

2.2. Trends in the cryptocurrency market¹

2024 turned out to be one of the most significant years for the cryptocurrency market. The capitalization of the entire market reached its new highs in 2024 at \$3.71 trillion in December (Fig. 67), surpassing the peak of August 2022, when the crypto market was valued at \$2.8 trillion.

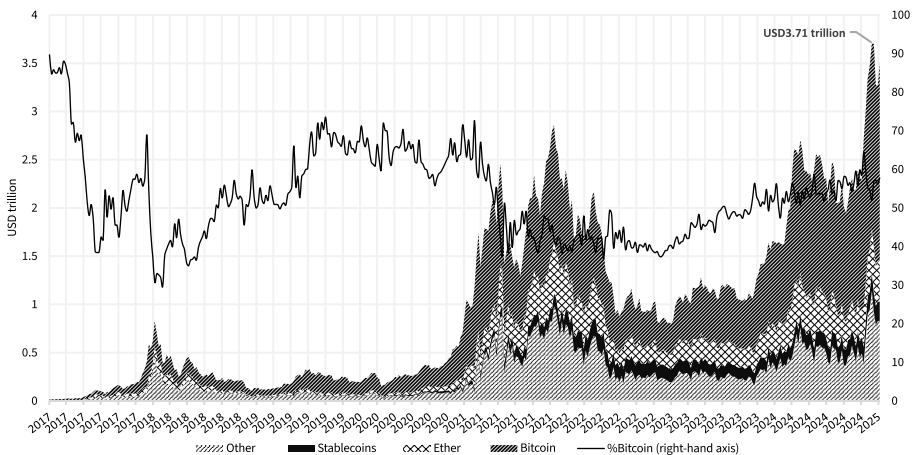


Fig. 67. Cryptocurrency capitalization dynamics, trillion USD

Source: Own calculations on the data released by coinmarketcap.com.

In 2024, Bitcoin was the main market driver, whose capitalization grew by more than 133% over the year, exceeding the \$2 trillion mark, while the capitalization of the second largest cryptocurrency Ether increased by 57% (to \$440 bn), stablecoins by 49% (to \$200 bn), and all other altcoins together by 127.5% (to \$830 bn). Bitcoin's share of total market capitalization continues its gradual growth for the second year running: while in 2023 Bitcoin's share of market capitalization averaged 47.3%, in 2024 it is already 54.8%. In price terms, Bitcoin in December exceeded the "psychological" mark of \$100,000.

2.2.1. Bitcoin

In 2024, Bitcoin expanded primarily due to the key event of 2024 — on January 11, the full-fledged start of trading in spot exchange-traded funds (equity trade funds,

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ETFs) for Bitcoin cryptocurrency, issued by such large financial companies as Black-Rock, Fidelity, 21 Shares, ARK Investments, VanEck, ProShares and others. Bitcoin-ETFs proved to be extremely popular in the financial market, which was reflected in the almost constant inflow of money into the corresponding funds throughout 2024 (Fig. 68).

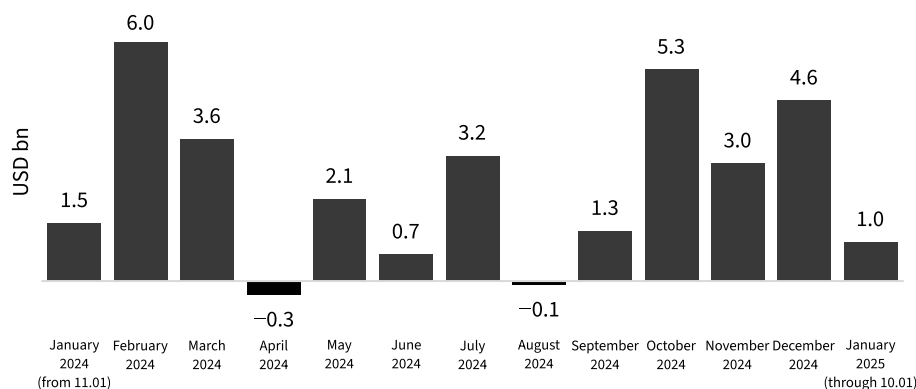


Fig. 68. Dynamics of inflows/outflows in Bitcoin-ETFs, USD bn

Source: Own estimates based on the data released by Farside Investors.

The average monthly gain in assets under management of the funds at the expense of investors' funds for the year totaled \$2.4 bn, and investors invested \$31 bn in these funds during the year. At the end of the year, the assets under management of Bitcoin-ETFs issued by U.S. financial companies exceeded \$100 bn, reaching \$123 bn¹ in mid-December. As of December 31, assets under management of U.S. gold ETFs totaled \$138.5 bn.²

The investors' high demand for Bitcoin-ETFs is evident by comparing it with another asset, the launch of trading in exchange-traded funds, which was considered the most successful until now. We are talking about physically-backed gold exchange-traded funds (EFTs), which began trading in November 2004 (Table 11). It should be noted that both categories of ETFs were launched under similar conditions: both assets had some publicity (of course, gold has much more), futures were actively traded on them (Bitcoin futures were launched on the CBOE back in December 2017) and there were already Bitcoin exchange-traded futures (Bitcoin futures were launched on the CBOE back in December 2017) and there have already been exchange-traded funds investing in these assets via futures (ProShares launched

1. According to data released by Coinglass. URL: <https://www.coinglass.com/bitcoin-etf>

2. According to data released by World Gold Council. URL: <https://www.gold.org/goldhub/data/gold-etfs-holdings-and-flows>

Table 11

Comparison of inflows and assets in Bitcoin and gold ETFs

	Bitcoin ETFs	Gold ETF
Launch	January 11, 2024	November 18, 2004
Net inflow of investor funds		
First 1.5 months	\$7 bn	\$2.3 bn*
First year	\$31 bn	\$6.23 bn*
Assets under management one year after launch		
In USD	\$100 bn	\$8.62 bn*
Number of Bitcoins/tons of gold	1.17 mn	337.8 t
% of total extracted supply	5.91%	0.22%**
As of the end of December 2024		
In USD		\$270 bn
Tons of gold		3218.8 t
% of total extracted supply		1.51%***

* In December 2024 prices.

** The 2005 year-end data of 156,435 tons is used as an estimate of total gold production.

*** The 2003 year-end data of 212,582 tons is used as the respective estimate.

Sources: Own estimates based on data released by Farside Investors, World Gold Council, U. S. Bureau of Labor Statistics <https://www.bls.gov/>; Turk J. and Castañeda J. The Aboveground Gold Stock: Its Importance and Its Size //GoldMoney Foundation. — 2012 (to estimate the amount of gold in 2005).

such an Bitcoin-ETFs in October 2021),¹ as well as OTC trusts,² but they are much less favorable in terms of commissions than exchange-traded spot funds.

In 2004, total inflows into gold ETFs reached about \$2.3 bn³ during the first 1.5 months, while Bitcoin ETFs were able to attract more than 3 times as much — \$7.5 bn — during the same period. In just the first year, gold ETFs attracted about \$6.3 bn⁴ in investor funds, which is almost 5 times less than the corresponding figure for Bitcoin ETFs. At the same time, in just one year, ETF issuers have already concentrated 5.91% of the total current supply of Bitcoin (or 5.57% of the 21 milli-

1. ETFs futures are less profitable for the investors due to higher commissions associated with the need to regularly sell expiring and buy the next futures with a new expiration date (so-called rolling costs), the existence of deviations between the dynamics of the price of the underlying asset and its futures, higher fees for the management of such a fund.
2. Separately, we can mention the OTC Bitcoin unit trust from Grayscale, which in 2015 became the first public Bitcoin fund on the stock market and whose balance sheet accumulated more than 500,000 units of the cryptocurrency by 2020 (around 2.4% of the entire Bitcoin supply)
3. \$1.4 bn in nominal prices.
4. \$3.9 bn in nominal terms.

on maximum supply), while under the management of funds for gold at the end of 2024 concentrated only 1.51% of the mined volume.¹

There are quite a few institutional investors and companies from the financial sector amongst the buyers of Bitcoin ETFs. Thus, according to the latest available 13-F² reporting data, by the end of 2024, more than a thousand asset management companies had Bitcoin ETFs in their portfolios. These include JPMorgan, Bank of America, Millennium Funds, Susquehanna, ARK Investment, Jane Street, Citadel, and others. Notably, the list also features the 8th largest U.S. pension fund by assets, State of Wisconsin Investment Board, which invested about \$163 mn³ in Bitcoin ETFs. In addition, there are 8 relatively small private companies providing pension portfolio management services.

What attracts investors to Bitcoin? Issuers of Bitcoin ETFs publicly label Bitcoin as “digital gold”, which, due to its limited supply, may have some protective properties against fiat money in the context of rapid growth of the money supply in many countries.⁴ Another important advantage of Bitcoin as a “new asset class” (in the words of Blackrock CEO Larry Fink) is the low correlation of its returns, for example, with the returns of U.S. stocks. In their materials, investment companies such as BlackRock,⁵ Greyscale,⁶ WisdomTree⁷ and others demonstrate the characteristics of investment portfolios that include some Bitcoin. They show that, on average, the addition of Bitcoin to a classic portfolio 60/40 — 60% in ETFs on the S&P 500 stock market and 40% in ETFs on the U.S. government bond market — in the amount of 1 to 5% of capital (mainly due to the reduction of allocation to the stock market), can significantly raise the profitability of such a portfolio with a slight increase in risk. In particular, the increase in the portfolio’s annualized return proves to be several times higher than the corresponding increase in the standard deviation (volatility).

Nevertheless, Bitcoin’s correlation with many other assets rather increased in 2024 compared to 2023 (*Table 12*). In particular, the effect of the emergence of Bitcoin ETF in the U.S. was primarily reflected in the change in the correlation of the cryptocurrency with all U.S. indices. First of all, Bitcoin’s correlation with the U.S. stock market (S&P 500, NASDAQ, Russell 2000, VIX) increased significantly,

1. Or about 4% of all gold in bullion and coins (publicly and privately held), excluding the manufacturing sector (jewelry, microelectronics, etc.)
2. A report required to be filed by U.S. asset management firms with a portfolio size of over \$100 million. It reflects all active positions of such companies. Data on Bitcoin-ETF holdings is taken from URL: <https://www.ccn.com/news/crypto/bitcoin-etf-holders-list-btc-investors-sec-13f-filing>.
3. Which, however, is just over 0.1% of their \$156+ bn portfolio.
4. URL: <https://cointelegraph.com/news/blackrock-larry-fink-calls-bitcoin-digital-gold>
5. URL: <https://www.blackrock.com/institutions/en-zz/insights/portfolio-design/sizing-bitcoin-in-portfolios>
6. URL: <https://www.grayscale.com/research/reports/crypto-in-diversified-portfolios>
7. URL: <https://www.wisdomtree.eu/en-gb/blog/2024-03-07/how-much-should-a-neutral-investor-allocate-to-cryptocurrencies>

Table 12

Correlation matrix of daily logarithmic returns of some asset classes and Bitcoin (in 2023 and 2024)

	BTC 2023	BTC	S&P 500	NASDAQ	Russell 2000	VIX	Euronext 100	Nikkei	Hang Seng	SSE	RTS	20+ UST	High yield US Bonds	EM Bonds	Infl Exp	REIT	Oil	Gold	DXY
S&P 500	0.27	0.36		0.96	0.75	-0.79	0.39	0.31	0.12	0.10	0.01	0.05	0.52	0.47	0.12	0.46	0.02	0.17	-0.12
NASDAQ	0.27	0.34	0.96		0.65	-0.72	0.36	0.28	0.12	0.11	0.01	0.01	0.46	0.41	0.13	0.31	0.04	0.15	-0.10
Russell 2000	0.31	0.44	0.75	0.65		-0.62	0.37	0.24	0.06	0.06	0.06	0.13	0.56	0.49	0.07	0.60	-0.01	0.19	-0.21
VIX	-0.26	-0.32	-0.79	-0.72	-0.62		-0.26	-0.32	-0.08	-0.01	-0.14	0.04	-0.42	-0.36	-0.12	-0.44	-0.01	-0.10	0.10
Euronext 100	0.12	0.11	0.39	0.36	0.37	-0.26		0.37	0.30	0.07	0.05	-0.01	0.29	0.19	0.14	0.16	0.17	0.22	-0.12
Nikkei 225	0.08	0.13	0.31	0.28	0.24	-0.32	0.37		0.16	0.04	-0.02	-0.07	0.22	0.10	0.13	0.19	0.08	0.05	0.12
Hang Seng	0.04	0.01	0.12	0.12	0.06	-0.08	0.30	0.16		0.55	0.00	-0.05	0.19	0.15	0.12	0.07	0.21	0.21	-0.11
SSE	0.03	0.02	0.10	0.11	0.06	-0.01	0.07	0.04	0.55		0.01	-0.06	0.14	0.09	0.13	0.04	0.13	0.03	-0.02
Composite																			
RTS	0.08	0.09	0.01	0.01	0.06	-0.14	0.05	-0.02	0.00	0.01		0.05	0.06	0.05	0.04	0.02	0.01	0.04	0.00
20+ UST Bonds	-0.02	-0.11	0.05	0.01	0.13	0.04	-0.01	-0.07	-0.05	-0.06	0.05		0.52	0.74	-0.65	0.43	-0.26	0.18	-0.54
High yield US Bonds	0.15	0.18	0.52	0.46	0.56	-0.42	0.29	0.22	0.19	0.14	0.06	0.52		0.82	-0.27	0.56	-0.09	0.25	-0.42
US Bonds																			
EM Bonds	0.11	0.11	0.47	0.41	0.49	-0.36	0.19	0.10	0.15	0.09	0.05	0.74	0.82		-0.41	0.59	-0.13	0.30	-0.56
Inflation Exp	0.05	0.15	0.12	0.13	0.07	-0.12	0.14	0.13	0.12	0.13	0.04	-0.65	-0.27	-0.41		-0.19	0.19	-0.03	0.38
REIT	0.17	0.24	0.46	0.31	0.60	-0.44	0.16	0.19	0.07	0.04	0.02	0.43	0.56	0.59	-0.19		-0.17	0.28	-0.41
Oil	-0.08	-0.08	0.02	0.04	-0.01	-0.01	0.17	0.08	0.21	0.13	0.01	-0.26	-0.09	-0.13	0.19	-0.17		0.20	0.05
Gold	0.09	0.07	0.17	0.15	0.19	-0.10	0.22	0.05	0.21	0.03	0.04	0.18	0.25	0.30	-0.03	0.28	0.20		-0.32
DXY	-0.08	-0.03	-0.12	-0.10	-0.21	0.10	-0.12	0.12	-0.11	-0.02	0.00	-0.54	-0.42	-0.56	0.38	-0.41	0.05	-0.32	

Note. Correlation value for all returns except the first column for the full 2024. All index returns are in US dollars. Bond index returns are taken through the dividend-adjusted returns of the respective ETFs: 20+ UST Bonds — iShares 20+ Year Treasury Bond ETF, High yield US Bonds — iShares Broad USD High Yield Corporate Bond ETF, EM Bonds — iShares J.P. Morgan USD Emerging Markets Bond ETF, Inflation Exp — ProShares Inflation Expectations ETF, Vanguard Real Estate Index Fund ETF Shares returns are used as a proxy for REIT real estate fund returns, DXY — US Dollar Index. Oil — price of WTI crude oil

Sources: Own estimates based on data released by yahoo.finance, coinmarketcap.com and investing.com.

with the highest correlation of daily returns observed with the index of small-capitalization companies (Russell 2000), which is historically considered to be more risky than the S&P 500 index. In addition, correlations with all U.S. bond indices (20+ UST Bonds, High yield US Bonds, Inflation Expectations ETFs) and with U.S. commercial real estate fund (REIT) returns have increased markedly. At the same time, compared to 2023, Bitcoin's correlation with stock returns in Europe (Euronext 100), Japan (Nikkei 225), China (Hong Kong Hang Seng and Shanghai SSE Composite) and Russia (RTS), with emerging market bond yields (EM Bonds), as well as with oil and gold, remained virtually unchanged in 2024.

Of course, these results do not fundamentally undermine Bitcoin's ability to act as an interesting asset-diversifier for a portfolio of U.S. assets. Nevertheless, taking into account the high risk of investing in cryptocurrency, there is a possibility that due to the greater involvement of traditional market participants in the Bitcoin market, whose actions may be largely driven by macroeconomic shocks, the degree of correlation between Bitcoin and the U.S. equity market may increase even more, which may negatively affect the attractiveness of the investment properties of the cryptocurrency. On the other hand, the correlation matrix clearly shows that Bitcoin may prove to be a good asset for diversification in many other markets, including Russia.

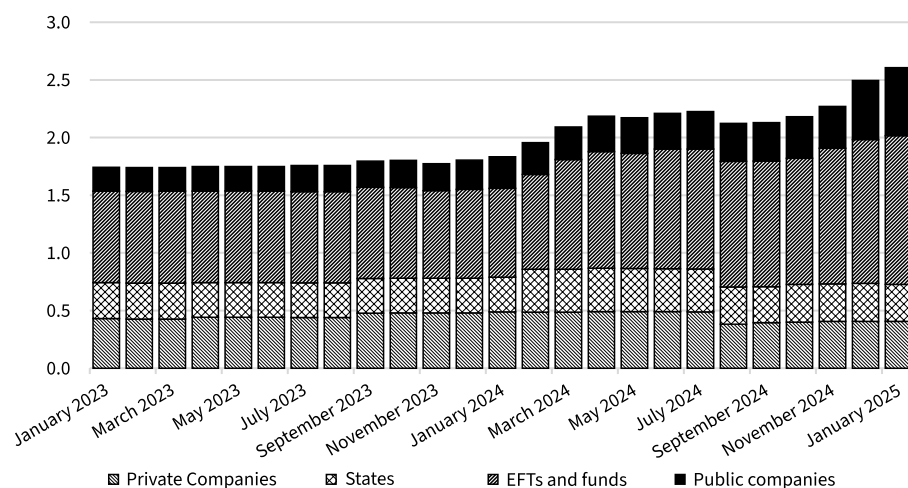


Fig. 69. Dynamics of Bitcoin cryptocurrency accumulation on wallets of companies, funds and states, mn cryptocurrency units

Sources: Own estimates based on data from URL: <https://bitcointreasuries.net> and Arkham Intel.

In addition to the purchase of Bitcoin ETFs in 2024, the trend of direct ownership of Bitcoin by private companies and even states has also increased (Fig. 69). During 2023, an average of about 976,000 Bitcoins were held on the respective wallets,

and about 787,000 more were held by various investment funds, including future ETF issuers, which have been accumulating the cryptocurrency on their accounts for quite some time.

According to the bitcointreasuries portal, 74 public companies from different countries hold a certain amount of cryptocurrency. The analytical software developer Microstrategy is the largest holder of Bitcoins among such companies that, however, is better known by its founder and chairman Michael Saylor and his strategy of constant purchase of Bitcoin by the company from 2020. As of the latest report,¹ the company acquired 471,000 units of the Bitcoin cryptocurrency, which is about 2.24% of its total supply. All other publicly traded companies collectively have 3 times less cryptocurrencies on their books than Microstrategy. The business of the vast majority of the remaining companies is related to cryptocurrencies in one way or another. Thus, about 20 companies are engaged in mining,² and about 25 more provide various financial services.³

Among the other 18 companies not directly related to the cryptocurrency sector that have more than 10 Bitcoins on their balance sheets are Tesla (11,500), online game developers, Hong Kong Boyya (3,800) and Japanese NEXON (1,700), medical equipment and software developer Semler Scientific (1,500), Chinese digital platform for the auto market Cango (0,900, engaged in mining). It is worth noting an intriguing fact that among these companies there are no Bitcoin ETF issuers (Blackrock, Fidelity, 21 Shares, ARK Investments). In open sources we could not find information that they acquire cryptocurrency on their own balance sheet (not as an asset for ETFs). Nevertheless, Blackrock and ARK hold some amount of their own ETFs on their balance sheet for about \$100 mn and \$200 mn, respectively.

As of January 2025, about 400,000 more Bitcoins are still in the possession of some non-public private companies. Naturally, all of them are related to the digital asset sector.⁴ The only exception is SpaceX, which has 8,300 Bitcoins on its balance sheet.

Among the countries actively investing in Bitcoin, so far solely El Salvador and Bhutan do so intentionally and openly. After accepting Bitcoin as a means of payment in September 2021, El Salvador began to gradually acquire the cryptocurrency also for government reserves. There were no official statistics regarding

1. URL: https://www.microstrategy.com/press/microstrategy-acquires-10107-btc-achieves-btc-yield-of-2-ytd-2025-now-holds-471107-btc_01-27-2025

2. For example, Marathon (18,000), Riot (13,000), Hut8 (8,000), CleanSpark (10,000), Hive (2,800.)

3. Among them are cryptocurrency exchange Coinbase (9,000); Block Inc (8,000), which actively integrates Bitcoin payments into its payment application; German Bitcoin exchanger Bitcoin Group (3,600); Galaxy Digital (3,100), which provides financial services and investment management of cryptocurrencies and blockchain projects; the creator of cryptocurrency wallet Exodus (1,900), etc.

4. The largest holders are Block One (164,000), which is engaged in blockchain development; USDT Tether (84,000), the issuer of the USDT stablecoin, cryptocurrency exchange BitMEX (52,000), the issuer of bank cards with the ability to pay with Bitcoins Xapo (39,000), etc.

the size of the purchases, other than President Naib Bukele's statements on social network X. The government acquired Bitcoins periodically throughout 2022, during which time the price of the cryptocurrency dropped from \$46,000 to \$16,000, with a total of 2,381 units known to have been purchased. In December 2022, El Salvador switched to a strategy of buying 1 BTC each day and by December 2023, the government's Bitcoin reserves went into the plus side and totaled about \$131 mn (or 3,111 BTC). In March 2024, the addresses of wallets used by El Salvador to accumulate cryptocurrency became known, and they already had 5,689 units, and by January 10, 2025, in accordance with the strategy of 1 BTC per day (although sometimes more), the amount had already reached 6,023, which corresponds to \$570 mn. For comparison, the foreign exchange reserves of El Salvador's central bank amount to \$3.5 bn.¹

The government of Bhutan through state-owned Druk Holding and Investments (DHI) has been actively involved in the cryptocurrency sector since 2019, however the main focus has been on mining, which has been able to monetize to some extent the surplus electricity from Bhutan's hydropower plants generated during the COVID-19 pandemic.² According to Arkham Intel, DHI increased the number of Bitcoins on its wallets from 1,700 in early 2023 to 10,000 by early 2024 and to 12,200 by January 2025 (or about \$1.1 bn at the exchange rate of early January). Also, as part of the development of the Gelephu special administrative region aimed at creating a number of socio-economic clusters (similar in meaning to domestic special economic zones), to which Bhutan plans to give a fairly wide autonomy, it is already planned to create a strategic reserve of digital assets such as Bitcoin, Ether and BNB.³

Nevertheless, the largest state holders of Bitcoins by far are countries that have not declared state support for cryptocurrencies during 2023–2024 — the USA (198,000) and the UK (61,000). All of these funds were obtained as a result of various operational and enforcement activities and (usually after some time) are subject to sale on the open market. In particular, the bulk of Bitcoins in the U.S. ended up in the U.S. after the anonymous marketplace Silkroad was shut down and its wallets seized. In January 2024, the police of Saxony (Germany) also seized 50,000 Bitcoins in a case about a website with pirated movies, closed back in 2013, but they were all sold last summer.⁴

It is worth noting that the arrival of the new administration in the United States is accompanied by a complete revision of the state's views on cryptocurrencies. Thus, by the end of January 2025, more than 10 U.S. states (including Texas, Florida, Pennsylvania, Ohio, etc.) are actively working on the creation of Bitcoin reserves

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1. As of the end of December 2024, according to the data of the Central Bank of El Salvador. URL: <https://estadisticas.bcr.gob.sv/serie/reservas-internacionales-netas-bcr>
 2. URL: <https://www.forbes.com/sites/digital-assets/2024/09/17/how-bhutan-quietly-built-750-million-in-bitcoin-holdings>
 3. URL: <https://gmc.bt/digitalassets/>
 4. URL: <https://intel.arkm.com/explorer/entity/germany>

at the state level,¹ and Cynthia Lummis, the initiator of the bill to create a state Bitcoin reserve,² was appointed head of the Senate Banking Subcommittee on digital assets. Under the bill proposed by Lummis, the U. S. should gradually form a reserve of 1 mn Bitcoins (4.7% of the proposal), acquiring 200,000 units of cryptocurrency per year. Thus, it is possible that the existing 198,000 Bitcoins in the U. S. will not be sold, but will be transferred to the newly created reserve if this bill is passed.

There is also some speculation as to what other countries may have cryptocurrency stockpiles on their balance sheets. According to some reports, China may have a stockpile of 194,000 Bitcoins seized as part of the shutdown of one of Asia's largest cryptocurrency pyramid schemes, PlusToken, in 2019. However, there is evidence that they were sold around the same year.³ Another possible major cryptocurrency owner could be Iran. The country has allowed mining since 2021, but the mined cryptocurrencies are subject to sale to the state through channels determined by the Central Bank of Iran,⁴ to use cryptocurrency assets as a means of payment to circumvent U.S.-imposed sanctions. In August 2022, the first import transaction using cryptocurrency (although it is not specified which one) worth \$10 mn was reported.⁵ As of the end of 2024, the estimated amount of cryptocurrencies Iran has in its possession is between \$30 billion and \$50 billion.⁶ If Bitcoin makes up the majority of that, Iran could own a minimum of 300,000 units, making it the largest government holder.

The trend of Bitcoin accumulation is likely to continue in 2025. On the investor side, this is attractive in terms of diversification benefits, and even if large investment funds do acquire Bitcoin for 1–2% of their portfolio, as advised by ETF issuers, it could lead to a significant increase in the price of the cryptocurrency. At the same time, managers of some public companies, especially after the phenomenal growth of Microstrategy shares more than 4 times, may also be “tempted” to acquire Bitcoin as one of the ways to increase the shareholder value of the company. The interest from the states in case of successful development of the situation in the USA is also likely to grow.

2.2.2. Altcoins

In addition to Bitcoin, Ether ETFs, the second largest cryptocurrency by capitalization, were also launched in July 2024. The success of Ether ETFs was not so resounding — over the last 6 months of 2024, net inflows into the respective funds

1. URL: <https://www.ccn.com/news/us-states-strategic-bitcoin-reserve-2025/>

2. URL: <https://www.lummis.senate.gov/press-releases/lummis-introduces-strategic-bitcoin-reserve-legislation/>

3. URL: https://x.com/ki_young_ju/status/1882328830649799039

4. URL: <https://www.odaily.news/post/5163133>

5. URL: <https://www.reuters.com/business/finance/iran-makes-first-import-order-using-cryptocurrency-tasnim-2022-08-09/>

6. URL: <https://www.presstv.ir/Detail/2024/12/07/738673/Iran-crypto-asset-market-worth-expert-view>

amounted to only about \$12 bn. In general, Ethereum has no strong growth drivers in the eyes of investors, which is reflected in the rather modest dynamics of the Ether price in 2024 — the cryptocurrency grew by only 46%. Despite the fact that Ethereum and its second-tier networks (Arbitrum, Base, Optimism, Polygon, zkSync, StarkNet) remain the main base for the decentralized finance (DeFi) sector and occupy more than 60% of its volume, native cryptocurrencies of competing networks demonstrated more positive dynamics. For example, the price of the Solana cryptocurrency has increased by more than 86% over 2024, while BNB has increased by 126%. Both cryptocurrencies rank 5th-6th in terms of capitalization around \$100 bn and reached their new highs in 2024, unlike Ether.

The main driver of Solana's growth in 2024 was memecoins — tokens with a funny name and no functions, but with the potential for multiple growth in value if other users find the token interesting. It became very easy to create your own memecoins on the Solana network with the launch of the specialized pump.fun service. According to Coingecko data for 2024,¹ about 5.3 mn memecoins were launched with the help of this service.² Binance research³ notes that in 2024, the capitalization of memecoins was 11% of the capitalization of all cryptocurrencies except Bitcoin and stablecoins. In comparison, in 2023, their share was 5%. At the same time, as of August 10, 2024.⁴ When 1.7 mn memecoins had already been created on Pump.fun, only 141 of them were listed in the database of the Coingecko aggregator site, of which only 41 had a market capitalization above \$1 mn for several weeks. Thus, at least 99.992% of the newly created memecoins for 2024 are essentially “dead”, i. e. have no significant market capitalization.⁵ However, those memecoins that “survived” and managed to bring their holders hundred- and even thousand-fold profits (BONK, WIF, PENGU, and earlier DOGE, SHIB and PEPE) are still for many a benchmark of possible profitability, despite the extremely high risk. Perhaps the “culmination” of the memecoin sector in January 2025 was the launch of the TRUMP token on the same pump.fun service, which was created by someone from the team of the newly elected U. S. president right before his inauguration, whose capitalization reached \$15 bn in just a day and a half (becoming the 12th cryptocurrency in terms of capitalization), after which it dropped to \$6.5 bn.

Stablecoin capitalization grew by 56% in 2024 (*Fig. 70*), reaching a new high of \$200 bn by early January 2025 and surpassing its past high of \$188 bn in April 2022. In absolute terms, the leading stablecoins USDT (+\$40 bn) and USDC (+\$20 bn)

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1. URL: <https://www.coingecko.com/research/publications/2024-annual-crypto-report#read-the-report-coingecko-s-2024-annual-crypto-industry-report>
 2. URL: <https://dune.com/queries/4440437/7432359>
 3. URL: <https://www.binance.com/en/research/analysis/understanding-the-rise-of-memecoins>
 4. URL: <https://x.com/newtoneinsteinx/status/1822117050464260458>
 5. Having said that, the Pump.fun service itself, which charges a commission for creating memecoins, earned more than \$400 mn for 2024.

grew the most, while the combined capitalization of all other stablecoins¹ increased by only \$2.7 bn. Stablecoin usage was also highest in 2024 — according to Visa data,² transaction volume on major blockchains using the digital dollar totaled \$5.62 trillion (vs. \$3.6 trillion in 2023), 99.4% of which was accounted for by USDT (\$4.02 trillion) and USDC (\$1.57 trillion). By comparison, the dollar turnover for all Mastercard cards in 2024 was \$9.76 trillion.³

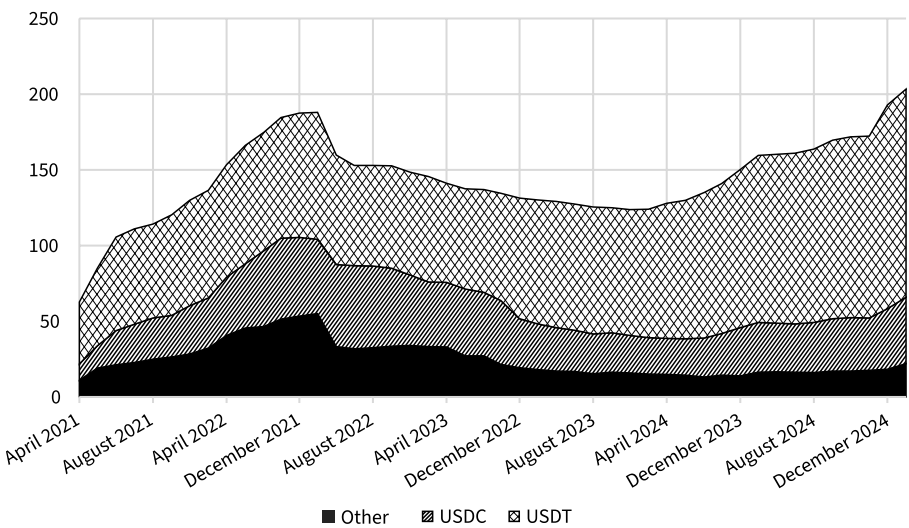


Fig. 70. Stablecoin capitalization, USD bn

Sources: Own estimates based on data released by DeFiLlama.com.

Tether, the issuer of the USDT stablecoin, reported that it was able to earn an extraordinary net profit of \$13 bn for 2024.⁴ In comparison, Goldman Sachs earned \$11.4 bn, Bank of America earned \$21.7 bn, and Blackrock earned \$6 bn, according to its last reported earnings for the previous 12 months. By some estimates, Tether is the most profitable company per 1 employee in the world (\$85 mn per employee). The main source of this profit is U. S. government bonds, in which Tether invests the funds it receives from customers, in exchange for which it issues USDT.

1. Of which, according to DeFiLlama, there are more than 200 and only 135 have a capitalization of more than \$1 mn.
2. URL: <https://visaonchainanalytics.com/transactions>
3. URL: <https://investor.mastercard.com/investor-news-details/2025/Mastercard-Incorporated-Fourth-Quarter-and-Full-Year-2024-Financial-Results-Available-on-Companys-Website>
4. URL: <https://tether.io/news/tether-hits-13-billion-profits-for-2024-and-all-time-highs-in-u-s-treasury-holdings-usdt-circulation-and-reserve-buffer-in-q4-2024-attestation/>

In June 2024, Europe adopted the new MiCa (The Markets in Crypto Assets Regulation), which sets requirements for issuers of digital assets to ensure transparency and investor protection. The USDT stablecoin appeared to be non-compliant with the new regulations in terms of operations and reserve requirements, which led to the delisting of USDT (and some other smaller stablecoins) from some cryptocurrency exchanges (Coinbase, Crypto.com, Kraken), but only for European users. Tether intends to bring USDT into compliance with the new regulation next year, but for now, the main USDT stablecoin for Europe is USDC, which is fully MiCa compliant.

2.2.3. Cryptocurrencies in Russia

As far as Russia is concerned, 2024 brought significant changes in legislation dealing directly with conventional cryptocurrencies rather than digital financial assets. Thus, in the middle of the year, a package of laws aimed at regulating the mining and turnover of cryptocurrencies (which are referred to as “digital currencies” in Russian law) was adopted. Since November 2024, mining in Russia has finally become fully legal and regulated, both for legal entities and individuals (within certain limits), but required to register in a special register of the Ministry for Digital Technology, Communications and Mass Media and submit reports on the amount of “mined” cryptocurrency. The procedure for determining the base for calculating tax in mining was also specified. In general, tax rates on mining income correspond to the standard calculation of income tax, but the moment when income arises is recognized as the crediting of “mined” cryptocurrency to the miner’s wallet. At the same time, the sale of such cryptocurrency is recognized as another taxable event, so if, for example, Bitcoin has managed to increase in value since the moment of mining, tax should also be paid on this increase. Legalization of mining is especially relevant in the context of the fact that according to HashRate Index estimates (as of December 2024¹) Russia has the second largest concentration of mining capacity in the world: Russia has about 16% of the total computing power of the Bitcoin network, which is less than in the United States (36%), but more than in all other countries, including China (14%), UAE (3.75%), Paraguay (3.5%), Canada (3%), Kazakhstan (2.5%) and others.

In terms of regulation of cryptocurrency turnover, the situation has also undergone some changes. In particular, in accordance with Article 1 of FZ-259 “On Digital Financial Assets, Digital Currency...”,² the definition of digital currency reveals its essence as a possible means of payment (which is not a monetary unit of the Russian Federation or another state) and investment. At the same time, the law prohi-

1. URL: <https://hashrateindex.com/blog/top-10-bitcoin-mining-countries-of-2025/>

2. Federal Law 259-FZ of July 31, 2020 “On Digital Financial Assets, Digital Currency and on Amendments to Certain Legislative Acts of the Russian Federation”.

bits the use of cryptocurrencies as a means of payment for goods/services in Russia, but allows their use in foreign trade transactions (which have been used before), and, for example, does not prohibit payment for goods/services with non-residents (part 5 of Article 14). However, advertising of cryptocurrencies is prohibited, as well as public offer of services to organize its circulation.

In general, based on current practice, buying/selling cryptocurrencies in Russia is not prohibited for investment and speculative purposes, including through foreign cryptocurrency exchanges. Nevertheless, the operation of cryptocurrency exchanges within the country is not explicitly regulated — the laws only state that it is necessary to verify the identity of cryptocurrency users and monitor their transactions for money laundering and terrorist financing. According to industry representatives,¹ participants of p2p services and offline/online exchangers are in a rather vulnerable position both to uncertain legislation and directly to fraudsters who try to “launder” illegally obtained funds through the exchanger.

During 2024, there have been several high-profile cases of organizations involved in “illegal cryptocurrency trafficking”² being closed down and The Central Bank, together with Rosfinmonitoring, is actively engaged in cracking down on “suspicious” activities related to the provision of services for buying/selling cryptocurrencies using bank cards,³ including by introducing new mechanisms for identifying “droppers”;⁴ people who transfer their bank cards to third parties. people who transfer their bank cards to third parties. The situation with “droppers” looks quite paradoxical: the lack of transparent regulation and the absence of the Bank of Russia’s instructions to domestic banks to stop working with customers involved in cryptocurrency transactions⁵ has forced online and p2p exchanges to hire “droppers” to be able to distribute turnovers between several accounts to avoid blocking by banks, but the use of which today, also in the absence of clear regulation, is considered a sign of “illegal” turnover and fraud. This situation has already led to an increase in the spread of cryptocurrencies between offline exchanges and p2p services.

At the same time, cards of droppers are also actively used in various fraudulent schemes (including phone fraud). Under the current regulation, however, the fight against “drops” harms the market of cryptocurrency exchangers, which, formally, is not illegal. It would probably be optimal for the regulator to “regulate” p2p services in some way, allowing, for example, commercial banks to open separate accounts for individual entrepreneurs and legal entities specifically for such trans-

1. See for example URL: <https://forklog.com/exclusive/delo-cryptex-za-chto-osnovatelya-birzhi-razyski-vali-v-ssha-a-arestovali-v-rf>

2. URL: <https://www.rbc.ru/crypto/news/66fd249f9a7947461d037335>

3. URL: <https://www.rbc.ru/crypto/news/67498b8d9a7947079b182fd0>

4. URL: <https://www.rbc.ru/finances/26/12/2024/676bb6029a7947844263d4ee>

5. The first of which were issued back in 2022 URL: <https://www.vedomosti.ru/economics/articles/2022/03/17/913983-popitki-vivoda-valyuti>, and also in early 2024 <https://cbr.ru/Crosscut/LawActs/File/7690>

actions (or at least adjust their recommendations and regulations).¹ This would reduce the demand for “droppers” on the part of this rather large market,² thus giving the regulator an opportunity to more effectively suppress criminal schemes directly, as well as simplify the interaction between exchangers and banks, which, in the end, is beneficial to both, as neither the bank nor the exchanger wants to be involved in the circulation of funds related to illegal activities.

Many people associate the future development of the cryptocurrency market with special experimental legal regimes (ELR) in the area of digital innovations in the financial market, which may be established by the Bank of Russia. It is expected that regulated platforms for buying and selling cryptocurrencies may emerge under the ELR, but it is still difficult to say to what extent these services will be available to retail users. First of all, they will obviously be aimed at ensuring foreign economic activity, which is certainly important in the context of sanctions.

1. URL: <https://pravo.ru/news/251842/?ysclid=m6klbv0oxz532293291>

2. In 2023, the p2p payment market was estimated at Rb 70-100 bn <https://plusworld.ru/journal/2023/plus-7-2023/p2p-kriptoperevody-zablokirovat-nelzya-pomilovat/>