



# BITCOIN: A CURRENCY, INVESTMENT, OR NEITHER?

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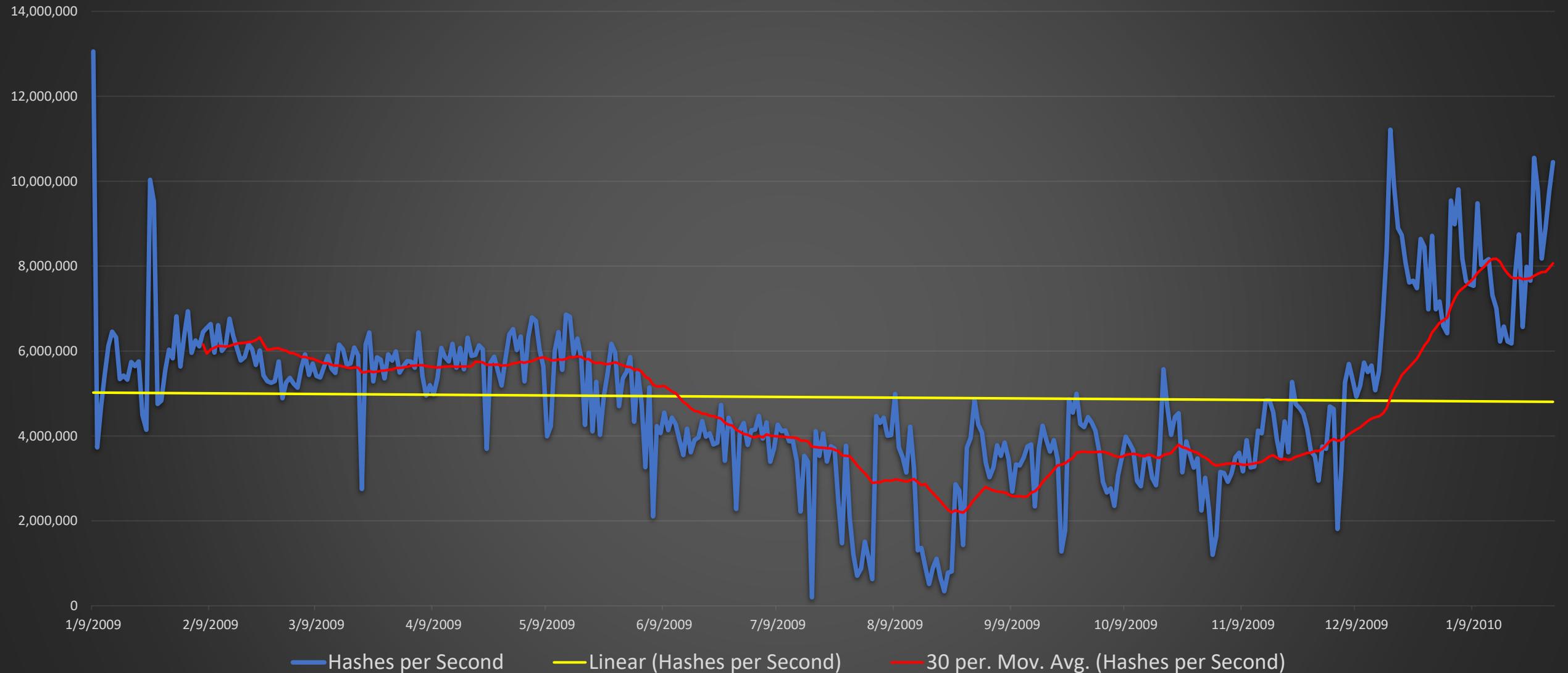
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# HISTORY OF BITCOIN: EARLY TIMELINE

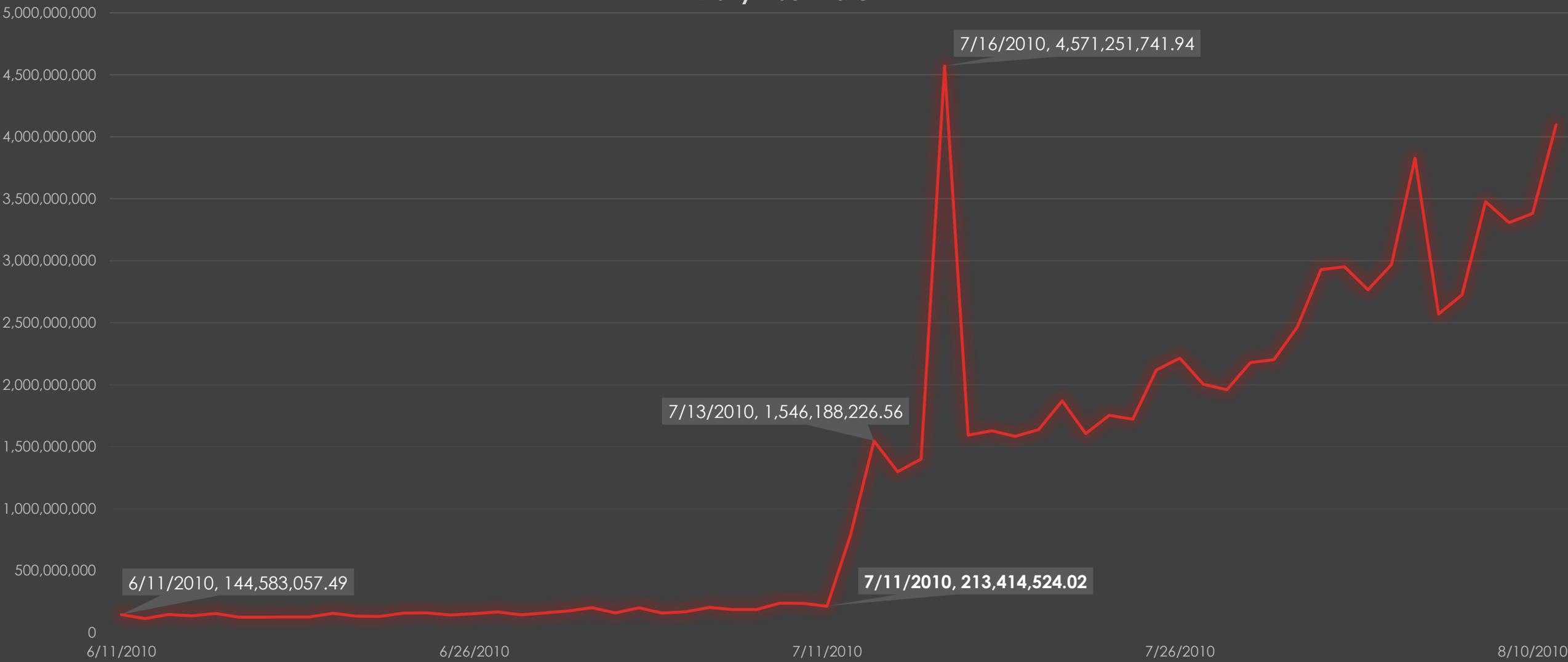


# HISTORY OF BITCOIN: EARLY HASH RATE

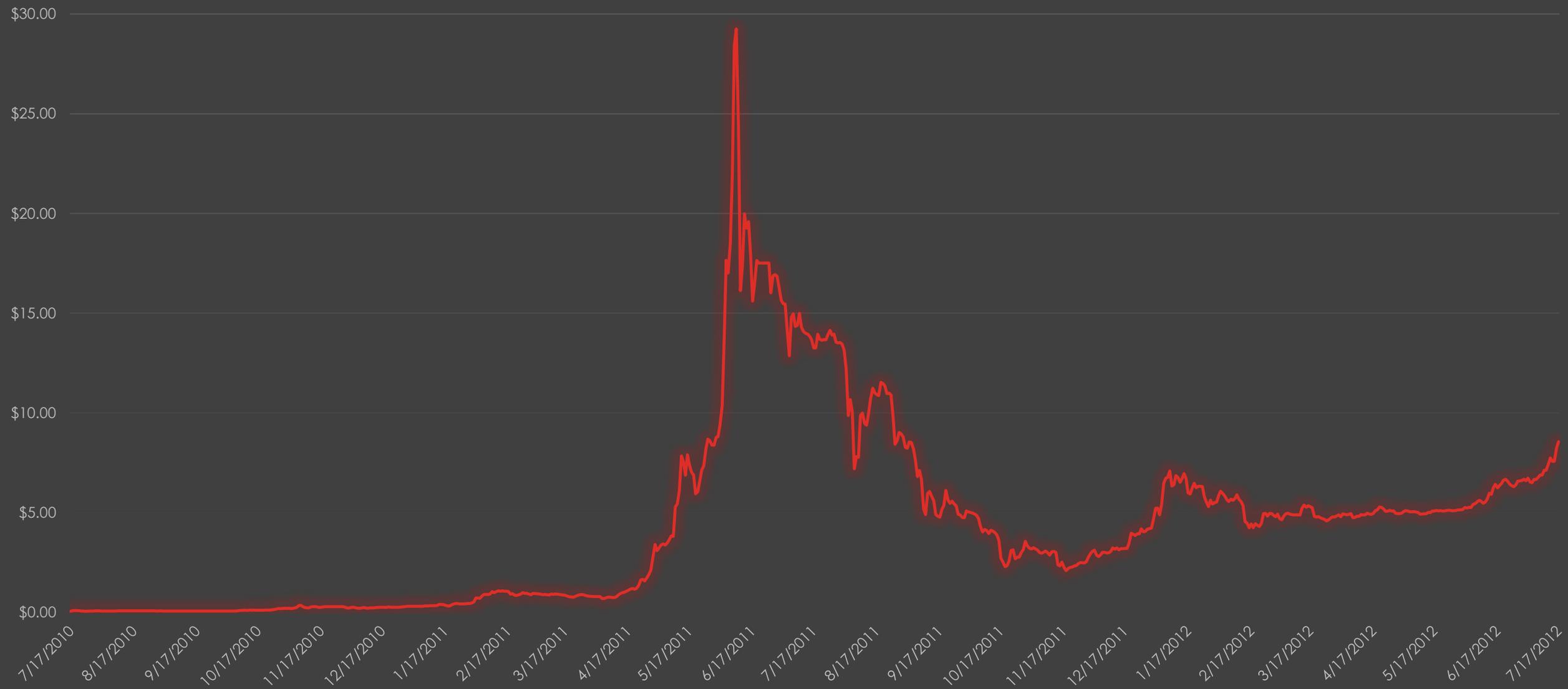


# HISTORY OF BITCOIN: GROWTH AFTER SLASHDOT

Daily Hash Rate



# HISTORY OF BITCOIN: EARLY PRICES 7/17/2010 – 7/17/2012



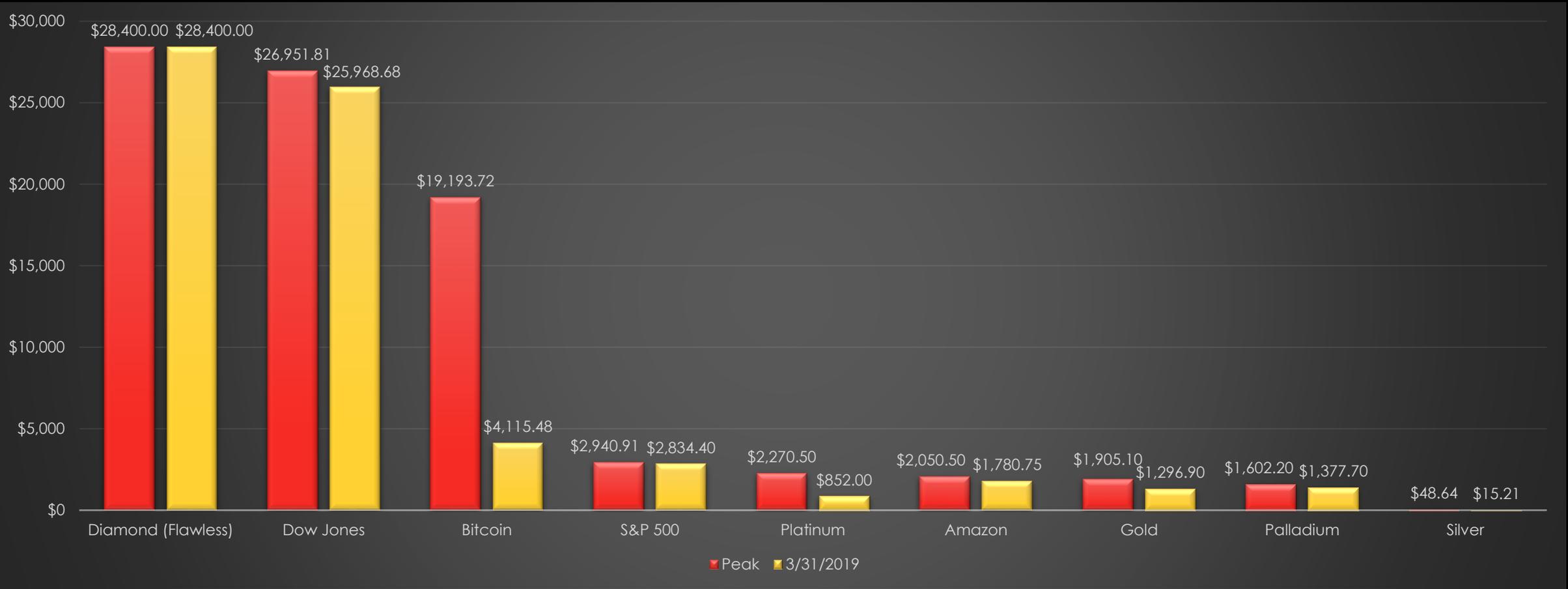
# HISTORY OF BITCOIN: THEN VS. NOW

- 2009: home computer = ~2,000,000 Hashes/second
- 2019: Antminer S9 = ~14,000,000,000,000 Hashes/second
  
- 2009: Bitcoin network = ~5,000,000 Hashes/second
- 2019: Bitcoin network = ~45 Exahashes/second
  
- 1 Exahash = 1,000,000,000,000,000,000 (or 1 quintillion)
- Total network computing power in 2019 is 9 trillion times larger than it was in 2009

# ALL-TIME HIGH PRICES

- Bitcoin: \$19,193.72 (12/16/2017)<sup>1</sup>
- Silver: \$48.64 (4/29/2011)<sup>2</sup>
- Gold: \$1,905.10 (9/5/2011)<sup>3</sup>
- Platinum: \$2,270.50 (3/5/2008)<sup>4</sup>
- Palladium: \$1,602.20 (3/21/2019)<sup>5</sup>
- Diamond\*: ~\$28,400.00 (2016)<sup>6</sup>
- Amazon: \$2,050.50 (9/4/2018)<sup>7</sup>
- Berkshire Hathaway: \$335,900.00 (10/9/2018)<sup>8</sup>
- Dow Jones Industrial Average: \$26,951.81 (10/3/2018)<sup>9</sup>
- S&P 500: \$2,940.91 (9/17/2018)<sup>10</sup>

\*1 carat, flawless cut diamond



# ALL-TIME HIGH VS CURRENT PRICES

(AS OF 3/31/2019)

# CRYPTOCURRENCIES VS BITCOIN

(AS OF 3/31/2019)

- Around 2,100 <sup>11</sup> total cryptocurrencies
- Big 4: Bitcoin, Tether, Ethereum, and Litecoin
- Total market cap of about \$144.3B <sup>11</sup>
  - Bitcoin: \$72.3B <sup>11</sup> (50.14%)
  - Big 4: \$93.0B <sup>11</sup> (64.36%)
- Daily volume is about \$30.4B <sup>11</sup>
  - Bitcoin: \$9.0B <sup>11</sup> (29.68%)
  - Big 4: \$22.9B <sup>11</sup> (75.47%)

# BITCOIN AS FIAT MONEY OR CURRENCY

- Using Bitcoin as currency was Satoshi's vision from the onset
- Divisibility of Bitcoin supports small transactions
- Bitcoin community believes in its use as a currency
- Some online retailers currently accept payment via Bitcoin
- The IRS categorizes Bitcoin as a currency

# BITCOIN AS FIAT MONEY OR CURRENCY: KEYS TO SUCCESS

For Bitcoin to succeed as a currency/fiat:

- Adoption of Bitcoin as a payment method (suppliers/retailers)
- Usage of Bitcoin by consumers (number of wallets and Bitcoin volume)
- Reasonable fees
- Speed of payment processing
- Lower volatility

# BITCOIN AS FIAT MONEY OR CURRENCY: CONCERNS

- While credit card transactions are verified almost instantly, Bitcoin transactions usually take 10+ minutes to be verified
- As money supply increases, the network becomes increasingly reliant on transaction fees as compensation to miners
- Measuring consumer usage is difficult due to transaction chains
- Satoshi controls at least 4.76% of Bitcoin's total money supply

# BITCOIN AS AN INVESTMENT

- In most cases of a client holding or wishing to hold Bitcoin, their goal is ROI
- Products in the financial industry have treated Bitcoin as a capital asset
- The IRS categorizes the sale of Bitcoin for USD or other cryptocurrencies as capital gains/losses

# BITCOIN AS AN INVESTMENT: KEYS TO SUCCESS

For Bitcoin to succeed as an investment, examples of critical technicals to review and analyze would be:

- Transaction volume
- Mining difficulty and hash rate
- Fee rates
- Average block time
- UTXOs

# BITCOIN AS AN INVESTMENT: CONCERNS

- Lack of a “Bloomberg Terminal” for cryptocurrencies makes trading and information gathering more difficult
- Transaction volume is inflated by transaction chains
- Consumers demand lower fees
  - Segwit was developed and adopted for this purpose
- No insider transaction reporting

# CURRENCY OR INVESTMENT?

In order to succeed? **BOTH**

Reality is that the consumers and investors will dictate the answer.

# INVESTMENT RISKS

- Prudent Investor Rule
- ICOs are incredibly risky and have a high rate of failure
- Client direction to buy or sell – volatility
- Ease of market manipulation
- Pricing is inconsistent from exchange to exchange
  - A number of exchanges are fraudulent companies
  - Due diligence on these exchanges is difficult
- Satoshi selling his positions

# FIDUCIARY RISKS

- Source of Bitcoins
  - Were they mined?
  - Were they from illicit activities?
- Tax implications
- Client death/estates
- Increased employee fraud potential
- Volatility affecting alignment with investment objectives
- Rebalancing could introduce significant capital gains taxes
- Must pay a fee to deliver Bitcoins to the client's wallet/account

# BITCOIN'S FUTURE VIABILITY

The crux of whether or not Bitcoin succeeds in the long run lies largely with the transaction fees generated.

- A miner's reward will grow increasingly dependent on transaction fees over time
  - Eventually becoming the entire reward
- Competing interests of a consumer's desire for minimal fees vs a miner's desire for increased revenue (or even stable revenue)
- Fees are based on "weight" of transaction instead of percentage of the transaction cost
- If Bitcoin is to be used as a currency, that includes small transactions

# ALLOWING BITCOIN HOLDINGS

How to hold/custody Bitcoins:

- Online vs. offline wallets
  - Online wallets are connected to the network, allowing for faster transactions but are more susceptible to hacking attempts
  - Offline wallets are either stored on a computer that is not connected to the internet or are drives/USBs removed from any computer
- Hot vs. cold wallets
  - Hot wallets functionally act as an omnibus account
  - Cold wallets store reserve funds and are not meant for regular movement (to or from)
- Constant movement of funds

Exchanges widely used in the community & date established:

- Bitstamp – July 2011
- HitBTC – February 2014
- Binance – July 2017

# OFFLINE WALLETS

- Even an offline wallet can have its private key(s) hacked and its contents sent to another person without the wallet being online or a fiduciary ever being aware the contents moved.
- Offline wallets can be damaged or corrupted by environmental conditions.
- Backups are encouraged and should be stored at another physical location to mitigate risk.
- Air-gapped computers used in conjunction with offline wallets are popular, however IT departments would likely object to using one.

# POSITIVE ASPECTS OF BITCOIN & BLOCKCHAIN

- The technology, code, and concepts are excellent
  - Despite Bitcoin being the original and most valuable cryptocurrency, the code has never been hijacked
  - Very few exploits in the code have been found, especially after the initial versions
  - The concept of blockchain has been used by numerous companies, including Facebook <sup>12</sup>
- I believe that blockchain technology will eventually be widely utilized by banks, credit card companies, escrow services, etc.

# FINAL QUESTIONS



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CONTACT  
INFORMATION

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