EXHIBIT · FORM 10-K · ITEM 1A RISK FACTORS

What the Bitcoin ETF filings say about the halving

12 US spot-Bitcoin ETFs hold the asset. 11 have filed an annual report, and all 11 disclose the same risk: the block subsidy halves on a schedule, transaction fees have not replaced it, and if that does not change the incentive to mine falls — and the security of the network with it. This is the complete record, in their own words.

11 / 11

funds with a 10-K that disclose it

0.63%

fees, share of miner revenue, last 12 months

50%

fees needed at the next halving to hold today's budget

529

days to block 1,050,000 · projected 25 Mar 2028

01 The finding

Every US spot-Bitcoin ETF must tell its investors what could go wrong with the asset it holds. 11 of the 12 funds have now filed an annual report on Form 10-K, and **every one of them discloses the same structural risk**: Bitcoin's block subsidy is cut in half on a fixed schedule, transaction fees have not grown to replace it, and if that does not change, miners lose the incentive to secure the network.

They are not speculating about a distant possibility. The next halving occurs at block `1,050,000`, projected **25 Mar 2028** — about 529 days from the date on this report — when the reward per block falls from 3.125 BTC to 1.5625 BTC. At 83,677 dollars per bitcoin that is **$130,746 per block** removed from mining revenue.

Over the last twelve months, transaction fees supplied **0.63%** of what miners were paid. The subsidy supplied the other 99.37%. Put in units a reader can hold: of every 24 hours of Bitcoin's security budget, fees pay for about **9 minutes**, and the subsidy pays for the remaining 23 h 51 m.

For total miner revenue to survive the halving unchanged, at a constant bitcoin price, fees would have to reach **50% of revenue — roughly 80 times their current share**. The best single month in Bitcoin's recorded history was 22.9%, in December 2017. No issuer quoted in this report asserts that this gap will close. Several state plainly what happens if it does not.

The four numbers

0.63%
fees today, 12-month mean

50%
fees needed after the halving

80×
the gap between them

$39.2M
paid for security per day

02 The roster

Which funds are in this report, and which are not. A fund is included when it has filed a Form 10-K containing the disclosure. Grayscale operates two trusts that file the same passage, so 11 funds produce 10 quoted passages.

TICKER	REGISTRANT	FILING	STATUS
IBIT	iShares Bitcoin Trust ETF	10-K · 2026-02-27	✓ discloses it
FBTC	Fidelity Wise Origin Bitcoin Fund	10-K · 2026-02-25	✓ discloses it
GBTC	Grayscale Bitcoin Trust ETF	10-K · 2026-02-25	✓ discloses it

BTC	Grayscale Bitcoin Mini Trust ETF	10-K · 2026-02-25	✓ discloses it
ARKB	ARK 21Shares Bitcoin ETF	10-K · 2026-03-02	✓ discloses it
BITB	Bitwise Bitcoin ETF	10-K · 2026-03-02	✓ discloses it
HODL	VanEck Bitcoin ETF	10-K/A · 2026-03-27	✓ discloses it
BTCO	Invesco Galaxy Bitcoin ETF	10-K · 2026-03-02	✓ discloses it
BRRR	CoinShares Bitcoin ETF	10-K · 2026-03-10	✓ discloses it
BTCW	WisdomTree Bitcoin Fund	10-K · 2026-03-27	✓ discloses it
EZBC	Franklin Bitcoin ETF	10-K · 2026-06-29	✓ discloses it
MSBT	Morgan Stanley	no 10-K	listed April 2026 — no 10-K filed yet

Also considered and excluded. Hashdex Bitcoin ETF (DEFI) liquidated in August 2026 — it filed Form 25-NSE on 24 August 2026 to delist and Form 15-12G on 3 September 2026 to deregister, and holds no bitcoin. It is therefore not part of the universe and is not counted in the 12.

03 The filings, verbatim

Each passage below is reproduced exactly as filed, with the sentence that names the risk highlighted. Nothing is paraphrased. The full EDGAR address of each document is printed beneath its quote, together with the paragraph index and the SHA-256 of the document, so any reader can fetch the original and confirm both the wording and the file. EDGAR adds one bot-detection <script src> tag, carrying a rotating token, to every download; the hash printed here is of the document with that tag removed, so it reproduces whenever the file is fetched.

The excerpts are the filings' own English and are never translated — they are the evidence. Beneath each one, the highlighted sentence is given in this edition's language.

BlackRock
iShares Bitcoin Trust ETF

IBIT
Form 10-K · filed 2026-02-27
Item 1A Risk Factors

> … occurred in April 2024, and the next reward halving event is expected to occur in or around March 2028, at which time the reward earned per block will fall to 1.5625 bitcoin. The reduction in mining rewards of bitcoin could result in less of an incentive for miners to continue to perform mining activities, thereby jeopardizing the security of the Bitcoin network, which could harm the value of the Shares.

IBIT · CIK 1980994 · https://www.sec.gov/Archives/edgar/data/1980994/000143774926006058/bit20251231_10k.htm
¶268 · document sha-256 dac350e7c2dd22174543f575

Fidelity Investments

Fidelity Wise Origin Bitcoin Fund

FBTC
Form 10-K · filed 2026-02-25
Item 1A Risk Factors

Ultimately, if the awards of new bitcoin for solving blocks declines and transaction fees for recording transactions are not sufficiently high to incentivize miners, miners may operate at a loss or cease operations. If the award does not exceed the costs of mining in the long-term, miners may have to cease operations entirely. If miners cease their operations, this could have a negative impact on the Bitcoin network and could adversely affect the value of the bitcoin held by the Trust.

Counsel-drafted boilerplate: HODL and ARKB file variants of this same passage.

FBTC · CIK 1852317 · https://www.sec.gov/Archives/edgar/data/1852317/000119312526071484/ck0001852317-20251231.htm
¶302 · document sha-256 4f2d4669269e62fae14ecb03

GRAYSCALE

Grayscale Bitcoin Trust ETF
Grayscale Bitcoin Mini Trust ETF

GBTC / BTC
Form 10-K · filed 2026-02-25
Item 1A Risk Factors

If the digital asset rewards for mining blocks or the transaction fees for recording transactions on the Bitcoin Network are not sufficiently high to incentivize miners, or if certain jurisdictions continue to limit or otherwise regulate mining activities, miners may cease expending processing power to mine blocks and confirmations of transactions on the Bitcoin Blockchain could be slowed. Currently, the fixed reward for solving a new block is 3.125 Bitcoin per block. The amount of Bitcoin rewarded for solving a new block is expected to decrease by half ...

One sponsor, two trusts - the same passage, with the same sentence highlighted, appears in both filings. Counted here as one voice, not two.

GBTC · CIK 1588489 · https://www.sec.gov/Archives/edgar/data/1588489/000119312526071956/gbtc-20251231.htm
¶545 · document sha-256 2a73bd77a773740e05533998
BTC · CIK 2015034 · https://www.sec.gov/Archives/edgar/data/2015034/000119312526071952/btc-20251231.htm
¶555 · document sha-256 e37278cf390c24a6a99d3bb0

ARK INVEST

ARK 21Shares Bitcoin ETF

ARKB
Form 10-K · filed 2026-03-02
Item 1A Risk Factors

Ultimately, if the awards of new bitcoin for solving blocks declines and transaction fees for recording transactions are not sufficiently high to incentivize miners, or if the costs of validating transactions grow disproportionately, miners may operate at a loss, transition to other networks, or cease operations altogether. Each of these outcomes could, in turn, slow transaction validation and usage, which could have a negative impact on the Bitcoin network and could adversely affect the value of the bitcoin held by the Trust.

Counsel-drafted boilerplate: FBTC and HODL file variants of this same passage.

ARKB · CIK 1869699 · https://www.sec.gov/Archives/edgar/data/1869699/000121390026021831/ea0276464-10k_ark21share.htm
¶304 · document sha-256 25916f9878c2f7f8196b749e

Bitwise

Bitwise Bitcoin ETF

BITB
Form 10-K · filed 2026-03-02
Item 1A Risk Factors

... reward" or "coinbase") will decrease over time. In April 2024, the block reward was further reduced from 6.25 bitcoin to 3.125 bitcoin. This halving process occurs approximately every four years and will continue until all 21 million bitcoin are mined. As the block reward continues to decrease over time, the mining

incentive structure may transition to a higher reliance on transaction confirmation fees to incentivize miners to continue dedicating processing power to the blockchain. If transaction confirmation fees become too high, the marketplace may be reluctant to use bitcoin. Conversely, if the combination of the block reward and transaction …

BITB · CIK 1763415 · https://www.sec.gov/Archives/edgar/data/1763415/000119312526085335/bitb-20251231.htm
¶340 · document sha-256 4bf42bf82259a2f4beff97d1

VanEck Bitcoin ETF

HODL
Form 10-K/A · filed 2026-03-27
Item 1A Risk Factors

Ultimately, if the awards of new bitcoin for solving blocks declines and transaction fees for recording transactions are not sufficiently high to exceed the costs of mining, miners may operate at a loss or cease operations. If the award does not exceed the costs of mining in the long-term, miners may have to cease operations entirely. If miners cease their operations, this could have a negative impact on the Bitcoin …

> *Counsel-drafted boilerplate: FBTC and ARKB file variants of this same passage.*

HODL · CIK 1838028 · https://www.sec.gov/Archives/edgar/data/1838028/000093041326000927/c115591_10ka-ixbrl.htm
¶260 · document sha-256 59ea42af394d92050c10f96e

Invesco Galaxy Bitcoin ETF

BTCO
Form 10-K · filed 2026-03-02
Item 1A Risk Factors

If the award of new bitcoin for solving blocks and transaction fees for recording transactions are not sufficiently high to incentivize miners, miners may cease expending processing power to solve blocks and confirmations of transactions on the Bitcoin blockchain could be slowed temporarily. A reduction in the processing power expended by miners on the Bitcoin network could increase the likelihood of a malicious actor or botnet obtaining control.

BTCO · CIK 1855781 · https://www.sec.gov/Archives/edgar/data/1855781/000119312526083572/btco-20251231.htm
¶130 · document sha-256 50339edb70e73654c2f8ee7b

CoinShares Bitcoin ETF

BRRR
Form 10-K · filed 2026-03-10
Item 1A Risk Factors

Miners ceasing operations or materially reducing their processing power contribution would reduce the aggregate hash rate securing the Bitcoin Network, which can slow transaction confirmations until the next difficulty adjustment and increase the network's vulnerability to attacks, including the risk that a malicious actor could obtain sufficient control to manipulate the blockchain or hinder transactions. Shifts of mining capacity toward non-bitcoin uses may also reflect, or exacerbate, competition for energy and data center resources, given the energy-intensive nature of proof-of-work mining and the significant electricity …

BRRR · CIK 1841175 · https://www.sec.gov/Archives/edgar/data/1841175/000199937126005527/brrr_10k-123125.htm
¶243 · document sha-256 6619be875013cc7095e92360

WisdomTree®

WisdomTree Bitcoin Fund

BTCW
Form 10-K · filed 2026-03-27
Item 1A Risk Factors

… newly mined bitcoin rapidly, and it may partially or completely cease operations if its profit margin is negative. The reduction in mining rewards of bitcoin, including block reward halving events, which are events that occur after a specific period of time that reduce the block reward earned by miners, could be inadequate to incentivize miners to continue to perform mining activities. In a low profit margin environment, a higher percentage of the new bitcoin mined each day will be sold into the bitcoin market more rapidly, thereby reducing bitcoin prices. The network effect of reduced profit margins resulting in greater …

BTCW · CIK 1850391 · https://www.sec.gov/Archives/edgar/data/1850391/000121465926003899/wtb32026010k.htm
¶426 · document sha-256 b08a1cd6659227c4dd3c0d6d

FRANKLIN TEMPLETON

Franklin Bitcoin ETF

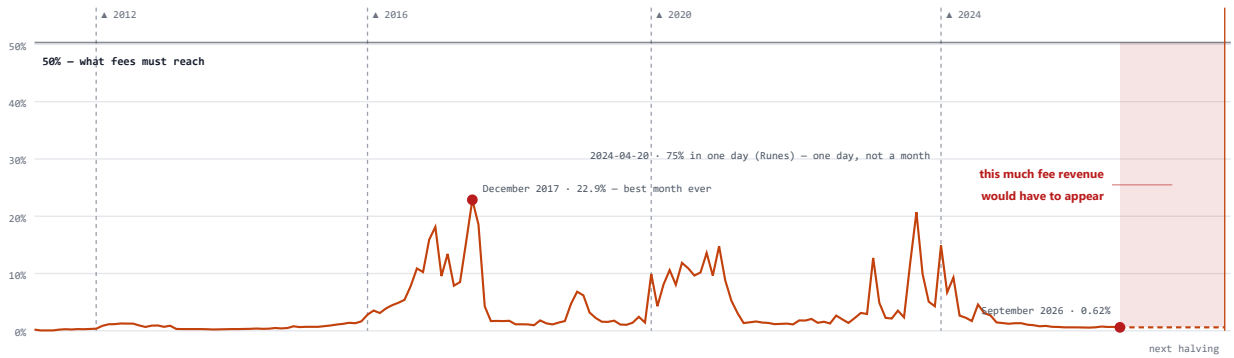
EZBC
Form 10-K · filed 2026-06-29
Item 1A Risk Factors

If the digital asset award for mining blocks and transaction fees for recording transactions on the Bitcoin network are not sufficiently high to incentivize miners, or if certain jurisdictions continue to limit mining activities, miners may cease expanding [sic] processing power or demand high transaction fees, which could negatively impact the value of bitcoin and the value of the Shares.

EZBC · CIK 1992870 · https://www.sec.gov/Archives/edgar/data/1992870/000114036126026744/ef20070486_10k.htm
¶213 · document sha-256 61cdd05efcf3381111b61658

04 What the filings are describing

The chart plots transaction fees as a share of total miner revenue — fees divided by fees plus subsidy, in bitcoin terms — as a monthly average of daily values since 2012. The four dashed rules are the past halvings. The shaded band is the shortfall: the distance between where fees are now and where they would have to be at the next halving for miner revenue to stay where it is today.



Fees are drawn flat from today to the halving because nothing in the series implies a climb; the band is therefore the size of the problem, not a forecast of it. A higher bitcoin price can substitute for a higher fee share — none of the filings quoted here assumes one.

The arithmetic

Let miner revenue per block be `R = F + S`, where F is fees and S is the subsidy. Today F is 0.63% of R. After the halving the subsidy pays S/2, so to hold R constant fees must supply `F + S/2` — which, as a share of the unchanged revenue, is `0.63 + (100 − 0.63) / 2 = 50.31%`. That is 80.0 times today's fee share. The identity holds in bitcoin terms and assumes a constant price; it is arithmetic, not a projection.

Reference figures

22.9%
best month ever · December 2017

0.62%
last full month · 2026-09

0.82%
security budget as a share of market value

9.67
minutes per block, trailing 14 days

05 How this report was made

On 2026-09-20 the most recent Form 10-K for each fund was retrieved from EDGAR. Every paragraph matching a subsidy / halving / miner-incentive pattern was archived verbatim together with its byte offset and the SHA-256 of the source document. The quotes in section 03 are drawn from that archive and re-checked byte-for-byte against it on every rebuild: a quote that does not match its archived paragraph cannot be published, and the build fails instead. Fee figures are recomputed from a daily series on every rebuild. The countdown derives from the live chain tip and the trailing 14-day block interval.

Where discovery failed, and what was done about it

This report's roster is stated explicitly rather than discovered, because discovery by search alone proved insufficient twice:

- A full-text sweep of EDGAR keeps only registrants whose name contains “bitcoin”. That silently excluded funds filing under other trust names — among them Franklin Templeton Digital Holdings Trust, whose fund `EZBC` does disclose the risk and is quoted in section 03.
- The same sweep filters to Form 10-K, which excludes any fund too new to have filed one. Morgan Stanley's `MSBT` listed in April 2026 and has filed a 10-Q but not yet a 10-K. It is one of the 12 funds and not one of the 11 filers; its prospectus discloses the same risk.

On shared drafting

Several issuers file the same counsel-drafted passage. Fidelity, VanEck and ARK share one lineage, and Grayscale files two trusts that carry the same language. This report notes those relationships where they occur rather than presenting 11 funds as 11 independent judgements. The consensus is real, but it is the consensus of a disclosure standard, and a reader is entitled to know which sentences are relatives.

Limits

- Fee share is measured in bitcoin terms. A rising bitcoin price can hold the dollar value of the security budget while the fee share stays flat; none of the quoted filings assumes that it will.
- Figures are as of 2026-10-12 and the report is stamped 2026-10-13. A later edition will differ.
- The quotes are excerpts. Each is linked to its full document so the surrounding context can be read.

06 Sources and notices

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Nothing in this report is investment advice, a recommendation to buy or sell any security or digital asset, or a statement about the merits of any fund. It concerns one disclosed risk factor common to a category of filings.

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Chain data: block height and interval from public Bitcoin APIs; fee and subsidy series computed from daily network totals. Snapshot tip at build: 971,307; blocks remaining to the halving: 78,693.