh * 30 per cent) becomes ₹12,240 (1,56,000+ 6,240- TDS of ₹1.5 lakh). The remaining income other than STCG and winnings remain ₹5,07,412, and will be taxable as per the applicable slab rates provided as per the new tax regime which is default regime.

You may note that surcharge at 10 per cent is applicable on tax payable only if total taxable income exceeds ₹50 lakh.

The writer is a practising chartered accountant

Send your queries to **taxtalk@thehindu.co.in**

Interest rates on home loans (%)

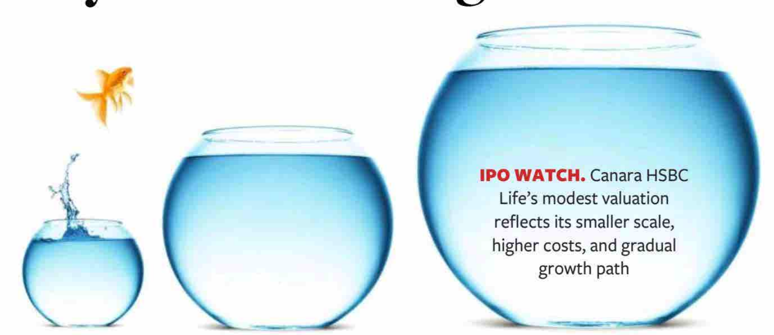
Institution	Loan amount		
	Under ₹30 lakh	₹30 to 75 lakh	Over ₹75 lakh
BANKS (Floating rates)			
Axis Bank	8.35-9.35	8.35-9.35	8.35-9.35
Bank of Baroda	7.45-9.20	7.45-9.20	7.45-9.20
Bank of India	7.35-10.10	7.35-10.10	7.35-10.10
Bank of Maharashtra	7.35-9.90	7.35-9.90	7.35-9.90
Canara Bank	7.30-10.25	7.30-10.25	7.30-10.25
Central Bank	7.35-8.90	7.35-8.90	7.35-8.90
DBS Bank	<=8.70	<=8.70	<=8.70
Dhanlaxmi Bank	8.60-9.75	8.60-9.75	8.60-9.75
Federal Bank	>=8.75	>=8.75	>=8.75
HDFC Bank	>=7.40	>=7.40	>=7.40
ICICI Bank	>=7.70	>=7.70	>=7.70
Indian Bank	7.40-8.80	7.40-8.80	7.40-8.80
IOB	7.35-8.45	7.35-8.45	7.35-8.45
IDBI Bank	7.55-12.15	7.55-12.15	7.55-12.15
J&K Bank	>= 7.35	>= 7.35	>= 7.35
Karnataka Bank	8.21-10.76	8.21-10.76	8.21-10.76
Karur Vysya Bank	8.50-10.90	8.50-10.90	8.50-10.90
Kotak Mahindra Bank	>=7.99	>=7.99	>=7.99
Punjab National Bank	7.45-9.15	7.40-9.15	7.40-9.05
Punjab & Sind Bank	7.55-10.75	7.55-10.75	7.55-10.75
RBL Bank	>= 9.0	>= 9.0	>= 9.0
State Bank of India	7.50-8.70	7.50-8.70	7.50-8.70
South Indian Bank	>=7.75	>=7.75	>=7.75
Tamilnad Mercantile Bank	8.15-9.50	8.15-9.50	8.15-9.50
BANKS (Fixed rates)			
ICICI Bank	8.65-11.80	8.65-11.80	8.65-11.80
Indian Bank	9.45-9.65	9.45-9.65	9.45-9.65
Punjab National Bank	8.55-10.70	8.50-10.70	8.55-10.60
HOUSING FINANCE COMPANIES (Floating rates)			
Tata Capital	>=7.75	>=7.75	>=7.75
PNB Housing	8.25- 12.15	8.25- 12.35	8.25- 12.35
Central Bank Housing	10-12.85	10-12.85	10-12.35
Samman Capital	>=8.75%	>=8.75%	>=8.75%
Aditya Birla Housing Fin	>=8.25	>=8.25	>=8.25
Bajaj Finserv	7.45-18.0	7.45-18.0	7.45-18.0
GIC Housing Finance	>=8.80	>=8.80	>=8.80
Sundaram Home Finance *	>=10	>=10	>=10
Piramal Finance Limited	>=9	>=9	>=9
IIFL Home Finance	>=8.75	>=8.75	>=8.75
LIC Housing Finance	7.50-9.45	7.50-9.80	7.50-9.80
HOUSING FINANCE COMPANIES (Fixed rates)			
LIC Housing Finance	10-10.25	10-10.25	10-10.25

Rates that vary with tenures or credit score within the specified loan amounts are indicated as a range. Fixed interest rates may be subject to a revision after a specified tenure. Rates may also apply only for a definite period and change to floating thereafter. Data taken from respective bank's website as on Oct 10,2025. Contributed by BankBazaar.com. *Annual percentage rate;

Play it for the long haul

Kumar Shankar Roy
bl. research bureau

IPO WATCH. Canara HSBC Life's modest valuation reflects its smaller scale, higher costs, and gradual growth path



GETTY IMAGES/ISTOCKPHOTO

India's private life insurers continue to command rich valuations, yet Canara HSBC Life, which is tapping the market with a ₹2,517-crore offer-for-sale closing on October 14, sits at the bottom of the range. Valued at about 1.6 times its Q1FY26 embedded value, Canara HSBC Life, at its upper price band of ₹106, trails SBI Life (2.4x) and HDFC Life (2.8x), and is even cheaper than Max Financial Services (2.1x) or ICICI Prudential Life (1.8x). That discount of 10-45 per cent versus peers looks tempting, but it also signals the uneven quality within India's private life-insurance landscape.

That said, Canara HSBC Life's low valuation itself answers many investor questions — it reflects the company's smaller scale and limited franchise. Hence, only long-term investors with a five-to-seven-year horizon may consider subscribing to the offer, as any re-rating is likely to be gradual.

The 17-year-old life insurer's promoters, Canara Bank and HSBC Insurance Holdings, and investor PNB are altogether selling 23.75 crore shares or 25 per cent stake to the public. Post the public issue, promoters will continue to hold 62 per cent in the firm, while PNB will retain 13 per cent.

Though Canara HSBC Life will be the sixth company from its industry to get listed, investors need to understand what drives long-term value in life insurance, given that the business often looks complex. Profits emerge gradually, with expenses front-loaded and valuations tied to embedded value rather than near-term earnings.

THE BASIC MODEL

Life insurers collect single or periodic premiums, which are invested to generate returns. The margins differ by segment: Participating (Par) policies share investment surplus with policyholders, non-par plans offer fixed benefits and retain investment gains/losses, ULIPs earn fund management fees, while annuities depend on long-term interest rate spreads.

How it fares against private-sector peers

Name	Embedded value (₹ crore)	Individual number of policies (lakh)#	Bancassurance share in new business premium (%)#	Weighted premium income (₹ crore)#	2-year CAGR (FY23-25)	61st month persistency (%)#	VNB margin (%)*	Operating RoEV (%)#	Solvency ratio (%)*
SBI Life	74,260	22.0	54.4	19,353.5	12.8	62.2	27.4	20.2	196.0
HDFC Life	58,355	12.7	34.7	13,363.6	10.6	63.5	25.1	16.7	192.0
ICICI Pru Life	47,951	6.6	23.1	8,307.2	11.0	63.9	24.5	13.1	212.0
Canara HSBC Life	6,353	1.9	87.1	2,178.6	14.7	57.7	19.5	19.5	200.4

EV of ICICI Pru Life as on FY25; others as on Q1FY26 VNB: Value of New Business Operating RoEV: Operating Return on Embedded Value
Source: RHP, CRISIL report *as on Q1FY26 #as on FY25

IPO rating
Canara HSBC Life Insurance

Business	★★★☆☆
Financials	★★★☆☆
Management	★★★☆☆
Valuation	★★★★☆
Overall	★★★☆☆

Rankings 1 to 5, 1 denoting lowest and 5 highest

Offer period	Oct 10 - 14, 2025
Issue size	₹2,517 cr
Price band	₹100 - 106
Market cap (upper end of the band)	₹10,070 cr

These policy premiums are invested and generate investment income. Claims, commissions and expenses are paid out; what remains is the surplus (profit). Part of this surplus enhances embedded value (EV), which is a measure combining net worth and present value of future profits from existing policies.

For a life insurer, ULIPs are volume-driven and cyclical; non-par products deliver steady, high margins; participating plans are stable but lower margin; annuities are long-duration and rate-sensitive.

Profitability in life insurance rests on a few levers. They include steady growth in new business, high persistency of policy renewals, a favourable product mix tilted towards non-par and annuity plans, broad distribution reach, stable investment returns and a healthy solvency ratio above the regulatory floor.

Typically, stock market participants value insurers on Price to Embedded Value (P/EV). High P/EV is usually for strong brand, persistency, scalability (for example, HDFC, SBI Life). Low P/EV could mean weak growth visibility or narrow franchise. EV growth and VNB (value of new business) margins are leading indicators of future valuation.

WHERE IT STANDS

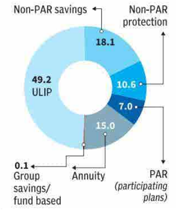
Investors typically assess life insurers on growth, persistency, product mix, distribution reach, investment performance and solvency.

Canara HSBC Life is among the smaller private-sector insurers, with a FY25 market share of 1.81 per cent in terms of individual weighted premium income (WPI). This is in stark contrast to other listed bank-led insurers SBI Life (16.1 per cent), HDFC Life (11.1 per cent), Axis Max Life (6.92 per cent) and ICICI Pru Life (6.9 per cent).

Backed by fourth-largest PSU lender Canara Bank, the company has a strong parentage and this ensures access to a large 15,700+ overall bancassurance branch distribution network. To its credit, the company posted faster growth in WPI and renewal premiums in FY23-25 period as well as FY25 compared to peer set (SBI Life, HDFC Life, ICICI Pru Life). Product distribution is almost entirely bancassurance-led (FY25: 87 per cent); limited agency or digital diversification restricts scalability. Even within bancassurance, productivity is modest — ₹21 lakh in premium and 16.8 policies per branch, against a 10-peer average of ₹51 lakh and 38 policies. This points to under-leveraged potential within a large partner network.

Its portfolio encompasses 20 individual products, seven group products, and two optional rider benefits, along with policies under the PMJJBY scheme. In terms of product mix, ULIPs form nearly half of annual premium equivalent (APE), non-par savings 18 per cent, non-par protection at 7 per cent and annuity 15 per cent. The mix is broadly similar to some peers but smaller non-par protection share could be impacting VNB margin at 19.5 per cent vs. over 25 per cent for the peer set. Expanding the non-par protection and annuity share could meaningfully lift margins and embedded-value growth.

Product pie (in %)



Basis June 30, 2025 annual premium equivalent mix Source: RHP

Canara HSBC Life sports persistency ratio of 82.5 per cent (13th month) and 57.7 per cent (61st month) for FY25. This is lower than peer set (85 per cent/86 per cent and 62 per cent/63 per cent). This indicates relatively higher lapse rates — customers discontinue earlier, hurting long-term profit recognition.

In terms of profitability, the company posted flattish PAT growth in FY25 and this has also meant that its growth for FY23-25 period is also the weakest among peer set. However, its track record of profitability for 13 consecutive years is encouraging. FY25 yields of 7-8 per cent highlight decent investment income; the drag lies more in operating scale than portfolio returns. Canara HSBC Life has the third-highest assets under management (AUM) among PSU bank-promoted life insurers, though its overall scale remains modest at about 9-12 per cent of the peer set.

The company's operating expenses-to-gross written premium (GWP) ratio at 12.4 per cent in FY25 is well above peers — HDFC Life (8.8 per cent), ICICI Pru Life (8.1 per cent) and SBI Life (5.3 per cent). Higher cost ratios usually reflect either weaker scale, greater dependence on high-commission channels, or limited operating leverage; if business volumes expand meaningfully, the cost ratio is likely to trend lower.

The company's solvency ratio, a measure of its ability to meet policyholder obligations, has consistently remained above the regulatory minimum of 150 per cent. But it has trended downward over the last three years, from 251.8 per cent in FY23 to 205.8 per cent in FY25, and further to 200.4 per cent in Q1FY26. The decline has primarily been driven by rising new business volumes and a shift in product mix. This metric warrants monitoring.

KEY TAKEAWAYS

The valuation discount largely mirrors Canara HSBC Life's smaller-scale, narrower product mix, and higher operating cost base. While profitability and solvency remain decent, growth visibility is moderate amid tough competition.

The company's prospects hinge on deeper cross-selling within Canara Bank and HSBC's network and a broader non-par product suite. But heavy reliance on a single channel, limited digital presence and low brand recall are constraints.

The life insurance sector enjoys structural drivers such as financialisation of savings and low penetration (CY23: 2.8 per cent) compared to global averages. It enters the second half of FY26 on a positive note — the GST waiver, while causing short-term margin pressure from the loss of input tax credit, should aid long-term penetration; a likely rate-easing cycle could also support non-par and annuity growth.

In addition, the proposed 100 per cent FDI under automatic route, potential composite licences for product expansion and ongoing digital initiatives are expected to deepen reach among younger and tier-II market customers.

That said, valuations of private-sector leaders are rich. Hence, smaller players trade at discounts offering catch-up potential over the long term if things improve.

At a relatively-lower valuation, downside risk, of course, remains limited for Canara HSBC Life. But upside potential will be gradual. Though not strictly comparable, insurance behemoth LIC's 2022 issue came at 1.1x P/EV, and the stock now trades below its offer price, a reminder that valuation comfort alone doesn't guarantee stock gains.

Not yet the time for this pill

IPO WATCH. Rubicon Research's premium valuations factor growth prospects

Sai Prabhakar Yadavalli
bl. research bureau

The IPO from Rubicon Research, a US-focused pharmaceutical company, will be open till October 13. The fast-growing generics and specialty medicine manufacturer has priced its issue at 60 times FY25 earnings. This is nearly double the valuations of larger Indian pharma players who have a sizeable Indian presence — a market that provides pricing power.

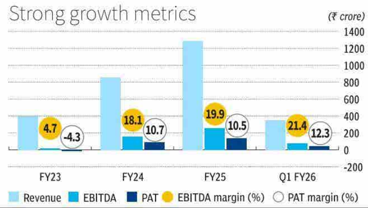
The company appears to have good growth prospects, but current valuations imply margin of safety is low for new investors. The company has launched two branded generics and five drug device combinations that can ramp up significantly in the next one year, along with the regular portfolio launches of simple generics and other pipeline products. This should support a high growth trajectory for the company, considering the small revenue base of ₹1,284 crore ($145 million) in FY25. But we recommend investors gain further clarity on the launched and pipeline product potential post-listing to invest in the company, as the valuations have factored the potential growth prospects. Also, the overhang of tariff on Indian pharma is magnified for Rubicon Research which has 98.5 per cent of sales from the US in FY25 compared to a diversified presence for pharma players.

The IPO consists of a fresh issue of ₹500 crore and an OFS from promoter General Atlantic Singapore of ₹877 crore. Also, note that this promoter has sold an additional 2 per cent to domestic funds at a price closer to the higher range of IPO at ₹485 per share. Post IPO, General Atlantic will retain 36 per cent of shareholding along with other promoters to the tune of 60 per cent.

POSITIVES

The company reported revenue growth of 80 per cent CAGR in FY23-25; however, it should be noted that this growth is starting from a low base. This was achieved as the company, which operated as a contract manufacturer for other companies, shifted to filing products in the US for its sales around FY19. The growth was driven by product launches with Rubicon Research having 70 commercialised products in Q1FY26 from 28 commercialised products in FY23. The company has more than 25 per cent market share for nine products in the portfolio, indicating a targeted and judicious portfolio build-up.

Strong growth metrics (₹ crore)



IPO rating
Rubicon Research

Business	★★★☆☆
Financials	★★★☆☆
Management	★★★☆☆
Valuation	★★½☆☆
Overall	★★½☆☆

Rankings 1 to 5, 1 denoting lowest and 5 highest

Offer period	Oct 9-13, 2025
Price band	₹461-485
Market cap	₹7,595-7,990 cr

Along with a generic portfolio, the company has targeted branded and drug device combinations to deliver a value-added mix to the portfolio. In February 2024, the company acquired the US-based Validus at $5.5 million to market branded prescriptions. Rubicon Research has launched two branded products, Raldesy and Lopressor. These are differentiated oral formulations of the existing molecules. This provides exclusivity for a certain period and a higher barrier for competition compared to normal generics.

Rubicon Research has launched five drug device combination products in the last two years, which are expected to gain traction in the next two-three years. Drug device combinations involve a drug and a device that is used to dispense the medicine. The five products include therapies for respiratory and migraine. The portfolio includes Fluticasone Propionate nasal spray, approved as a generic in June 2025 and as an over-the-counter medicine in the US in August 2025. This product should have significant potential with limited competition and high barrier for entry, considering the approval of the drug, device and delivery mechanism. The other products launched should similarly provide a strong growth trajectory in the next one year on gaining traction.

FINANCIALS, VALUATION

From the current revenue base of $145 million, the growth runway is secure with the ramp up of drug device medicines, the two branded products and the regular launches of simple and other complicated generics in the pipeline. But at 60 times FY25 EPS, the growth prospects are fully valued in the IPO offer. Investors can assess the ramp-up potential of the existing basket and the pipeline potential before investing in the stock.

Between FY23 and FY25, the company revenue grew at 80 per cent CAGR to ₹1,284 crore and PAT grew from loss of 17 crore to PAT of 134 crore in FY25. It reported an EBITDA margin of 20 per cent in FY25, despite an R&D expense of 10.4 per cent, which is at the higher end of the industry range of 5-8 per cent, owing to the growth stage of the company. It has a net-debt to EBITDA at comfortable levels at 1.27 times in Q1FY26 (annualised EBITDA) and a debt to equity of 0.83 times. The fresh issue proceeds will be used to clear a large part of the outstanding debt.

A bet on buoyant mutual funds

IPO WATCH. Solid track record and growing SIP book augur well for Canara Robeco AMC

Venkatasubramanian K
bl. research bureau

GETTY IMAGES/ISTOCKPHOTO

After a fairly steady run for three-four years post-Covid, the markets have seen mixed moves over the past year or so.

Currently, domestic cues are positive. Steady GDP growth, controlled inflation and reasonable interest rates, revival in consumption due to income tax and GST reductions are welcome indicators.

However, penal US trade tariffs, festering geopolitical equations, AI-related business and job disruptions and continued FPI selling are keeping the markets on a leash.

Even as volatility persists, one segment that has witnessed robust traction across market levels has been the asset management business, and more so that of mutual funds.

And most listed asset management companies (AMCs) have rallied well even in turbulent markets, thanks to record inflows of over ₹28,000 crore every month via the SIP route and the ever-expanding assets under management (AUM) of the industry.

Following the footsteps of many of its larger listed peers, Canara Robeco AMC is coming out with an initial public offering (IPO) that is open for subscription till October 13.

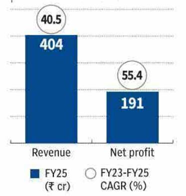
The company is looking to raise ₹1,326 crore at the upper end of the price band (₹253-266) and the issue is entirely an offer for sale.

At ₹266, the Canara Robeco AMC stock asks for 26 times its trailing twelve months (TTM) earnings (as of June). HDFC AMC trades at 44.5 times TTM earnings, while Nippon Life AMC is available at 41 times. Aditya Birla Sun Life AMC and UTI AMC trade at 25 times and 21 times TTM earnings, respectively.

For listed peers, market capitalisation to AUM, another valuation metric, ranges from 5 per cent to 16 per cent, while the Canara Robeco AMC issue asks for around 5 per cent.

The IPO is reasonably priced. Investors with a four-five year perspective can subscribe to the IPO.

Healthy operational performance



IPO rating
Canara Robeco Asset Management Company

Business	★★★½☆
Financials	★★★½☆
Management	★★★½☆
Valuation	★★★½☆
Overall	★★★½☆

Rankings 1 to 5, 1 denoting lowest and 5 highest

Offer period	Oct 9-13, 2025
Price band	₹253-266
Market cap at upper end	₹5,304 cr

A solid and growing SIP book, equity heavy assets, strong margins, a large distributor network and improving cost efficiencies are positives for the company.

Between FY23 and FY25, the firm's revenue from operations grew at a CAGR of 40.5 per cent to ₹404 crore in FY25, while net profits rose at a compounded annual rate of 55.4 per cent over the same period to ₹191 crore.

The company's net margin – at 47.2 per cent in FY25 – is better than that of UTI AMC. The net margin was 50.4 per cent for Canara Robeco AMC in the June quarter.

SCORING ON KEY METRICS

Canara Robeco AMC manages ₹1.11 lakh crore in quarterly average AUM as of June-end – it was ₹1.03 lakh crore as of March-end. It runs 12 equity, 10 debt and three hybrid funds. Most of its equity funds tend to perform reasonably over the long term and are mostly rated three-star and above across agencies.

The AUM of the company grew about 80 per cent in absolute terms between March 2023 and June 2025, which is faster than the overall industry's growth rate.

Since SIPs have been prominent investment vehicles for taking mutual fund exposure, the growth rate for Canara Robeco AMC is particularly impressive. The SIP AUM between March 2023 and June 2025 saw an impressive CAGR of 50.6 per cent, which is faster than most listed peers and among the best in the industry.

As of June 2025, the company's SIP AUM was ₹38,600 crore, and accounted for 33.2 per cent of the overall AUM. In fact, the SIP proportion has increased sharply from 24.8 per cent of AUM as of March 2023.

The overall SIP folio count has increased over 60 per cent in the last two-odd years to 1.8 million as of June 2025.

These figures are healthy, especially given the fact that the top 10 AMCs by AUM (Canara Robeco is placed 17th) account for nearly 69 per cent of the overall industry's assets and take away a lion's share of all SIPs.

One key aspect to note here is that 91 per cent of Canara Robeco AMC's assets are in equity funds, which is the highest proportion among the top 20 fund houses. Equity assets tend to earn higher management fees than debt schemes and a higher proportion could be rewarding over the long term, though market vagaries can hurt over the short term.

Operationally, the firm has a strong distribution network spread over 53 locations. Apart from its own parent entity – Canara Bank – the company has over 51,750 distributors with 548 national distributors, apart from sales done via 45 banks.

Interestingly, the company is also witnessing a quick improvement in its direct plan inflows. From 22 per cent of the AUM as of March 2023, direct inflows account for 26.6 per cent of the AUM as of June 2025. This direct and online presence helps penetrate newer markets, apart from helping reduce costs.

Quoting a CRISIL report, the RHP states that the AMC is the number 1 player in terms of share of B30 (beyond top 30 cities) AUM compared to the top 10 fund houses and number 2 among the top 20 AMCs. This indicates the ability of the company to mine assets from the fast-growing smaller cities.

Canara Robeco AMC's cost-to-income ratio has declined steadily from 47.7 per cent in FY23 to 36.2 per cent in FY25 (and further to 34.2 per cent as of Q1FY26). Return on equity has improved from 26.3 per cent in FY23 to 36.3 per cent as of FY25.

Overall, the company has delivered on many keenly-followed industry parameters and is positioned well for steady growth for the foreseeable future.

According to a CRISIL report, the Indian mutual fund industry is expected to grow at 16-18 per cent CAGR over the next five years and reach an AUM size of ₹147-155 lakh crore by FY30, indicating a long runway for growth for entrenched players in the industry such as Canara Robeco AMC.

Market volatility can impact performance in the short to medium term. Hence investors must have a long-term perspective.

businessline's editorial policy prohibits analysts from taking positions in the stocks they recommend — **Editor**

Retesting resistance

INDEX OUTLOOK. Nifty and Sensex close to their crucial resistance; Nifty Bank index confirms the bullish inverted head and shoulder pattern

GETTY IMAGES/ISTOCKPHOTO

Gurumurthy K
bl. research bureau

Nifty 50, Sensex and the Nifty Bank index were up for the second consecutive week. Nifty and Sensex rose about 1.6 per cent each. The indices are coming close to their crucial resistance. We will have to wait and see if the much-awaited bullish breakout is happening this time or not.

The Nifty Bank index, on the other hand, was up 1.8 per cent. The price action last week confirms the bullish inverted head and shoulder pattern we had indicated last week. This keeps the door open for the Nifty Bank index to rise more from here.

Among the sectors, the BSE IT index surged the most last week. It was up 4.28 per cent.

FPIS BUY
The Foreign Portfolio Investors (FPIs) turned net buyers after selling heavily for two consecutive weeks. The quantum of inflow was small though. The equity segment saw a net inflow of about $197 million last week.

NIFTY (25,285.35)
Short-term view: Immediate resistance is at 25,450 which can be tested this week. A decisive break above 25,450 can boost the bullish momentum. Such a break can take the Nifty up to 25,800 and 26,100-26,200.

Failure to breach 25,450 can drag the Nifty down to 25,000 or 24,600-24,500 again. The index will come under danger of seeing 24,100-24,000 only if it declines below 24,500. But that looks unlikely.

Medium-term view: The broader bullish view remains intact. We retain the view of the Nifty targeting 28,000-29,000 in the medium term and 31,000 in the long term. A breakout above 26,200 will clear the way for this rally.

The 24,000-23,500 region will remain as the strong support. Nifty has to break 23,500 and then fall subsequently below 23,000 to become bearish. Only then it can see 22,000-21,500 on the downside.

NIFTY BANK (56,609.75)
Short-term view: The outlook is bullish with a confirmed inverted head and shoulder pattern. Supports are at 55,700 and 55,400. The Nifty Bank index can rise to 58,200-58,500 first and then to 59,000 eventually.

The region between 55,000 and 54,500 is a strong support zone. A fall below 54,500 is needed to turn the short-term picture negative.

Medium-term view: The outlook remains bullish. Strong support is in the 54,000-53,500 region. The rise to 59,000 that we have mentioned can happen now. From a long-term term perspective, the Nifty Bank index has the potential to target 61,000-62,000.

Intermediate resistance is around 60,000. A corrective fall from here to 59,000-58,000 is a possibility before the index targets 61,000-62,000.

SENSEX (82,500.82)
Short-term view: The immediate picture is positive. Support is in the 81,700-81,500 region. Sensex can rise to 83,200-83,500 from here. The price action thereafter will need a close watch.

A decisive break above 83,500 will strengthen the momentum. Such a break can take the Sensex up to 84,000 initially. A further break above 84,000 will then clear the way for a rise to 85,300-85,500.

If Sensex fails to breach 83,500, and declines below 82,200, then a fall back to 80,200-80,000 can be seen again.

Medium-term view: The broader uptrend is intact. There is no change in our bullish view of the Sensex targeting 88,000-89,000 in the medium term and 91,000-92,000 in the long term.

Cluster of supports are there in the broad 78,000-77,000 region. Sensex has to fall below 77,000 to turn the outlook bearish and negate our bullish view.

CRUCIAL RESISTANCES
- Nifty 50: 25,450
- Sensex: 83,500
- Nifty Bank: 59,000

NIFTY MIDCAP 150 (21,743.95)
The Nifty Midcap 150 index is moving up within its range. As mentioned last week, 20,600-22,100 has been the trading range for more than four months now.

Intermediate support is in the 21,500-21,350 region. There is a good chance we see a rise to 21,900-22,100 in a week or two. Failure to breach 22,100 will continue to keep the sideways range intact. It will then drag the index down to 21,600-21,400 initially and then further lower eventually.

A decisive breakout above 22,100 can boost the bullish momentum. It will also confirm the bullish inverted head and shoulder pattern on the chart. Such a break will then clear the way for the Nifty Midcap 150 index to target 23,000-23,500 in the medium term and 25,000-25,500 in the long term.

The region around 20,000 is a strong support. The index has to decline below this support to negate the aforementioned bullish view and turn the outlook bearish.

NIFTY SMALLCAP 250 (17,112.75)
The Nifty Smallcap 250 index remains higher but stable all through the week. Immediate resistance is at 17,170. A break above it can take the index up to 17,350 – an important short-term resistance. A decisive break above 17,350 can strengthen the momentum. Such a break will then see the Nifty Smallcap 250 index rising towards 18,000-18,100.

From a big picture, a decisive break above 18,100 will confirm the bullish head and shoulder pattern. That in turn will trigger a rally to 20,000 in the medium term and 21,500-22,200 in the long term.

The region between 16,700 and 16,500 is a crucial support zone. The bullish view will go wrong only if the index declines below 16,500. Such a scenario, though unlikely, can drag the index down to 16,000-15,500.

bl.portfolio video
Watch **bl. Guru** share the Nifty & Bank Nifty technical outlook for this week

TECH QUERY

GURUMURTHY K
bl. research bureau

I have Oil and Natural Gas Corporation (ONGC) shares. My purchase price is ₹248. Shall I continue to hold the stock or exit?
Krishnan

ONGC (₹246.25): The long-term outlook is bullish. The downtrend that has been in place since August last year seems to have ended and forming a base. Strong support is in the ₹220-200 region. Resistances are at ₹260 and ₹275. A decisive break above ₹275 will confirm the trend reversal. That will have the potential to take ONGC share price up to ₹480. But please note that this rise may take at least another two years. If you can wait for another two years, then buy more at ₹230. Keep the stop-loss at ₹176. Trial the stop-loss up to ₹280 as soon as the stock goes up to ₹340. Revise the stop-loss higher to ₹360 and ₹410 when the price touches ₹420 and ₹460 respectively. Exit the stock at ₹480.

I have bought Can Fin Homes at ₹805. What is the long-term outlook?
Elsin Pravin

Can Fin Homes (₹794.25): The long-term trend is up. Indeed, the price action since 2018 is indicating a bull channel. Within this, the bounce from the low ₹558.80 made in February this year is happening from the lower end of the channel. It indicates that the corrective fall since September 2024 has ended and the broader uptrend is intact. This leg of upmove has potential to target ₹1,100 – the upper end of the channel, over the next three-four quarters. You can buy more at current levels and at ₹760. Keep the stop-loss at ₹580. Trail the stop-loss up to ₹830 when the price goes up to ₹930. Revise the stop-loss up to ₹940 and ₹1,010 when the price reaches ₹990 and ₹1,040 respectively. Exit the stock at ₹1,080.

I have shares of KFin Technologies. My purchase price is ₹1,056. What is the outlook for this stock?
Yuvaraj J, Dharmapuri

KFin Technologies (₹1,072.40). Long-term support is in the ₹1,000-980 region. As long as this support zone holds, the outlook will remain bullish. The price action over the last couple of months indicates the absence of strong sellers to drag the share price sharply lower. Resistances are at ₹1,150 and ₹1,240. A decisive break above ₹1,240 will boost the bullish momentum. Such a break will have the potential to take KFin Technologies share price up to ₹1,500 in the coming months. Accumulate at ₹1,030 if you get a dip. Keep the stop-loss at ₹910. Trail the stop-loss up to ₹1,220 as soon as the stock goes up to ₹1,290. Revise the stop-loss further up to ₹1,310 and ₹1,420 when the share price touches ₹1,380 and ₹1,460 respectively. Exit the stock at ₹1,500.

What is the outlook for Force Motors? I have bought this stock at ₹9,500. Shall I exit this stock?
Kavitha, Chennai

Force Motors (₹15,778.10): The stock peaked at ₹21,999 in August this year and has tumbled over 30 per cent from there. There is a confirmed head and shoulder pattern visible on the chart. This is a bearish reversal pattern. The neckline resistance of this pattern is now at ₹16,820 which can cap the upside. As such, a rise beyond ₹16,820 is unlikely if a recovery is seen any time. There is room on the downside for the stock to see ₹12,000 or ₹11,000 – the target level of the head and shoulder pattern. It is better to exit the stock now rather than losing more of your profit. The region between ₹12,000 and ₹11,000 is a strong support zone where the stock can find a bottom. So, you can consider re-entering the stock in this region.

Send your queries to **techtrail@thehindu.co.in**

MOVERS & SHAKERS

AKHIL NALLAMUTHU bl. research bureau

BSE (₹2,385)
Resumes uptrend

The stock of BSE rallied nearly 14 per cent last week. This has brought back positive momentum. After facing some correction in price in the recent months, the stock now seemed to have aligned back with the long-term uptrend.

Although there might be a decline in price from the current level, possibly to ₹2,230, the stock will eventually move to ₹3,000. Therefore, participants can go long now at ₹2,385 and accumulate of the price dips to ₹2,230. Place stop-loss at ₹2,000. When the stock hits ₹2,600, revise the stop-loss to ₹2,380. On a rally to ₹2,800, alter the stop-loss to ₹2,680. Exit at ₹3,000.

PG Electroplast (₹585.90)
Bullish reversal

The stock of PG Electroplast, which was in a downtrend since April, found support at ₹495 in August. However, even though the fall stopped, there was no sign of the trend becoming bullish until last week. By rallying 14 per cent last week, the stock has now formed a morning star candlestick pattern on the weekly chart, indicating a potential bullish reversal in trend. Going ahead, we expect the stock to appreciate to ₹800 over the medium term. Buy now at ₹585 and ₹535. Place stop-loss at ₹460. When the price touches ₹680 and ₹750, alter the stop-loss to ₹600 and ₹680 respectively. Exit at ₹800.

Voltas (₹1,417.10)
Potential shift in trend

The stock of Voltas has appreciated for two weeks in a row. The price action since May shows a positive inclination as it has been forming higher highs and higher lows. This indicates a potential shift in trend. Although there is a resistance ahead at ₹1,450, we expect the stock to breach this level. Once this happens, the stock can establish an uptrend to ₹1,900. So, buy the stock at ₹1,417 and add more longs if the price dips to ₹1,360. Place stop-loss at ₹1,300. When the stock hits ₹1,650, revise the stop-loss to ₹1,525. Alter the stop-loss to ₹1,700 when the price hits ₹1,800. Exit at ₹1,900.

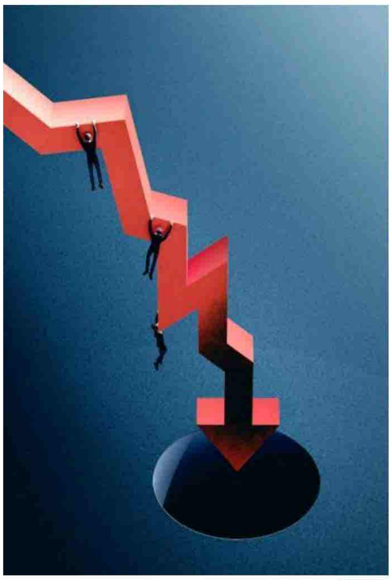
Knocked down

US MARKET OUTLOOK. US benchmark indices vulnerable to further fall

Gurumurthy K
bl. research bureau

The Dow Jones Industrial Average, S&P 500 and the NASDAQ Composite indices were knocked down badly last week. All the three indices were down over 2 per cent each. US President Donald Trump imposing an additional 100 per cent tariff on Chinese imports accelerated the fall on Friday.

Last week we had cautioned that the benchmark indices are coming close to a top. The sharp fall gives an early sign of the same. Will the US equity markets see more sell-off going forward? Here is an analysis:



GETTY IMAGES

DOW JONES (45,479.60)
The resistance at 46,800 has held very well. Immediate support is at 45,430. A bounce from there can trigger a relief rise to 46,250-46,300. But thereafter, the Dow can fall back again. The view is bearish to see 45,000 on the downside.

The level of 45,000 is a crucial support. Failure to sustain above it can drag the Dow Jones down to 44,500 as well.

S&P 500 (6,552.52)
The fall to 6,650-6,600 has happened well ahead of 6,800 itself. Strong resistances are now at 6,600 and 6,670 which can cap the upside from here. The outlook is bearish to see a fall to 6,500-6,480.

The region around 6,480 is a strong support. A bounce from there can take the S&P 500 index up to 6,600 again. But a break below 6,480 will see the index tumbling towards 6,330-6,300.

NASDAQ COMPOSITE (22,204.43)
The NASDAQ Composite index has a support near current levels. A bounce from here can give a breather and take the index up to 22,600 or 22,700. But a rise beyond 22,700 might be difficult. A reversal from the 22,600-22,700 region can drag the index down to 22,000-21,900 eventually. This fall to 22,000-21,900 can happen immediately if the index fails to see a bounce from here.

The level of 21,900 is a crucial support. A break below it will be bearish to see a steeper fall to 21,600 and even 21,000 going forward.

MORE FALL
The US 10 Yr Treasury Yield can break 4 per cent and fall to 3.9-3.85 per cent

DOLLAR OUTLOOK
The dollar index (98.90) surged breaking above the key resistance level of 98.60. Although it has come down sharply on Friday, the level of 98.60 will now act as a good support. As long the index stays above this support, the outlook will remain bullish. The dollar index can rise to 100-100.30.

In case the index declines below 98.60, a fall to 98-97.80 can be seen.

TREASURY YIELDS
The US 10Yr Treasury Yield (4.03 per cent) has come down sharply last week. The yield has been struggling to rise above 4.2 per cent for some time now. Cluster of resistances are there in the 4.1-4.2 per cent region.

The outlook is bearish. The US 10Yr Treasury Yield can break 4 per cent and fall to 3.9-3.85 per cent in the coming weeks.

From a big picture, the region around 3.85 per cent is a strong support. So, there are good chances to see the 10Yr yield reversing higher towards 4 per cent again after this fall.

BANDU'S BLOCKBUSTERS.

On April 1, four years back, piqued by the incessant jokes in the village at his expense, Bandu Barve decided he'd had enough. It was time for him to turn 'smart'. His dead granny's voice rang in his ears — "Read the papers, Bandya, they tell you all." So, off went Bandu to the stash of newspapers on his father's desk. As luck would have it, the first paper Bandu got his hands on was The Hindu businessline. The stock recos, in particular, had him in thrall. Soon Bandu metamorphosed into an ace investor and trader.

These days, Bandu picks five stocks each Sunday, which he believes will be blockbusters over the next week

BANDU'S PICKS
1 Yes Bank
2 Nuvama Wealth Management
3 360 ONE WAM
4 SRF
5 Kajaria Ceramics

Last week's prize winner
Rajkumar R

Last week's winning stock
Granules India

Closing price (Oct 3)
₹557.80

Closing price (Oct 10)
₹566.35

Return:
1.53 per cent

Here's your chance to match step with Bandu. Guess the stock that will give the best return by next Friday (BSE prices). By Wednesday noon, mail us your pick and its expected price rise to **bandublockbuster@gmail.com** with your name, mobile number and address. One lucky winner will get a prize of ₹2,000.

Scan to know the winner selection process

FT BIG READ. INNOVATION

Facing vast capital needs, the company behind ChatGPT has signed agreements with many of the largest tech groups, adding to a broadening web of financial dependencies across the AI world.

By Richard Waters

Do OpenAI's deals add up?

The pursuit of a humanlike artificial intelligence does not come cheap. OpenAI, the company that sparked the tech industry's AI race, recognises that its quest will need more capital than any investment project in corporate history. As a result, it has been forging new and unusual financial bonds with the biggest names in tech.

"We have decided that it is time to go make a very aggressive infrastructure bet," chief executive Sam Altman said on a podcast with venture capital firm Andreessen Horowitz this week. "To make the bet at this scale, we kind of need the whole industry, or a big chunk of the industry, to support it."

The size of that gamble has become clear in recent weeks as the company behind ChatGPT has lined up a series of deals that could lead to it spending more than $1tn on computing power.

Tapping into that much capital has led OpenAI to weave deals that draw on the financial resources of other Big Tech companies, adding to a growing web of financial dependencies across the AI world. In the process, it could be helping to create a new level of systemic risk in an industry that may already have entered bubble territory.

The latest evidence of Altman's unconventional dealmaking was an agreement this week with chipmaker AMD that could eventually result in OpenAI buying enough chips to require six gigawatts of electric power, three times the capacity of the Hoover dam. Each gigawatt of new computing capacity is generally assumed to require capital investment of about $50bn, of which some two-thirds could flow to AMD to pay for chips.

OpenAI, however, has only placed a firm order for the first gigawatt, and it is not clear how much of this deal — or other parts of its mammoth spending spree — will ever be fully realised. The arrangement also came with an unusual sweetener that could lead to AMD in effect giving OpenAI about 10 per cent of its stock, currently worth $36bn.

This is just one of the financing novelties that OpenAI has visited on the markets recently. Late last month, it reached a preliminary agreement for chipmaker Nvidia to inject up to $100bn in equity in 10 instalments, each tied to OpenAI placing orders for 1GW of Nvidia chips. OpenAI also confirmed last month that it had agreed to pay $300bn in a five-year deal to buy data centre capacity from Oracle.

Parsing the risks from giant transactions like these has brought a new complexity to the financing of the AI boom.

One challenge has been weighing the odds that these and other megadeals will ever be fully consummated. Among the unknowns: whether demand for AI services will be strong enough to justify building all the data centres, whether the new facilities can be financed, built and equipped, and whether there will be enough electricity to power them.

Under US accounting rules, companies can only report expected future revenue — known as "remaining performance obligations" — on contracts that cannot be cancelled. But that does not mean Oracle's shareholders can treat OpenAI's $300bn promise as money in the bank. If demand for its services falls short, OpenAI may simply be unable to pay, or the two sides could choose to renegotiate. Oracle's shares jumped 36 per cent on news of its growing book of AI business, but they have since given up a third of those gains.

Beyond the sheer scale and uncertainty of contracts like this, meanwhile, there are also questions about whether

'To make the bet at this scale, we kind of need the whole industry, or a big chunk of the industry, to support it'

they are leading to new interdependencies and wider systemic risks in the AI world. The circularity of the way money moves between companies in some transactions, for instance, could inflate the apparent level of demand.

With more interdependence, a setback at one big AI player could reverberate through the industry. And, depending on how they are financed, the effects could spread beyond the AI world, putting a dent in the wider financial system.

For sceptics who have questioned whether OpenAI and others can finance or build AI data centres on the massive scale they have promised, the latest slew of deals stretches credulity. "How are they going to pay for it all?" says Charles Fitzgerald, a tech investor and former Microsoft executive. "Maybe their real value will be in financial engineering."

OpenAI has not been alone in forging unusual deals with suppliers. To a large extent, this reflects a move by some of the biggest tech companies to use their powerful balance sheets and cash flow to support new AI start-ups that are also their customers.

Google and Amazon, for instance, have invested billions of dollars in AI model builder Anthropic, which is a customer of their cloud computing arms. Those deals echo the $13bn that Microsoft has ploughed into OpenAI, a cloud customer and broader business partner.

Nvidia has been among the most active, using its spare cash to fund a new generation of AI infrastructure companies that are also its customers, including CoreWeave and Lambda Labs.

To some, the heavy dependence on money from suppliers is a sign of potential instability. Nvidia has become "the central bank of AI, they're the lender of last resort", says Fitzgerald. Taking equity from vendors, and using the money to support further borrowings, has made the AI boom dependent on a high level of convoluted financial engineering, he adds.

The circularity has also prompted questions about how sustainable the revenues will turn out to be. It echoes arrangements that were a common feature of the dotcom bubble at the end of the 1990s, says Bill Janeway, a former chair of investment firm Warburg Pincus. Back then, an enterprise software company might have paid to advertise with a new internet media company, in return for the media company buying its software. That artificial arrangement would have created the illusion of stronger demand for both companies' services, adds Janeway.

In the closest parallel to today's AI infrastructure boom, telecom equipment companies such as Lucent and Nortel advanced money to customers in the 1990s to buy equipment, only to face write-offs when a wave of bankruptcies hit the industry.

Yet many observers claim there are big differences in the present boom. AI companies report that demand for their services is greatly outstripping supply, making this a far cry from the 1990s telecom bubble when start-ups built capacity for which there was no immediate need, says Tomasz Tunguz, a venture capitalist at Theory Ventures.

Even if this type of circularity has yet to become a cause of serious concern, it highlights the broader interconnectedness in the AI world among a group of companies that have a variety of overlapping relationships as investors, customers or partners, as well as high levels of customer concentration.

If a company like OpenAI were forced to retrench, it would ricochet through the industry. One sign of the concentration is that four Nvidia customers generated 46 per cent of sales in the most recent quarter. Yet even this level of concentration is not out of the ordinary in the tech world, says Jim Tierney, a portfolio manager at AllianceBernstein. Having five or six competitors makes the AI market highly competitive, he says. Were OpenAI to cut back its capital spending, other big AI companies might see it as an opportunity to step up their own investments.

A more serious cause for concern, according to many observers, stems from the growing amounts of debt being used in the AI build-out.

When tech bubbles burst, they can leave stock market investors nursing heavy losses without causing wider damage to the economy, says former Warburg Pincus chair Janeway. It is only when bubbles are fuelled by large amounts of debt that the risks to the financial system become serious. "I don't worry about the circulation of the cash flow, as long as it's not debt-funded," says Janeway. "The real economic destruction is from companies that go bust and have borrowed money they can't repay."

Debt is starting to play a more significant role in the AI build-out. This week, it was reported that Elon Musk's xAI is looking to raise $12.5bn in debt, part of a $20bn capital raise. Last month, Oracle

OpenAI's Sam Altman is among the tech bosses talking up the need for big investments in AI infrastructure, yet there are growing questions over how the spending spree is being sustained
FT montage/Getty

'The real economic destruction is from companies that go bust and have borrowed money they can't repay'

tapped the bond market for $18bn to help finance its data centres.

Among the questions is where the cash flow will come from to support the heightened level of borrowing, and who will end up carrying the can if AI demand does not grow as expected. A common structure used to finance data centres involves the creation of special purpose vehicles backed by large amounts of private credit. Arrangements like these have the advantage of staying off the balance sheets of the tech companies involved and are ringfenced from other projects.

"There's not a lot of visibility into what's going on," says Tunguz, the venture capitalist, of private credit arrangements like these. This type of lending "is leveraged, and it's one step removed from the banks", adds Janeway. In the event that a data centre project cannot generate the cash flow to support its debt load, the losses could feed back into the banking system, he says.

OpenAI's CEO, meanwhile, shows little concern about the scale of the spending that lies ahead — even though his company's revenue, which has reached an annualised run rate of $13bn, is dwarfed by the $1tn of investment it is planning. The pay-off, Altman said this week, would come from technology that was still on the drawing board. It will be based on AI models that his company has not developed yet, running on future generations of chips that would not even start shipping until the second half of next year.

"I've never been more confident in the research road map in front of us", he said, "and also the economic value that'll come from using those models."

Obituary

Writer who created racy bonkbusters in Rutshire

Jilly Cooper
Novelist
1937-2025

The novelist Dame Jilly Cooper, who has died at the age of 88, was both an open book and a mistress of disguise. Journalists dispatched to her Cotswolds home to interview her whenever the latest of her 18 novels was published would be greeted with a wall of warmth, laughter and indiscretion that suggested a life aimed at pleasure. In photographs, she is pictured either at a party, gap-toothed grin on her face and glass of champagne in her hand, or at home, anchored to her sofa by a nest of beloved pets. But Cooper spent much of her life in a gazebo in the garden, bent over a typewriter called Monica, making sure that her formidable work-rate rarely lapsed.

She was acute, too, at changing tack to satisfy her vast readership, although this may have been intuitive as much as strategic. After her career as a newspaper columnist had given rise to early works of non-fiction, she added romantic fiction to her repertoire with *Emily*, in 1975, enlarging the genre to include behaviour far more explicit and less decorous than that found in a Mills & Boon or Barbara Cartland novel, her contemporaries in the market. It was, perhaps, a natural step — aided by her life in the Cotswolds — to create the Rutshire Chronicles, which saw the creation of her most famous character, the bounder Rupert Campbell-Black, star of *Riders*, *Rivals* and, more recently, *Mount!*

The novels sold 11mn copies in the UK alone, came to typify the rise of the so-called bonkbuster, and introduced readers to the world of horsey high society. She also ventured into the territories of music, art and, latterly, football. Her last novel, *Tackle!* (she was fond of an exclamation mark), came into being after she sat next to Sir Alex Ferguson at lunch, and her research was aided by chats with her neighbour, former Arsenal player Tony Adams.

Her immense success, both commercially and in commanding devotion from her fans, was not immediately obvious given the patchiness of her early working life. She is reputed to have been fired from 22 jobs, and her first post in journalism, at the Middlesex Independent in Brentford, didn't suggest she had reporting in her blood, despite an ancestor having founded the Leeds Mercury, which later merged with the Yorkshire Post. It was her charisma and social ease that landed her first big break, when she met the editor of the Sunday Times Magazine, Godfrey Smith, at a dinner party. Her column about domestic and marital life — she had married military publisher Leo Cooper in 1961 — ran from 1969 to 1982.

Cooper was born Jill Sallitt in Hornchurch, Essex, in 1937, and grew up in Yorkshire and Surrey — her father was an army brigadier — first attending Moorfield School in Ilkley and then boarding at Godolphin School in Salisbury. After failing to get in to Oxford she moved to London. Adept at turning life into copy, she later wrote a book entitled *The Common Years*, drawing on her experience of walking her dogs Fortnum and Maidstone on Putney Common.

Animals were an integral part of her life, and visitors to her and Leo's Gloucestershire house, The Chantry, were well used to being greeted by Bluebell the greyhound, or a black-and-white cat called Simon Rattle (prone to jumping on your shoulders and clinging on, she told one interviewer, which was fine unless you were answering the phone in the nude).

The romances of the 1970s, each bearing its heroine's name, enthralled a generation of young women keen to read about the delights and perils of partying and falling for the wrong man. Cooper

She explored sexual shenanigans as well as class divisions and ambition

Her books sold 11mn copies in the UK alone and introduced readers to the world of horsey high society

wrote not only with humour and sympathy, but with a total absence of judgment on the misadventures of Imogen, Harriet, Prudence and Octavia.

That streak of delight found its ultimate expression in her fictional universe of Rutshire, in which sexual appetites ran amok, champagne glasses were rarely left unfilled, and rivalries — most notably between Campbell-Black and fellow show-jumper Jake Lovell — frequently moved between the stables and the bedroom. Last year's TV adaptation of *Rivals*, starring David Tennant and Danny Dyer, captured Cooper's interest not only in sexual shenanigans but in class divisions and ambition.

Jilly and Leo were married for more than 50 years, until his death in 2013; their relationship survived newspaper revelations of his infidelity, and she cared for him devotedly during his illness with Parkinson's disease. Her enormous circle of friends included Queen Camilla; perhaps one of her unlikeliest fans was former prime minister Rishi Sunak. Cooper had said that she was intending to write another novel, this time set in Sparta, "the only place in ancient Greece where adultery was allowed". *Alex Clark*

The FT View

FINANCIAL TIMES
'Without fear and without favour'
ft.com/opinion

The transformative potential of AI in healthcare

Accelerating the safe adoption of the technology in hospitals is a priority

As recent FT analysis highlights, corporate America may be waxing lyrical about the promise of artificial intelligence but few boardrooms appear able to describe how the technology is actually changing their businesses for the better. There is, however, one sector where the gains are clear, even if it is less eye-catching to profit-chasing investors: public health. For an industry with intensely high demands on accuracy and efficiency, generative AI could transform healthcare delivery and patient outcomes. In turn, the potential benefits for society, the economy and stretched public budgets are immense.

The greatest payback from AI may well come from the earlier and more accurate detection of life-threatening illnesses. In June, Microsoft claimed it had built a diagnostic medical tool that was four times more successful than doctors at determining complex ailments. Some models may even be powerful enough to ascertain distant health risks. Last month, scientists using the gen-AI system Delphi-2M — built at the European Molecular Biology Laboratory in Cambridge and trained on large-scale health records — reported that it could predict susceptibility to more than 1,000 diseases decades into the future.

But AI's impact extends beyond preventive support. In hospitals, the technology can rapidly analyse X-rays, CAT scans and MRIs. Robotic surgery systems powered by AI can improve precision. Labs are using large language models to accelerate drug discovery too. All these applications complement health professionals and free them to provide better care to more patients.

Equally significant is AI's ability to cut administrative burdens. The US-based Commonwealth Fund estimates paperwork costs, linked in part to onerous insurance checks, could account for about 30 per cent of America's excess per capita health spending compared with other nations. In surgeries and hospitals, speech-processing technologies can be used to transcribe conversations with patients, create structured medical notes and draft letters. A recent study by London's Great Ormond Street Hospital found documentation time more than halved for clinicians using so-called ambient voice technologies.

Clearly, accelerating AI adoption should be a priority for governments worldwide. Ageing populations and the growing prevalence of chronic diseases in advanced economies are contributing to rising healthcare costs. This strains public budgets and makes it harder for patients to afford private cover, as the wrangling between Republicans and Democrats over insurance support reflects. The World Health Organization also projects a shortage of about 11mn healthcare workers by 2030, which will hit harder in lower and middle-income countries. As the Covid-19 pandemic demonstrated, a healthier international population helps reduce the spread of disease, benefiting everyone.

> Applications of artificial intelligence can complement the work of professionals and free them to provide better care to more patients

For all the upsides, the use of AI in healthcare is nascent and patchy. This is partly because the technology is developing, and rigorous testing is needed before its widespread use. Health professionals need to train with it too. Data privacy concerns, fragmented sharing networks and outdated IT systems add further complications. Managers can also be reticent over introducing AI where staff may feel their jobs are under threat, or in private systems where revenue depends on high service volumes.

A concerted push from governments, health regulators and tech companies is needed to help fund, trial and deploy AI applications in hospitals, and overcome the cultural and technical obstacles. This will not be easy, but the scale of the prize — in the form of healthier populations and more sustainable healthcare systems — ought to focus the minds.

Opinion Data Points

What the graduate unemployment story gets wrong

John Burn-Murdoch

Is unemployment rising fastest among recent graduates? Not when compared with the most appropriate group

Unemployment rate among young adults, by education and age (%, seasonally adjusted, three-month rolling average)

Source: FT analysis of US Current Population Survey
*Completed education within previous 5 years

You would have to be living under a rock to have escaped the labour market story of the past year: the great graduate unemployment crunch. Long used to weathering economic storms better than their uncredentialled contemporaries, recent recipients of a degree have found joblessness climbing more steeply lately than those without one, from the US to Europe.

But what if this tale of graduate-specific woe is off-beam, based on a misguided analysis of the data? What if the accompanying narratives that seek to explain why the most educated are faring especially badly are focused on a mirage?

To set the scene: we know that rising unemployment is mainly down to weak hiring, not job losses. This dynamic is particularly important for new entrants to the labour market. Analysis of joblessness among recent US graduates confirms this: the rise is almost exclusively accounted for by the struggles of those freshly out of the education system.

But the studies that have found a less favourable picture for recent college graduates compared with their non-college contemporaries make a crucial mis-step in restricting their analysis to people in their mid-twenties.

A 23-year-old college graduate newly looking for a job is highly exposed to the current hiring slowdown. A 23-year-old who exited the education system several years ago aged 18 entered a different, more buoyant labour market, making them far less exposed to the sudden freeze in hiring today. This is not a like-for-like comparison.

To determine whether recent graduates are having an especially tough time in 2025's low-hiring environment, the comparison we should make instead is with others who recently entered the labour market for the first time, regardless of age. A newly job-seeking graduate might be in their mid-twenties, but someone entering the world of work from high school will be several years younger.

Once we do this, it turns out that those without a degree are actually having a much harder time of it. In the US, unemployment among recent college graduates is up 1.3 percentage points from its mid-2022 low, but by almost double that among recent labour market entrants without a degree, who have seen a 2.4 point rise. This is very different to the much more modest 0.7 point rise among the frequently — but inappropriately — cited group of non-grads in their mid-twenties who are sheltered from today's harsh hiring conditions.

Applying the same adjustment on the other side of the Atlantic reveals a similar pattern in western Europe: young workers without a degree have seen an uptick in joblessness rates of 2.4 percentage points on average compared with 1.4 for recent graduates.

None of this is to make light of the headwinds facing the newest cohorts emerging with a degree. But those winds are battering all young labour market entrants regardless of education level, and if anything employment outcomes are worsening more rapidly for those with fewer skills looking for blue-collar jobs than the highly skilled seeking knowledge work.

Getting this story right matters for two reasons. First, because those with the fewest qualifications are at much higher risk of being tipped into long-term worklessness.

And second, because of what this means for the secondary narratives shaped by this primary one. When we think about a force that is hitting graduates especially hard, we look for explanations that apply especially to early-career white-collar work. Generative AI, for example. But evidence for the kind of large-scale AI-driven displacement of early-career knowledge-sector jobs that would explain broad-based graduate malaise remains conspicuous by its absence.

When viewed instead as a broader cooling of the labour market, in which inexperienced workers of all stripes bear the brunt (and especially those with the least skills) we don't need to reach for such exotic explanations. The unwinding of extremely tight post-pandemic labour markets, rising input costs from inflation, tax changes and tariffs, plus the broader economic uncertainty during Donald Trump's second term, are sufficient to explain what we're seeing.

Young adults today undoubtedly face a tough job market, but framing this as uniquely or especially affecting graduates has muddied rather than clarified the picture.

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Forget ID cards — tech giants already own our digital souls

As a South African reader, I find the UK's outrage over digital ID rather quaint — a little like watching someone panic about electricity while clutching a torch ("Starmer gives green light to digital ID plan", Report, FT Weekend, September 20; and "In defence of digital ID", Spectrum, Life & Arts, October 4).

In South Africa, we've lived with a form of digital ID since the 1970s: one number linking births, deaths, taxes — and the occasional speeding fine. Because of crime, even when visiting a gated estate, you're asked to hand over your driver's licence — not out of fear of Big Brother, but because no public system talks to another.

The irony, of course, is that not only Britons but the whole connected world already surrender far more intimate data each day — to Meta, Apple, Amazon, Netflix, Google and soon Palantir, a cheerful oligarchy of digital overseers who not only know what we watch and buy, but predict what will trigger us next. Yet the idea of the state issuing one tidy identifier is treated like Orwell's second coming. Perhaps what's really feared is competence: the notion that government systems might one day work — not ours, alas — as seamlessly as the tech giants who already own our digital souls.

AJ Bekker
Nieu-Bethesda, South Africa

Purpose, not plasma, is the secret to longevity

Simon Kuper's article (Spectrum, Life & Arts, October 4) attributes moguls' longevity to "innovations like stem-cell therapy and blood washing". However, there is no scientific evidence for these treatments extending life — and as Kuper himself points out, Rupert Murdoch's mother lived to 103, long before any of these "advances".

What truly sustains these individuals — and others like Mary Berry, the food journalist, launching a new TV series and book at 90 — is purpose. The research is clear: those with purpose live longer, healthier, more engaged lives. Achievement, connection and a reason to get up in the morning matter far more than medical fads.

The media have enormous influence in shaping how we think about ageing. Employers worldwide are already failing to recruit the over-50s generation, and stories that portray later life as something to be extended artificially, rather than lived fully, only make the problem worse.

We all need to start planning to live purposeful lives into our 90s and 100s. You can be a tech entrepreneur at 70, an international risk consultant at 80, or — like Italy's Anna Possi — still waitressing with pride at 100.

None of these is relying on blood washing. Purpose, not plasma, keeps people alive and thriving into their 90s.

Victoria Tomlinson
Chief Executive, Next-Up, Harrogate, North Yorkshire, UK

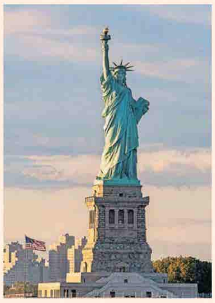
America's constitution: an unavoidable train wreck?

The review of Jill Lepore's book *We the People* ("Have Americans got their constitution all wrong?", September 27) does not answer the author's question — how long should a constitution last?

Were there an answer, it would be that America's constitution is no longer fit for purpose. Its checks and balances no longer work. The first branch of government, the legislature, has ceded its authority to the president. The Supreme Court has become a rubber stamp for the president. And the president believes and operates with the understanding that the only way government can function is for the executive to assume as much power and authority as it can.

Will the midterms in 2026 and the presidential election in 2028 reverse this constitutional train wreck? Given that both parties are so ideologically and bitterly divided, and debate so filled with bile, the grounds for optimism are not obvious. And amending the constitution is nearly impossible. Unless or until both parties recognise that sound governing must trump waging political war, the constitution will remain unfit for purpose. Realistically and sadly, it is unclear when or if that realisation will ever take hold, especially in light of the government shut down.

Harlan Ullman
Washington, DC, US



The Statue of Liberty in New York Harbor by Frédéric Auguste Bartholdi

Design can improve lives, but won't change the world

Edwin Heathcote, writing in FT Weekend ("Why designers stopped trying to change the world", Collecting, Life & Arts, October 4), claims that design was once seen as a tool to improve lives, but it failed to do so. I am not so sure about that.

As someone who gained an industrial design degree at London's Central School of Art and Design in the mid-1970s, I recall there was a distinct lack of interest in changing the world.

One notable activist designer at the time was Victor Papanek, who had written *Design for the Real World*. Faculty at the Central were sniffy about the relevance of his ideas and referred to him snidely as Victor Poppycock. Being young and idealistic I found this deeply discouraging.

What has happened since has changed my mind. Design became a signifier of celebrity and lost its humility. The illustrated "one-of-a-kind" Leica M camera designed by the former Apple designer Jony Ive is a case in point — the prototype sold for $1.8mn in Bono's 2013 charity auction.

Teaching design as a form of activism does not help either — it short-changes students who could be learning serious skills instead of being misled into thinking that design is a magic wand that can save the world.

Design does not have the power to offer direct solutions to global issues. The decisions that drive the consumer economy are beyond the reach of designers.

But design can ameliorate everyday life by improving products that will then give more pleasure in use, and perhaps be used for longer. Unfortunately it is not plausible to think that design itself could ever have aspired to change the world.

Nevertheless design remains a fascinating and worthwhile activity — as Ive would no doubt attest — and attributing super powers to it simply sets it up for a fall, as Heathcote, your architecture and design critic, has so clearly shown.

Hardin Tibbs
Fulbourn, Cambridgeshire, UK

Inappropriate framing for a villainous fashion feature

I have to take issue with the framing of the HTSI article by Mark C O'Flaherty ("Devil in the details", September 27), which discusses what he calls "villainy in menswear", invoking German attire of the early 1930s. The article features a portrait of Tadeusz Łempicki, and quotes a teacher on a London fashion design course commenting that the painting "vividly embodies this aesthetic". O'Flaherty describes the subject as "wickedly Weimar Republic, engulfed in his dark coat with white scarf tucked beneath it".

This framing is profoundly misleading. In reality Łempicki was Polish, a civilian lawyer and public servant. There is no evidence of any Nazi affiliation; on the contrary, he was later penalised for his stance against Poland's communist regime.

The portrait was painted by his wife, Tamara, in Paris in 1928 — so before the Nazi period.

Indeed Tamara de Lempicka, who was of Jewish ancestry, left Europe in 1939 precisely because of the rise of Nazism.

Łempicki was not German, not military, and not a villain. He was Polish.

Indeed both he and Tamara were marked by the very forces the article carelessly associates him with.

Maria Lasecka de Lasocka
Warsaw, Poland

Salvage heroics obscure the real story of Florence flood

Contrary to what was written in your magazine feature "The agony and ecstasy of restoring Fra Angelico" (Spectrum, October 4), the Arno did not "unexpectedly burst its banks" in 1966.

After a long period of rain, two dams upriver from Florence were under severe strain. In the early hours of November 4, engineers, fearing a burst dam, opened the spillways, discharging huge quantities of water into the river. It was a snap decision.

What they hadn't anticipated is the water would back up behind the Ponte Vecchio and quickly spread through the historic centre of the city.

To avoid panic, there had been no warning to residents, who awoke to biblical floods, up to six metres high, surging through their streets, with the priceless works of art swirling in the currents.

Dozens of people died.

More than 3mn books and manuscripts were damaged, as well as 14,000 works of art, many of which could have been moved to a safer elevation at short notice.

Nobody was held accountable.

Sixty years on, in the popular narrative at least, the disaster is considered to have been entirely natural. The heroic salvage efforts are celebrated, while the complex causes are barely mentioned and largely forgotten.

Vivien Reuter
London SW19, UK

A time when apples were named after country clerics

Reading Robin Lane Fox's piece "The apples of my eye" (House & Home, October 4), I was reminded of Ruth Pavey's delightful book *A Wood of One's Own* and its sequel *Deeper Into the Wood*. In these two volumes the author describes the acquisition of four acres of derelict orchard near Aller, Somerset, which she sets about restoring over the coming years.

Part of Pavey's plan was to cultivate a "red" apple, which she introduced by selecting a variety called Tom Putt. This cultivar was raised in the 18th century by a clergymen of that name, who was rector of Trent, a village then in Somerset, now in Dorset. The variety was highly esteemed in the west country as a cider apple.

One cannot help holding in mind a vision of when English country parsons had time on their hands to write village natural histories (Gilbert White) or cultivate varieties of apple, testimony to the ultimate sanity of the universe which, alas, becomes less assured.

Robert Rowbotham
Chesterfield, Derbyshire, UK

Liberty and freedom — not the same thing at all

Simon Schama's Weekend Essay "Lessons in liberty" (October 4) is right: we have forgotten the subtle but vital distinction between liberty and freedom. The Founders understood it — "Life, Liberty and the pursuit of Happiness". It's the Statue of Liberty, not the Statue of Freedom. *Liberté, égalité, fraternité* — not "do as you please".

Freedom is instinctive, even intoxicating; liberty is its cultivated form, tempered by the recognition that we live among others. Our age's failure to grasp the difference has left us with plenty of freedom, but precious little civility.

Chris Leslie
New York, NY, US

Doubting Thomas

Hey you wise guys at Jonathan Cape and Penguin Press, I know I'm a slow learner but how can you be sure that the PDF that crashed screaming into your inbox earlier this year really was the latest postmodernist jape from Thomas Pynchon ("Pynchon's shadow lands", Books, Life & Arts, October 4)?

Did he simultaneously send you, recorded delivery, both a wisdom tooth and, helpfully, the zip code of his dentist? Hell, the guy hasn't been photographed since he was 18.

OK, so it was a bit goofy but 70 years is a long time to hold a grudge. Are you guys even sure he's still alive? I reckon after Milwaukee's famous Hicks McTaggart, the hero of *Shadow Ticket*, has sniffed out *le grand fromage* that is making such a stink, he should track down this Tommy fella, pronto and bring him to me in the Upper Room.

He'll know where.

Joe Keaney
Manchester, UK

Opinion

How domestic deadlock brought Macron back to earth

Sylvie Kauffmann

President Emmanuel Macron has two lives, one lived abroad and one at home. Snubbing the official motorcade in Copenhagen last week, he strolled across town to Christiansborg Palace, where his fellow European leaders were awaiting him for a summit meeting.

Shaking hands with local well-wishers as if he had stepped out of the Danish TV series *Borgen*, the French president was all smiles, clearly relishing the warmth of his Scandinavian welcome.

The contrast with the political disaster brewing back in Paris could not have been more striking. His popularity at an all-time low, deserted by some of his most important allies, Macron has spent this week silently watching the disintegration of his support, with France plunged into its most serious political crisis since 1968.

On Monday, he tasked his third prime minister in 12 months, Sébastien Lecornu, to try again to find common ground between political parties dead set against doing so. (Lecornu had resigned 14 hours after announcing the composition of his government.)

On Wednesday night, Lecornu told the country that this mission had also ended, unsuccessfully. "I have tried everything," he said. Now it was up to the president to pick up the pieces and offer his own solution. Macron's former prime minister Edouard Philippe, now a presidential contender, has urged him to resign. Another of Macron's former prime ministers, Gabriel Attal, leader of Macron's Renaissance party, asked him to stop "desperately clinging to power".

This unprecedented situation has revived the spectre of the dreaded Fourth Republic (1946-58), when rival political parties unable to co-operate paralysed successive governments until Charles de Gaulle took over and initiated a new constitutional regime, founding the Fifth Republic that endures to this day. As the shock reverberated this week, blame immediately settled on the most powerful man in the French system: the head of state.

But who is really responsible? The current chaos undoubtedly originated in Macron's rushed, unilateral decision to dissolve the National Assembly and call a snap election on June 9 2024 to halt the rise of the far right. By failing to produce a parliamentary majority, that election created permanent instability. Macron belatedly admitted it brought "more divisions than solutions". If there was no winner in that election, which strengthened far right and far left, there was a clear loser: the presidential camp.

Yet Macron assumed he could muddle through until the end of his second term in 2027 — trying to protect his legacy despite a weakened, fragmented centrist bloc. Gone is the audacity that marked his early years; "Macronism" has instead immobilised the country.

France's political establishment also shares the blame. Leaders of all political parties, from all shades of left to right, have stubbornly refused to work together or compromise — oblivious to France's dire fiscal situation and the volatile international environment. As Lecornu put it, they were unable to "put country before party". The only goal

> The man who breathed new life into the European project could end up as the gravedigger of that dream

they seem to share, to the point of obsession, is running for president in 2027.

The irony is that Macron, who promised to halt the rise of the far right in France, may be forced to appoint a far-right prime minister if another snap election gives the majority to Marine Le Pen's Rassemblement National, now chaired by her youthful lieutenant, Jordan Bardella. The unthinkable is becoming plausible: a new poll yesterday put the RN in the lead with a 36 per cent share of the vote in a snap election — enough to reach a parliamentary majority with some centre-right allies.

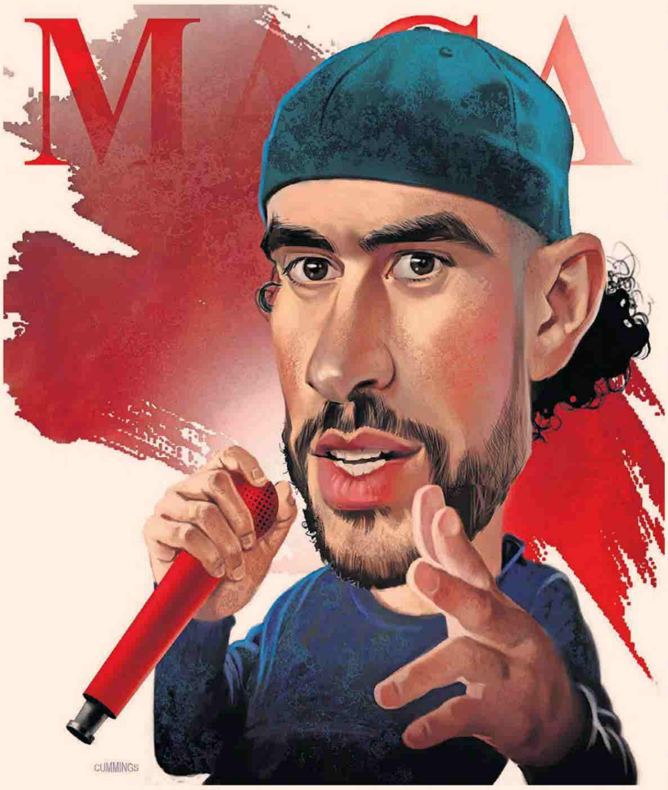
That prospect may scare mainstream parties enough to agree to a last-minute compromise with Macron and Lecornu on pension reform and avoid a new dissolution of parliament. But the lull will only be temporary. It is also sending shivers down the spines of most of Macron's European partners, many of them facing a similar challenge by illiberal forces. Populist Andrej Babiš's recent victory in the Czech election is bad enough; a French government with a far-right prime minister would be a much heavier blow to the EU, much to the delight of Donald Trump and Vladimir Putin.

Could Macron, the visionary whose ambition breathed new life into the European project after his 2017 election, end up as the gravedigger of that dream? This is the ultimate paradox for a leader whose creativity and activism on the world stage is saluted by his peers but who has failed to convince his fellow citizens of the demands of a fast-changing world.

A book published in 1946 has recently found its way into the French debate. Written by the French historian and resistance fighter Marc Bloch before he was arrested, tortured and executed by the Gestapo in 1944, *Strange Defeat* includes a devastating analysis of the French establishment's mistakes and the complacency that led to the collapse of the country's defences in 1940.

Macron paid tribute to Bloch's "scathing lucidity" last year, announcing that his remains would be transferred to the Panthéon. The fresh popularity of *Strange Defeat* over the past few days will probably come as no surprise to him. Now it is his turn to show "scathing lucidity" to spare France another defeat.

The writer is editorial director and a columnist at Le Monde



Person in the News | Bad Bunny

The rapper getting under Trump's skin

Puerto Rican singer's selection as the Super Bowl's half-time act has outraged the Maga crowd, writes *Louis Wise*

Those thinking of attending the Super Bowl on February 8 next year should probably get there early. According to US homeland security secretary Kristi Noem, the event will be crawling with members of ICE. "We'll be all over that place," she said last weekend. "People should not be coming to the Super Bowl unless they're law-abiding Americans who love this country."

The reason for this unusual mobilisation? The decision by the NFL to choose a 31-year-old Puerto Rican musician as the half-time entertainment at its annual showpiece event. Bad Bunny, real name Benito Antonio Martínez Ocasio, is set to follow in the footsteps of Madonna, Beyoncé, Coldplay and others — to howls of outrage from the president down.

"I don't know why they're doing it. It's crazy," Donald Trump told Newsmax. House Speaker Mike Johnson called it a "terrible decision". The late Charlie Kirk's Turning Point USA organisation has announced its own alternative concert in protest. And several other critics of the NFL's pick have asked why they couldn't choose someone American — overlooking the fact that Puerto Rico is an "unincorporated territory" of the US.

Trump said he'd never heard of Martinez, which is hard to believe: Bad Bunny is one of the biggest pop superstars working today. His 2022 album, *Un Verano Sin Ti* is the most-streamed album ever on Spotify, while his latest offering, *DeBÍ TiRAR MáS FOToS*, released in January, became the fastest album by a male artist to surpass 1bn streams on the platform (replacing *Verano*). His last global tour earned over $200mn. He has co-chaired the Met Gala and has acted in films alongside Brad Pitt and Adam Sandler. And, naturally, he has dated a Kardashian (the supermodel variant, Kendall Jenner).

This won't even be his first Super Bowl appearance. Back in 2020, he popped up to rap a verse during the headline slot shared by Latin megastars Jennifer Lopez and Shakira. But unlike previous performers, who have had to sing in English to break into the American market, he has gone global by staying resolutely local, singing and rapping in a Puerto Rican-accented Spanish to music which is stubbornly Latin too: reggaeton and trap mostly, but now with new injections of salsa, bolero or jibara. Today, he represents the ever-growing power of the Latin American market in a fully globalised music industry.

How did the son of a truck driver father and a teacher mother, who grew up in Vega Baja on the north coast of Puerto Rico, go from being a communications student at college to a Super Bowl headliner in under 10 years? "First and foremost, Bad Bunny is a star because he makes total bangers," says Valerie Trapp, assistant editor at The Atlantic, who went to Puerto Rico this summer to review his 30-date residency on the island. Pointedly, he had refused to bring the show to mainland America because, as he put it, mindful of his large Latino audience, "like, fucking ICE could be outside my concert".

"Bad Bunny is naturally funny, sexy, embodies a fearlessness lacking in most of his peers, has a great musical talent and is in control of that thing that makes one a star," says Mel Ottenberg, editor of Interview Magazine, who styled Martinez for a hit Calvin Klein underwear advert earlier this year. "He is the quintessential pop star for today," adds film producer David Hinojosa, who is himself American of Puerto Rican heritage. "He's pushing boundaries . . . He's on top of the world while remaining wholly true to his roots, culture and individuality."

Though Trump may have forgotten it, he and Martinez in fact have a long history. When Trump was criticised in 2018 for his response to the island's devastation by Hurricane Maria, Bad Bunny appeared on *The Tonight Show*, saying, "more than 3,000 people died, and Trump's still in denial".

But Martinez's political engagement has not been restricted to Trump. In 2019 he joined the protests which eventually brought down disgraced Puerto Rican governor Ricardo Rosselló. And last year, he bought billboards on the island before the general election and threw his support behind the local pro-independence party.

> 'He's on top of the world while remaining wholly true to his roots, culture and individuality'

There is a political edge in his music, too. "TURiSTA", a track on his last album, was inspired by those who only come to the island for fun, and ignore its many problems. And in "Lo que le pasó a Hawaii" ("What Happened to Hawaii") he resists the idea of Puerto Rico becoming a fully fledged US state.

Some may wonder why the NFL chose a vocally anti-Trump performer in an era in which pleasing the president often seems like the easiest option. But Trapp says "choosing Bad Bunny is a smart choice" for an organisation that has been trying to position American football as a global game. "Bad Bunny's Super Bowl halftime seems to be another step in the NFL's global outreach," she adds.

As for Martinez, he seems to have been enjoying the controversy. Last weekend he hosted *Saturday Night Live*, performing various comedy skits and delivering the opening monologue, looking as languid and cheeky as ever. "I'm doing the Super Bowl," he shrugged in his strongly accented English. "I think everyone is happy about it."

Meanwhile, his streaming numbers jumped 26 per cent in the week following the Super Bowl announcement, reaching a cool 218.5mn. Expect another jump on February 8.

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Trump's deal ended the war but hasn't yet delivered peace

Emile Hokayem

The trade-offs and compromises needed to end wars inevitably test one's values and expectations. Those who survey the immense waste and agony of the past two years may well balk at admitting that the deal agreed to on Thursday by Israel and Hamas will reduce human suffering and perhaps unlock a path to Israeli-Palestinian peace. However imperfect it is, it prevents worse prospects, notably the ethnic cleansing of Gaza.

Commendably, it frees the Israeli hostages, it stops the killing of civilians in Gaza and it frees hundreds of Palestinian prisoners. It also calls for an immediate delivery of much-needed aid, even though Israel will remain in control of more than half of the Gaza Strip for the foreseeable future.

US President Donald Trump has already begun to celebrate his achievement, and he will seek the glory and approval that eludes him at home during his upcoming trip to Israel, where Prime Minister Benjamin Netanyahu is working hard to convince his public that he achieved the intended result and that the price was worth it. Palestinians have begun the hard job of seeking to heal and rebound from the worst war they have ever endured.

As everyone has predicted since 2023, it would take US pressure to get there — and once Washington applied it, the guns went silent quickly. Trump pivoted in just two weeks, understanding during his meetings at the UN that Israel's maximalist plans and rhetoric had antagonised everyone and jeopardised his own global standing. Abandoning his earlier Gaza Riviera delusion, he used Israel's international isolation to corner Netanyahu and addressed the anxieties of nervous Egyptians, Jordanians, Qataris, Emiratis and Saudis. His oft-decried self-aggrandising bulldozer approach delivered what Joe Biden's mild, reluctant manner could not, even if the terms of the deal are not far removed from those floated in 2024.

As it stands, however, the Trump plan is not yet about peace nor is it a well-developed plan. Beyond the agreed first phase, the rest still reads like a restaurant menu that leaves plenty of ambiguity, room for haggling and unexpected hitches. Such a menu makes sense only if the chef doubles up as a fair and willing enforcer.

The deal's design is shaky. Even if the US can claim regional support, this was a deal that sidelined the Palestinian Authority, the decrepit yet widely recognised government of Palestine. It also establishes a trusteeship for Gaza with no reference to international law (or, so far, UN Security Council approval) and envisions an open-ended negotiation process conditioned only on Palestinian reforms, akin to past failed ones. Many observers will approve of the "nos" included in the declaration: no displacement, no annexation, no obstruction or suspension of aid to civilians. It is a testament to how battered international law and norms have become that the mere rejection of illegal behaviour and policies qualifies as a success.

Hamas will now face a moment of reckoning. The Islamist movement is undeniably the war's biggest loser: its bloodiest ever gamble has turned into the costliest tragedy for Palestinians. Its standing is in tatters, domestically and in the region. Shameless Hamas leaders may claim that this war, however costly, was a needed step towards inevitable victory and they may resist full disarmament. Seeing this as disingenuous grandstanding, many Gazans will welcome the group's exclusion from governance, provided they are presented with political rights. The transitional set-up envisioned by Trump and former UK prime minister Sir Tony Blair does not meet this standard — but it may work temporarily if it seeks and gains legitimacy.

With Hamas relegated, the onus rests on Israel. Netanyahu can easily derail the process because the terms of the deal are ambiguous enough. He could restart the war on the flimsiest of pretexts, delay indefinitely further Israeli withdrawals or refrain from negotiating further phases as happened when he ended ceasefire talks earlier this year. It will take Trump's notoriously fleeting attention and Israeli society's desire to reckon

> As always in the Middle East, scepticism is warranted but cynicism is not

with this dark chapter to keep him on track until new Israeli elections either supercharge diplomacy or end for good the prospect of a negotiated peace deal that delivers Palestinian statehood.

The plan could also flounder if the US gets tired or distracted, or if it once again becomes enthralled to Israeli hardliners. This would endanger regional and international troop commitments from Indonesia, Egypt, Turkey and the Gulf that require US backstopping. These forces lack experience of ground deployments in war zones and don't want to serve as proxy occupying forces that shield Israel.

Gulf largesse isn't open-ended and will take years to materialise. Europe seems too indecisive to fill any vacuum. And the UN is being asked to stabilise a horrific humanitarian situation even as it is gutted and faces US and Israeli wrath. As always in the Middle East, scepticism is warranted but cynicism is not. A Palestinian state is still not on the horizon, but its prospects are better than they were two weeks ago and there is hope — albeit tenuous — for regional peace.

The writer is director of regional security at the International Institute for Strategic Studies

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The dangers of war in the grey zone
Russia's resort to hybrid warfare is a sign of weakness. But it still requires a response, writes **Gideon Rachman**

Discord at the Venice opera house
La Fenice's orchestra has objected to the appointment of a conductor aligned with Giorgia Meloni's party, writes **Amy Kazmin**

«الأدَبُ كنزٌ عِندَ الحاجةِ، عَونٌ علىَ المُروءةِ
صاحِبٌ في المَجلِسِ، أنيسٌ في الوَحْدة»
(- علي بن ابي طالب - ر)

YOUR DAILY ARABIC PROVERB

Good manners are a treasure when needed, an aid to generosity, a friend within a crowd, and a companion in loneliness.

Ali bin Abi Taleb
(The fourth caliph)

Opinion

If you want peace, try it

HASSAN BIN YOUSSEF YASSIN

The world is mad. That is what we have all been saying to ourselves and to others for a few years now, to the point that we perhaps do not understand anymore quite what it is that we mean. What madness means by one definition is "doing the same thing over and over again and expecting different results," as civil rights campaigner Rita Mae Brown (not Albert Einstein, as commonly claimed) wrote.

The most tragic and damning example is the seemingly endless cycle of war and reconstruction that Israelis have imposed on Gaza. It has never made sense to me to seek peace through war. If the objective is to enter into peace negotiations, then would it not make eminent sense to launch such negotiations before resorting to war and destruction?

More than 65,000 innocent Gazan civilians have been killed over the last two years of Israel's war, with most of Gaza's infrastructure, homes, hospitals and schools destroyed. An entire people and their livelihoods have been crushed, yet those Gazans who did not perish under the bombs will eventually rebuild their homes and rebuild their lives insofar as they can.

This brings us back to the painful interrogation as to why today's shuttle diplomacy could not have taken place two years ago. Some of us seem set on repeating an endless cycle of violence instead of trying to reason, to talk and to honor peace.

Jane Goodall, who passed away last week, devoted her life to understanding our closest cousins, the chimpanzees, and subsequently worked tirelessly to protect them from the destructive dominion of humankind. She single-handedly showed us not only that other species and the ecosystems they live in deserve our attention, but that it is well within our means to protect them and to coexist peacefully with other species, even with nature as a whole.

If one woman can achieve this, how have we other humans still not been able to end the foolish cycles of war, destruction and reconstruction in favor of respect, understanding, compromise and peace?

There are other figures, such as Nelson Mandela and Mahatma Gandhi, who also devoted their lives to showing us that peace and the common good lie in tolerance, understanding and mutual respect.

In Saudi Arabia, too, centuries of tribal disputes came to an end when one man, King Abdulaziz, chose quite unusually to apply kindness and magnanimity to his adversaries, thereby establishing a new country, which has not ceased to rise to ever greater heights since.

Saudi Arabia and other Gulf countries have become an important collective force for peace, progress and understanding in the Middle East.

Our economies and societies are evolving through judicious choices and the wisdom of our leadership, who are also taking bold steps to bridge divides and work toward a more harmonious and peaceful Middle East.

While Gulf countries have been constructing in every sense of the word, Israel remains hell-bent on destroying. We want the heartbreaking destruction wreaked upon Gaza these past two years to be the very last of its sort. When Israeli leaders get angry, they choose to kill and to destroy, making it almost impossible for Gazans to exist on a daily basis.

They humiliated the latest Gaza flotilla in a disturbingly similar approach to their mistreatment of activists whose only cause was peace and the dignity of others. What is the purpose of constantly destroying, only to rebuild, and repeating this without end? Peaceful coexistence clearly means not resorting to war. That means, if you want peace, don't go to war. Period.

It is time for humanity to finally absorb this very simple lesson. If it means that we avoid years of war, destruction and needless deaths, why can some people not bring themselves to recognize the common humanity and dignity in other people and recognize that they also deserve respect, thereby allowing for compromises that resolve conflicts peacefully?

Regular cultural, social and economic relationships between all peoples who call the Middle East their home are essential to build the connections and understanding that we call peaceful coexistence.

Let us try peace. And let us make it permanent.

Hassan bin Youssef Yassin worked closely with Saudi petroleum ministers Abdullah Tariki and Ahmed Zaki Yamani from 1959 to 1967. He headed the Saudi Information Office in Washington from 1972 to 1981 and served with the Arab League observer delegation to the UN from 1981 to 1983.

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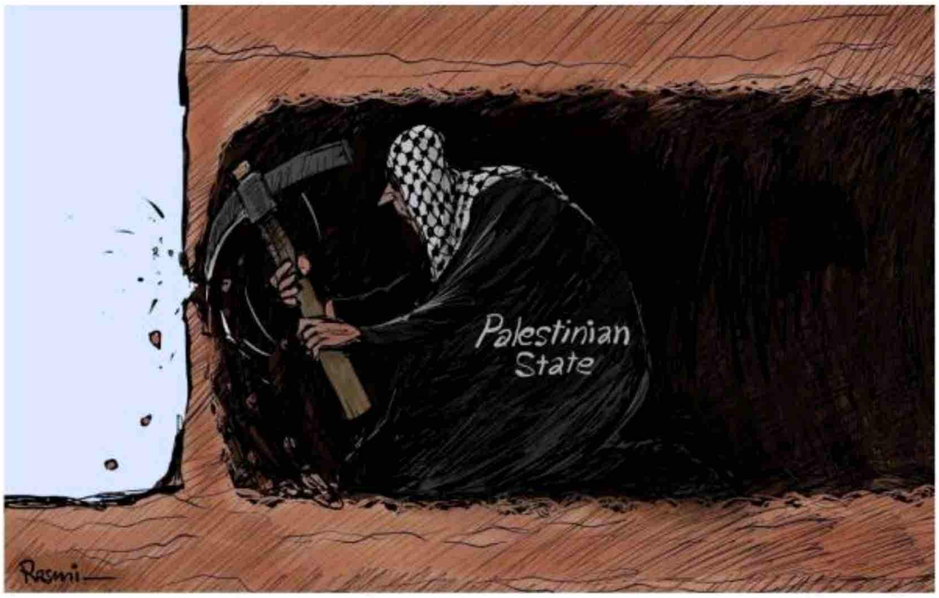
Saudi Arabia and other Gulf countries have become an important collective force for peace, progress and understanding



COURTESY: AMJAD RASMI/ASHARQ AL-AWSAT

Health — like peace — is a political choice. At every turn, we must choose peace. And we must choose health

Health under siege or a hopeful future?

DR. HANAN BALKHY

The health of millions of people across the eastern Mediterranean region is under siege. From Gaza to Sudan, war has torn through hospitals, displaced health workers and left civilians without access to the most basic services.

Across the region, attacks on healthcare are shattering records — accounting for nearly two-thirds of all incidents worldwide last year and 93 percent of all deaths documented this year. Health workers, facilities and patients are being deliberately targeted, undermining the very systems meant to save lives.

Children are missing vaccines, mothers are giving birth in bombed-out clinics and health workers are risking — and too often losing — their lives simply by showing up. These horrors must not be allowed to stand.

Health — like peace — is a political choice. At every turn, we must choose peace. And we must choose health.

Yet even amid brutality, there is also progress — and hope. Ministries of health, communities and World Health Organization teams are driving reforms and innovations that save lives.

In 2024, Egypt was certified malaria-free, the third country in the region to reach that milestone. Pakistan launched an ambitious hepatitis C elimination program, while Jordan achieved global recognition for eliminating leprosy. And Sudan, despite its civil war, became the first country in Africa to introduce the malaria vaccine, protecting vulnerable children in high-risk areas.

The contrast is striking: On one side, hospitals reduced to rubble; on the other, breakthroughs in disease elimination and prevention.

This shows that progress is possible — even in the toughest circumstances — if we protect health systems and the people who sustain them.

Mental health tells the same story. Nearly one in six people in the region live with a mental disorder and needs are soaring in conflict zones. Yet regionwide suicide rates are falling; Libya has launched its first national mental health strategy; and 14 countries are scaling up community-based care. The challenge is to sustain these gains in the very places where trauma runs deepest.

Last year, three of the 10 deadliest extreme weather events — including heat waves and severe winter conditions — struck in the eastern Mediterranean. Air pollution, unsafe water and food insecurity account for almost a quarter of the region's disease burden. Still, 15 countries have pledged to build climate-resilient health systems and more than 120 cities are monitoring air quality. Progress is happening — but it must be accelerated.

Next week, health ministers will gather in Cairo for the 72nd session of the WHO Regional Committee, known as RC72, to take stock of progress on health in our part of the world. Member states face a defining choice: allow conflict and crisis to erode decades of health gains or commit to resilience, equity and long-term investment in health — including in emergencies.

Our region carries 37 percent of the world's humanitarian burden, despite being home to just 9 per cent of its people. The world's displacement crisis is also concentrated here: 57 percent of all refugees come from our region and 40 percent of all internally displaced people live within it.

Western countries' recent reductions in foreign aid threaten to further deepen this strain, with their full impact only now starting to emerge.

Our communities deserve more than survival. They deserve systems that can withstand shocks, protect the vulnerable and give future generations a chance to thrive.

The real cost of inaction is measured not only in lives lost, but also in hope extinguished. Even under siege, we can choose health. And at RC72, we must.

Dr. Hanan Balkhy is the World Health Organization's Regional Director for the Eastern Mediterranean.

Opinion

New EU defensive initiatives vital in era of hybrid warfare

LUKE COFFEY

European Commission President Ursula von der Leyen on Wednesday gave a forceful speech in the European Parliament about the security threats and geopolitical challenges Europe faces from Russia. Her comments were striking for their clarity, given how cautious EU officials had previously been in describing Russia's behavior.

Von der Leyen did not mince her words, stating that Moscow's actions amounted to "a coherent and escalating campaign to unsettle our citizens, test our resolve, divide our union and weaken our support for Ukraine. And it is time to call it by its name. This is hybrid warfare."

For European countries, the question of what role the EU should play in defense has been debated since the early days of integration, even during the time of the European Coal and Steel Community in the 1950s.

After decades of enlargement, integration and successive treaties that often centralized power in Brussels at the expense of member states' sovereignty, defense has remained the one area in which individual nations have been reluctant to cede authority. The reason is simple: The decision to go to war — or not — is still widely seen as a sovereign prerogative that belongs to the nation state, not a supranational body based in Brussels.

However, since Russia's large-scale invasion of Ukraine in February 2022, the EU has largely abandoned its grand notions of a unified European army or full defense consolidation. Instead, it has pursued more helpful and practical steps to strengthen Europe's security.

In many ways, Russia's invasion of Ukraine served as a wake-up call that the idealistic and lofty goals of a single integrated defense policy were misplaced. Instead, the EU chose to pursue more effective measures. Among these was the European Commission's decision to finance and fund weapons purchases for Ukraine, a country that is not even an EU member. A decade or two ago, such a move would have been unthinkable.

Since Russia's invasion of Ukraine, the EU has pursued more practical steps to strengthen Europe's security

The war in Ukraine has also allowed Brussels to move beyond the anxieties caused by Brexit, recognizing that, regardless of whether the UK is part of the EU, the continent's security fate remains deeply intertwined with that of London. This realization has led to more open-minded thinking in Brussels about military and defense cooperation with non-EU countries that are still European, like the UK and Turkiye.

The two most recent concrete measures to enhance Europe's defense capabilities stand out. The first is the "ReArmEU" initiative, also known as Readiness 2030. Championed by Von der Leyen, it has the ambitious goal of securing €800 billion ($930 billion) in public and private investment for the defense sector across EU member states.

Beyond the financial component, the initiative introduces bureaucratic reforms designed to streamline defense procurement across the EU and give member states greater fiscal flexibility — allowing them to bypass certain budget deficit restrictions if it means increasing investment in their armed forces.

However, some countries, including Spain and Italy, considered the term "ReArmEU" too provocative, which is why the initiative is often referred to as Readiness 2030 instead.

The second major initiative is Security Action for Europe, or SAFE, which serves as a key component of Readiness 2030. It provides €150 billion in loans and special financing to strengthen Europe's armaments industry. One of the main lessons from Russia's invasion of Ukraine has been just how munitions-intensive modern warfare is and how depleted stockpiles across Europe and even in the US have become due to years of underinvestment.

For American policymakers, especially President Donald Trump, these EU initiatives are music to their ears

For American policymakers, especially President Donald Trump, these EU initiatives are music to their ears. Trump has long focused his engagement with European counterparts on better burden-sharing within NATO. A majority of EU member states are also NATO members so, when EU leaders commit to greater defense spending, it is welcome news in the Oval Office.

However, many American policymakers have also been skeptical of EU defense initiatives, fearing that, over time, they could undermine NATO's cohesion by attempting to supplant the alliance's role in European defense. But the pragmatic nature of the EU's recent actions — moving away from abstract ideas such as an EU army or new military committees in Brussels and toward concrete measures like funding for munitions and greater investment in defense capabilities — has also been welcomed in Washington.

With newfound momentum behind European defense initiatives, the next few years will be crucial. Will Europe meet its own spending targets and cut the bureaucratic red tape that slows procurement or will political interest fade once it becomes clear that reform is easier said than done? The stakes are high. It is time for Brussels to turn rhetoric into action.

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Turkiye pushes for closer Syria-Turkic states ties

DR. SINEM CENGIZ

The leaders of the Organization of Turkic States — Turkiye, Azerbaijan, Kazakhstan, Kyrgyzstan and Uzbekistan — on Tuesday held a summit in Azerbaijan, where Turkish President Recep Tayyip Erdogan called on his counterparts to deepen their engagement with the new administration in Damascus.

There were three key takeaways from Erdogan's speech. First, he called for a unified Organization of Turkic States response to shared security challenges. Second, he stressed the need for members to support the stabilization efforts in Syria by engaging in dialogue with Damascus. Third, he spoke of the importance of closer coordination between the organization and other international alliances. The call to deepen ties with the Syrian government stood out as particularly significant.

During the Syrian war, the Central Asian states of the former Soviet Union drew significant attention when Kazakhstan's capital, Astana, emerged as the primary venue for the peace talks involving Turkiye, Iran and Russia. Just a month before the fall of Bashar Assad's regime, it hosted the 22nd round of negotiations under the Astana peace process.

Kazakhstan was seen as a trusted intermediary due to its long-standing relationship with the Syrian regime and its close ties with Russia, Assad's most steadfast ally. Following the collapse of the Assad regime, many speculated that this power shift could prompt a change in the Central Asian states' approach to Syria, given their past relations. However, Organization of Turkic States members reaffirmed their support for Syria's unity, stability, territorial integrity and postwar reconstruction under the new administration.

Many speculated that the fall of Assad could prompt a change in the Central Asian states' approach to Syria

But the Central Asian Turkic states still face significant constraints in terms of establishing a closer relationship with the new Syrian leadership. Aside from Turkiye, which maintains the closest ties with Damascus, Azerbaijan has taken notable steps toward building relations with President Ahmad Al-Sharaa.

In July, Baku hosted Al-Sharaa in a short but symbolically important visit. During the visit, the two sides discussed economic development and energy cooperation and signed a memorandum of understanding on the energy sector.

Turkiye is seeking support from the Turkic nations for the maintenance of Syria's stability, which is vital not only for the Levant and Middle East but also the Caucasus and Central Asia.

During the Syrian war, several nationals from Central Asian states joined the ranks of Daesh. According to reports, some 40 percent of the overall number of militants joining the extremist group were from the former Soviet states. This situation raised serious concerns among Central Asian states about the potential threat posed by extremist movements to their domestic security and political stability.

In response, several countries, including Uzbekistan, Kazakhstan and Kyrgyzstan, have launched state-sponsored repatriation and reintegration programs to address this issue, while Turkmenistan has resisted such measures. Given these security challenges, Syria's stability should not only be a strategic priority for Turkiye and neighboring states, but also for the Central Asian Turkic states.

Ankara is trying to draw the Turkic states closer to its allies and position itself as a bridge between the Levant and Central Asia

Over the past decade, Turkiye has strengthened its ties with the Central Asian Turkic states in a bid to reduce Russia's influence over them. Through the sale of military drones, economic connectivity projects and diplomatic engagement, Ankara has sought to bypass Moscow's traditional dominance, which is also what these states desire.

Moreover, Russia's war in Ukraine has further increased the importance of Central Asia as a key transport and trade route.

While Turkiye may use its leverage to encourage greater support for the Al-Sharaa government, it is likely to take time for the Turkic states to fully embrace the new Syrian administration. Progress on this strategy depends on several factors, such as unity among the Organization of Turkic States members, the organization's relations with Turkiye, Russian influence over the members, and future developments within Syria itself.

Still, Turkiye's goal of stronger ties between the Turkic states and Syria is significant and could impact several dynamics in the years to come.

Dr. Sinem Cengiz is a Turkish political analyst who specializes in Turkiye's relations with the Middle East.
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The OpenAI CEO at a White House meeting on AI education on 4 September
PHOTOGRAPH: ALEX BRANDON/AP

It's Sam Altman – the man who stole the rights from copyright

Marina Hyde

Take a look at Sam Altman. I mean, actually do it. Go to Google images, where you can find countless photos of the OpenAI boss smiling in a kind of wan genius way, the humble lost puppy of Silicon Valley. But I urge you to simply cover the bottom half of his face in any picture, and you will clock that Sam has the sad-psycho eyes of the lost woman's boyfriend who the police have asked to front the missing person's appeal. Please come home, Sheila – we're all worried sick and we just want you back.

If that joke seems off-colour, or crass, or some kind of manipulative stretch – please, don't worry. I'm using the OpenAI gold standard of giving a toss, where the unwilling subjects of any generated content have to formally, time-consumingly and bureaucratically opt *out* of being used/abused/exploited any way anyone likes. I haven't heard from Sam, so my assumption is that he's fine with me saying that he knows exactly where Sheila is because he put her there. He is, after all, fast emerging as precisely the type to appear alongside the phrase "in plain sight".

The past fortnight for Sam has involved the release of AI video generator Sora 2 – an upgrade on the Sora of barely 10 months ago – and its instant descent into a sludge of stolen copyrighted goods. We also saw the announcement of a further web of circular bargains between OpenAI and chip firms like Nvidia and AMD that brings OpenAI's frenzied deal tally to more than $1tn this year. That does not mean that in addition to enabling you to watch videos of meticulously created characters get pixel-puppeted by bigoted and talentless losers, OpenAI will also enable you to lose your home in a financial crash if the bubble bursts badly.

And look, no offence to Sora's "creators". I often walk through art galleries and realise the stuff on the walls would be so much better if I simply stole it and drew penises on it or whatever, and that they wouldn't have made it publicly viewable if they didn't want that. Furthermore, no tech titans have a cultural life, so they can't imagine what could be so creatively valuable that you wouldn't want a robot to desecrate it for cash. If you've seen Sam's frequent reading recommendations, you'll know they're literally the "business philosophy" section of an airport bookshop. This week, he wanted us to know Sora 2 was all cool and fun. "It is way less strange to watch a feed full of memes of yourself than I thought it would be," Sam posted. So everything's fine! Although, I guess it helps if you're one of the most powerful people in the world and making untold billions off this stuff, not just getting revenge-porned in a Byzantium simulation because somehow, historical prompts seem to confuse the "guardrails".

> **No tech titan has a cultural life, so they can't imagine what would be so creatively valuable that you wouldn't want a robot to desecrate it for cash**

I've seen it said that OpenAI's motto should be "better to beg forgiveness than ask permission", but that cosies it preposterously. Its actual motto seems to be "we'll do what we want and you'll let us, bitch". Consider Altman's recent political journey. "To anyone familiar with the history of Germany in the 1930s," Sam warned in 2016, "it's chilling to watch Trump in action." He seems to have got over this in time to attend the second inauguration, presumably because – if we have to extend his artless analogy – he's now one of the industrialists welcome in the chancellery to carve up the spoils. "Thank you for being such a pro-business, pro-innovation president," Sam simpered to Trump at a recent White House dinner for tech titans. "It's a very refreshing change." Inevitably, the Trump administration has refused to bring forward any AI regulation at all.

Meanwhile, please remember something Sam and his ironicidal maniacs said earlier this year, when it was suggested that the Chinese AI chatbot DeepSeek might have been trained on some of OpenAI's work. "We are aware of and reviewing indications that DeepSeek may have inappropriately distilled our models, and will share information as we know more," his firm's anguished statement ran. "We take aggressive, proactive countermeasures to protect our technology." Hilariously, it seemed that the last entity on earth with the power to fight AI theft was OpenAI.

It was left to Hollywood talent agencies this week to extract some kind of momentary pause from Altman, who posted some flannel about trying to direct, if not hard cash, then certainly some "new kind of engagement" at those he openly called "rightsholders". Many of us remember a time – about 15 minutes ago – when rightsholders meant *the people who hold the rights*. I mean, the clue's right there in the word. But Sam is post-rights. The question is: if he's post-creative rights, can we honestly believe he isn't effectively post- other kinds of rights?

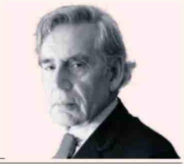
OpenAI wants what all loving platforms want: its users never to have to leave its confines. It's clearly positioning towards being seen as the new default homepage of the web, as Meta did. Can a heartwarming coming-of-age privacy horror-show/election distortion scandal/child harms crisis be far behind?

Because, incredibly, we've already gone through this life cycle. But we're going to do it again, aren't we? Or, more accurately, given the unprecedented speed Sam's company is moving at, we already *have* done it again. We've initially lauded some mysterious tech Pied Piper as a brilliant, unconventional altruist, then belatedly realised he is not as he seemed and that his technology is more dangerous than imagined, then still failed to regulate, and are now being victimised by it. In more ways than one, this is just the terrible AI version of a movie we've already seen. If Altman's models can learn, why can't we?

A Year in Westminster
Join John Crace, Marina Hyde and Pippa Crerar at the Barbican in London and livestreamed globally on Tuesday 2 December as they look back at another extraordinary year. Book tickets at theguardian.com/guardian-live-events

Reform UK and the hard right can be stopped in their tracks

Gordon Brown



Nigel Farage portrays Reform UK as a unique phenomenon that has burst on to the global stage, its meteoric rise an exceptional epochal event. But this week, in every one of Europe's major countries and from India and Thailand to the US and Argentina, hard-right, anti-immigrant, anti-globalisation parties like his are also ahead in the opinion polls.

In last Saturday's Czech elections, the rightwing, pro-Putin populist Andrej Babiš toppled the prime minister, Petr Fiala. The National Rally, which has just brought down yet another French prime minister, has been leading the polls for both the French presidency and parliament. In Germany, the far-right Alternative für Deutschland is currently the most popular party. Hungary's Fidesz party, Robert Fico's pro-Russian Slovakian coalition and the Brothers of Italy are already in government, while the Freedom party of Austria, the Netherlands' Freedom party and Belgium's Vlaams Belang - all hardline nationalists - are part of an international coalition of anti-internationalists, inspired by far-right propagandists like Steve Bannon, seeking to dethrone the international rule of law, diminish human rights and destroy multilateral cooperation.

The populist nationalist surge exposes a new and unavoidable truth that democrats ignore at our peril: an authoritarian ethnic nationalism once thought toppled with the Berlin Wall has replaced neoliberalism as the dominant ideology of our age, giving us a world of firsts: "America first", "India first", "China first", "Russia first", "my tribe first" and often "my tribe first and only" regimes. It is this ethnic nationalism that helps explain why the world is now composed of 91 autocracies and only 88 democracies.

It is important to understand the forces that have fuelled this new age of nationalism. It starts with a widely felt sense that globalisation was a free for all that has not been fair to all. For more than a decade, leaders have not only been slow to respond to the left-behind but also to the changing balance of economic power, moving us from a unipolar world dominated by the US to a multipolar world of competing superpowers, and from a rules-based order to a power-based one. The ethnic nationalism that this has incited means free trade is giving way to protectionism.

But all is not lost - and we can find hope in the common sense of the global public. In a survey by Focaldata for the Rockefeller Foundation, of 36,000 people in 34 countries, we find a clear majority are more resistant to an exclusionary nationalism and more willing to embrace international cooperation than many of the leaders who rule over them.

Across the world there is, perhaps surprisingly, only a small group of hardened anti-internationalists representing 16.5% of the global population (even if 25% in today's US) who feel coexistence between ethnic and religious groups is impossible or have a zero-sum mindset that if they or their country do well, it has to be at the expense of others doing badly. But there are another 21% at the opposite extreme, whom we might call committed internationalists, who see cooperation across borders through open trade as a positive sum win-win, or are what the US philosopher Kwame Anthony Appiah calls "rooted cosmopolitans".

The vast majority of the global public are somewhere in between: they are patriotic but don't see the world as in a struggle between "us" and "them", adversaries set apart from each other by an unbridgeable divide. Do they prefer a duty-free or a dutiful world? Will they accept obligations beyond their city wall? Yes, under certain conditions.

Guardian readers quiz the Labour deputy leader candidates
Bridget Phillipson and Lucy Powell respond to questions on wealth taxes, Brexit, climate crisis and the far right. Read now on theguardian.com/commentisfree

> **We can turn back the xenophobic tide as long as we champion a positive patriotism that resonates with people's immediate concerns**

A first group, 22%, will back humanitarian action and are prepared to act out of altruism, supporting emergency help for disaster zones. Those we might call "good cause" multilateralists feel the pain of others and believe in something bigger than themselves. A second group, comprising 22%, are pragmatic multilateralists who want to know that taxes paid out for international development are spent well. And there is a third group, 21%, self-interested multilateralists, who will endorse cooperation if they can see that it benefits them, whether through food on the table or peace and security.

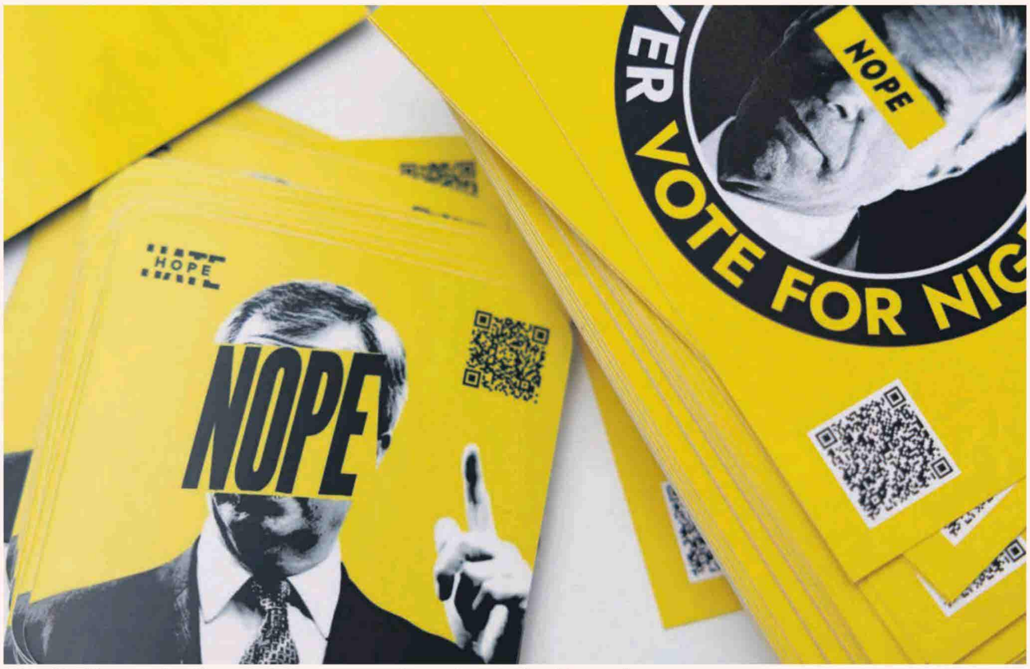
So a clear majority can be constructed for humanitarian aid if money is well spent and for global action to deal with global problems, like climate crisis and pandemic prevention, as long as this case is argued on grounds of enlightened self-interest, and if we stress the reciprocal benefits. And thus for those who have long wondered whether we cooperate out of need or if we need to cooperate, the answer is both.

And this openness to cooperate across borders shows how we can turn back the xenophobic tide: we can defeat today's negative, inward-looking and often aggressive and authoritarian nationalism that demonises immigrants, foreigners and "others" as long as we champion a positive, outward-looking and inclusive patriotism that responds to people's desire to belong and resonates with their immediate concerns.

And while in-depth polls tell us that across the west, illegal immigration is the biggest national issue, they also tell us that the public are even more concerned about what is happening in their own lives and communities. Last month, Keir Starmer spoke movingly about how what's good about Britain can drive out what's bad, doing so precisely because in most western countries, "broken" and in "decline" are the words people have for years most commonly cited when asked about both our economy and society.

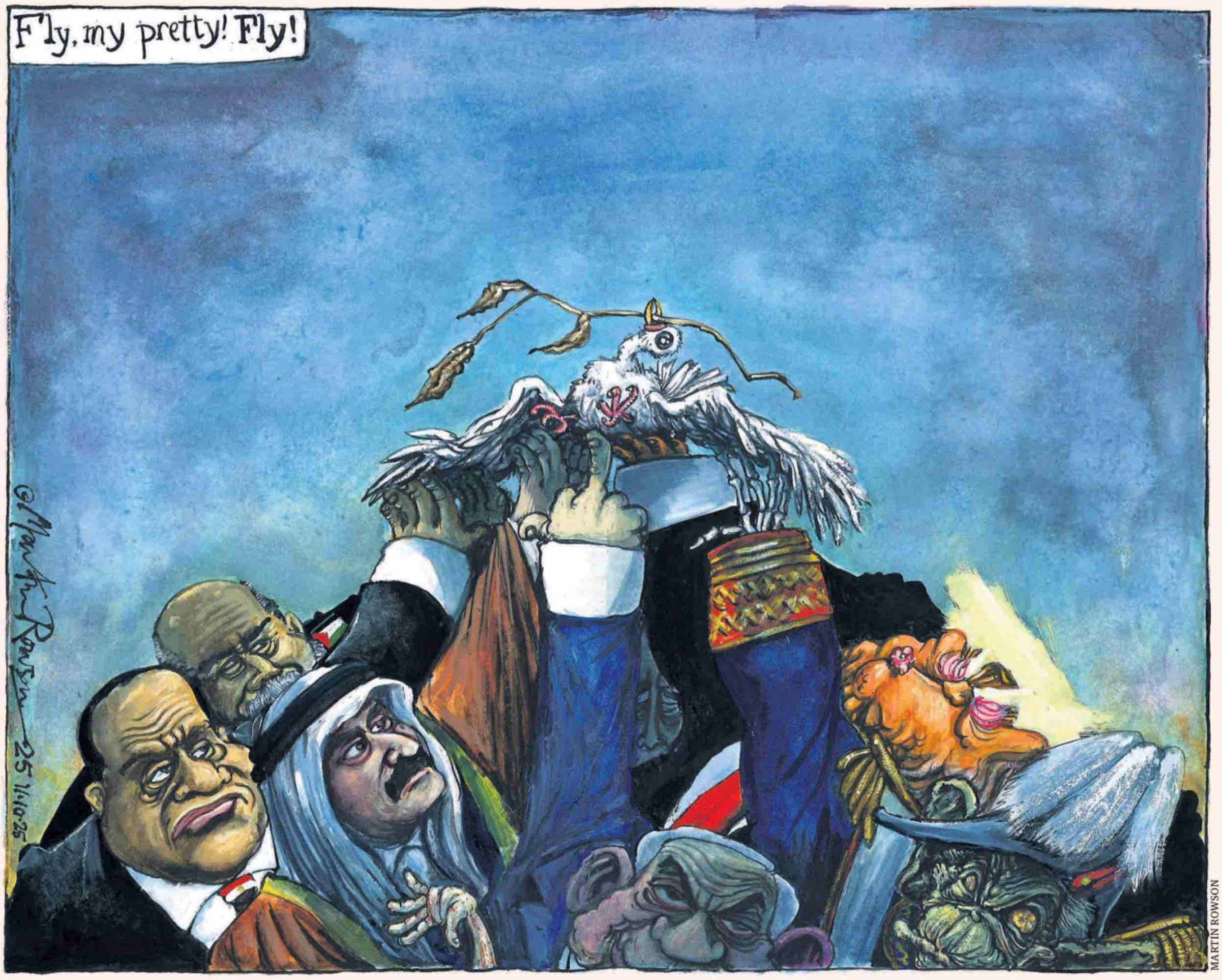
But as the prime minister also reminded us, the far right is more interested in exploiting grievances than ending them. Reform's plan to reduce public spending by £275bn would not repair downtrodden communities but ravage them, wrecking any spirit of solidarity. Under a Farage hard-right regime, you will not be able to afford to be sick, disabled, poor or vulnerable. Every day from now on, and in every constituency, Reform should be asked which hospital, which school and which public service will be the first to be cut or closed.

"Faragism" is neoliberalism at its most inhumane, more destructive even than monetarism, and vindictive far beyond austerity. What the public are telling us is that they want their governments to rebuild our economies and civic societies. Reform and its global allies should be exposed day after day for policies that would devastate both. And for those of us who believe our best days could be ahead of us, we can go beyond highlighting Reform's hypocrisy by setting out a case for a better Britain that appeals not just to idealists but to pragmatists, to self-interest, and to the everyday compassion of the British people.



Hope Not Hate merchandise at the Labour party conference last month in Liverpool PHOTOGRAPH: DAN KITWOOD/GETTY IMAGES

Gordon Brown *was UK prime minister from 2007 to 2010*



I'm bereft of my kids - and of inspiration

Helen Serafinowicz

Motherhood has given me two kids and a TV show (and spin-off). When I first entered Motherland, it was clear this was a mad world and ripe for the picking. Finding your tribe when you have nothing in common with your fellow tribespeople, other than babies of the same age, is very difficult, but also rich in inspiration for comedy.

Over the years, I would write down little moments or observations that made me chuckle: arriving at a kids' party dressed exactly like one of the dads; watching in amazement as a mum asked an usher to turn the heating up in the auditorium on a school trip to see The Lion King; the mum whose advice to her children if they got lost in a crowd was "think like a paedophile" (we used this - with permission - in the Halloween episode of Motherland).

My document of observations grew into Motherland, and more recently Amandaland. But now my little inspos have left, and I don't know what to do with myself. They both started uni last week. I was dreading this moment, and as a single mum I'm finding it unbearable. The house is so quiet. The kitchen is permanently clean and there are no trip hazards in the hallway. Both gone. Two for none. It's so sad.

My daughter was the first to go. It was a slick operation. Three hours down the M11 and M25 with her hijacking the music and whacking me every time she saw a yellow car. We had a time slot to collect her keys, and between the two of us lugged her stuff up a couple of flights of stairs to her new home; a 6.5-sq metre room with the basics: a desk, chair, bed, storage and noticeboard. It was quite clean apart from a Cheerio in the wardrobe. After I used all my God-given strength to get the single sheet to fit her small double mattress (I should have checked this) and unpacked an awful lot of my clothes and makeup that she had pilfered from my bedroom, it was time to say goodbye. The sight of her walking away (in my boots) hit me in the stomach.

A week later, it was five hours up the M6 with an overnight stop in a budget hotel bursting with emotional families on the same path. Campus was rammed with cars full of duvets, air fryers and students trying to hide their nerves. I hadn't learned my lesson from the previous week and almost passed out, straining like I was in labour to get another single sheet over another small double mattress. I didn't want to cramp my son's style by hanging around, saying hello to his neighbours, so we had a solid hug and I managed to sneak in a kiss on his cheek without inflicting any embarrassment on him whatsoever. He waved, then disappeared into his building, jangling his keys like he'd just bought his first house.

As I drove off, there were a bunch of students holding banners from their various societies that said things like BEEP FOR NETBALL and HONK FOR WATERSPORTS, so I honked and they cheered and I cried for most of the five-hour drive home with nobody to pass me a salt and vinegar Disco.

When I got home, my eyes had dried up. I felt utterly bereft, then I switched on the hall light and the bulb popped out of the socket and the cat ran in and puked up a tiny snout and a tail. I walked the dog to the pharmacy today to collect my son's backup EpiPen for his lobster allergy (though I'm sure he'll manage to avoid lobster for the next few years). The walk took me past the kids' old primary school. The sound of the little children playing in the playground started me off again and I had to dig deep to control my lip wobble as I said my son's name, collecting his prescription.

I owe so much to my children. Motherland wouldn't exist without them. In our first Motherland Christmas special, Kevin is testing Minecraft to see if it's suitable for his girls. I got most of his dialogue from my son and his experience of having his homestead set on fire and his pigs stolen by his so-called friend. I'm hoping this next chapter of parenting will deliver another wave of anecdotes I can use in my writing, although it seems the world goes quiet. The mums sign up for upholstery courses while the dads have their midlife crises.

Apparently, Gordon Ramsay wore his son's underpants after he dropped him off at uni. I am sad, but I'm fine not wearing my kids' underwear. There are counsellors who specialise in empty nest syndrome. Instead I've signed up for netball on Tuesdays and Thursdays and I'm going to have a good old sort-out of the house, ready for when they're back for Christmas. Let's hope they bring home lots of material!

Helen Serafinowicz *is a writer and television producer*

OPINION

The Washington Post
AN INDEPENDENT NEWSPAPER

EDITORIALS

America's good-cop, bad-cop approach to Venezuela

ALFREDO LASRY R/GETTY IMAGES

María Corina Machado speaks at a 2024 rally in Caracas, Venezuela.

THE NORWEGIAN NOBEL COMMITTEE'S decision Friday to award the Peace Prize to Venezuelan opposition leader María Corina Machado was a deft means of shining a spotlight on the despotic regime of Nicolás Maduro. But it also raises an important question: What exactly is America's Venezuela policy?

Maduro has caused countless headaches for three presidents and fueled the migration crisis in America's backyard, but he has clung to power through brutality and with the help of American adversaries such as Cuba and Russia.

After trying and failing to oust Maduro during his first term, President Donald Trump has been more opaque about his ultimate objective this time around. Over the summer, the United States surged several warships and fighter jets to the Caribbean, along with an attack submarine and thousands of troops. The White House says this massive force is there for drug interdiction, and indeed it has attacked and sunk four speedboats. Pressed to provide a legal rationale for these moves, the Trump administration told Congress that the United States is engaged in "armed conflict" with drug cartels.

But the real target appears obvious. In early August, the State Department doubled the bounty for information leading to the arrest and conviction of Maduro to $50 million. Secretary of State Marco Rubio called Maduro illegitimate and described him as the leader of a cartel who is killing Americans by surging drugs into our country.

> SECRECY AND SABER-RATTLING OBSCURE WHETHER REGIME CHANGE IS THE TRUE AIM OF THE TRUMP ADMINISTRATION.

Trump has simultaneously pursued a second track. His special envoy to Venezuela, Richard Grenell, has been negotiating with the Maduro regime for access to Venezuela's vast troves of natural resources. Media reports suggest that Maduro had made generous offers of preferential contracts for American business and to scale back ties with countries including China. Clearly Maduro is spooked by the show of force right off his coast, but Trump rejected his first offer and has shut down negotiations.

Rubio has been playing the bad cop to Grenell's good cop. Perhaps the secretary of state's arguments won out with Trump. Machado, the Nobel Prize winner, recently presented an economic vision for a free Venezuela that could triple the country's gross domestic product over 15 years by tapping its vast resources. Undeniably, U.S. economic interests will be better served over the long term if Venezuela is rid of Maduro, who will never be a reliable American partner like Machado.

But Trump is unpredictable and could simply be driving a hard bargain. If Maduro is willing to give up so much to stay in power, perhaps the United States can hold out for more. The risk of threatening to use military force in a credible way is that sometimes it winds up spiraling into war.

The United Nations Security Council held an emergency session Friday afternoon at Venezuela's request, due to its fears of an "armed attack" on its territory. Are decapitation strikes on the agenda? An invasion? Or is this just saber-rattling?

Meanwhile, Machado continues to live in hiding. She will not be able to attend the Nobel ceremony to accept her Peace Prize. A better prize for all Venezuelans would be if she someday got to lead the country she is so courageously fighting to save.

Yet another vindictive prosecution

SAY THIS FOR the Trump administration's indictment of New York Attorney General Letitia James (ostensibly for mortgage fraud but really for being his political opponent): It bears some resemblance to what James did to Donald Trump when she had power over him.

That does not make the decision to bring these charges any less abusive.

James, a Democrat, campaigned to be attorney general in 2018 on the promise of pursuing Trump. That was inappropriate, even unethical, but also rational politics in blue New York. She kept her promise, combed through his business records, claimed he made false statements applying for loans and in 2024 won a civil-fraud judgment for more than $400 million before a friendly judge. The penalty was overturned on appeal, with one judge calling James's case against Trump political "retaliation." It sure was.

Trump makes no secret of his own desire for retaliation. Hence the indictment against James for an alleged discrepancy on mortgage paperwork five years ago. Instead of merely seeking money from James, the Justice Department is charging her with crimes carrying up to 30 years in prison.

YUKI IWAMURA/AP

New York Attorney General Letitia Jamest on Feb. 14.

> LETITIA JAMES ABUSED HER POWER WHILE TARGETING TRUMP. THAT DOESN'T MAKE HER INDICTMENT ANY LESS ABUSIVE.

The indictment says that when James purchased a house in Virginia in 2020 as a "secondary residence," she signed a rider to the contract limiting how she would use the property. The charges claim she rented out the property, which violated the contract. She calls the allegations "baseless."

Mortgage agreements contain lengthy fine print, and this is obviously not the kind of discrepancy that normally prompts federal felony charges. If James rented out the property, it's not even clear that was prohibited by the agreement, which is open to interpretation. And if it was prohibited, prosecutors would need to prove James acted with intend to defraud, a high legal hurdle.

Trump had to strong-arm the Justice Department to bring this weak case. He called for charges against James and forced out U.S. Attorney Erik S. Siebert in the Eastern District of Virginia (whom Trump appointed) after Siebert concluded there was insufficient evidence to prosecute the president's foes. Trump then installed Lindsey Halligan, his former defense lawyer and a White House aide, into the role on an acting basis. She persuaded grand juries to indict James and former FBI director James B. Comey.

Justice Department special attorney Ed Martin also appears to be leading Trump's weaponization of the law, including by posing for a photo outside James's home in New York. Trump initially nominated Martin to be U.S. attorney for D.C., but the Republican-controlled Senate Judiciary Committee didn't let him through. Trump is embarrassing the Senate GOP by circumventing its advise and consent role.

Though Trump's first two revenge prosecutions (James and Comey) look like legal duds, that doesn't mean they won't consume significant executive and judicial resources and poison politics further. Perhaps reforms to the grand jury system are needed so that it acts less like a rubber stamp for determined presidents to conduct fishing expeditions against their enemies. Congress could also shorten the statute of limitations for certain offenses. For example, the crimes James is charged with have a limitation of 10 years. Shortening that window could make it harder for political prosecutions.

Fortunately, in the American system, the prosecutor does not also get to serve as the judge, jury and appellate court. Just as Trump fought the overtorqued charges against him, James now gets to avail herself of the same rights that every other defendant has.

DRAWING BOARD

LISA BENSON/TRIBUNE CONTENT AGENCY

LETTERS TO THE EDITOR

That totterin' town

On Sept. 30, Immigration and Customs Enforcement agents conducted a military-style raid of an apartment building in Chicago, where U.S. citizens as well as non-citizens were battered, children were left hysterical, and homes were broken into and trashed. The episode sent chills across the nation, but it took The Post until Oct. 5 to even mention the assault. It merited just one sentence in the front-page article "Violent clashes erupt in Chicago over ICE crackdown": "ICE agents and other federal authorities in armored vehicles and helicopters swarmed a building on Tuesday as they went door-to-door at a large apartment building on the South Side of Chicago looking for suspects." The episode left me more dismayed than ever over the behavior of the Trump administration. But not as disappointed as I was by The Post.

Joan Arsenault, *Arlington*

Don't put stock in congressional virtue

Regarding Michael Ramirez's Sept. 30 editorial cartoon, "Taking stock":

MICHAEL RAMIREZ/LAS VEGAS REVIEW-JOURNAL FOR THE WASHINGTON POST

I'm confused as to why Ramirez apparently believes that congresspeople having inside information on businesses' activities is a good and normal thing. He seems to believe that their ability to leverage the stock market is a function of "basic economics" rather than access to information not available to the public. Why wouldn't he want to prevent politicians from gaining millions of dollars through what would be an illegal activity if performed by a private citizen?

Al Mauroni, *Montgomery, Alabama*

An even firster first

In his Sept. 20 Free for All letter, "Sibling rivalry," Stan Heuisler stood up to The Post's condescension toward Washington's little brother to the north: During the War of 1812, "while D.C. was getting its burned-out city center back in order, Baltimore erected the country's first major Washington Monument, which still stands."

True enough, but the *first* Washington Monument is in Washington Monument State Park, near Boonsboro, Maryland. It is easily accessed via the Appalachian Trail.

Doug Gaede, *Freeland, Maryland*

Stan Heuisler responds: Some friends from D.C. accuse me of having a "chip on my shoulder" when I write such invective. I paraphrase Winston Churchill. Responding to French generals' warning that Hitler's bombers would wring England's neck just as with a chicken, Churchill said "some chicken, some neck." So to my Washington friends, I say "some chip, some shoulder."

From vibe shift to vibe delete

The Oct. 1 Sports article "A timeout on the court," about an Ivy League basketball player preparing to transfer schools, contained this peculiar line: "[Caden] Pierce could visit a school, vibe with the staff, fall in love with the program and campus, then watch them recruit two similar players in April."

"Vibe with the staff"? Try a little harder. Affected attempts at hip slang are awful.

Jeff Ward, *Bethlehem, Pennsylvania*

Cats have nine lives to take

In her Oct. 4 letter, "D.C. is overrun with rats. Why isn't Tokyo?," Sandra Cesca asked, "What are they doing in Tokyo, a population-dense city, that could be replicated" in ratty cities such as D.C.? Rat expert Jonathan Richardson responded, pointing to Japan's strict cultural norms around cleanliness: "Overflowing rubbish bins and litter are rare, which helps limit rat populations." That said, Richardson cautioned, "If you know where to look, rats are likely thriving somewhere in every large city."

Curiously, neither of them mentioned a universally known way to help keep rat populations in check. Why do you think they have cats on ships?

Lisa Lawler Colvin, *Washington*

Germany, centaur capital of the world

The Oct. 6 letters package "Why America should legalize horse slaughter" brought back memories of eons ago.

My wife, Walli, and I were in Germany to see her family. One afternoon on a day trip, we visited a small village restaurant where the staff challenged me to try horse meat.

I accepted the challenge, enjoyed the lunch and savored our time together. As we were departing the restaurant, they asked me what I thought of my horse meat lunch experience.

I said it was okay — but afterward I had an incredible urge to run and jump over the nearby fence.

Charlie McGovern, *Columbia*

Write to us
The Post recently compiled 101 of the greatest works of and about Washington, D.C. What are the greatest works that best represent the city you live in and why? Share your response with us at **wapo.st/cities_greatest**, and it might be published in the letters to the editor section.

Letter submissions
Send letters to **letters@washpost.com**. Submissions must be exclusive to The Post and should include the writer's address and day and evening telephone numbers. Letters are subject to editing and abridgment. Please do not send letters as attachments. Because of the volume of material we receive, we are unable to acknowledge submissions; writers whose letters are under consideration for publication will be contacted.

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The Washington Post accepts opinion articles on any topic. We welcome submissions on local, national and international issues. We publish work that varies in length and format, including multimedia. Submit a guest opinion at **oped@washpost.com** or read our guide to writing an opinion article at **wapo.st/guestopinion**.

OPINION

FAREED ZAKARIA

Five realities about the new Middle East

Donald Trump is often called a "transactional president," and this week, that apt description led to success. The ceasefire negotiated between Israel and Hamas was a transaction, and a complicated one at that. It's worth placing all the caveats that this is only Phase 1 and it may break down or get stuck if the parties renege on their commitments. But the first phase is in fact a plausible pathway to ending the horrific violence in Gaza and represents a chance well worth taking. It reveals five important realities about the Middle East today.

First, Israel is in a commanding position of strength. Dan Senor, a Republican analyst and author, noted on my CNN show last week that the deal was an Israeli plan, or at least an American plan that Israelis could live with. Israel is the power on the ground, and it has become more powerful in the last two years as it defeated an array of its enemies abroad. Nothing is going to happen without its consent. As a practical matter, if you want Israel's guns to stop firing, you need a plan that Israel can live with.

Indeed, Israel's rise has been so dramatic that both Qatar and Saudi Arabia have warily begun to balance against that strength — Doha seeking military guarantees from Washington and Riyadh signing a mutual defense pact with Pakistan, a nuclear-armed nation.

Second, you can get concessions from Israel, but it takes political capital and skill. Trump used both intelligently in getting Prime Minister Benjamin Netanyahu to accept the deal. Trump has huge political capital with Israelis, and he used it to pressure Netanyahu. He seized the moment when Israel's attack on Hamas operatives in Doha produced lots of blowback in the region. And he took Hamas's partial acceptance of the plan and pretended it was a full embrace — even though the Israelis had begun to balk — forcing the deal to a close.

Third, you see in the negotiations the reality of the new Middle East. Look at who was in the negotiating room for the deal: Egyptians, Turks, Israelis, Qataris and Americans, along with Hamas. The Egyptians are important only in this particular context because of their border with Gaza and the Rafah crossing, which is a key corridor for flooding aid into Gaza. Their attendance harkened back to the old Middle Eastern order, which was dominated by the large, populous and culturally rich countries.

The new Middle East is dominated by Israel and the gulf states. Nowhere is that more evident than in the rise of Qatar, a tiny, gas-rich country with just around 400,000 citizens but with a shrewd leadership that is willing to talk to all parties, including Iran and Hamas, making them indispensable in any conflict mediation. Where the old Middle East was led by large states that espoused pan-Arabism and encouraged Palestinian terrorism, the gulf kingdoms search for modernity, technological advancement and above all, peace and stability. Turkey is the new wild card, strong but ruled by a willful leader who has flirted with Islamic radicalism.

Fourth, the new Middle East is one where the Iranian threat has weakened considerably. Ever since the Islamic revolution of 1979, the Arab states have worried about an expansionist, ideologically aggressive Iran. But over the last 15 years or so, Iran has been in economic misery and periodically convulsed by political crises, from the "green movement" to the widespread protests of the women's movement to divisions within its ruling elite. Through all this, Iran faced a series of devastating Israeli attacks on its nuclear scientists, military leaders and nuclear facilities, culminating in the attacks in June that were so comprehensive as to almost be akin to an invasion.

Finally, despite all the violence, extremism and animosity, there is really no long-term plan that doesn't end with a two-state solution. The veteran American diplomat Martin Indyk, who was passionately pro-Israel and also in favor of a Palestinian state, wrote an essay in Foreign Affairs last year, a few months before he died, titled "The Strange Resurrection of the Two-State Solution." He argued that decades of abandonment of that objective have only proven there is no alternative. Every other possible alternative — continued occupation, one state, expulsion — doesn't work, so people will eventually, reluctantly come back to it.

But that will only happen now if Trump comes to it himself and invests it with his power and energy. His plan makes a small reference to it. But in announcing the ceasefire, he hoped not just for a ceasefire but for "Everlasting Peace." That would require more than a transaction; it would require vision. The fruits of that vision — genuine and lasting peace — would echo through history, and would constitute a prize much larger than even the one awarded by the Nobel Committee every October.

ADEK BERRY/AFP VIA GETTY IMAGES

Opening Ceremonies for the World Humanoid Robot Games in Beijing on Aug. 14.

The Chinese robots are coming

BY SELINA XU AND HELEN ZHANG

Robot dogs. Humanoid helpers. Entirely automated dark factories without human workers. These might seem straight out of a sci-fi novel, but they are arriving full force in China as we speak. After years of patient investment, China is on the cusp of a robotics revolution.

If embodied intelligence — think AI-powered robots that can navigate the real world — is the next frontier of AI, then China appears poised to dominate. Though the United States still has distinct advantages in software, advanced AI chips and foundational research, China leads in robot hardware, deployment and policy support.

Last year, China installed nearly 300,000 robots in its factories, more than the rest of the world combined, according to a September report by the International Federation of Robotics. More than half were made domestically. The United States installed only 34,000 robots, with most of these imported from Japan and Europe.

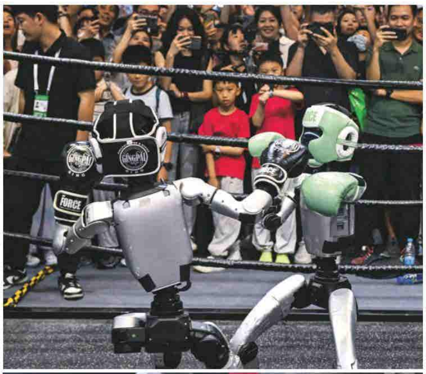
A rising new era of Chinese technological supremacy has been proclaimed repeatedly over the past two decades, but we had never felt it more acutely than on our trip this summer to China. There, we took the high-speed train from Shanghai to Hangzhou — a city that has emerged as a global powerhouse for AI and robotics (in large part thanks to DeepSeek). Speaking to founders and engineers from Hangzhou's "Six Little Dragons" — an online moniker for the city's best-known tech start-ups — we could feel the ground beneath our feet shifting.

Part of the reason is sheer manufacturing prowess. From actuators to sensors to batteries, China has built a comprehensive supply chain that allows start-ups to rapidly fine-tune robot prototypes until a viable, affordable and scalable product emerges. Most of the companies we visited build their robots close to their research labs, creating fast feedback loops. Companies are also prioritizing vertical integration, with many producing key components in-house and procuring base materials domestically. Entry prices for humanoid robots are dropping drastically. In July, Unitree released its R1 bot for under $6,000, about a third of the price of its G1 robot from a year earlier.

The world's second-largest economy is eager to deploy this technology. With an aging population, China hopes to address its labor shortage with AI and robotics. Most of the start-ups we learned about were already deploying their robots on factory floors, spurring data collection that's necessary to train the robots' brains.

Public enthusiasm is growing, too, in part driven by policymakers' support and high-profile showcases of the technology. At the glitzy World Artificial Intelligence Conference in Shanghai this summer, the exhibition halls were filled with humanoid boxers fighting in the ring, quadruped dogs on their hind legs and robots serving popcorn. A few weeks later, Beijing hosted the first World Humanoid Robot Games, where droids raced, danced, played soccer and navigated obstacle courses.

Chinese robot companies are running at full speed. Founders we spoke to talked about going from double-digit unit counts to tens of thousands within months. China is full of hubs — from Shenzhen to Hangzhou — that are "communities of engineering practice" where entrepreneurs, investors and engineers can mingle with the world's most experienced manufacturing workforce to innovate quickly. As China analyst Dan Wang writes in his recent book, "Breakneck," "In China … tech innovation emerges from the factory floor, when a new product is scaled up into mass production."



HECTOR RETAMAL/AFP/GETTY IMAGES

Robots box and serve popcorn at the World Artificial Intelligence Conference in Shanghai in July.

Expect these innovations to charge abroad. Almost every founder we met wanted to expand overseas, including into the United States. Part of the reason is brutal price wars at home, with razor-thin profit margins amid competition against a glut of other companies (what some dub neijuan, or "involution"). Despite these headwinds, the founders' zeal was notable — they sincerely believed that "Made in China" was the sign of world-class quality, especially in high-end manufacturing. Already, Chinese companies such as BYD, CATL, DJI and Huawei are global leaders in electric vehicles, batteries, consumer drones and 5G networks, respectively. The emerging crop of start-ups in robotics and AI are determined to follow in their footsteps.

A rising era of Chinese technological supremacy has been proclaimed repeatedly over the past two decades, but we had never felt it more acutely than on our trip this summer to China.

Born in the 1990s, this new generation of entrepreneurs and engineers appears to be starkly different from the more Westernized previous generation. While China's older tech pioneers tend to idolize Silicon Valley, younger founders find their role models in people such as DeepSeek's Liang Wenfeng and Unitree's Wang Xingxing — both of whom studied exclusively at Chinese universities and are known to predominantly hire domestic talent.

A December analysis from Citi GPS projected that the world would be populated by 648 million humanlike bots by 2050, unlocking an enduring production advantage and immense economic potential as robots manufacture more robots — better, cheaper, faster.

Much ink has been spilled about how the U.S. can reindustrialize. When it comes to robotics, the U.S. needs to invest in infrastructure to power the industries of the future — from building a better electrical grid to joint ventures with allies that can onshore manufacturing expertise for critical robotics components. America also needs to double down on its strengths in ways that could prove difficult in this turbulent political moment: university-driven fundamental research, immigration policies that welcome the best talent from abroad, and a vibrant entrepreneurship ecosystem that's not mired in regulatory hurdles.

The robot race isn't over. But unless the United States ups its game, it seems clear that this is a race China will dominate.

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Afghanistan's internet blackout was a warning

BY SHABANA BASIJ-RASIKH

I was talking to a teenage girl in Afghanistan last week. She was on her laptop and I was on mine. She was explaining to me how she came to understand that women don't have the temperament to be politicians.

And then she vanished. One moment, she was there. The next moment, gone.

She hadn't shut off her computer. She'd lost internet access, just like everyone else in Afghanistan, the literally tens of millions of people who went dark in the unprecedented nationwide internet shutdown that lasted more than two days. No phone calls, no text messaging, no emails, no social media, no WiFi — nothing. A complete blackout for everyone in the country.

Blame immediately fell on the Taliban. Properly so: In mid-September, they cut off fiber-optic internet in several Afghan provinces, stressing the need to combat "immorality and vice." But they left the mobile internet untouched. What happened seemed like the next step ratcheted up to the level of total information control. The thousands of girls and women who defy the Taliban's ban on girls' education by taking internet classes — including the students of SOLAx, my Afghan girls' school's online academy — would find their opportunities eclipsed, gone dark just like their computers and phones.

Afghanistan has become a place where women's dreams glow only with dim light.

The Taliban said the blackout was due to them upgrading Afghanistan's tech infrastructure. Was it merely due to ineptitude? Even if so, the Taliban is clearly working on implementing a dark vision.

The Taliban recently banned all books written by women from being used in universities in Afghanistan. More than a dozen university-level subjects have also been banned. Among them are gender and development courses and courses on women's sociology.

Women, of course, are not attending these universities. Women haven't attended any university in Afghanistan since 2022. Girls haven't gone to school past sixth grade since the Taliban's seizure of power in 2021. An Afghan girl's formal education ends around the time she enters puberty. For the Taliban, no further education is needed for the only job she is meant to do.

"I'm 14 now," the girl I was talking to, the girl who suddenly went dark last week, told me. "I have big dreams. I wanted to be a member of Parliament; I've always been drawn to law and justice. Then I did research and found out that women are soft hearted and cannot be great judges. So, I thought about other things I can do."

In the space of four years under the Taliban, Afghanistan has become a place where women's dreams glow only with dim light, a place where a teenage girl can come to understand that her place in her society is not what she desires it to be — a place where she has come to understand that she was wrong to ever have that desire at all.

The internet is back on in Afghanistan now. And it needs to stay on.

In 2023, when I spoke at the U.N. Security Council, I urged the international community to take the necessary steps to keep the internet accessible within Afghanistan. With internet, education could come into every Afghan home, into the smartphone in the palm of every Afghan girl's hand. And we as Afghans — educators and activists — would take care of the rest. But without the internet, it's darkness. The Taliban took the internet dark for two days. They can do it again, and they can do it for much longer. This cannot be allowed.

I'd like to talk to that girl again, the girl on the laptop that went dark. I'd like to share a poem with her, a poem that a different Afghan girl shared with me just a few weeks earlier. A teenage girl in Kabul, looking to the sky and the illumination there that defies all attempts at eclipse.

A girl cries,

not for her scars but for her rights

she wants her wings to fly

you can burn her wings,

but she can grow them bigger this time

maybe you can make her
wear the burqa

but you can't hide what she
has under it

maybe her mind's brightness
blocks your sight

but you can't hide the
sun with two fingers

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