

Beyond the Fed: Why gold's record rally has deeper foundations

GOLD's extraordinary rally is entering a more consequential phase. After surging to historically elevated levels, the yellow metal is now testing the market's conviction that its bull run still has room to run. With prices moving towards \$4,400, the next leg may depend less on momentum and more on the interplay between US monetary policy, the dollar and geopolitical risk.

Recent US data have offered some comfort to gold bulls. Inflation has softened, while employment and consumer activity have shown signs of losing momentum. That combination has reduced expectations of further monetary tightening by the Federal Reserve, putting pressure on the US dollar and strengthening the appeal of non-yielding assets such as gold.

But it would be a mistake to reduce gold's story to a simple Fed narrative. As Ross Maxwell, Global Strategy Operations Lead at VT Markets, points out, monetary policy remains the principal driver, but geopolitical risks, dollar weakness and structural diversification flows are increasingly important parts of the equation.

The geopolitical premium, in particular, cannot be ignored. Persistent uncertainty around the US and Iran is keeping safe-haven demand alive. In an environment where investors remain wary of sudden geopolitical shocks, gold continues to serve its traditional role as a portfolio hedge.

More significant, perhaps, is the structural demand coming from central banks. Over the past few years, gold has increasingly been treated not merely as a commodity or inflation hedge but as a strategic reserve asset. Central-bank diversification away from concentrated exposure to traditional reserve currencies provides a longer-term underpinning to prices. That

demand is less sensitive to short-term swings in interest rates and can help explain why gold has remained remarkably resilient despite periodic pullbacks.

The market's behaviour is itself revealing. At such elevated levels, conventional wisdom would suggest that investors should be eager to lock in profits. Instead, pullbacks appear to be attracting fresh exposure. That indicates a shift in investor psychology: dips are increasingly being viewed not as the end of the rally, but as opportunities to rebuild positions.

Technically, however, the road ahead is unlikely to be smooth. The \$4,400-\$4,450 zone represents immediate resistance. A sustained break above \$4,500 would reinforce the bullish structure and potentially open the door to \$4,650-\$4,700. Beyond that, the higher-timeframe resistance lies around \$4,850-\$4,900.

The downside levels are equally important. The \$4,150-\$4,200 band is the first major support zone that bulls need to defend, while \$3,950-\$4,000 remains the more significant psychological and structural floor.

For investors, therefore, the next three to six months may be defined by volatility rather than a one-way ascent. Gold could challenge \$4,500 and, under a more dovish Fed and a weaker dollar, potentially move towards \$4,900. But a fresh inflation shock or a more hawkish Fed could quickly alter that calculus. The larger lesson is that gold's rally is no longer simply a bet on lower interest rates. It reflects a broader search for safety, diversification and monetary insurance. The \$4,500 threshold may prove an important technical milestone—but the durability of the rally will ultimately depend on whether the global macroeconomic and geopolitical backdrop continues to justify gold's elevated status.



Unity remains a powerful force

The spirit of cooperation binds nations, institutions, professional groups, political organizations and even the animal kingdom



THE value of the spirit of cooperation and the strength that comes out of group activity has also been realised for long at the international level. For instance, the United Nations is an international organization founded in 1945 after the Second World War by 51 countries committed to maintaining international peace and security, developing friendly relations among nations and promoting social progress, better living standards and human rights. There are also many associations of countries, known as international or intergovernmental organizations, which help nations cooperate on global peace, trade, security, and development. Those include NATO, the North Atlantic Treaty Organization, ASEAN, BRICS the intergovernmental organization of 11 major emerging economies and developing countries, BRICS, the organization comprising Brazil, China, Egypt, Ethiopia, India, Indonesia, Iran, Russia, Saudi Arabia, South Africa, and the United Arab Emirates, the Group of Twenty, EU, the European Union, and SAARC, the South Asian Association for Regional Cooperation.

An interesting type of groups comprises what are known as cine star fan clubs. Around the middle of the 20th century, when the ambience of the film world centred round matinee idols such as M.G. Ramachandran and N.T. Rama Rao, that the culture of such clubs began. The fans treated the actors like minor deities and even engaged in rituals like bathing giant cut outs in milk. Importantly, they also under-

took welfare measures such as organising blood donation camps, in addition to undertaking other works of a charitable and community service nature such as providing educational aid for poor students and distributing free food for those in need. Over time, they also became powerful political vote banks and springboards for regional political power.

On the flipside, however, rivalries between such associations often escalated into physical violence some of which resulted in severe injuries and even tragic deaths. Large-scale street brawls, vandalism of theatres, and reckless celebrations endangering public safety, disrupting local communities became common, apart from toxic digital harassment, and deeper social polarisation.

As a result, the activities of the clubs have amplified social divides instead of fostering pure entertainment and abandoning a healthy and artistic discourse in the film industry informed by professional camaraderie. Many of them openly profess continued loyalty to political parties through organisations such as the Rashtriya Swayam Sevak Sangh (RSS), the All India Trade Union Congress.

Certain attributes of educational institutions help build unified community, identity, provide equality, reduce social pressure and improve campus safety. For instance, having a school uniform, an anthem, a motto that captures the core values of the institution and inspires students. They also serve to create a bond of commonality and a feeling of awareness. Schools, in particular, are known to use names and colours for different houses to build a sense of community, encourage teamwork and spark, friendly competition. The arrangement also teaches the pupils the value of leadership and sportsmanship.

Associations of people belonging to professions, such as medicine, the law, accountancy, and the like, also exist at the national and provincial lev-

els There is for example, the Indian Medical Association, the largest represented organisation of doctors of modern system of medicine in India which looks after the interests of doctors as well as the wellbeing of the community at large. It offers its members various services such as networking, and continuous legal education.

Employees of the governments at the national and state levels also, on similar lines, have formed into associations. As an example, associations of members of the All India Services and the central and state government service, which

tion as voluntary membership societies. Similarly, the Institution of Engineers is a national organization for engineers in India and is the world's largest multi-disciplinary engineering professional society. Chartered Accountants' Societies belong to the same genre and are voluntary or statutory professional organizations that support tax, accounting, and audit professionals.

There are also associations with a somewhat more serious and purposeful set of objectives, such as, for instance, the RSS, a right wing, Hindu nationalist volunteer organiza-

tions of teachers and students, among others, have also often been known to go on strikes to press for the demands of their members. One such strike, the All India Railway Employees' strike called by George Fernandes, then a union leader and subsequently a Union Minister, is remembered for the dynamic leadership provided and the results achieved. One cannot, however, forget the amount of hardship and inconvenience caused to the general public on account of that event

The spirit of team work is not confined to human beings alone. In fact, several animals show teamwork. Ants and bees, for example, are known to be the ultimate symbols of collective cooperation and division of labour. Notable examples of species of animals working together are wolves, orcas, and elephants. Several types of birds, such as woodpeckers and parrots, also demonstrate how amazing teamwork can help them survive, save energy, and raise their young. They work together in groups using smart habits like shared leadership, cooperative breeding, and synchronized movement.

What comes out from the discussion on this subject over two weeks, essentially, is that the message of that well-worn cliché is that the message of the adage that unity is strength, continues to hold good. Given mutual support and a spirit of cooperation, a team can overcome any problems no matter how challenging it may be in terms of dimension and complexity. And, to reinforce the strength of that statement with another cliché, the lesson for the members of any team, group or organisation is that united they stand, divided they fall. So appropriate, indeed, not only for the people belonging to different faiths, cultures, and regions of our country, but also its political parties!

(The writer was formerly Chief Secretary, Government of Andhra Pradesh)

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further the common interests of their members in cultural and literary activities. They also organize exposure activities, such as lectures by experts, in emerging phenomena such as climate change in artificial intelligence. On occasion, they have also been known to take up matters relating to their service conditions with the governments concerned. Their activities, however, stop short of those of similar groups in other areas such as the central and state government employees, the railways, the banking services, insurance, generally known as trade unions, in addition to similar groups of teachers and students.

Likewise, the Bar Association of India, alongside organizations like the Indian National Bar Association and the Indian Lawyers Association, at the national level, and Advocates Associations at the state level represent the interests of lawyers. Unlike statutory bodies such as the Bar Councils, which handle licensing and professional discipline, such associations func-

tion and the core ideological leader of the family of affiliated groups of the Bharatiya Janata Party. It is known for its focus on character, building, individual, discipline, physical fitness, ideological commitment, and societal cohesion. The organization has produced eminent and successful leaders such as M. Venkaiah Naidu, Atal Bihari Vajpayee, L.K. Advani and Narendra Modi.

The Akhil Bharathi Vidyarthi Parishad, India's largest student organisation and an affiliate of RSS focuses on student activism, education, educational reforms, leadership development, and fostering patriotism. The Students' Federation of India, likewise, is a major Left-wing student organization affiliated with the Communist Party of India (Marxist), focusing on student rights, education access, and social justice. The All India Students' Federation is a similar students' wing of the Communist Party of India. It actively supports LGBT rights. Trade unions and associa-

Psychedelics may reorganise, not scramble, the brain

Machine-learning analysis reveals hidden patterns of neural activity

DEVON STOLIKER & ADEEL RAZI



ONE participant described "melding with the MRI machine, floor, walls and air". Another described "losing all sense of self", becoming at one with their surroundings. Half the participants in our study reported having one of the most meaningful experiences of their lives. What were they talking about? Taking psilocybin, the psychedelic compound in magic mushrooms. Participants reported feeling less separation between themselves and the world. We scanned their brains during the experience, and found surprising patterns of organisation – while the brain networks that process our inner world and surroundings also became less distinct. Our research is published today in Nature. It adds new information to the ongoing discussion of the mental effects of psychedelics such as psilocybin and how they can be used in therapies.

Rest, meditation, music and clouds

We examined 62 healthy adults with no prior psychedelic experience. Each received 19 milligrams of psilocybin, a moderate dose similar to those used in clinical trials. Participants had magnetic resonance imaging (MRI) scans and electroencephalograph (EEG) recordings of electrical brain activity twice, about one week apart. Once without psilocybin, and once after taking it. Both sessions involved rest, meditation and listening to ambient, ethereal music with closed eyes, followed by a silent video of moving clouds.

We have published the results in the PsiConnect dataset. It is the world's largest single-site psychedelic brain-imaging dataset and is openly available. **Less difference between eyes open and eyes closed**

In ordinary consciousness, closing our eyes reduces external visual input. Under psilocybin, however, participants can have complex visual experiences. Using MRI and EEG analyses conducted by our co-author Leonardo Novelli, we found this separation was reduced across participants. In the MRI scans, the gap between eyes-open and eyes-closed activity shrank by 85 per cent in the visual network, and by more than 66 per cent across all brain networks. In the EEG recordings, the difference in a major brain rhythm between eyes-open and eyes-closed states decreased by 48 per cent. Regions involved in integrating information, including the regions involved in the sense of self, became more connected with the rest of the brain. Sensory regions became less connected, but this varied by participant.

Hidden organisation

Previous research has found that psilocybin desynchronises the coordinated activity of brain networks. We also saw disruption. However, this does not explain why some individuals experience clarity during the psychedelic state or report

subsequent positive psychological changes. Most studies average brain activity across time. This can conceal how it changes from moment to moment. Our analytical strategy was to use machine learning to find patterns in complex brain activity. Our co-author Moein Khajehnejad applied a machine-learning method that made a simplified map of complex brain activity while still tracking how it changed over time. We used this map to examine participants with and without psilocybin during rest, meditation, music and cloud-watching. In the simpler map, those four contexts formed distinct patterns.

Continuity between the self and world

The signature of this organisation was clearest when participants reported less separation between themselves and the world that was positively felt. It was weaker for visual or sensory effects alone, and absent when participants reported confusion and anxiety. We call the experience associated with this organisation "embeddedness". Participants felt continuous with their moment-to-moment experiences, including the music and their surroundings, rather than separate from them. The signature was also associated with reports of positive psychological change the next day. This helps explain why the psychedelic experience can be

meaningful or therapeutic despite earlier analyses suggesting the brain is disordered.

The importance of context

Half the participants were assigned to an eight-week standardised mindfulness course. At the group level, their reported experiences and brain changes did not measurably differ from those of the other participants. When we looked at the experience of listening to music, however, participants rated it as substantially more meaningful and emotionally resonant under psilocybin than without it. The signature may provide part of the biological explanation for why context is so influential during the psychedelic experience. It could allow researchers to track how the brain responds to different contexts, while providing a target for patient preparation and session design. Future studies can test whether the signature appears in patients, how preparation and setting influence it, and whether it can help predict who benefits from treatment.

Limitations

Our study participants were healthy adults, not patients. The study was open-label, meaning there was no placebo group. Everybody knew they had taken psilocybin. Responses varied widely, despite the fixed dose. We cannot yet say which setting or stimulus is best, whether the signature generalises to patients or whether it predicts treatment benefit.

(The writers are associated with the Monash University, Melbourne, Australia)

Why Taiwan, South China Sea matter to US and world

Trade, semiconductors and China-US rivalry put strategic hotspots in focus

WASHINGTON

WHEN US Senator Darline Graham struggled to answer in a debate whether the US has a national security interest in Taiwan and the South China Sea, she drew criticism for saying national security was "not my thing".

Taiwan and the South China Sea have long been major issues in US foreign policy, and tensions involving China have kept both in the news in recent months. Beijing claims Taiwan as its own territory and asserts sovereignty over virtually the entire South China Sea, bringing it into confrontation with US allies and partners in the region. What happens in Taiwan and the South China Sea could have an impact not only on the region but around the world, given their importance to global trade. The South China Sea, a large body of water bordered by several nations, including China, the Philippines and Vietnam, is one of the world's key maritime trade routes. Taiwan produces the majority of the world's advanced semiconductors.

"The two are very much connected," said Hunter S. Marston, director of the Southeast Asia Program at the Lowy Institute in Australia. "If China were to blockade or seek to forcibly retake Taiwan from the mainland, the South China Sea could quickly see spillover effects." Here's a look at why Taiwan and the South China Sea are important and how the two are connected strategically:

Taiwan, a key issue in US-China relations

The South Carolina senator Darline Graham is seeking a full Senate term after being appointed to the seat of her late brother, Lindsey Graham, who was known for his foreign policy involvement and made several foreign trips, including to Taiwan. Taiwan is a self-ruled democracy that China claims as its own territory, and Beijing has not renounced the use of force to bring it under its control. After China and Taiwan split amid civil war in 1949, it became a thorny international issue.

China sends military aircraft, coast guard ships and other vessels around



Taiwan on a near-daily basis and periodically conducts large-scale military exercises. Taiwan also regularly holds military drills, including its annual Han Kuang exercises. The US does not have formal diplomatic relations with Taiwan, but maintains extensive unofficial relations and is required under US law to provide Taiwan with the means to defend itself. Under that framework, the US has long been Taiwan's main informal backer and arms supplier, a relationship that has been a persistent source of tensions with Beijing.

During US President Donald Trump's latest visit to Beijing in May, Chinese President Xi Jinping made clear that Taiwan remains the most important issue in the bilateral relationship. Xi warned that mishandling US ties with the island could lead to confrontation between the two countries.

Trump did not publicly address Taiwan during the trip. But on his way back to the United States, he said arms sales to Taiwan were a "very good negotiating chip" with China, comments that stirred anxieties on the island.

"If China were able to take control of Taiwan, or if the United States clari-

fied that it would not come to Taiwan's defence in the event of a conflict, China would be able to project its military power (particularly submarine capabilities) far into the South China Sea and beyond the first island chain into the Pacific," said Marston, from the Lowy Institute. A conflict over Taiwan would have direct consequences for Southeast Asia. Marston said that nearly 1 million citizens of the countries in the Association of Southeast Asian Nations, or ASEAN, would need to be evacuated. A conflict could also bring US and Chinese military forces through the South China Sea and put pressure on regional governments to navigate between the two powers.

Tensions persist in the South China Sea

But China asserts sovereignty over much of the South China Sea, despite a 2016 international arbitration ruling that invalidated Beijing's expansive maritime claims. In July, on the 10th anniversary of the ruling, the US, the United Kingdom and 12 other countries reiterated that China's expansive claims have no legal basis. Beijing responded by insisting it would neither accept nor recognise the arbitration decision. Confrontations in the disputed waters have become more frequent in recent years, particularly involving Chinese, Philippine and Vietnamese forces and fishing fleets. Chinese coast guard ships and other vessels have used powerful water cannons, military-grade lasers and dangerous blocking manoeuvres against Philippine forces and fishermen from other claimant countries. Such confrontations have led to collisions at sea and high-risk encounters in the air. China has also carried out military drills this month near Scarborough Shoal, a disputed area claimed by both China and the Philippines.

In April, the United States and the Philippines kicked off the annual Balikatan military exercises. The drills included mock battle scenarios and live-fire exercises in Philippine provinces facing the disputed South China Sea and the Taiwan Strait.