

What the Bitcoin futures fund prospectuses say about miners' pay

5 Bitcoin futures funds are in this scan, each because its own prospectus lists this risk: ETFs and mutual funds that hold futures contracts, not coins. It is a stated roster, not every bitcoin fund: funds that still trade but whose text on this sits in another fund's section are left out. All 5 list the same risk among their principal risks: miners may not be paid enough. Four of them share one paragraph, word for word, which adds that the pay falls on a declining schedule and that the Bitcoin Network may become more vulnerable to malicious actors. This is the complete record, in the sponsors' own words.

5 / 5

funds whose prospectus discloses it

0.63%

fees, share of miner revenue, last 12 months

50%

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

529days to block 1,050,000 · projected
25 Mar 2028

01 The finding

Every fund must set out, in its prospectus, the principal risks of its strategy. A Bitcoin futures fund holds contracts on bitcoin, not bitcoin itself. Even so, all 5 of the 5 futures funds in this scan **list the same structural risk among their principal risks**: miners may not be paid enough. Four of them share one paragraph, word for word, which adds that miners are paid on a declining schedule and that the Bitcoin Network may become more vulnerable to malicious actors.

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 fund quoted in this report asserts that this gap will close. Their prospectuses say what may happen if miners are not paid enough.

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 holds bitcoin futures, as its own strategy section says, and the disclosure sits in its own Principal Risks. Candidates came from an EDGAR full-text search of prospectus filings (Form 485BPOS and 497) since January 2025, plus the ProShares and VanEck trusts named in advance. This is a stated roster, not a census: a fund that is not listed here has not been shown to lack the risk.

TICKER	REGISTRANT	FILING	STATUS
BITO	ProShares Bitcoin ETF	485BPOS • 2025-09-23	✓ discloses it
BITI	ProShares Short Bitcoin ETF	485BPOS • 2025-09-23	✓ discloses it

BTCFX	Bitcoin ProFund	485BPOS • 2025-11-25	✓ discloses it
BITIX	Short Bitcoin ProFund	485BPOS • 2025-11-25	✓ discloses it
BITX	2x Bitcoin ETF	485BPOS • 2026-06-26	✓ discloses it

Checked and left out. BTF, BITC and BTOP: their filings carry the text only in sibling funds' sections (the CoinShares Bitcoin Mining ETF's; Bitwise's MARA option-income funds'). BITU, SBIT and BTCU: swaps on a spot bitcoin ETF, and BTCLX: options on bitcoin ETPs, so none is a futures fund. BITS and BTRN: the heading appears only in their Statement of Additional Information, not in Principal Risks. None is counted in the 5. Two of the 5, BTCFX and BITIX, are mutual funds, not ETFs. XBTF and BTCMX appear after the sheets as history and are not counted.

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.



ProShares Bitcoin ETF
ProShares Short Bitcoin ETF

BITO / BITI
Prospectus • Form 485BPOS • filed 2025-09-23
Principal Risks

oDeclining mining compensation – Transactions in bitcoin are processed by miners which are primarily compensated in bitcoin based on a declining payment schedule and, in some instances, by voluntary fees paid by participants. **If this compensation is not sufficient to incentivize miners to process transactions, the confirmation process for transactions may slow and the Bitcoin Network may become more vulnerable to malicious actors.** Additionally, changes in the prices of hardware or electricity required to process transactions may reduce miner incentives. These and similar events may have a significant adverse effect on the price and liquidity of bitcoin and the value of an investment in a Fund.

Two funds, one sheet. The paragraph sits byte for byte in each fund's own Principal Risks, with the same sentence highlighted. Both are linked below, each with its paragraph number.

Counsel-drafted boilerplate: BTCFX file variants of this same passage.

BITO • CIK 1174610 • <https://www.sec.gov/Archives/edgar/data/1174610/000119312525213457/f42758d1.htm>
¶12367 • document sha-256 4d61683ae8c919c3821ae445

BITI • CIK 1174610 • <https://www.sec.gov/Archives/edgar/data/1174610/000119312525213457/f42758d1.htm>
¶11784 • document sha-256 4d61683ae8c919c3821ae445



Bitcoin ProFund
Short Bitcoin ProFund

BTCFX / BITIX
Prospectus · Form 485BPOS · filed 2025-11-25
Principal Risks

○Declining mining compensation – Transactions in bitcoin are processed by miners which are primarily compensated in bitcoin based on a declining payment schedule and, in some instances, by voluntary fees paid by participants. **If this compensation is not sufficient to incentivize miners to process transactions, the confirmation process for transactions may slow and the Bitcoin Network may become more vulnerable to malicious actors.** Additionally, changes in the prices of hardware or electricity required to process transactions may reduce miner incentives. These and similar events may have a significant adverse effect on the price and liquidity of bitcoin and the value of an investment in a Fund.

Two funds, one sheet. The paragraph sits byte for byte in each fund's own Principal Risks, with the same sentence highlighted. Both are linked below, each with its paragraph number.

Counsel-drafted boilerplate: BITO file variants of this same passage.

Both are mutual funds, not ETFs. One ProFunds prospectus covers the two of them, and the paragraph appears once, in the Principal Risks section they share.

BTCFX · CIK 1039803 · <https://www.sec.gov/Archives/edgar/data/1039803/000119312525297644/f43283d1.htm>
¶7574 · document sha-256 481bc823101970cb818e0005
BITIX · CIK 1039803 · <https://www.sec.gov/Archives/edgar/data/1039803/000119312525297644/f43283d1.htm>
¶7574 · document sha-256 481bc823101970cb818e0005



2x Bitcoin ETF

BITX
Prospectus · Form 485BPOS · filed 2026-06-26
Principal Risks

Miners may cease expanding processing power to create blocks and verify transactions if they are not adequately compensated.

The whole entry. In BITX's summary of principal risks this is a single bullet, with no heading of its own.

BITX · CIK 1884021 · https://www.sec.gov/Archives/edgar/data/1884021/000121390026072183/ea0295205-01_485bpos.htm
¶91 · document sha-256 83fe3254b292d4f42e119203

History, not in the count. 2021: VanEck Bitcoin Strategy ETF (XBTF), a Bitcoin futures fund, filed a risk titled “Insufficient Mining Reward Risk” in its prospectus (Form 485BPOS, filed 2021-10-20). The fund is not on the SEC's fund list today (checked 2026-09-24).

Insufficient Mining Reward Risk. Miners generate revenue from both newly created bitcoin, known as the “block reward” and from fees taken upon verification of transactions. If the aggregate revenue from transaction fees and the block reward is below a miner’s cost, the miner may cease operations. If the award of new units of bitcoin for solving blocks declines and/or the difficulty of solving blocks increases, and transaction fees voluntarily paid by participants are not sufficiently high, miners may not have an adequate incentive to continue mining and may cease their mining operations. The current fixed reward for solving a new block on the Bitcoin network is 6.25 bitcoin per block, which decreased from 12.5 bitcoin in May 2020. It is estimated that it will halve again in about four years after the previous halving. This reduction may result in a reduction in the aggregate hash rate of the Bitcoin network as the incentive for miners decreases.

XBTF · <https://www.sec.gov/Archives/edgar/data/1137360/000113736021000916/ck0001137360-20201231.htm>
¶157 · document sha-256 07f5866d7670e775646e3bdc

History, not in the count. 2021: Stone Ridge Bitcoin Strategy Fund (BTCMX), a mutual fund, filed a risk under the same title in its prospectus (Form 485BPOS, filed 2021-07-23). It is not on the SEC's fund list today either (checked 2026-09-24).

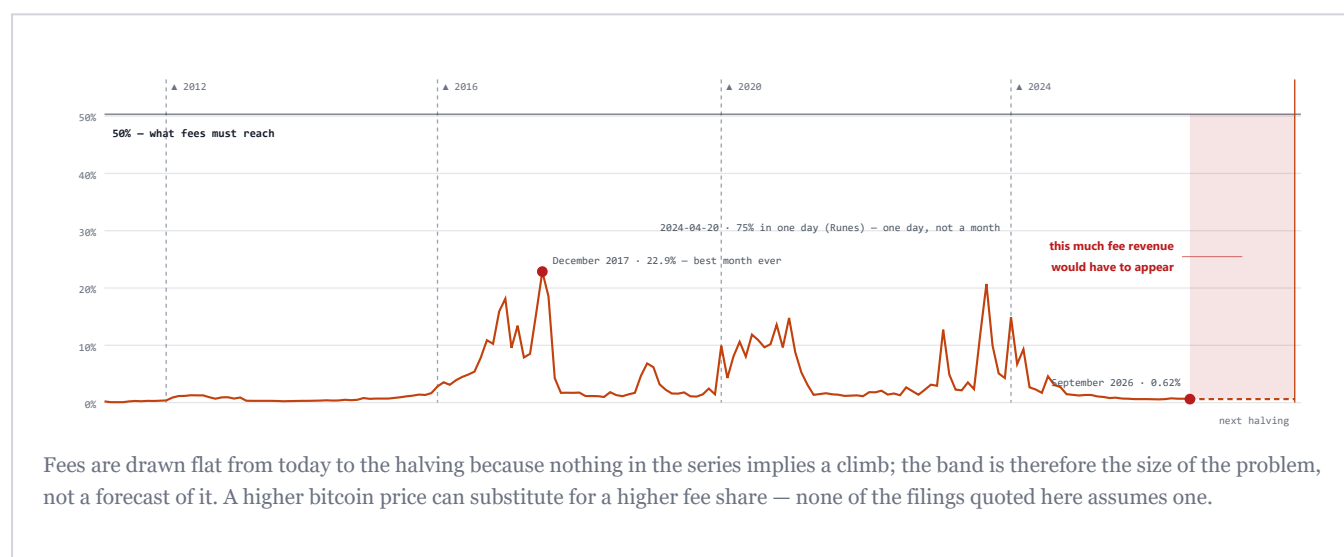
Insufficient Mining Reward Risk. Miners generate revenue from both newly created bitcoin, known as the “block reward” and from fees taken upon verification of transactions. See “Investment Objective and Principal Investment Strategies — The Bitcoin Network.” If the aggregate revenue from transaction fees and the block reward is below a miner’s cost, the miner may cease operations.

BTCMX · <https://www.sec.gov/Archives/edgar/data/1559992/000119312521222638/d735267d485bpos.htm>

¶182 · document sha-256 be5f23ea56c5fe7bd6e0450c

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.



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 2026-09-24 the latest effective prospectus of each fund was retrieved from EDGAR: the newest Form 485BPOS or 497 naming the fund that is a full prospectus. Later supplements with no Principal Risks section do not replace it. Every paragraph matching a subsidy / halving / miner-incentive pattern was archived verbatim together with 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.

How the roster was found, and the two corrections it needed

Search found the candidates. Reading each fund's own sections corrected the list twice:

- Many funds share one prospectus filing. A matching paragraph is credited to a fund only when it sits in a Principal Risks section that fund owns. Read that way, BTF, BITC and BTOP drop out, because their filings carry the text only in sibling funds' sections. BITO is quoted from its own copy of the paragraph, not the identical copy in the Short Bitcoin ETF's prospectus bound into the same filing.
- A matching paragraph is not enough: the fund must hold bitcoin futures. Each fund's own strategy section was read. BITU, SBIT and BTCU use swaps on a spot bitcoin ETF, and BTCLX uses options on bitcoin ETPs. None of the four is a futures fund, so none is in the roster.

On shared drafting

Four of these 5 funds carry one paragraph, word for word: ProShares' two Bitcoin futures ETFs and ProFunds' two Bitcoin mutual funds, from affiliated sponsors. This report puts each sponsor's pair on one sheet and says on both sheets that the text is shared, rather than presenting 5 funds as 5 independent judgements. The fifth, Volatility Shares' BITX, carries its own single line. The consensus is real, but 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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Chain data: the block interval and the build-time height are derived from the same daily series as the fee figures — the height from its cumulative issuance, carried forward at the trailing 14-day block rate. The web edition replaces that figure with a live tip fetched from public Bitcoin APIs; this printed one is the derived value. Fee and subsidy series computed from daily network totals. Derived tip at build: 971,307; blocks remaining to the halving: 78,693.

What the Bitcoin futures fund prospectuses say about miners' pay · <https://futures-etf-risk-factor.pages.dev/> · verified 2026-10-13