

202502MResearch

1. Price Trends

1.1 BTC

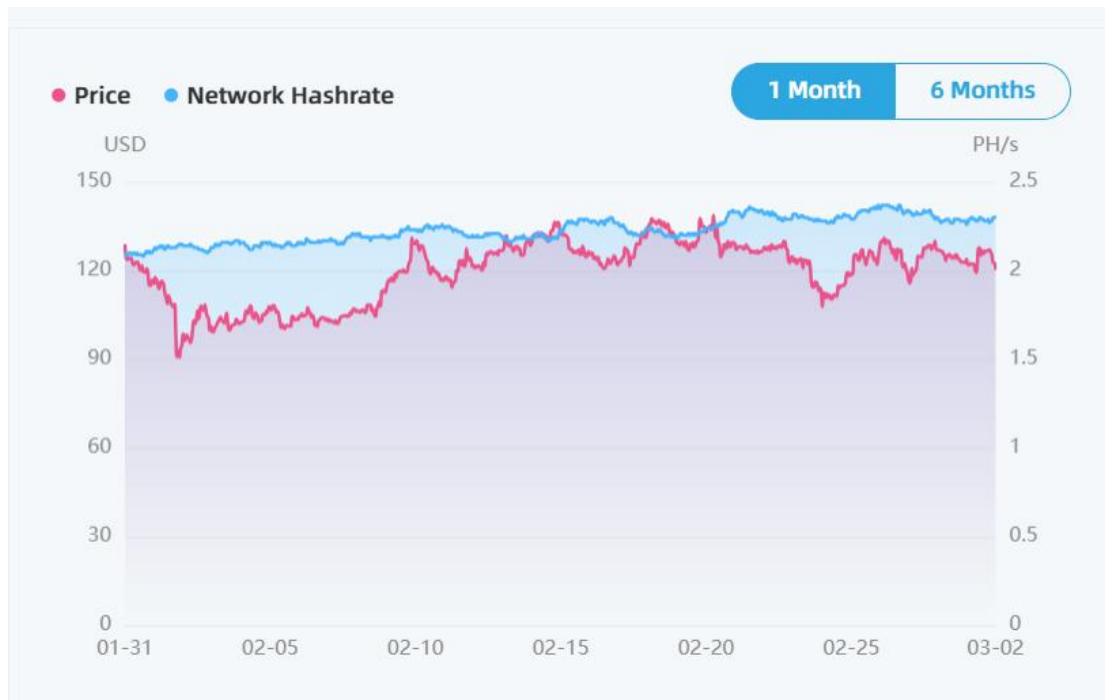
In February 2025, the price of BTC experienced significant fluctuations. After hitting an all-time high of about \$109,000 in early January, BTC entered a deep correction in February. Selling pressure began to intensify in the middle of the month, and it fell below the \$80,000 mark in late February, hitting a monthly low of about \$78,000 on February 28. BTC then rebounded slightly, rising to about \$84,900 at the end of the month, but still about 22% lower than its all-time high. "This is the worst single-month performance in three years," showing that the market has experienced a rapid cooling.



1.2 LTC

In contrast, LTC prices showed a relatively resilient trend in February. At the beginning of the month, LTC climbed with the market and broke through \$128 in mid-February, showing strong performance. Around February 19, LTC stood at \$130, with a cumulative increase of about 12.4% in the past 30 days. During this period, LTC repeatedly tested the strong resistance level of \$140. Although it fell back at the

end of the month as BTC fell, LTC's overall decline was smaller than BTC, and it rose against the trend on some trading days: for example, on February 26, LTC rose by about 9.5% in a single day, becoming one of the leading currencies on that day. This shows that LTC showed a certain degree of resilience and relative strength relative to BTC in February.



2. Computing power and hash rate

2.1 BTC

The BTC network hashrate hit a new high in February 2025, reflecting miners' confidence in the future investment expansion. In early February, the 7-day moving average of the BTC network hashrate soared to about 833 EH/s (exahash per second), setting a new record. Compared with 767 EH/s a few days ago, this indicator has surged by about 9% in a short period of time. Since the halving of the BTC block reward in April 2024, the hashrate has increased by more than 40%, indicating that the scale of global mining operations is continuing to expand. Behind the surge in hashrate, on the one hand, the mining profit has improved due to the sharp rise in the price of coins in the second half of 2024, and miners have funds to purchase and deploy new equipment; on the other hand, institutional capital has accelerated into mining infrastructure: According to Miner Magazine, a large amount of institutional investment in the construction of large-scale mining farms in the past 18 months has driven the network hashrate to rise steadily. This "front-end investment" also allows

the hashrate to continue to rise after the halving in 2024. However, it should be noted that the high-speed growth of hashrate has begun to show signs of slowing down. As major mining machine manufacturers gradually deliver their expansion orders before the halving, the growth rate of new computing power is expected to slow down after February. After the trend of miners hoarding equipment in advance subsides, the computing power growth curve may return to stability. The network difficulty adjustment increased by 6.17% at the end of February and hit a record high in early March, making the competition among miners more intense and the pressure on profitability increased accordingly.

2.2 LTC

The LTC network computing power has also risen sharply in the past year and is close to the peak level in early 2025. Statistics show that the LTC network computing power in 2024 has increased by about 120% in the year, and the degree of mining competition has increased significantly. This is due to the rise in the price of the coin after the halving of the LTC block in August 2023 (and the increase in the income of merged mining brought about by the subsequent strengthening of Dogecoin), which attracted more miners to participate; on the other hand, the major mining machine manufacturers launched a new generation of high-performance Scrypt algorithm mining machines in 2024, which greatly increased the computing power output and doubled the computing power of the entire network in a short period of time. By the end of February 2025, the LTC computing power once climbed to a historical high of about 2.3 PH/s (hash per second). According to the data from the Miner Statistics Station, the LTC computing power reached 2.34 PH/s on February 27, which was the peak level of the year. At the beginning of 2024, this value was only about 0.6 PH/s, which means that the computing power has increased nearly 4 times in just over a year. It should be pointed out that as the performance improvement of BTC mining machines encounters bottlenecks, some mining machine manufacturers have turned their attention to LTC mining machines with low power consumption and merged mining benefits. The performance (computing power/power consumption ratio) of the current new LTC mining machines has been significantly improved, allowing miners to join the network more efficiently, thereby further pushing up the overall computing power. In view of the rising prices of merged mining currencies such as DOGE, the industry expects that more mining machines will be invested in LTC mining in 2025. The growth trend of LTC computing power also reflects the market's recognition of the long-term value of this mature PoW currency.

3. Mining income

3.1 BTC

In February, the income situation of BTC and LTC miners was a mixed bag: high coin prices led to an increase in nominal income, but soaring hashrate and low fees compressed unit hashrate revenue. BTC Miner Revenue: In early 2025, the BTC price was close to \$100k, bringing the dollar value of each block reward (6.25 BTC) to a peak of about \$600,000. This should have significantly increased miners' total income. However, due to increased competition and a sharp drop in on-chain transaction fees, miners' actual profit growth was eroded. In 2024, the BTC price rose by about 120%, but the daily income per unit of hashrate ("hash price") fell by 75% during the same period, and miners' profit margins were greatly compressed. This anomaly continued in February 2025. BTC block space demand was weak, and on-chain fees were at a multi-year low - with sufficient block capacity, the cost of sending a high-priority transaction was only about 5 satoshis/byte (about \$0.69), one of the lowest levels in recent years. In February, the total daily handling fees received by miners were less than 3% of the block subsidy income, which means that miners rely almost entirely on block subsidies to maintain their income. However, after the block subsidy is halved in 2024, it will only be half of what it was before, and the total income growth of BTC miners is far less than the increase in the price of the currency. According to the data from February, although the daily BTC output value of many miners exceeds the level during the bear market in 2022, the net profit margin after deducting costs such as electricity is still low. Some mining companies with high operating costs are struggling under the profit squeeze, which also explains why the computing power of mining machines deviates from the price of the currency: despite the rise in the price of the currency, the stock price and investment return of mining companies have not reached the peak of the previous bull market. Overall, the US dollar income of BTC miners in February was high, but the actual profitability was challenged by the double challenge of record high difficulty and too low handling fees, and it needs to be maintained by improving efficiency and reducing costs.

3.2 LTC

LTC miners' income: The income structure of LTC miners is different from that of BTC. In addition to receiving 2.5 LTC block rewards, they also enjoy the advantage of obtaining additional income such as Dogecoin (DOGE) through AuxPoW merged

mining. The sharp rise in the price of DOGE in 2024 has increased the total income level of LTC miners, and many miners have made profits by mining LTC and DOGE at the same time. In February 2025, the price of LTC was relatively strong, which also supported the mining income of miners. With the simultaneous rise in prices and computing power, new miners are still profitable. However, similar to BTC, the per capita income of LTC miners is also diluted by the surge in computing power. The launch of a large number of high-efficiency mining machines has increased the difficulty of the entire network, and the output per unit of computing power of old mining machines has shrunk, making those miners with high electricity costs but low efficiency almost unprofitable. According to Statista, the average daily profit of LTC mining in February 2025 is about \$0.04/GH/s, which is far from \$0.1/GH/s at the peak of the bull market in 2023. This forces miners to upgrade their equipment or move to areas with cheaper electricity prices to maintain profitability. The good news is that with the expansion of the LTC ecosystem, some new merged mining coins (such as BELLS, LKY, etc.) have been introduced, providing miners with additional sources of income. Although these tokens are not valuable, they are better than nothing, which has somewhat alleviated the pressure on LTC miners to make money. Overall, LTC miners' income remained stable in February, and the increase in rewards brought by the price increase was roughly offset by the increase in difficulty. Miners with advanced mining machines and cheap electricity can still make considerable profits, while the profit margins of participants with poor efficiency are further compressed, and the mining industry presents a situation of "the strong get stronger".

4. Fund Flow

4.1 Total Market Value

In February, the flow of funds in the market turned from net inflow to net outflow. In January, the total market value of the crypto market once exceeded the peak of \$3.76 trillion, but after entering February, the market value growth slowed down and showed a correction. By February 26, the total market value of global cryptocurrencies was about \$2.94 trillion, down 3.6% on the day. This reflects that a large amount of funds were withdrawn in mid-to-late February, and the overall market value of the crypto market has shrunk compared to the beginning of the month.

4.2 Institutional Investment

More significant fund flows appeared in institutional investment products. As BTC prices weakened, investors began to withdraw funds from products such as BTC exchange-traded funds (ETFs). In mid-to-late February, US spot BTC ETFs saw net redemptions for eight consecutive trading days, with cumulative outflows exceeding US\$3.2 billion. On February 25 alone, the net outflow of 11 US BTC ETFs reached approximately US\$1.1 billion, setting a new record for single-day fund outflows since the launch of such products. The huge redemptions during this period showed that some institutions and large investors chose to take profits when BTC was high, and the risk aversion of funds increased. However, at the end of the month, as BTC rebounded from a low of \$78,000 to around \$85,000, the trend of ETF fund outflows eased, with a net inflow of approximately US\$94.3 million recorded again on February 28.

4.3 Futures and Derivatives

In addition to investment funds, the capital dynamics in the futures and derivatives markets are also worth paying attention to. Due to the decline in spot prices, many long positions in BTC-based futures were forced to close, and the Chicago Mercantile Exchange (CME) BTC futures open interest fell from 180,099 BTC at the beginning of the year to 168,549 BTC at the beginning of February, indicating that some arbitrage funds withdrew from the market. Overall, capital flows in February showed the characteristics of "first inflow, then withdrawal": risk funds accelerated their entry at the beginning of the month to push up the market, and then quickly flowed out due to risk aversion after the middle of the month, resulting in a phased tightening of market liquidity.

5. Technical Analysis

5.1 BTC

From a technical perspective, BTC fell below several key support levels in late February, triggering a technical sell-off. The on-chain UTXO actual price distribution (URPD) indicator shows that about 171,693 BTC changed hands at \$83,440, accounting for 0.87% of the total supply, making this price the most important support range at present. Analysis points out that if BTC falls below the \$83k support, it will enter the "air canyon", and due to the lack of a large number of chips in the \$72,000-\$82,000 range, it may accelerate its decline. Fortunately, BTC quickly rebounded after hitting \$78k and stood above \$83k, holding this key defense line in

the short term. In terms of technical indicators, BTC's relative strength index (RSI) fell to 24 at the end of February, entering the oversold area. Historically, whenever BTC's RSI is below 30, it often means that a stage bottom is approaching. Indeed, BTC rebounded after the RSI was deeply oversold in February, which is consistent with the past trend pattern. In addition, the cost price for short-term holders is around \$88,400, and BTC fell below this price range in late February, which means that some short-term holders began to suffer floating losses. Glassnode data shows that about 2 million to 3.5 million BTC are in floating losses in the recent correction, but there has been no panic selling in the overall market. The relative unrealized loss rate was as high as 4.3% in the last round of decline (in the third quarter of 2024), which is significantly lower than the peak of previous cycles. This shows that although BTC's technical side is weak in the short term, the market structure dominated by long-term investors is relatively stable, and the selling pressure mainly comes from short-term traders.

5.2 LTC

The technical chart of LTC in February shows the characteristics of consolidation after a strong rise. The price has failed to reach \$140 several times, marking this level as the main resistance. Technical analysis shows that the \$140 mark has blocked LTC's upward movement four times recently. If it can effectively break through and close above \$141 on the daily line, it is expected to open up about 30% of the upward space, and the target can reach \$180. On the contrary, if it encounters resistance and falls back near \$140, LTC may fall to the support area of

around \$100 again. In the market correction in late February, LTC retreated to a high of about \$100 and found support, verifying the buying power at this price. It is worth noting that some profit-taking signals appeared in the on-chain data: when LTC rose sharply in mid-February, the long-term holding whale address injected about \$2.3 million of LTC into the exchange, indicating that some long-term investors reduced their positions at highs. This profit-taking puts some pressure on the price in the short term. But overall, LTC maintains a box-shaped oscillation between the \$100 support and the \$140 resistance, and its breakthrough direction depends on the subsequent changes in volume and market sentiment.

6. Market sentiment

6.1 Overall sentiment

In February, the crypto market sentiment experienced a change from extreme prosperity to caution. At the beginning of the year, due to favorable policies and capital influx, market sentiment was once high, and many investors poured into the market with optimism and FOMO (fear of missing out). However, as BTC fell back from a high in late January to early February, risk appetite cooled significantly. In mid-February, under the impact of macro bearishness and hacking incidents, market risk aversion rose rapidly, and sentiment indicators such as the Fear & Greed Index slipped from the greedy area to neutral and panic. As the analysis shows, February 2025 became the worst month for the crypto market in the past three years, indicating that investor confidence has been hit. Some short-term traders panicked and sold, and a considerable number of short-term BTC holders suffered floating losses.

6.2 Retail Investors and Long-term Holders

Despite the overall bearish sentiment, it is worth mentioning that the long-term enthusiasm of retail investors continues. The number of active addresses on the chain rose instead of falling at the end of February: the number of active BTC addresses soared to 912,300 on February 28, a nearly three-month high. This usually means that there is more on-chain trading activity during periods of sharp price fluctuations. Some people believe that this is a reflection of retail investors' participation on dips and capital turnover. At the same time, the number of small addresses holding at least 0.1 BTC continues to grow and is close to the historical peak, indicating that the adoption rate of BTC at the retail level is still steadily increasing. In addition, long-term holders (HODLers) continue to show high confidence. They did not sell a large number of chips in this pullback, but instead had a "buy on dips" trend. For example, the Salvadoran government continued to increase its BTC holdings every day in January and February, reflecting the firm belief of institutions and state entities in the long-term value of BTC.

6.3 Emotional Summary

Overall, market sentiment in February gradually shifted from "overheated" to "cautious wait-and-see". Macro uncertainty and security incidents have increased risk aversion, but the bullish beliefs of retail investors and long-term funds have provided some support to the market. After a brief panic, pessimism eased as prices stabilized and rebounded at the end of the month. The divergence of the mentality

of various market participants indicates that the subsequent trend will depend on fundamental signals and the recovery of confidence.

7. Macroeconomic Background

7.1 Monetary Policy

The macroeconomic environment is one of the important background factors for the volatility of the crypto market in February. First, the tone of the Fed's monetary policy tends to be cautious and loose but not aggressive. According to market expectations, the Fed may only implement two small interest rate cuts in 2025. Compared with the previous tightening cycle, this mild policy shift provides some support for risky assets, but the limited release of liquidity also means that the speed of speculative capital inflows is limited. The high interest rate has made investors retain their preference for high-risk assets, and some funds still tend to stay in stable areas such as bonds and cash, which has curbed the further upward momentum of crypto assets such as BTC to a certain extent.

7.2 Trade and Policy

Secondly, uncertainty in trade and policy affected market sentiment in February. The new trade tariff policy being prepared by the US government has raised concerns about the global trade environment. In late January, news that an AI company called DeepSeek had made a technological breakthrough caused the market to reassess the valuation bubble of US technology stocks, and the Nasdaq index subsequently fell sharply. This risk-averse trend also affected the crypto market, with investors worried that the decline in technology stocks and potential tariff retaliation could weaken market risk appetite and liquidity, causing high-Beta assets including BTC to fall during the same period. The uncertainty of the macro environment made funds more inclined to take profits and wait and see in February.

7.3 Inflation and safe-haven assets

Thirdly, the dynamics of inflation and safe-haven assets are also worth noting. In February, the US inflation data remained at a relatively controllable level, but it

was still higher than the historical average, which put the Fed in a dilemma in terms of policy. The rise in real interest rates and the expectation of economic recession have caused some investors to turn to traditional safe-haven assets such as gold. In the last week of February, the US stock market fell significantly (Nasdaq fell about 3.5% in the week), while the price of gold was relatively strong. Well-known investors such as Robert Kiyosaki have said that due to the increasingly serious debt economic problems in the United States, the short-term weakening of the market is actually a good opportunity to buy BTC. This reverse investment logic of "bad news is good news" has spread in the crypto community, but more mainstream institutions choose to wait for clearer macro signals. It can be seen that the combined effect of macro-level instability factors (interest rates, trade, stock market fluctuations) in February has put the crypto market in a long-short interweaving pattern.

7.4 Regulatory Trends

Finally, regulatory trends are also part of the macro context (see the policy and regulation section below for details). The U.S. federal government's change in attitude towards digital assets is seen as a major positive in the medium and long term, but the market is still waiting to see the actual implementation effect in the short term. Before the overall macroeconomic environment showed a clear turning point, investors took a more cautious attitude towards crypto assets in February. This phenomenon of macro-market interaction highlights the increasing linkage between the crypto field and the traditional economic environment.

8. Energy costs and mining efficiency

8.1 Mining Machine Energy Efficiency

Energy costs and mining efficiency have always been key factors in determining miners' profits and losses, and February was no exception. While BTC computing power hit a new high, the annual energy consumption of global BTC mining is estimated to have exceeded 140 terawatt-hours, equivalent to the electricity consumption of a medium-sized country. This has aroused great attention from regulators and miners to energy efficiency. Mining machine energy efficiency improvement: In order to maintain profits in fierce competition, miners continue to pursue higher energy efficiency ratios (hash computing power per kilowatt of power output). Since 2024, the energy efficiency of new generation mining machines has

been significantly improved, whether it is SHA-256 algorithm or Scrypt algorithm. For example, the power consumption ratio of the new LTC mining machine has dropped to less than 300 watts per gigahash, while the old model equipment is difficult to make a profit under the current network difficulty and coin price because the power consumption is higher than 300W/G. In terms of BTC, the energy efficiency of mainstream high-end mining machines (such as the Ant S21 series) has been improved to about 20 J/TH, which is nearly 30% higher than the previous generation. This means that more computing power can be produced with the same amount of electricity, thereby diluting the mining cost per unit of BTC. In February, many large mining farms replaced the latest mining machines to improve overall energy efficiency. A mining report pointed out that the average energy efficiency of the entire industry increased by 15%-20% in 2023, and this trend will continue in 2025. The improvement of mining energy efficiency has offset the pressure brought by rising electricity costs and halving of block subsidies to a certain extent, allowing large-scale operators to maintain profits by "winning by volume".

8.2 Energy costs and regional differences

Energy costs and regional differences: However, not all miners can benefit from the latest technology, and high electricity costs remain one of the industry's pain points. International energy prices were relatively stable in February, but industrial electricity prices in some mining-intensive regions (such as North America and Europe) are still much higher than those in mining meccas (such as Kazakhstan and parts of the Middle East). This has led to the continued concentration of mining farms in areas with low electricity prices. Texas, the United States, has attracted a large number of mining companies in recent years due to its rich energy resources and relatively friendly policies. However, the load of mining farms during peak electricity consumption puts pressure on the power grid. The Texas Public Utilities Commission has introduced new regulations requiring crypto mining farms with a power consumption of more than 75MW to register with the grid operator and report power consumption and operation information annually to strengthen power dispatch management. The regulations will officially take effect in February 2025, and unregistered large mining farms will face fines of up to \$25,000 per day. This move reflects the energy regulatory authorities' attention to the energy consumption of crypto mining, and also forces miners to optimize power efficiency and participate in demand response in exchange for policy support. Some mines have signed interruptible load agreements with power companies, voluntarily reducing load when the power grid is under pressure, thereby obtaining lower electricity prices. This type of flexible load strategy played a role in the Texas cold wave in February: some mines were temporarily closed, giving priority to electricity to protect people's livelihood, thus avoiding more political resistance.

8.3 Renewable Energy Application

Renewable energy and mining efficiency: In February, discussions on the sustainability of the mining industry remained heated. A report released by a research team from Harvard and other universities stated that currently about 52% of the electricity used in BTC mining comes from renewable energy or waste energy. This proportion has increased significantly compared to three years ago, indicating that miners are actively turning to clean electricity such as hydropower, wind power and solar energy to reduce costs and respond to environmental concerns. Mining farms operating in hydropower-rich areas such as Sichuan and Yunnan moved to areas with low coal power costs such as Kazakhstan to spend the winter due to the arrival of the dry season. There are also mining companies using geothermal and wind energy for mining in Northern Europe, claiming to have achieved a "carbon neutral" operating model. It is worth mentioning that in February, a Canadian mining company announced that it would try to use oil field associated natural gas to generate electricity for mining, using a large amount of gas originally burned and emitted as power, achieving a "win-win" situation. These innovative cases show that energy and mining efficiency are being deeply integrated: by using cheap or waste energy on site, miners have reduced electricity bills and reduced environmental impact. In short, in the mining landscape of February 2025, energy efficiency and cost control have become the top priorities for miners' survival. The upgrading of mining machine technology, the optimization of site selection strategies, and the interaction with the power system have made mining, a high-energy-consuming industry, evolve in a more efficient and sustainable direction. Under the dual test of currency price fluctuations and halving cycles, only by continuously improving the efficiency of computing power output and reducing unit energy consumption costs can mining companies remain invincible in future competition.

9. Policy and regulatory news

9.1 Relevant policies of US state governments

In February 2025, U.S. states showed an active exploration of cryptocurrency policies, and some state governments introduced eye-catching legislative and regulatory initiatives.

Texas:

As a major crypto mining town in the United States, Texas has taken an important step in promoting the "official reserve" of BTC. At the end of February, the Texas Senate Banking Committee passed Senate Bill No. 21 (SB 21) with a vote of 9 in favor and 0 against. The bill proposed the establishment of a "Texas Strategic BTC Reserve". According to the text of the bill, this reserve will be a special fund outside the state treasury, and the state comptroller will serve as a "custodian" to manage it. The bill clearly states that cryptocurrencies such as BTC are regarded as assets with strategic potential, which will help enhance the state's financial risk resistance. The purpose of establishing a BTC reserve is to fight inflation and economic fluctuations while providing residents with more financial security. After Trump was elected president in 2024, the governor of Texas has stated that he plans to include BTC in the state government's asset reserve in 2025. The advancement of the SB 21 bill marks that this vision is one step closer to legislative implementation: as of February 28, the bill has been submitted to the Senate for deliberation, and if passed, it will be sent to the House of Representatives for a vote. In addition to reserve legislation, Texas is also strengthening its supervision of crypto mining. According to a law passed by Texas in 2023, all large-scale crypto mining farms connected to the state's main power grid and consuming more than 75 megawatts of electricity must register with the Texas Public Utility Commission (PUC) from February 2025. Those who fail to register in accordance with the regulations will be fined up to \$25,000 per day. This regulation is intended to allow regulators and power grid operator ERCOT to grasp the exact location, power consumption scale and owner information of the mine to ensure the reliability of the power grid and the balance of power supply. It can be seen that Texas embraces BTC as a strategic asset on the one hand, and on the other hand, it also focuses on regulating the rapidly developing mining industry to balance innovation and energy security.

Arizona:

The state has been active in cryptocurrency legislation, even at the forefront of the country. On February 27, the Arizona Senate passed two bills related to digital asset reserves in one go. The first is SB 1373, the "Digital Asset Strategic Reserve Fund" bill, introduced by Senator Mark Finchem. The bill was passed by the Senate with 17 votes in favor and 12 votes against. SB 1373 proposes the establishment of a "Strategic Digital Asset Reserve Fund" managed by the state treasurer, with funding sources including legislative appropriations and cryptocurrencies confiscated in law enforcement actions. The state treasurer may invest up to 10% of the fund's funds in cryptocurrencies each fiscal year and may earn income by lending digital assets, but must ensure that it does not pose a significant risk to state finances. It was followed by SB 1025, the "Strategic BTC Reserve Act," co-sponsored by Senator Wendy Rogers. The bill was also passed by the Senate on February 27 with 17 votes in favor and 11 votes against. SB 1025 gives the state government the authority to invest in crypto assets with public funds, allowing (but not forcing) the state treasury to allocate part of the funds to authorized crypto investment tools. It should be emphasized that

both bills must be reviewed by the House of Representatives and signed by the governor before they can become law, but their passage makes Arizona another state after Texas to promote official crypto reserves at the legislative level. In addition to reserve legislation, Arizona is also trying bolder measures. State Senator Wendy Rogers proposed to define cryptocurrency as the state's legal tender. On February 26, 2025, the Arizona Senate passed SB 1062 on third reading, which recognized "decentralized digital currencies such as BTC and Ethereum" as legal tender in Arizona, which can be used to pay off debts, pay for official business, etc. This legislation is symbolic in law because according to the U.S. Constitution, issuing legal tender is the federal government's authority, but it expresses a clear attitude at the state level towards the status of cryptocurrency: that is, to recognize and accept cryptocurrency as much as possible within the capabilities of the state government.

Other state trends:

In addition to Texas and Arizona, many other states in the United States are brewing similar pro-crypto policies in February. According to a statistic, 18 states in the United States have proposed bills to establish cryptocurrency reserves or allow public funds to invest in cryptocurrencies, and some are waiting for a vote in the Senate. For example, Utah's HB 230 (Blockchain and Digital Innovation Amendment) was approved by the House Committee in February and advanced to the Senate for deliberation. The bill proposes to authorize the state treasurer to study the feasibility of holding part of the state's reserves in the form of BTC. This means that Utah is expected to follow in the footsteps of Texas and Arizona and allow officials to hold BTC assets. For example, it is reported that lawmakers in Missouri, Ohio, and Oklahoma are interested in proposing proposals to establish state-level BTC reserves. At the same time, a few states have reservations about such legislation. Previously, the legislatures of Montana, Wyoming, North Dakota, South Dakota, Pennsylvania and other states have rejected proposals to invest public funds in cryptocurrencies. Take Wyoming as an example. Although the state is known for its crypto-friendliness (it has issued a charter for banks to hold crypto assets), it is still cautious about directly purchasing coins with public funds. In general, entering 2025, states are diverging and competing in crypto policies: some states are scrambling to enact progressive legislation to attract blockchain industries and capital, while others are temporarily waiting to see the direction of federal policies and not taking rash actions. The trend in February shows that thanks to the warming atmosphere at the federal level, the voices supporting crypto at the state level are louder. It is expected that more states will introduce innovative policies in the future to include BTC in the state government's asset portfolio or adjust tax policies to embrace the crypto economy.

9.2 Relevant policies of the U.S. federal government

At the beginning of 2025, the U.S. federal cryptocurrency regulatory policy took a major turn, and the implementation of this new direction was continued and accelerated in February. From executive orders to regulatory enforcement, the U.S. federal government has shown an unprecedented pro-crypto industry attitude.

Presidential Executive Orders and National Strategy:

On January 23, President Donald Trump signed and issued an executive order titled "Strengthening U.S. Leadership in Digital Financial Technology." This executive order completely reversed the previous administration's cautious and even hostile policy tone toward crypto assets. Specifically, the new order repealed Executive Order No. 14067 on digital assets during the Biden administration and the Treasury Department's "International Framework for Participating in Digital Assets." Instead, the Trump administration explicitly proposed to support open public blockchain networks and opposed the issuance of U.S. central bank digital currencies (CBDCs) or the recognition of CBDCs issued by foreign governments. This shows that the U.S. government is not considering launching a digital dollar at this stage, and is repulsive to foreign CBDCs such as the digital RMB. The executive order emphasizes the need to provide regulatory certainty for the crypto market, requiring the clarification of the regulatory boundaries of different institutions on digital assets to avoid uncertainty caused by multiple jurisdictions. More notably, the order established the President's Digital Asset Market Working Group and appointed Silicon Valley investor David Sacks as the "President's Special Advisor on Artificial Intelligence and Cryptocurrency" and chairman of the working group. The task force is to submit a report to the President within 180 days (i.e., before July 2024) recommending regulatory and legislative options necessary to advance the policies of this executive order. The working group covers a wide range of topics, including establishing a federal regulatory framework for crypto assets (especially the regulation of stablecoins), evaluating the possibility of creating and managing a national crypto asset stockpile, etc. The order also requires federal agencies such as the SEC and CFTC to review and revoke any existing guidance that conflicts with the new policy direction to ensure that the United States maintains its innovative leadership in blockchain and digital finance. It can be said that this executive order sets the tone for the U.S. digital asset policy of "embracing innovation and rejecting shackles", and is one of the most cryptocurrency-friendly official documents at the federal level to date.

Securities supervision turns to "rational supervision":

Guided by the spirit of the executive order, the attitude of the U.S. Securities and Exchange Commission (SEC) towards the crypto industry changed significantly in February 2025. After former Chairman Gary Gensler left office at the end of 2024, the new SEC management adopted a completely different strategy. Acting Chairman Mark Uyeda and senior member "HODL Sister" Hester Peirce have always advocated the development of a "reasonable regulatory path" for digital assets, abandoning the previous practice of suppressing mainly through law enforcement. This idea was

implemented in February: On February 21, Coinbase Chief Legal Officer Paul Grewal publicly announced that the SEC had "agreed in principle" to withdraw the lawsuit and abandon the unregistered securities exchange lawsuit filed against Coinbase. This lawsuit, which began in June 2023, is a landmark case of the conflict between the crypto industry and the SEC. The SEC accused Coinbase of providing securities trading and pledge services without registration. Now that the SEC has chosen to withdraw the lawsuit, it means that this protracted legal tug-of-war has ushered in a dramatic turn. Moreover, on February 21, NFT trading platform OpenSea revealed that the SEC had voluntarily terminated its investigation into its operations; on February 24, the crypto department of brokerage platform Robinhood also announced that the SEC had closed its year-long investigation into it. In just a few days, multiple pending regulatory swords were put down one after another, which excited the industry. Some analysts said that this marked a new stage in the US crypto regulation from "high-pressure law enforcement" to "communication and reconciliation."

At the same time, a special crypto regulatory task force was established within the SEC to formulate new rules. On February 4, Commissioner Pierce issued a statement titled "The Journey Begins," announcing the reorganization of the SEC and the establishment of a new "Crypto 2.0" task force, which she will lead. The task force aims to address the regulatory uncertainty that has long plagued the industry and provide guidance to the industry by developing a clearer token registration path, improving information disclosure requirements, and unifying enforcement standards. The SEC has been widely criticized in the past for "only enforcing the law without being willing to formulate clear rules," a situation that is expected to change under the Crypto 2.0 task force. It is worth noting that shortly after announcing the establishment of the task force, the SEC filed a motion with the court requesting a 60-day suspension of proceedings against Binance and Coinbase. In early February, the SEC's lawsuit against Binance US and its founder Zhao Changpeng was set to enter a critical stage, but the two parties jointly applied for a stay of the litigation process at the end of January to consider the possible settlement plan brought by the new task force. The lawsuit against Coinbase was also requested to be suspended. The SEC's move is seen as a goodwill signal to the market, showing that it is willing to re-examine its previous tough stance under the new policy framework. Industry insiders commented that this is consistent with the president's broader goal of supporting the industry: after the federal top leadership changed its attitude, the regulatory authorities began to implement a "pause-reflection-adjustment" strategy in order to develop a regulatory system that both promotes innovation and protects investors.

Federal Legislation and Other Regulation:

In addition to administrative and securities regulation, the U.S. Congress and other federal agencies also took action in the crypto field in February. In Congress, members of both parties have stated that they will promote cryptocurrency-related

legislation in 2025. In particular, in terms of stablecoin regulation, the House Financial Services Committee plans to restart the discussion of the "Stablecoin Issuance Regulatory Framework" bill, seeking to set federal standards for stablecoin issuers. At the same time, the "Responsible Financial Innovation Act" led by Senators Lummis and Gillibrand is also expected to be resubmitted to the new Congress for review, which involves clarifying the classification of digital asset securities/commodities, tax exemptions, and tax exemptions for small transactions. Other issues such as anti-money laundering compliance (the extension of the Travel Rule in the crypto field) are also on the congressional hearing schedule. Some observers pointed out that the Trump administration's high-profile support for crypto innovation has actually given Congress greater political space to promote industry legislation, and it is expected that 2025 may be a breakthrough year for comprehensive legislation on digital assets in the United States.

In addition, in terms of banking supervision, the Federal Deposit Insurance Corporation (FDIC) released a batch of internal documents on the supervision of crypto-related activities in February, indicating that traditional financial regulators are also re-evaluating how to coexist with digital assets. For example, the FDIC released a document on February 5 to disclose its regulatory considerations for banks involved in crypto business. This shows that the regulators are not simply laissez-faire, but hope to reduce risks through transparent guidance. In general, the federal policy environment in February 2025 is historically friendly to the crypto industry: the executive order established a supportive tone, the SEC withdrew its lawsuit to show goodwill, and legislation and banking supervision gradually caught up. The market generally believes that the United States is trying to reverse the outflow of industry talent and innovation caused by regulatory uncertainty in the past few years, and to attract the blockchain industry to develop locally with more open and inclusive policies. This shift at the federal level will undoubtedly have a profound impact on the global crypto market in the coming months and even years.

11. BTC related news

11.1 X Hot Topics

- ①Trump's trade war rhetoric affects Bitcoin price

- In early February, Trump announced tariffs on Canada, Mexico and China, sparking market panic and causing Bitcoin prices to fall by about 14%. Discussions on X reflected investors' concerns about global economic uncertainty.
- The number of views of related X posts reached 140,961, and the number of likes reached 1,212, indicating high attention. For example, the post of X user @rovercrc, "TRUMP SLAPS TARIFFS ON CANADA, MEXICO, CHINA. MARKETS PANIC, TRADE WAR FEARS. THIS IS WHY #BITCOIN HAS BEEN DUMPING. INVESTORS FLEE TO CASH." reached 140,961 views and 1,212 likes.

② Bitcoin price drops sharply in February

- Bitcoin fell from a high of \$109,241 in January to \$78,363 on February 28, a monthly drop of about 28%. Discussions on X reflected the sharp fluctuations in market sentiment, with some prediction posts receiving as many as 74,259 views.
- The views of related X posts range from tens of thousands to hundreds of thousands. For example, @AstroPrashanth9's post "Bitcoin Price will Drastically Go Down in..... Last week of February 2025 " has 74,259 views and 389 likes.

③ Bybit hack

- On February 21, the Bybit exchange was hacked, losing about \$1.5 billion in Ethereum (ETH), which is considered one of the largest thefts in the history of cryptocurrency, and the discussion on X was very heated.
- Related X posts have 167,940 views and 852 likes, such as @tobalgarci's post "The exploit of Bybit's rapid hack helped me find the friends of my CEO @benbybit." has 167,940 views and 852 likes.

④ SEC drops lawsuit against Uniswap, Coinbase, and MetaMask

- In February, the SEC dropped its lawsuit against Uniswap, Coinbase, and MetaMask, signaling a potential shift in regulatory attitudes, and discussions on X reflected positive reactions from both inside and outside the industry.
- The views of related X posts range from thousands to tens of thousands. For example, @austin_hurwitz's post "in the past couple weeks the SEC has

dropped cases against @coinbase, @opensea, and now @uniswap” has 4,808 views and 87 likes.

⑤ Bitcoin whale (large transaction) activity in February

- There were large Bitcoin transactions in February, and the movement of whale accounts affected market liquidity. Although the discussion on X was not as heated as the previous events, it still had thousands to tens of thousands of views.
- The views of related X posts range from thousands to tens of thousands. For example, @Detroit_Crypto_'s post "Crypto Recap for Feb 6, 2025: \$BTC slipped to \$97K..." has 5,215 views and 233 likes.

⑥ U.S. Federal Marshall Service encounters tracking problems when managing confiscated crypto assets

- Reports in February showed that the U.S. Federal Marshall Service encountered tracking problems when managing confiscated crypto assets, and the number of views on X discussions was low, ranging from tens to hundreds.
- The number of views of related X posts ranged from dozens to hundreds. For example, @martypartymusic's post "As expected the US Marshal are unclear if they have the keys to their seized digital assets..." had 179,900 views and 1,674 likes.

11.2 Global BTC holdings

In February, institutions and entities around the world holding large amounts of BTC continued to increase their positions, and the distribution of BTC holdings showed an institutional and long-term trend.

Listed companies and institutional holdings:

MicroStrategy (now renamed Strategy), a typical representative of corporate "coin hoarding", once again caused sensational news in February. According to SEC documents submitted on February 24, Strategy spent about \$1.99 billion to buy 20,356 BTC between February 18 and 23, with an average purchase price of about \$97,514. This increased the company's cumulative holdings of BTC to 499,096, equivalent to about 2.3% of the total BTC supply. The company's chairman, Michael Saylor, announced the news in a high-profile manner on social media, once again

demonstrating his strategic determination to "buy unlimited" BTC. Strategy's current holdings are second only to the world's largest BTC ETF, BlackRock's iShares BTC Trust (IBIT). According to statistics, IBIT holds about 2.8% of the BTC supply, about 0.5 percentage points more than Strategy. This means that IBIT holds about 580,000 BTC, reflecting that a large amount of physical BTC has been deposited in custody since the launch of the ETF. In addition to Strategy, Tesla, another well-known coin holder in the corporate world, still holds about 10,725 BTC (about 0.05% of the supply) after selling some BTC in 2022. As of February, Tesla has not announced any new buying or selling actions, indicating that it holds BTC as a long-term reserve on its balance sheet. Other listed companies with more coins include Marathon Digital (about 12,200 coins) and Galaxy Digital (about 8,000 coins), all of which choose to continue to hold them for a long time without selling them. As for institutional investors, Grayscale BTC Trust (GBTC) still holds about 620,000 BTC in custody, although the redemption scale has decreased due to the emergence of ETFs. It is worth mentioning that some national sovereign-related entities are also increasing their holdings of BTC: the government of El Salvador has implemented a "daily coin purchase" plan since the end of 2022, and it is estimated that its national reserves have accumulated more than 2,500 BTC. In February, officials in the country reiterated their confidence in BTC as a national strategic reserve asset. Politicians in several other Latin American and Asian countries are also rumored to be looking into following El Salvador's lead, suggesting that BTC is increasingly being viewed as a reserve asset to hold for the long term.

On-chain position structure:

From the on-chain data, BTC holdings continue to concentrate on long-term holders. Glassnode's analysis pointed out that more than 75% of the current BTC supply has not been transferred for at least 6 months and is in a "dormant" state, indicating that long-term HODLers dominate. In the plunge at the end of February, the selling pressure from short-term holders (who held the currency for less than 155 days) was more obvious, but long-term holders did not reduce their positions on a large scale. Statistics show that about 2 million to 3.5 million BTC are in a floating loss state after this correction, mainly belonging to the chips of short-term investors. However, the relative unrealized losses account for only about 4% of the total market value, which is much lower than the previous bear market highs (such as about 45% at the end of 2018), which reflects that most of the chips in the market are still in the hands of long-term holders with extremely low costs and no intention to sell. These long-term holders have remained almost motionless during the price fluctuations in February, and some even increased their holdings on dips, reflecting their high confidence in the long-term value of BTC. This "supply lock" phenomenon reduces the effective supply in the circulation market, helps to ease selling pressure and support the currency price to a certain extent.

Concentration and dispersion:

Although the holdings of institutions and whales are increasing, the overall

distribution of BTC holdings is still tending to be decentralized. In February, the number of small addresses holding ≥ 0.1 BTC reached a record high of 3.339 million (this data is constantly growing), indicating that more and more ordinary investors are accumulating BTC through fixed investment or small purchases. Similarly, the number of wallet addresses holding ≥ 1 BTC also hit a new high. In contrast, the number of "whales" (holding $\geq 10,000$ coins) has not increased significantly, indicating that there is no rapid monopoly of chips by a single entity. According to BitInfoCharts data, the five largest BTC addresses (excluding exchange custody addresses) still account for less than 5% of the total supply. The largest single non-exchange address holds about 248,597 BTC, accounting for 1.18% of the total supply. It is a cold wallet of early BTC miners and has not been moved for many years. In terms of exchanges, affected by the outflow of funds attracted by ETFs, the BTC balance of centralized exchanges continued to decline in February, hitting a new low in more than 5 years. This means that more BTC is transferred to cold wallets for long-term storage or custody products such as ETFs, and is not placed on exchanges. Industry insiders said that this is a typical "chip collection" signal from the end of the bear market to the beginning of the bull market, which often indicates a reduction in selling pressure and a tightening of supply. From a global perspective, BTC is showing a trend of long-term supply lock-in and gradually wide distribution: on one end, "big players" such as countries, listed companies, and ETFs are holding steadily; on the other end, thousands of retail investors are slowly accumulating through lightning networks and wallets. The data in February further confirmed this trend, which provides a basis for the resilience of the BTC market.

11.3 Mining News

1. Bitcoin mining company Bitfarms is exploring artificial intelligence (AI) and high-performance computing (HPC) businesses to meet the challenge of reduced miners' income after the Bitcoin halving in April 2024. Bitfarms has hired two consulting firms, Appleby Strategy Group and World Wide Technology, to conduct a feasibility analysis on its 1.2 gigawatt (GW) energy assets in North America and develop an AI/HPC business development strategy.

2. The Russian Ministry of Energy announced plans to establish a single registration center for crypto mining equipment, and all crypto mining operations must register. If the plan is implemented, it will become "impossible" to conduct crypto mining without registering the equipment to the system. The plan, led by Deputy Energy Minister Yevgeny Grabchak, is part of a proposed amendment to existing mining regulations aimed at better identifying domestic mining activities, especially those carried out in areas where mining is prohibited.

3. Bitcoin mining company Stronghold Digital was fined more than \$1.4 million by the Federal Energy Regulatory Commission (FERC) for violating energy market rules and giving priority to supplying electricity to Bitcoin mining. Of this, \$678,600

must be returned to PJM and \$741,400 must be paid to the U.S. Treasury as a civil penalty. FERC's investigation found that Stronghold's Scrubgrass power plant failed to fulfill its contractual obligations to provide available electricity to the PJM grid from June 2021 to May 2022, diverting electricity to Bitcoin mining during 57% of the day-ahead market trading time and 59% of the real-time market trading time. In addition, Stronghold was accused of purchasing electricity at wholesale prices and mistakenly classifying some of its electricity use as "station power." Stronghold withdrew from the PJM capacity market in June 2022, but may still need to participate in future auctions unless it formally applies for an exemption or switches to only providing electrical energy resources.

4. Bitcoin mining company Bitdeer acquired 19 acres of land near Fox Creek in Alberta, Canada for \$21.7 million and obtained a 101 megawatt (MW) site permit, planning to build a natural gas power plant and a 99 MW Bitcoin mining data center. Bitdeer expects to start site and infrastructure construction in the second quarter of 2025. It is estimated that the power plant construction will cost an additional \$90 million, and the data center is expected to invest \$30 million, with a unit MW cost of \$300,000. As of December 2024, Bitdeer's total managed computing power reached 21.7 EH/s, of which 8.9 EH/s is its own computing power and 12.8 EH/s is managed computing power.

5. Russia has issued new regulations on cryptocurrency mining, stipulating that miners must report their income before the 20th of each month, and only approved entities can operate mining operations. The new regulations clearly state that those with a record of financial crimes will be prohibited from engaging in cryptocurrency mining activities. In addition, Russia will also establish a national miner registration system to strengthen supervision of the cryptocurrency mining industry.

6. Bitcoin mining company CleanSpark announced revenue of \$162.3 million in the fourth quarter of 2024, quarterly net income of \$241.7 million, adjusted EBITDA of \$321.6 million, and the marginal cost of mining each bitcoin fell by 6% to approximately \$34,000. As of December 31, 2024, CleanSpark had total assets of \$2.8 billion, including \$929.1 million in bitcoin, total liabilities of \$757.7 million, shareholders' equity of \$2 billion, and working capital of \$1.2 billion.

7. As of February 8, 2025, among the listed Bitcoin mining companies, Marathon Digital (MARA) holds the largest number of BTC, reaching 45,659, followed by Riot Platforms (RIOT) with 18,221, CleanSpark (CLSK) with 10,556, and Hut 8 (HUT) with 10,208. Other major mining companies such as HIVE, FUFU, CANGO, and CANAAN all hold less than 3,000.

8. Due to the enhanced inspection by the U.S. Customs, Bitmain's recent delivery of Bitcoin mining machines to U.S. customers has been delayed, affecting several large mining companies. After the U.S. Department of Homeland Security blacklisted Bitmain's artificial intelligence subsidiary Xiamen Sophgo Technology in

January, inspections of related equipment have become stricter. Although Bitmain accounts for 90% of the market share, this move may affect the competitiveness of U.S. mining companies, especially under the pressure of equipment upgrades and rising tariffs.

9. Estonian nationals Sergei Potapenko and Ivan Turõgin, operators of the defunct cloud mining service HashFlare, pleaded guilty to multiple charges in a \$577 million cryptocurrency Ponzi scheme. Potapenko and Turõgin's sentencing is set for May 8 and they face up to 20 years in prison. HashFlare suspended its mining services in 2018 and eventually ceased operations.

10. Brent Kovar, a Las Vegas man, appeared in court on suspicion of wire fraud, mail fraud and money laundering. He was accused of falsely advertising his company, Profit Connect, as a profitable cryptocurrency mining and transaction verification company, promising 15%-30% annualized returns and a 100% refund guarantee, defrauding about 400 investors and illegally obtaining \$24 million. Kovar used the investment funds for personal expenses and disguised the repayments as income from cryptocurrency mining. If convicted, Kovar faces up to 330 years in prison and a \$4.5 million fine.

11. The U.S. Securities and Exchange Commission (SEC) has suspended fraud lawsuits against cryptocurrency mining company Geosyn Mining and its executives. Public documents show that these executives are suspected of defrauding customer funds, promising to purchase and host Bitcoin mining machines for customers, but actually misappropriating funds for personal expenses. The SEC previously stated in its lawsuit that Geosyn, its CEO Caleb Joseph Ward and former operating CEO Jeremy George McNutt defrauded approximately 64 investors of \$5.6 million through service agreements sold in the form of securities between November 2021 and December 2022.

12. Russian power grid company Rosseti Group suffered losses of more than 1.3 billion Russian rubles (about 14.2 million U.S. dollars) in 2024 due to illegal crypto mining. Illegal mines cause overloads in the power grid, resulting in voltage drops, which in turn damage electrical equipment and household appliances. Among them, the largest case of power theft occurred in Novosibirsk, involving more than 32,000 mining machines and an estimated loss of 197 million rubles.

13. MARA Holdings has acquired a wind farm in Texas, adding 114 MW of rated wind capacity and 240 MW of grid-connected capacity to its operations, and will use ASIC mining hardware powered by renewable energy to reduce the cost of Bitcoin production. MARA is the second largest publicly traded corporate Bitcoin holder, with 45,659 BTC on its balance sheet.

14. Bitcoin mining company Core Scientific has expanded its high-performance computing (HPC) hosting business to Auburn, Alabama by leasing AUBix's existing

facilities. The company plans to make an initial capital investment of approximately \$135 million in the 40,000 square foot facility, and the total investment is expected to exceed \$400 million. Auburn Mayor Ron Anders said Core Scientific's \$400 million investment is expected to bring \$1.5 million in tax revenue to the local area each year. It is worth noting that Core Scientific has resumed a full "holding" strategy in January this year, retaining all monthly Bitcoin output, increasing its Bitcoin holdings to more than 500.

15. Canaan Inc. released the unaudited monthly update of its bitcoin mining business as of January 31, 2025, which disclosed that 88 bitcoins were mined in January 2025, and the number of bitcoins held on Canaan Inc.'s balance sheet at the end of the month was 1,319. The deployed computing power at the end of the month was 6.43 EH/s, and the operating computing power at the end of the month was 5.53 EH/s.

16. BitFuFu announced the acquisition of a 51MW operating data center in Oklahoma at a price of \$400,000 per megawatt. The acquisition is aimed at expanding its self-operated mining business. BitFuFu plans to deploy AntMiner S21 series mining machines here, claiming that the cash mining cost per Bitcoin can be reduced to \$18,000.

17. Bgin Blockchain Limited, a cryptocurrency mining equipment manufacturer, has applied for listing in the United States and is expected to raise \$50 million. In a document submitted to the U.S. SEC on February 21, Bgin stated that it would issue approximately 59.54 million Class A common shares and 15.69 million Class B common shares. Its registration statement also stated that it had applied to Nasdaq to list its Class A shares under the stock code "BGIN". Bgin's documents did not disclose its offering price, but investment advisory firm Renaissance Capital said in a report that Bgin's initial public offering (IPO) could raise up to \$50 million.

18. Bitcoin mining company Riot Platforms released its financial report, with total revenue of \$376.7 million in 2024, a year-on-year increase of 34.2%; net income was \$109.4 million, while it was a net loss of \$49.4 million in 2023. The output of Bitcoin in 2024 was 4,828, and the average mining cost per Bitcoin was \$32,216, a significant increase from \$3,831 in 2023.

19. Bitdeer reported that it paid \$240 million to chip manufacturing giant TSMC in the fourth quarter, aiming to achieve a hash rate target of 40 EH/s in 2025, driven by its proprietary SEALMINER Bitcoin mining hardware. In addition, Bitdeer CEO Jihan Wu has reached a 10b5-1 trading plan, under which he can sell up to 4 million Bitdeer shares on a predetermined date between March and June 2025 if a minimum price threshold is met.

20. The first scalable PoW blockchain, Quai Network mainnet, is now fully operational, using an innovative Proof of Entropy Minimum (PoEM) consensus

mechanism, combined with execution sharding and merged mining. Currently, the network has over 150,000 GPU miners, 3.3 million transactions, and hundreds of consensus nodes around the world. In addition, Quai Network launched its native token QUA1 through TGE in February 2025, with a trading volume of over \$120 million, reaching a high of \$0.35, and the current fully diluted valuation exceeds \$1 billion.

21. Recently disclosed court documents show that Bitcoin financial services company Swan Bitcoin is suspected of defaulting in its Bitcoin mining joint venture with stablecoin giant Tether. The documents accuse Swan of using its equity in the joint venture 2040 Energy without authorization to obtain financing from Ripple Labs. The dispute between Swan and Tether has triggered mutual lawsuits between the two parties in British and American courts, involving disputes over control of their mining business.

11.4 BTC ETF Dynamics

In February 2025, the BTC spot ETF market continued its hot progress since the fourth quarter of the previous year, but it also experienced a significant reversal of capital flows in the middle, which can be described as ups and downs.

The surge in ETF size and the influx of funds at the beginning of the year:

After the Trump administration came to power, the SEC approved several institutions to launch BTC spot ETFs in late 2024, providing investors with a compliant and convenient channel to enter the market. Entering 2025, these ETFs have maintained a strong growth momentum. According to CoinDesk data, the cumulative net inflow of spot BTC ETFs listed in the United States in the first three weeks of 2025 (as of February 5) was about US\$4.4 billion, a year-on-year increase of 175%. During this period, the total net inflow of 11 US BTC ETFs reached US\$4.06 billion, bringing the total inflow since its listing to a huge US\$40.6 billion. Such a huge amount of funds has made BTC ETF one of the most successful new ETF products in history. Among them, the largest is iShares BTC Trust (IBIT) under Blackstone Group, which has attracted a total net inflow of about US\$40.7 billion since its establishment, occupying a dominant position in the market. A large amount of institutional funds entered the BTC market through ETFs, which also caused a surge in demand for physical BTC-ETF custodians need to buy and cold store an equal amount of BTC in the spot market, which objectively pushed up the price of the currency. No wonder when BTC hit a new high in early January, many analysts attributed it to the "ETF effect".

Capital outflow and market correction in mid-to-late February:

However, the good times did not last long. As the price of BTC turned downward in mid-February, the flow of funds in the ETF market also reversed rapidly. From February 17 to February 28, the US spot BTC ETF saw net redemptions for eight

consecutive trading days, with a total outflow of more than US\$3.2 billion. This is the longest and largest wave of capital outflows since the advent of ETFs. Among them, on February 25, the market saw a record single-day net redemption: more than US\$1.1 billion of funds were withdrawn from the BTC ETF. This means that some of the funds that poured in earlier chose to stop profit and leave the market in time after seeing the high price of the currency fall. In particular, some institutions that adopted the spot arbitrage strategy previously locked in basis income by buying ETF spot and shorting CME futures. When the BTC futures premium narrowed in February, these arbitrage positions began to close, triggering concentrated redemptions of ETFs. Julio Moreno, director of research at CryptoQuant, analyzed that since 2025, BTC ETF has not been the main source of demand growth as it was in 2024. Data shows that the net inflow of various ETFs in the first 58 days of 2025 totaled only about 12,100 BTC (worth about \$1.7 billion), while the figure in the same period of 2024 was as high as 128,700 (about \$6.3 billion). The cooling of ETF funds partially explains why the price of BTC slowed down or even fell at the beginning of this year. Fortunately, after the price of the currency stopped falling and stabilized at the end of February, the outflow of ETF funds also tended to end. On February 28, BTC ETF finally saw net subscription after 8 trading days, with a net inflow of about \$94.3 million per day. This marks the end of the capital withdrawal that lasted for more than a week. Looking ahead, if the price of the currency strengthens again, ETFs are expected to attract capital inflows again.

Changes in the internal structure of the ETF market:

Fund flows in February also revealed a pattern of gains and losses among different ETF products. According to reports, in the last few days of February, ARK 21Shares BTC ETF (ARKB) and Fidelity Wise Origin BTC Trust (FBTC) received a large number of subscriptions against the trend, with net inflows of \$193.7 million and \$176.0 million respectively on February 28. Investors of ARKB and FBTC took advantage of the decline in the price of the currency to increase their positions, showing their confidence in the managers of these two ETFs (Cathie Wood's ARK and Fidelity). At the same time, the leading IBIT continued to suffer net redemptions: on February 28, IBIT had a net outflow of \$244.6 million on a single day. This "gain and loss" may be related to factors such as fees and liquidity-ARK and Fidelity's ETF fees are slightly lower and have high flexibility in rising and falling, and some funds choose to withdraw from IBIT and switch to these ETFs. According to CryptoNinjas analysis, ARKB's counter-trend inflow in February was also related to its relatively small holdings and higher beta value. Speculative funds prefer to increase holdings of smaller ETFs during adjustments to gain greater flexibility. In any case, internal competition in the ETF market has begun to emerge, and investors have diversified choices.

Other crypto ETF developments:

Although the focus this month is on BTC ETF, it is worth mentioning that other crypto asset ETFs such as Ethereum are also developing simultaneously. The SEC has

approved several Ethereum spot ETFs at the end of 2024. They also received considerable capital inflows in January, but experienced a similar performance as BTC ETF in February. In addition, as Binance Research and other reports pointed out, with the support of the Trump administration, many institutions submitted spot ETF applications for ****LTC, Dogecoin (DOGE), Solana (SOL) and Ripple (XRP)**** at the beginning of this year. Among them, LTC and DOGE are considered to have a higher chance of approval because they do not involve securities determination issues. The Nasdaq exchange has submitted an application for the listing of the Canary LTC Trust, and NYSE Arca has also submitted a 19b-4 rule change document for the conversion of the Grayscale LTC Trust to an ETF. If these new varieties of ETFs are approved for listing in 2025, they may bring a new round of capital increments. In the industry discussion in February, many people regarded the BTC ETF as a bridgehead for the "entry of mainstream funds", and its success paved the way for more subsequent crypto ETFs. Therefore, although the BTC ETF experienced some twists and turns in February, in the long run, the expansion of the crypto ETF landscape will continue to attract more traditional capital into the digital asset field and provide stable financial support for the market.

11.5 Other Technology Giants Related News

In February, the relevant developments of technology and Internet giants in the encryption field were also eye-catching. Although large technology companies are still cautious about their direct involvement in cryptocurrencies, their initiatives in payment infrastructure, blockchain applications, etc. indicate the trend of the integration of encryption technology with mainstream technology.

Musk's X platform and payment plan:

Elon Musk's social platform X (formerly Twitter) continued to advance its "financialization" transformation strategy in February. According to public reports, X has obtained money transmission licenses in 15 US states (including Illinois and New Mexico, which were added in February). These licenses pave the way for X to provide payment services across the United States, and are also widely interpreted as a prelude to X's possible integration of crypto payments in the future. In February, there were rumors that X would launch peer-to-peer payment functions within 2025, but X officials clarified that fiat currency payments would be the main method in the initial stage, and "there are no plans for cryptocurrencies yet." Despite this, the market still has expectations that Musk may introduce crypto assets such as Dogecoin. It is worth noting that in February, X announced a partnership with Visa to launch an account service called "X Money", with Visa as the first official partner. This service is designed to enable peer-to-peer transfers and shopping payments between X platform users. Some analysts believe that once X Money has established a large-scale user base, it will be possible to increase support for cryptocurrencies in

the future (for example, allowing users to buy, sell or reward BTC, DOGE, etc.). Therefore, Musk's movements are still closely watched by the crypto community - after all, he has repeatedly supported Dogecoin on Twitter, and his Tesla company has previously accepted Dogecoin to pay for peripheral products. X has not yet announced any official crypto integration, but its payment progress in February shows that crypto payments may play an important role in the evolution of social media giants into "universal apps."

Actions of traditional payment giants:

In February, global payment giants Visa and Mastercard also made new progress in the layout of digital assets. Visa continued to advance its crypto payment card plan and cooperated with several crypto platforms to issue co-branded debit cards. In Europe, Visa has newly approved exchanges such as Bitstamp to issue Visa cards, allowing users to directly consume crypto assets in their accounts. At the same time, Visa began to test the solution of cross-border corporate payment settlement through blockchain in the country. As for Mastercard, they continued the crypto project launched last year and announced that they are cooperating with some CBDC (central bank digital currency) research and development projects to provide technical support. In addition, Mastercard said in February that it would expand its "Crypto Trust Framework" plan and cooperate with more exchanges to audit on-chain transaction records to enhance the security of fiat currency deposits and withdrawals. Although these initiatives are still far from direct application on the consumer side, they reflect that traditional payment companies are actively embracing blockchain technology and are unwilling to fall behind in the new financial revolution.

Other technology companies and blockchain applications:

In addition to payment, other blockchain-related news from other tech giants in February include: Google's cloud computing department added support for the Solana blockchain in its Web3 development kit, making it easier for developers to deploy Solana nodes and index on-chain data. This is considered a step for Google to consolidate its position as a blockchain infrastructure provider. As for Amazon, according to CoinDesk, its cloud division AWS is working with a startup to develop enterprise-level blockchain solutions and provide hosting services for Ethereum nodes. Although Amazon's previously rumored NFT platform has not yet been officially launched, its internal research on blockchain technology continues to invest. Meta (formerly Facebook) is shifting some resources to the field of blockchain identity and user ownership while shrinking its metaverse strategy. Industry sources in February said that Meta is incubating decentralized social network protocols (similar to Bluesky's AT protocol) and wallet projects internally to explore new forms of combining social and blockchain. Apple and Google, the two major mobile operating system giants, continue to wait and see but prepare for Web3 applications. When Apple's App Store updated its review guidelines in February, it reiterated that it allowed NFT applications to be listed but prohibited the use of out-of-App

purchase mechanisms, and stated that it would strictly charge a 30% commission for NFT transactions. This policy has been criticized as being detrimental to the Web3 ecosystem, but it also shows that Apple is willing to regulate and include rather than completely ban NFT applications. The Google Play Store is also evaluating adjusting its payment policy to accommodate transactions of on-chain digital assets.

Tesla, Microsoft, etc.:

In addition to continuing to hold BTC, Tesla CEO Musk's words and deeds will still affect market expectations. In February, Tesla did not release any direct crypto news, but Musk's several joke tweets about DOGE on social media still caused a brief fluctuation in DOGE prices, reflecting the aftermath of the personal influence of the tech giant. Microsoft has less direct involvement in the crypto field, but in February, its verification email service mistakenly marked the BTC white paper as a virus and was complained by users. Microsoft quickly corrected it, showing that the tech giant is still sensitive to topics such as BTC. In general, large tech companies have not yet made a big move into cryptocurrency trading or holding, but they have tried blockchain infrastructure, payment integration, Web3 applications, etc. to varying degrees. These measures may not be as explosive as the rise and fall of coin prices, but they represent the gradual penetration of blockchain technology in the system of Internet giants. The dynamics in February show that with the clear regulatory environment and increased market demand, it is a general trend for technology companies to get involved in digital assets. In the future, we may see more substantial investment and actions from them in this field.

11.6 Hacking Incident

In February 2025, there were several high-profile hacking incidents in the cryptocurrency field, among which an unprecedented major case was the most sensational, and it also reminded the industry to remain highly vigilant against security risks.

Bybit exchange suffered a massive theft of \$1.5 billion:

In mid-February, Bybit, a well-known crypto exchange headquartered in Dubai, was hacked, and the amount of loss set a new industry record. According to Bybit's official disclosure, hackers hacked into the exchange's Ethereum cold wallet last week (the third week of February) and stole crypto assets worth about \$1.5 billion. Blockchain security company Elliptic later confirmed that the incident was the largest known cryptocurrency theft to date, more than twice the size of the previous record. Bybit CEO Ben Zhou said that the stolen assets were stored in cold wallets that should have been the safest, but they were still not spared. This has sparked heated discussions in the industry about the security of cold wallets. It is reported that hackers used a supply chain attack method: they hacked into the developer environment of Safe{Wallet}, the multi-signature wallet software provider used by Bybit, and implanted malicious code in it. Safe{Wallet} confirmed that one of its

developers' computers was hacked, causing Bybit's multi-signature wallet to approve a disguised malicious proposal, resulting in a huge amount of funds being transferred out. The Federal Bureau of Investigation (FBI) soon intervened in the investigation and officially attributed the attack to the North Korean hacker group "Lazarus" in late February. The FBI said that after the hacker group (they tracked it as TraderTraitor) stole Bybit assets, they were quickly converting part of the stolen money into BTC and splitting it to thousands of addresses in an attempt to eventually launder it. Bybit has frozen the withdrawal of coins from the platform and sought assistance from global peers to track it. Since the hackers have transferred about 62,200 ETH in just a few days, Elliptic analysis shows that the entire \$1.5 billion stolen money may be laundered within 3 days. This incident shocked the entire crypto circle: the total amount of cryptocurrency stolen in 2024 was about \$2 billion, and the Bybit case alone reached more than 70% of this value. Many exchanges and projects have urgently checked their own security risks and strengthened the cold wallet multi-signature process. Industry experts called for strengthening the security audit of the wallet software supply chain and recommended that exchanges implement stricter fund management mechanisms such as "multi-party signature + hardware isolation" to prevent such large-scale thefts from happening again.

Other security incidents:

In addition to the Bybit case, there were some other hacker and security developments worth noting in February. Although there was no similar huge theft in the decentralized finance (DeFi) field, there were several attacks: for example, a cross-chain bridge was attacked by a hacker flash loan in February, with a loss of about 1.2 million US dollars. Fortunately, the development team promptly plugged the loophole and obtained the help of white hats to recover some funds. In addition, the THORChain decentralized liquidity protocol was involved in a security storm in February. A core developer proposed to implement a transaction blockade for addresses related to North Korean hackers to prevent suspected stolen funds from being exchanged through THORChain. However, the proposal triggered heated discussions in the community. Many node operators believed that this violated the principles of decentralization and neutrality. In the end, the majority of nodes rejected the proposal to intervene in transactions, causing the developer to quit the team in anger. This incident highlights the dilemma of decentralized projects between security vs. trustlessness: it is necessary to prevent malicious use while adhering to the concept of decentralization, and test community consensus and governance capabilities.

In addition, in February, there was a phishing incident at Kraken, a well-established exchange. Many users reported receiving phishing emails disguised as Kraken official accounts. Fortunately, Kraken quickly reminded users that no asset losses had occurred. Ledger, a hardware wallet supplier, released a firmware update in February to fix a vulnerability submitted by experts that could affect the export of

seed phrases, ensuring the safety of user assets. In general, security is still the sword of Damocles hanging over the crypto world. The hacking incident in February injected a bit of panic into the market, and also prompted project owners and users to reflect again: while developing rapidly, investment in security infrastructure should not be neglected. From exchanges to DeFi protocols, from software to hardware, each link needs to establish more stringent protection. Faced with increasingly rampant hacker opponents, even with national backgrounds, the crypto industry can only protect user assets and consolidate the market's trust in platforms and protocols by improving technical security levels, strengthening institutional cooperation and information sharing. As a security expert said after the Bybit incident: "Trust comes from verification, and any system must withstand the test of the worst attacks." I believe that after experiencing the shock in February, the entire industry will further strengthen its attention and investment in the security field and move towards a more mature and stable direction.