# Huobi Blockchain Big Data Weekly Insights Vol. 7

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## Abstract

**All data in this report was captured and analyzed by Huobi Research; please cite the source "Huobi Blockchain Big Data" for reference.**

- **On-Blockchain Data:**

This week, the number of active Bitcoin addresses dropped from 4.21 to 3.52 million , of which the number of new addresses increased from 1.26 to 1.37 million, the highest in the past two months, and the number of reactivated addresses decreased 750,000 to 1.59 million. In addition, the total BTC trading volume decreased 1.3% to 6.40 million BTC, despite the total number of transactions increased 8.9% to 1.53 million. The average transaction volume dropped 7.9% to 4.18 BTC. This week, the number of large transactions on BTC network decreased slightly from 400 to 380. The total volume of transactions worth between 100 and 1,000 BTC accounted for 33.89% of all BTC transactions (31.2% last week). There were five top 30 Bitcoin addresses with significant change in balance, including 3 net inflows and 2 net outflows this week.

The number of active address in ETH increased 28.1% from 1.21 to 1.57 million, rising for two consecutive weeks. The overall ETH transaction volume increased 19% to 10.97 million ETH, ending the downward trend for four consecutive weeks. The total number of transactions increased 20.5% to 4.99 million. The overall transaction fee decreased from 22,000 to 11,000 ETH, and average transaction fee decreased 60% to 0.0021 ETH this week, the lowest in two months. Concentration of wealth on ETH network increased slightly. There was only one extra-large transaction on ETH network this week.

- **Social Media Data:**

BTC, ETH, and EOS were the top trending cryptocurrencies in China, while BTC, ETH, and Ripple were the top trending cryptocurrencies overseas. In the Events category, "Risk", "Dividend" and "ETF" were the hottest words in China, while "ETF", "Bot" and "SEC" were the hottest overseas; in the Exchange and KOL category, "Huobi", "OKEX" and "Fcoin" were the hottest in China, while "Coinbase", "Binance" and "Satoshi" were the hottest overseas. BTC, ETH and EOS were the most active projects on GitHub with the most added and accumulated Stars and Forks. Search for Cryptocurrency-related keywords has significantly increased on Baidu and Google.

- **Market Trading Data:**

The price of most top 10 Cryptocurrencies experienced increase to various degrees, with IOTA having the biggest decreased of 9.2% and Stellar having the biggest increase of 28.9% in price. In terms of price volatility, BTC had the lowest volatility of 0.0031 s.d. while Stellar had the largest volatility of 0.0089 s.d. EOS has the largest turnover of 52.7% and Stellar has the smallest turnover of 5.4%. There was a high correlation between all top 10 Cryptocurrencies this week except for BTC and Stellar.

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# 1. On-Blockchain Data

## 1.1 Active Bitcoin Addresses

**This week, the number of active Bitcoin addresses dropped 16.4% from 4.21 million to 3.52 million.**

Figure 1: Active Bitcoin Addresses (in thousands)
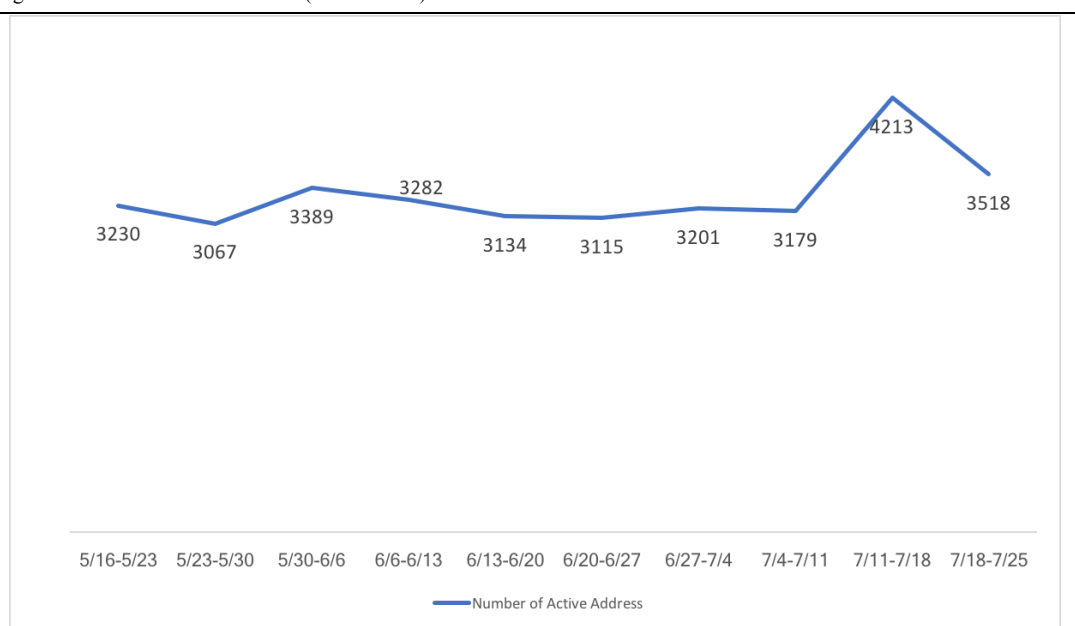


Data Source: Blockchain Node File, Huobi Research

**This week, the number of new addresses increased from 1.26 million last week to 1.37 million, the highest in the past two months. The continuously active addresses reduced slightly** from 61,000 to 56,000 million, accounting for 15.9% of the total active addresses (14.4% last week). **The number of reactivated addresses was reduced greatly for 32% from 2.34 to 1.59 million, which directly led to a significant decrease in the number of active addresses.**

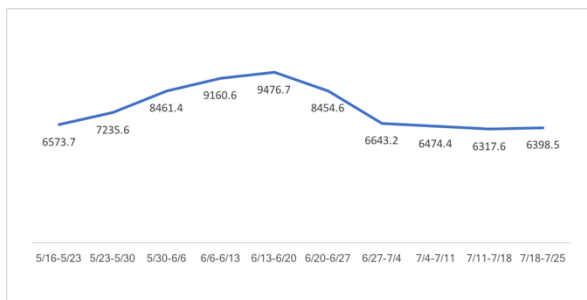Figure 2: Categorization of Active Bitcoin Address（in thousands）
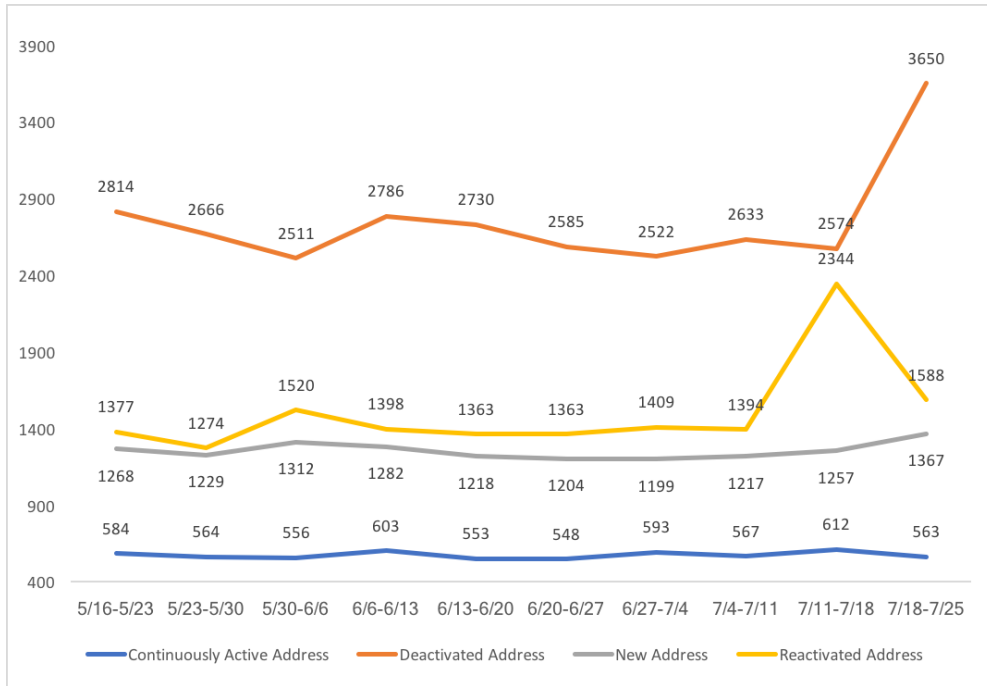
Data Source: Blockchain Node File, Huobi Research

## 1.2 Transactions on Bitcoin Network

**The overall transaction volume on the Bitcoin network was 6.398 million BTC, up 1.3% from 6.318 million BTC last week, ending the downturn of four consecutive weeks.** There were overall 1.53 million transactions, up slightly from 1.39 million last week. The average amount of BTC per transaction decreased by 7.9% from 4.54 to 4.18 BTC in a week.

Figure 3.1: Bitcoin Trading Volume (thousand BTC)　　　Figure 3.2: Number of Transactions on BTC (in thousands)
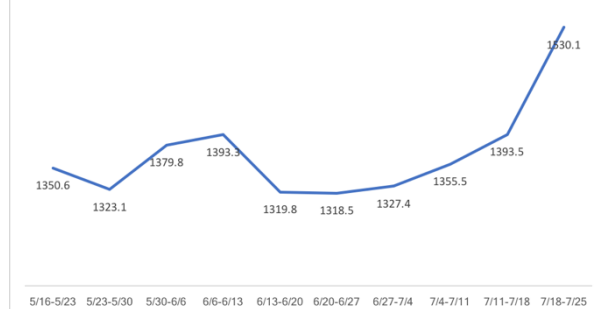


Data Source: Blockchain Node File, Huobi Research　　　Data Source: Blockchain Node File, Huobi Research

## 1.3 Bitcoin TPS

The average bitcoin transaction volume per second (TPS) this week increased to 2.53, rising for five consecutive weeks.

Figure 4: Bitcoin TPS
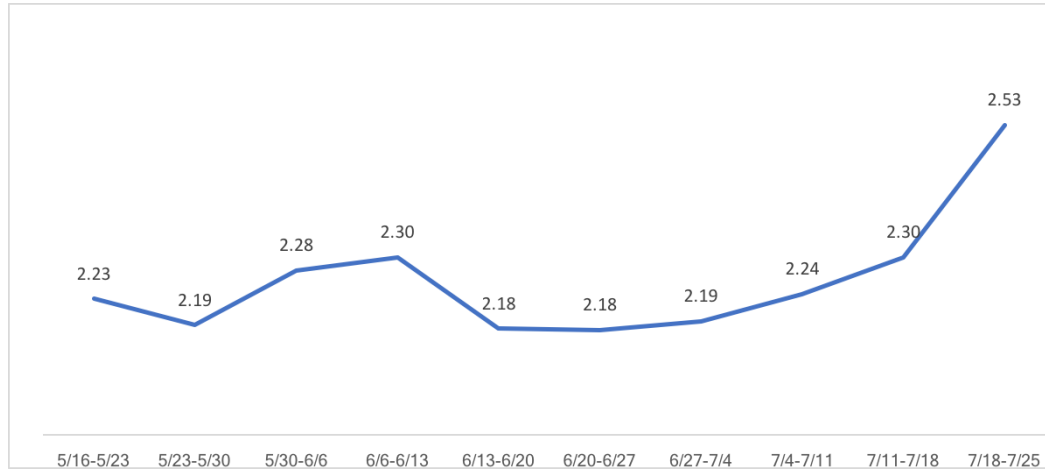


Data Source: Blockchain Node File, Huobi Research

## 1.4 Bitcoin Transaction Fe

This week, the overall Bitcoin transaction fee was up from 137.5 to 171.7 BTC. The average transaction fee per transaction was 0.00011 BTC, increased slightly from last week.

Figure 5: Bitcoin Transaction Fee (BTC)



Data Source: Blockchain Node File, Huobi Research

## 1.5 Concentration of Wealth on Bitcoin Network

**Concentration of Wealth on Bitcoin Network was nearly unchanged compared to last week.** The holding ratios of top 10 addresses was about the same. Top 10-100 addresses held 13.3% of all Bitcoins, up 0.05% from 13.3% last week. Top 100-1000 address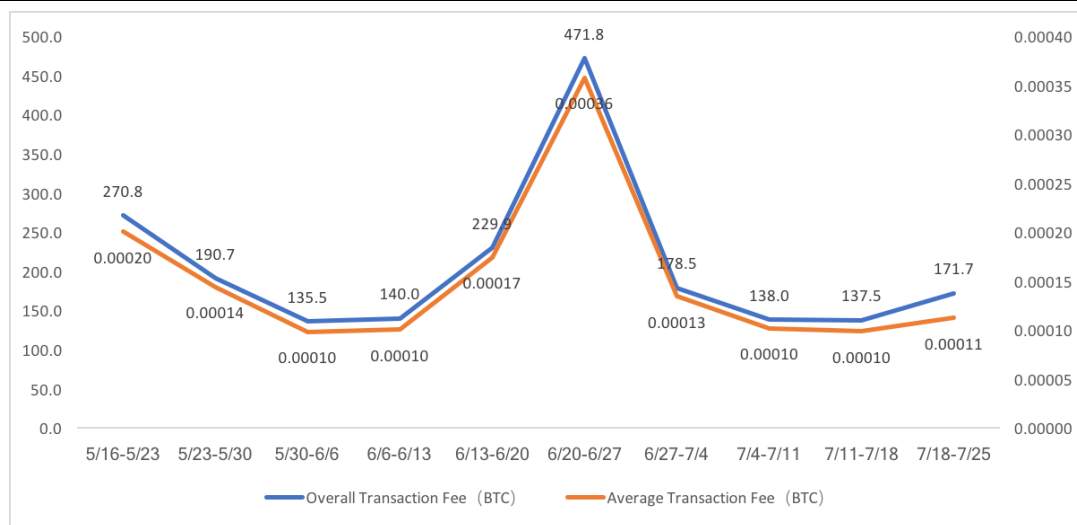es held 16.46% of all Bitcoins, down 0.03% from 16.49% last week. The holding ratios of other remaining addresses was almost as same as last week.

Figure 6: Concentration of Wealth on BTC Network
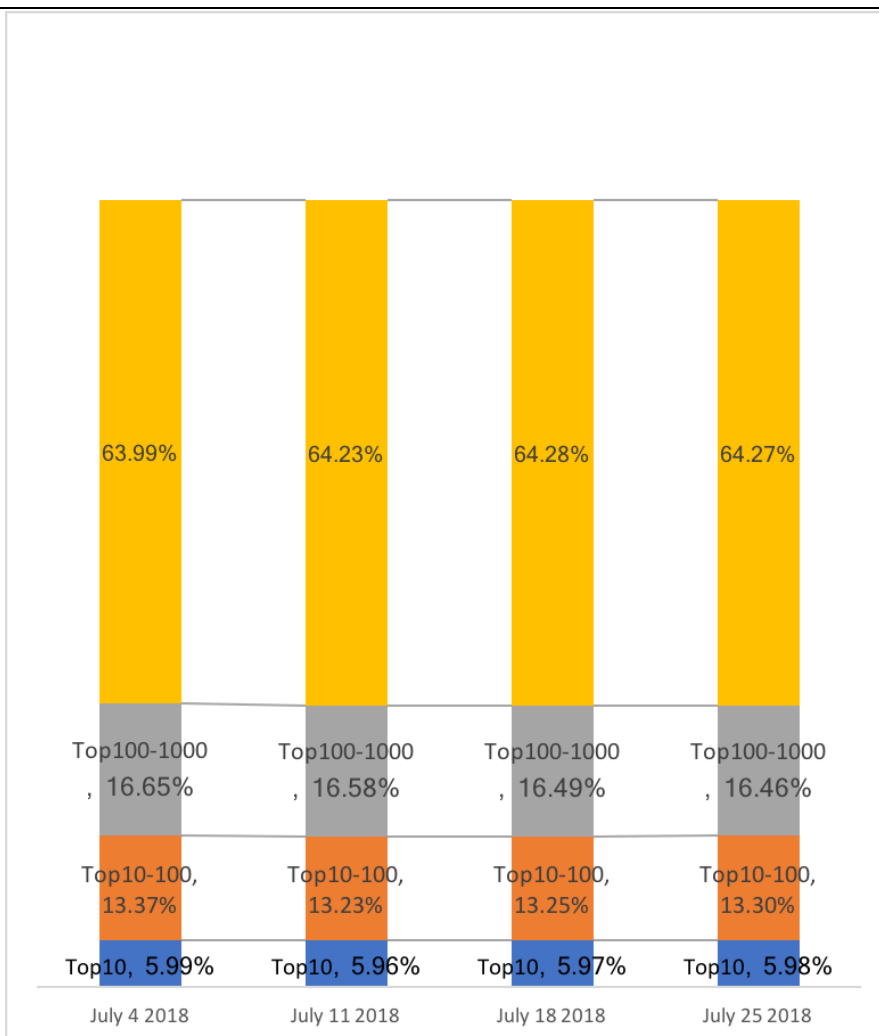


Data Source: Blockchain Node File, Huobi Research

## 1.6 BTC Large Transactions Monitor

Huobi Research defines "extra-large transactions" as individual transactions

worth over 10,000 BTC, and "large transactions" as those worth between 1,000-10,000 BTC. This week, there were no extra-large transactions on Bitcoin network. **The number of large transactions decreased from 400 last week to 380, which was the lowest in the past two months.**

Figure 7：Large and Extra-large Transactions on BTC Network
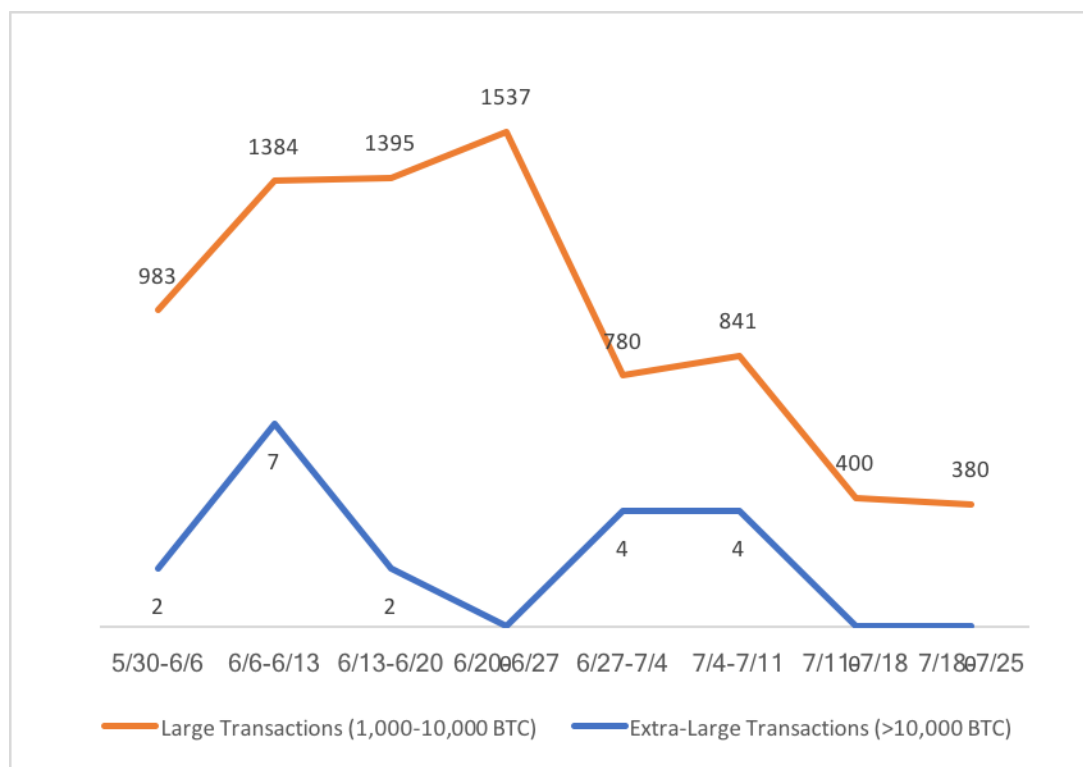


Data Source: Blockchain Node File, Huobi Research

## 1.7 Transaction Volume Distribution of Bitcoin

This week, Bitcoin's overall transactions volume for transactions worth between 0-1,000 BTC increased, while the overall transaction volume for transactions worth over 1,000BTC decreased. There was no extra-large Bitcoin transaction this week. The majority of the transactions this week was worth between 10-100 BTC, accounted for 33.9% (31.2% last week) of all BTC transactions this week.

Figure 8.1: Transaction Breakdown by Volume                    Figure 8.2: Weekly BTC Transaction Distribution
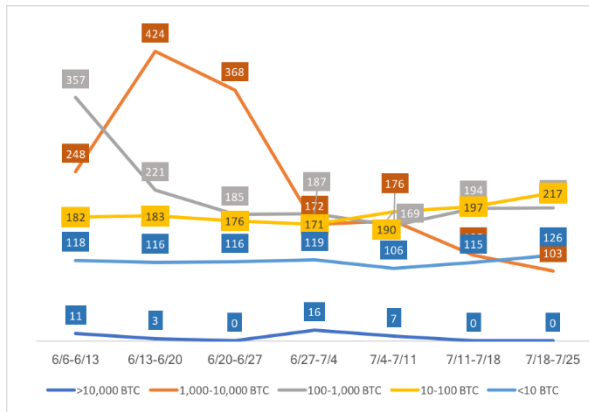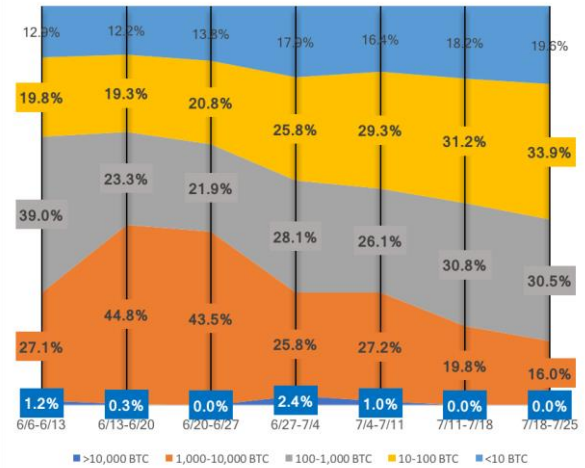
Data Source: Blockchain Node File, Huobi Research          Data Source: Blockchain Node File, Huobi Research

## 1.8 Change in Balance of Top 30 Bitcoin Address

This week, among the Top 30 Bitcoin addresses, 5 addresses had significant changes in their balance, including 3 net inflows and 2 net out flows. Bitfinex's cold wallet address had the highest net inflow of 2,975 BTC, followed by a net inflow of 2,002 BTC to the address "38UmuUqPCrFmQo4khkomQwZ4VbY2nZMJ67". The address "32ixB1aXiwgpHGHo27SMRSULajCdc7jq9Q" had the highest net outflow of 2,500 BTC.

Figure 9: Change in Balance of Top 30 Bitcoin Address

| Address | Balance as of 2018/7/25 | Balance as of 2018/7/18 | Change in Balance | Note |
|---|---|---|---|---|
| 3D2oetdNuZUqQHPJmcMDDHYoqkyNVsFk9r | 185719 | 182744 | 2975 | Bitfinex Cold Wallet |
| 16ftSEQ4ctQFDtVZiUBusQUjRrGhM3JYwe | 158779 | 158779 | 0 | |
| 16rCmCmbuWDhPjWTrpQGaU3EPdZF7MTdUk | 107203 | 107203 | 0 | |
| 3Nxwenay9Z8Lc9JBiywExpnEFiLp6Afp8v | 101848 | 101848 | 0 | |
| 3Cbq7aT1tY8kMxWLbitaG7yT6bPbKChq64 | 98042 | 98042 | 0 | |
| 183hmJGRuTEi2YDCWy5iozY8rZtFwVgahM | 85947 | 85947 | 0 | |
| 1FeexV6bAHb8ybZjqQMjJrcCrHGW9sb6uF | 79957 | 79957 | 0 | |
| 18rnfoQgGo1HqvVQaAN4QnxjYE7Sez9eca | 73600 | 73600 | 0 | |
| 1HQ3Go3ggs8pFnXuHVHRytPCq5fGG8Hbhx | 69370 | 69370 | 0 | |
| 1PnMfRF2enSZnR6JSexxBHuQnxG8Vo5FVK | 66452 | 66452 | 0 | |
| 1AhTjUMztCihiTyA4K6E3QEpobjWLwKhkR | 66379 | 66379 | 0 | |
| 1DiHDQMPFu4p84rkLn6Majj2LCZZZRQUaa | 66236 | 66236 | 0 | |
| 1EBHA1ckUWzNKN7BMfDwGTx6GKEbADUozX | 66234 | 66234 | 0 | |
| 1LdRcdxfbSnmCYYNdeYpUnztiYzVfBEQeC | 53880 | 53880 | 0 | |
| 1JCe8z4jJVNXSjohjM4i9Hh813dLCNx2Sy | 53000 | 53000 | 0 | |
| 1AC4fMwgY8j9onSbXEWeH6Zan8QGMSdmtA | 51830 | 51830 | 0 | |
| 12YygZpCEC8VED2oSMQdWCq5xBnHo9ts1Z | 48500 | 48500 | 0 | |
| 38UmuUqPCrFmQo4khkomQwZ4VbY2nZMJ67 | 41419 | 39417 | 2002 | |
| 323ENWgPNZdzsm2d6CzEaPTFrvavn1giv5 | 40055 | 38553 | 1502 | |
| 37x6JnDNhbsBw95bvEreB7WHWA74gGR17y | 40014 | 40012 | 2 | |
| bc1q9sh6544xls87x7skjzyfhkty4wq7z76vn7qzq9 | 40000 | 40000 | 0 | |
| 33VMRgxXZWgZGmGnGRZ9AEW8bZs8scMiY1 | 39239 | 39237 | 1 | |
| 3Ap6mixhHLmVtH41YHH94Ut4jBfmqRpzgQ | 38875 | 38874 | 1 | |
| 3CqBquEFMYY548fNBz8u2MBw3HKprS3Xft | 38794 | 38792 | 2 | |
| 17hf5H8D6Yc4B7zHEg3orAtKn7Jhme7Adx | 36000 | 36000 | 0 | |
| 36TEhDpuSJnVbGbBC3kqWd8FiCvX95pir4 | 35612 | 35612 | 0 | |
| 1MAhRt279uYmVC1dUxKR6dWwEULBJT34Nh | 34010 | 34010 | 0 | |
| 32ixB1aXiwgpHGHo27SMRSULajCdc7jq9Q | 33500 | 36000 | -2500 | |
| 336xGpGweq1wtY4kRTuA4w6d7yDkBU9czU | 33083 | 34277 | -1194 | |
| 18tTLso5jaa4XqyTQzo9S6mqhfCsgcufdh | 32957 | 32957 | 0 | |

## 1.9 Active Ethereum Addresses

The number of active addresses in Ethereum increased from 1.21 million last week to 1.56million, increasing 28.1% and rising for two consecutive weeks.
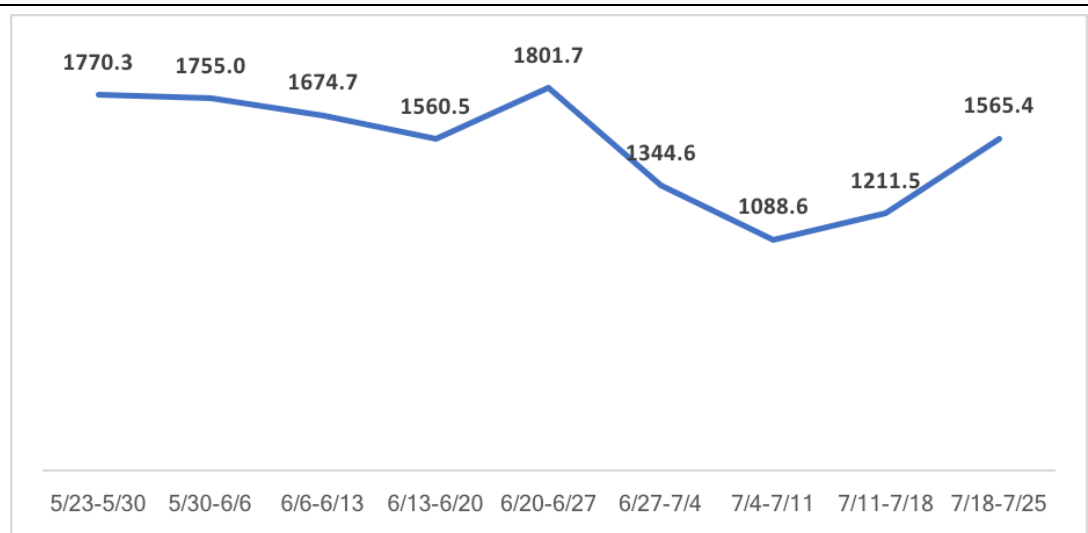
Figure  10: Number of Active Ethereum Addresses (in thousands)



Data Source: Blockchain Node File, Huobi Research

## 1.10 Transactions on Ethereum Network

**The transaction volume on the Ethereum network increased to 10.97 million ETHs this week, up 19% from last week and ending the downward trend for four consecutive weeks. Number of transactions on the Ethereum network this week was 4.99 million, up 20.5% from 4.14 million last week.** The average transaction volume was 2.19 ETH, about the same as last week.

Figure 11.1: Overall Trading Volume on ETH (million ETH)     Figure 11.2: Number of Transactions on ETH (in millions)
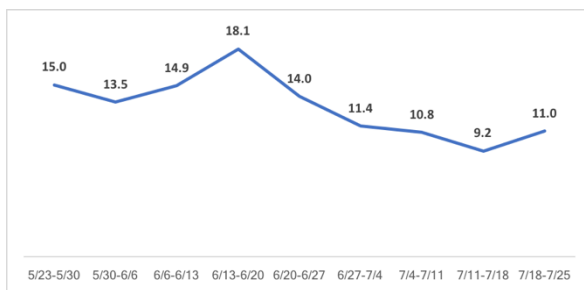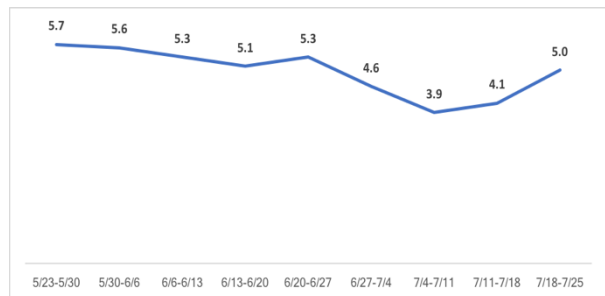


Data Source: Blockchain Node File, Huobi Research          Data Source: Blockchain Node File, Huobi Research

## 1.11 Ethereum TPS

This week, Ethereum's average transaction per second was 8.3, up 22% from last week and increasing for two consecutive weeks.

Figure 12:Ethereum TPS



Data Source: Blockchain Node File, Huobi Research

## 1.12 Ethereum Transaction Fee

This week, Ethereum's total transaction fee decreased greatly from **22,000 ETH to 11,000 ETH, the lowest in two months.** The average transaction fee was **0.0021 ETH, down 60% compared to that of last week.**

Figure 13: Ethereum Transaction Fee
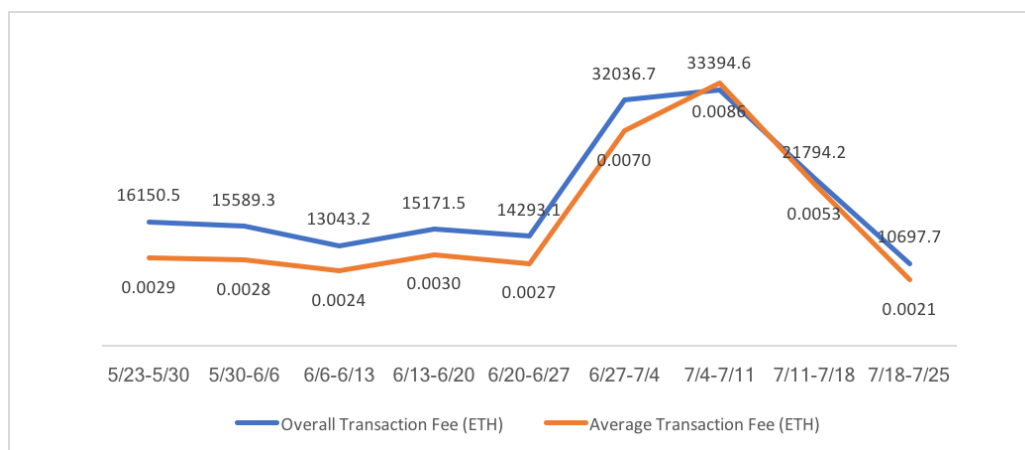


Data Source: Blockchain Node File, Huobi Research
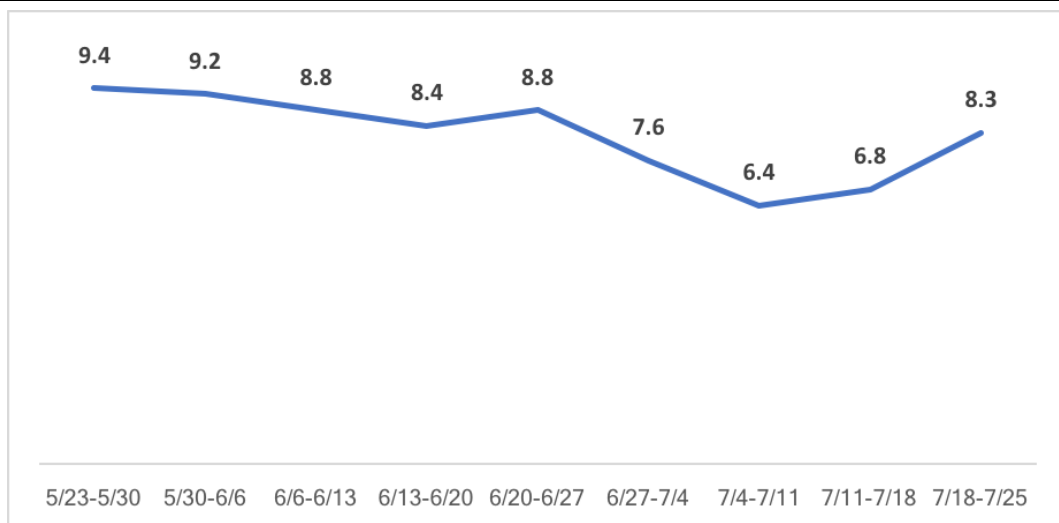
## 1.13 Concentration of Wealth on Ethereum Network

**The concentration of wealth on Ethereum network has continued to improve.** The top 10 addresses held 11% of all ETH, unchanged from last week. The top 10-100 addresses held 23.6% of all ETH, up 0.21% from last week. The top 100-1000 addresses held 25.2% of all ETH, decreased by 0.09% from last week's 25.29%. As a result, the remaining addresses held 40.2% of all ETH, down 0.11% from last week's 40.31%, reached the lowest point in recent two months.

Figure 14: Concentration of Wealth: BTC vs. ETH
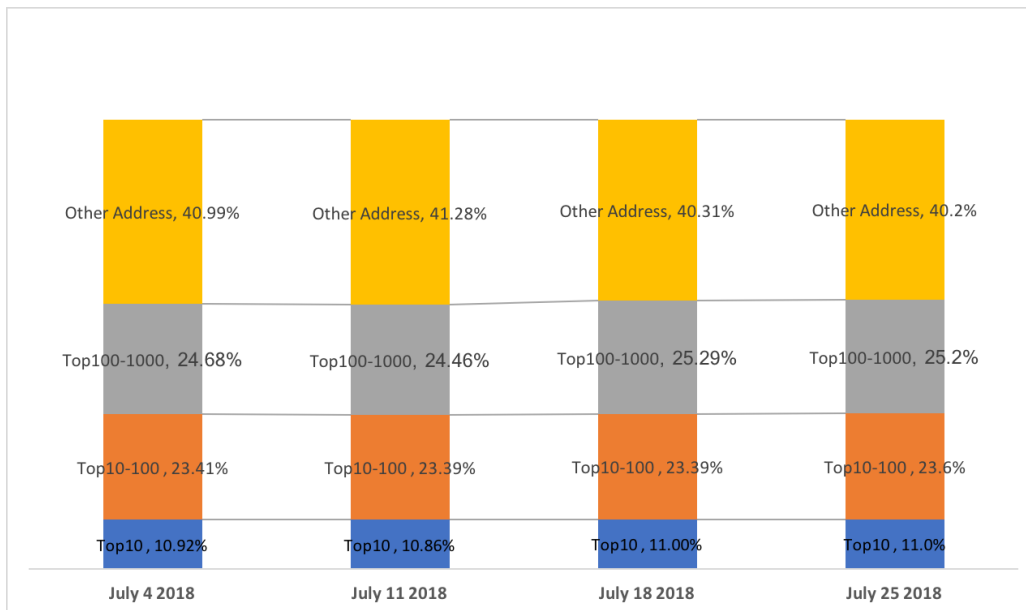
Data Source: Blockchain Node File, Huobi Research

## 1.14 ETH Large Transactions Monitor

Huobi Research defines "extra-large transactions" as individual transactions worth over 5,000 ETH, "large transactions" as those worth between 1,000-5,000 ETH, "other" as those worth under 5,00 ETH. This week, there was one extra-large transaction of 50,000 ETH on ETH network. The number of large transactions increased from 55 last week to 66.

Figure 15: Large and Extra-large Transactions on ETH Network
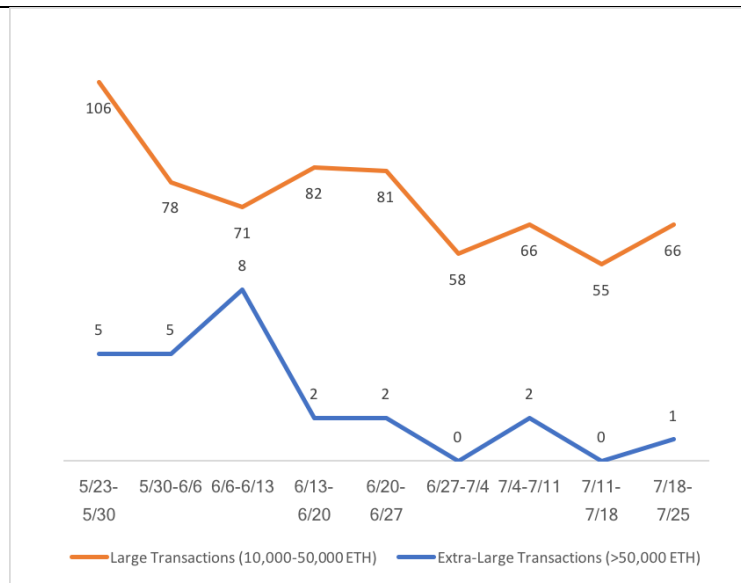


Data Source: Blockchain Node File, Huobi Research

## 1.15 Transaction Volume Distribution of Ethereum

The overall transaction volume of transactions increased. The proportion of overall volume of ETH transactions was about the same as last week, with the majority of the transactions worth between 100-1,000 ETH.

Figure 16.1: Transaction breakdown by volume

Figure 16.2: Weekly ETH transaction distribution
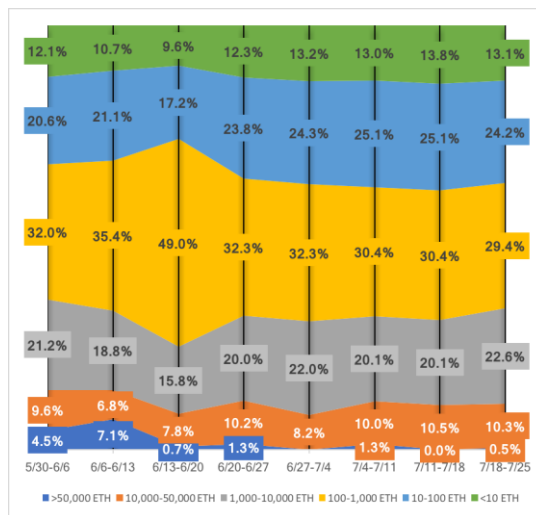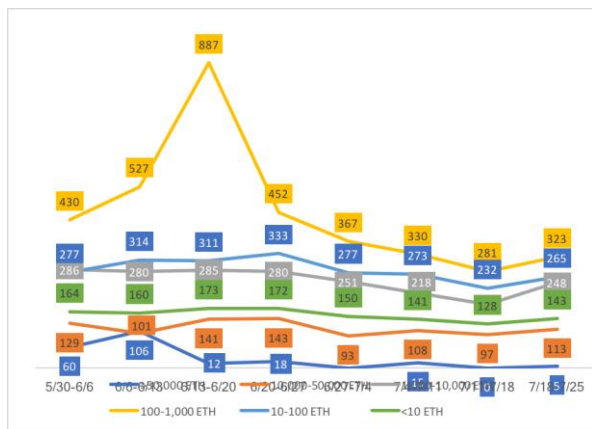


Data Source: Blockchain Node File, Huobi Research

Data Source: Blockchain Node File, Huobi Research

## 1.16 Change in Balance of Top 30 Ethereum Address

This week, among all top 30 Ethereum address, 4 address had significant changes in their respective balances. Three of them were net inflows and one of them was net outflows. The address of "0x742d35cc6634c0532925a3b844bc454e4438f44e" had the largest change in balance this week—a net inflow of 20,063 ETH. It was worth noting that the address last week had a net inflow of 142,917ETH, the largest net inflow for two consecutive weeks.

Figure 17: Change in Balance of Top 30 Ethereum Address

| Address | Balance as of 2018/7/25 | Balance as of 2018/7/18 | Change in Balance |
|---|---|---|---|
| 0x281055afc982d96fab65b3a49cac8b878184cb16 | 1538422.985 | 1538422.935 | 0 |
| 0x6f46cf5569aefa1acc1009290c8e043747172d89 | 1510065.642 | 1510065.612 | 0 |
| 0x90e63c3d53e0ea496845b7a03ec7548b70014a91 | 1507810.429 | 1507810.429 | 0 |
| 0x53d284357ec70ce289d6d64134dfac8e511c8a3d | 1378754.093 | 1378754.093 | 0 |
| 0xab7c74abc0c4d48d1bdad5dcb26153fc8780f83e | 1000000.011 | 1000000.011 | 0 |
| 0x742d35cc6634c0532925a3b844bc454e4438f44e | 969545.8326 | 949282.3725 | 20263 |
| 0xfe9e8709d3215310075d67e3ed32a380ccf451c8 | 923964.652 | 923964.6538 | 0 |
| 0xe853c56864a2ebe4576a807d26fdc4a0ada51919 \| Kraken_3 | 801159.2619 | 801159.2619 | 0 |
| 0x61edcdf5bb737adffe5043706e7c5bb1f1a56eea | 755000 | 755000 | 0 |
| 0xdc76cd25977e0a5ae17155770273ad58648900d3 | 723811.4777 | 723811.4777 | 0 |
| 0xfbb1b73c4f0bda4f67dca266ce6ef42f520fbb98 \| Bittrex | 673714.4677 | 662580.0924 | 11134 |
| 0xf27daff52c38b2c373ad2b9392652ddf433303c4 | 672784.6212 | 672784.6212 | 0 |
| 0x3d2e397f94e415d7773e72e44d5b5338a99e77d9 | 672524.3543 | 672524.3543 | 0 |
| 0xb8487eed31cf5c559bf3f4edd166b949553d0d11 | 670941.3442 | 670941.3442 | 0 |
| 0xde0b295669a9fd93d5f28d9ec85e40f4cb697bae \| EthDev | 663046.7923 | 663836.573 | -790 |
| 0xfca70e67b3f93f679992cd36323eeb5a5370c8e4 | 614999.8993 | 614999.8993 | 0 |
| 0x1b3cb81e51011b549d78bf720b0d924ac763a7c2 | 560000 | 560000 | 0 |
| 0x6f52730dba7b02beefcaf0d6998c9ae901ea04f9 | 558116.6972 | 558116.6972 | 0 |
| 0x5ffc99b5b23c5ab8f463f6090342879c286a29be | 552124.1554 | 552124.1554 | 0 |
| 0x74660414dfae86b196452497a4332bd0e6611e82 | 549999.9972 | 549999.9972 | 0 |
| 0x51f9c432a4e59ac86282d6adab4c2eb8919160eb | 530000 | 530000 | 0 |
| 0x52965f9bd9d0f2bbea9b5a9c155a455d0e58fe25 | 493015.4605 | 493015.4605 | 0 |
| 0x847ed5f2e5dde85ea2b685edab5f1f348fb140ed | 483000.0949 | 483000.0949 | 0 |
| 0xf0160428a8552ac9bb7e050d90eeade4ddd52843 \| DigixCrowdSale | 466648.1475 | 466648.1475 | 0 |
| 0x900d0881a2e85a8e4076412ad1cefbe2d39c566c | 450000.05 | 450000.05 | 0 |
| 0xf1ce0a98efbfa3f8ebec2399847b7d88294a634e | 450000.02 | 450000.02 | 0 |
| 0x3bf86ed8a3153ec933786a02ac090301855e576b | 450000 | 450000 | 0 |
| 0xbf09d77048e270b662330e9486b38b43cd781495 | 436000 | 436000 | 0 |
| 0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2 | 394974.7075 | 386965.3626 | 8009 |
| 0x9d2bfc36106f038250c01801685785b16c86c60d | 380000.0418 | 380000.0418 | 0 |

Data Source: Blockchain Node File, Huobi Research

## 1.17 Wealth Concentration Analysis of Popular ERC20 Tokens

Huobi Research performs wealth concentration analysis on the top 5 ERC20 tokens in terms of their respective market caps: OMG, VEN, ZIL, ICON and ZRX. For ZIL, ICON, and ZRX, the top 10 addresses held more than 60% of all tokens in their respective networks. For VEN, ZIL, and ICON, the top 1000 addresses held more than 90% of all tokens in their respective networks. Compared with last week, the wealth concentration of these popular ERC20 tokens did not change much.

Figure 18: Wealth Concentration Analysis of Popular ERC20 Tokens
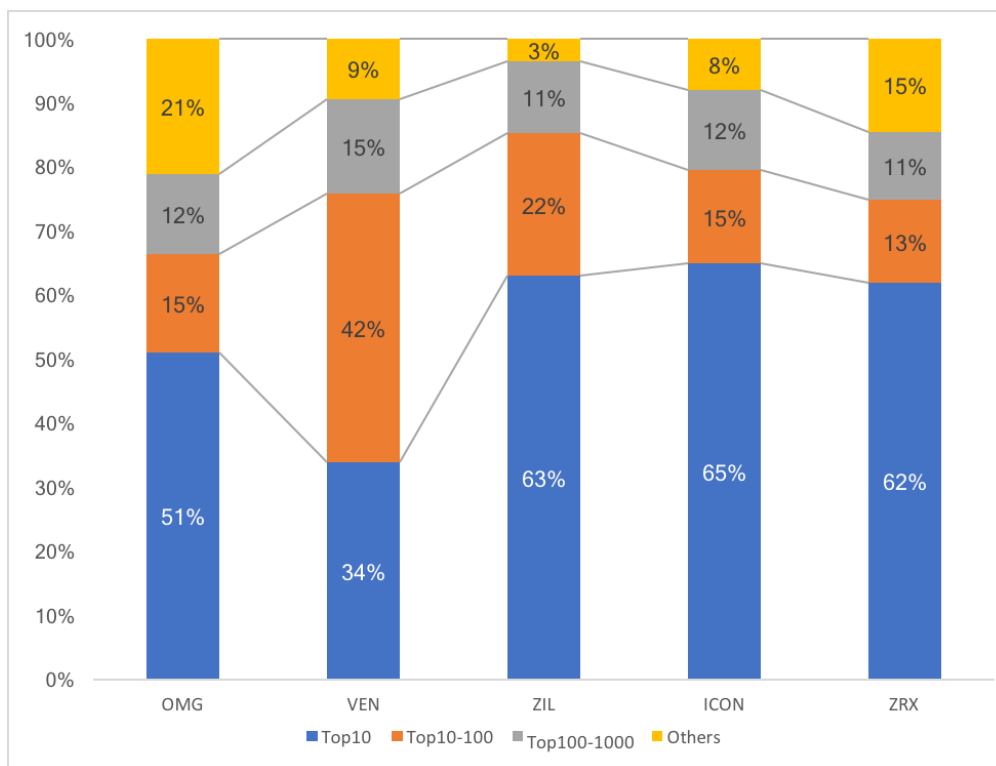
Data Source: Blockchain Node File, Huobi Research

## 2. Social Media Data

### 2.1 Keyword Analysis (China)

Huobi Research analyzed text using NLP Word Cloud to extract relevant keywords and understand the overall sentiments from China's largest Cryptocurrency online community 8btc.com. Specifically, we break down the keywords to three categories: Cryptocurrencies, Events, and Exchanges/Opinion Leaders.

In the Cryptocurrencies category, **NLP Word Cloud suggests Bitcoin, EOS, and Ethereum as the three cryptocurrencies that received the most widespread attention** (similar to previous weeks). Discussions on Bitcoin and Ethereum mainly focused on price and trading strategies, while discussions on EOS focused on its security issues and the alleged price manipulation.

In the Events category, **NLP Word Cloud suggests "Risk", "Dividend" and "ETF" as the hottest words of the week.** "**Risk**" has been the top word for 4 consecutive weeks, with its discussions focused on 1. risk warning by Fomo3d

and 2. The risk of BTC's price crash after a violent surge. Discussions on "**Dividend**" focused on the comparison of dividend payout of multiple new Crypto exchanges, and discussions on "**ETF**" focused on whether Bitcoin ETF will be approved, and what will happen if Bitcoin ETF gets approved.

In the Exchanges/Opinion Leaders category, **NLP Word Cloud suggests "Huobi", "OKEX", and "Fcoin" as the three hottest words of the week.** Specifically, posts regarding "**Huobi**" and "**OKEX**" mainly focused on the Cryptocurrency listing procedures and their respective Cryptocurrency prices. Discussion on "**Fcoin**" focused on its newly-issued FT1808 Warrant and the crash of ARP's price over 80% after listing on Fcoin.

Figure 19: 8btc.com Word Cloud



Data Source: Huobi Research

We witness a drastic change in the trending topics this week, with focus on "ETF", "Election", "Bytom", "Huobi", "Ripple" receiving the largest increase, while focus on "HB10", "Chen Weixing", "Li Xiaolai", "World Cup" and "RAM" receiving the largest decrease.

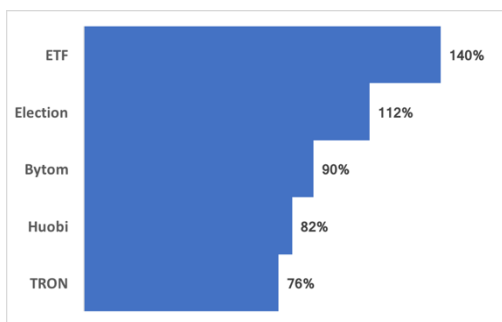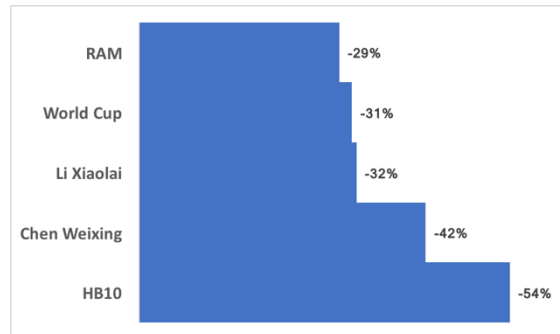Figure 20.1: Least Trending Topics on 8btc.com      Figure 20.2: Most Trending Topics on 8btc.com

## 2.2 Keyword Analysis (Overseas)

We also performed NLP Word Analysis on Reddit's r/CryptoCurrency Subreddit to understand the trending topics and overall sentiments overseas, and we similarly broke down the keywords into three categories: Cryptocurrencies, Events, and Exchanges/Opinion Leaders.

In the Cryptocurrencies category, NLP Word Cloud suggests that, "**Bitcoin**", "**Ethereum**", and "**Ripple**" were the three cryptocurrencies that received the most widespread attention this week. Discussions on Bitcoin and Ethereum were focusing on the same issues as in China, while discussions on BTC also focused on the effect on Bitcoin ETF on the Cryptocurrency market if it gets approved. Ripple replaced EOS as the top word of the week in the Cryptocurrencies category, with its discussions focused on the speculation that IT giant Samsung might take Ripple as payment.

In the Events category, NLP Word Cloud suggests **"ETF", "Bots" and "SEC"** as the three hottest words of the week. "**ETF**" and "**SEC**" referred to the recent speculation on whether Bitcoin ETF will be approved by SEC, while discussion on "**Bots**" focused on whether Crypto Trading Bots are in fact profitable.

In the Exchanges/Opinion Leaders category, NLP Word Cloud suggests **"Coinbase", "Binance", and "Satoshi"** as the three hottest words of the week. Discussions on "**Coinbase**" focused on Coinbase ad resurfacing on Google, and discussion on "**Satoshi**" focused on the real identity of the inventor of Bitcoin.

Figure 21: Reddit Word Cloud



Cryptocurrencies                    Events                    Exchanges and Opinion Leaders

Data Source: Huobi Research

This week on r/CryptoCurrency, the focus on "Inflation", "BCH", "ETF", "DASH", "Bitmex" has received the largest increase, while focus on "RAM", "fcoin", "GDAX", "Kraken" and "Decentralized" receiving the largest decrease in a week.

Figure 22.1: Least Trending Topics on r/CryptoCurrency    Figure 22.2: Most Trending Topics on r/CryptoCurrency
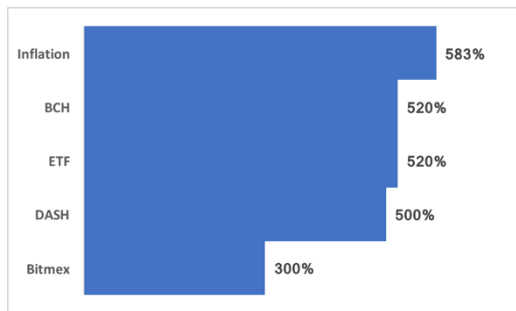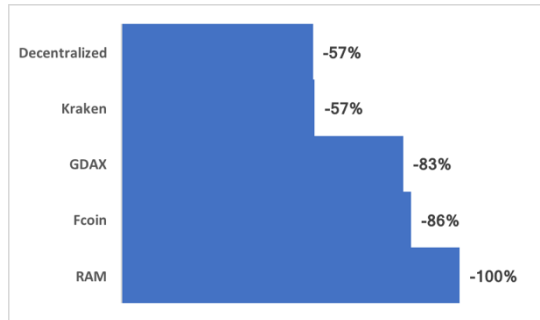


Data Source: Huobi Research                    Data Source: Huobi Research

## 2.3 GitHub Code Activity

**Among all GitHub communities, BTC, ETH, and EOS are the most active projects of all time. BTC, ETH, and EOS are also the projects with the most Stars and Forks in the past week.**

Figure 23: Top Starred/Forked Projects on GitHub
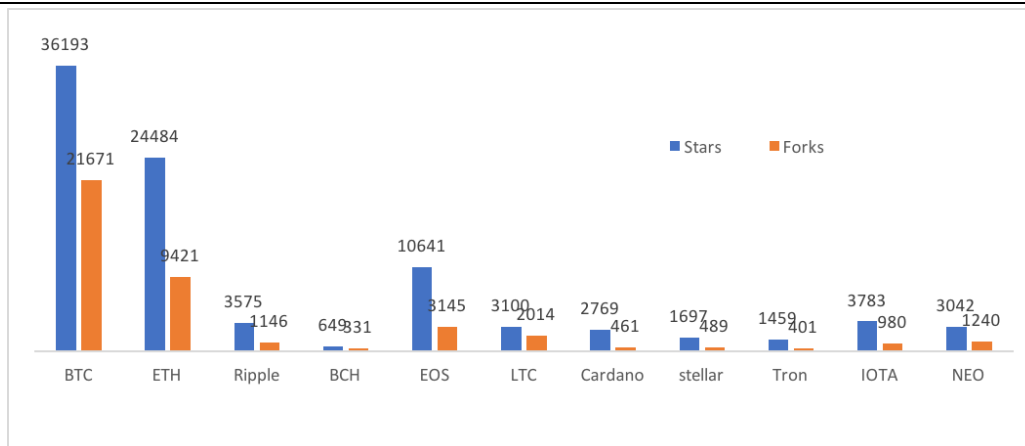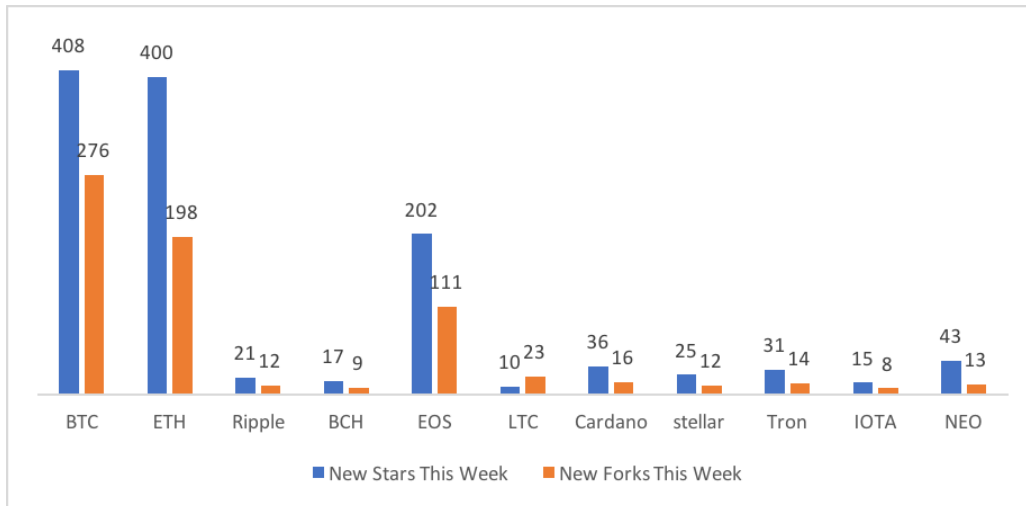
Data Source: Huobi Research

## 2.4 Search Trends

This week, there has been increased search for "Bitcoin", "Ethereum", "EOS", and "Cryptocurrency" on both Baidu and Google. Search for "Smart Contract" and "Blockchain" has increased on Google but decreased on WeChat and Baidu. Search for "Bitcoin" has surged 32.8% on Baidu this week.

Figure 24: Weekly Changes in Search Trends
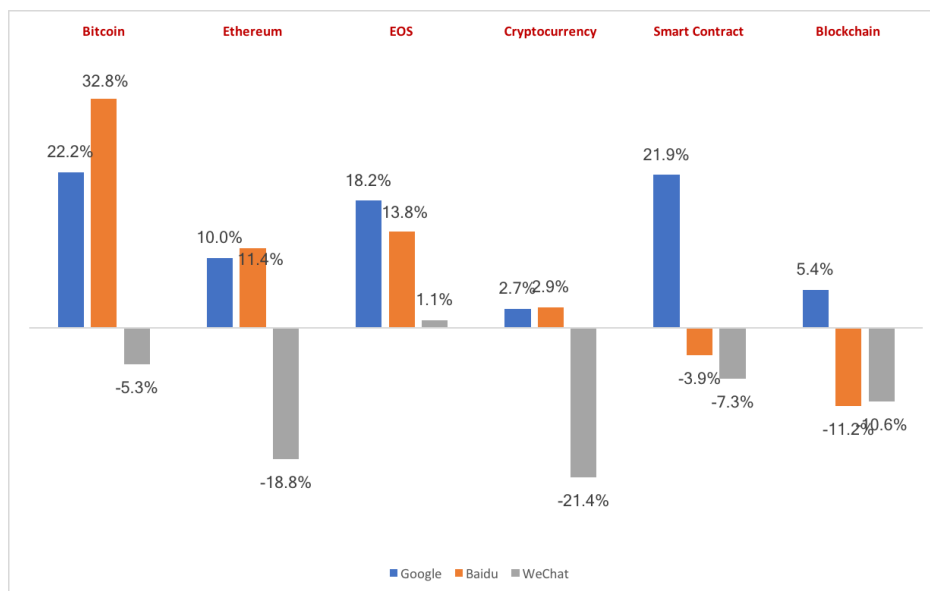


Data Source：Huobi Research, Google Trend, Baidu Index, Wechat Index

## 3. Market Data

### 3.1 Rate of Return/Price Volatility

**In the cryptocurrency market this week, the price of most top 10 cryptoassets experienced increase to various degrees.** Among all top 10 cryptocurrencies, Stellar experienced the largest increase of 28.9% and IOTA experienced the largest decrease of 9.2% in their respective prices. In terms of price volatility, BTC has the smallest volatility rate of 0.0031 s.d. (standard deviation of price fluctuation in every 15 minutes), and Cardano has the largest volatility rate of 0.0089 s.d.

Figure 25: Rate of Return vs Price Volatility
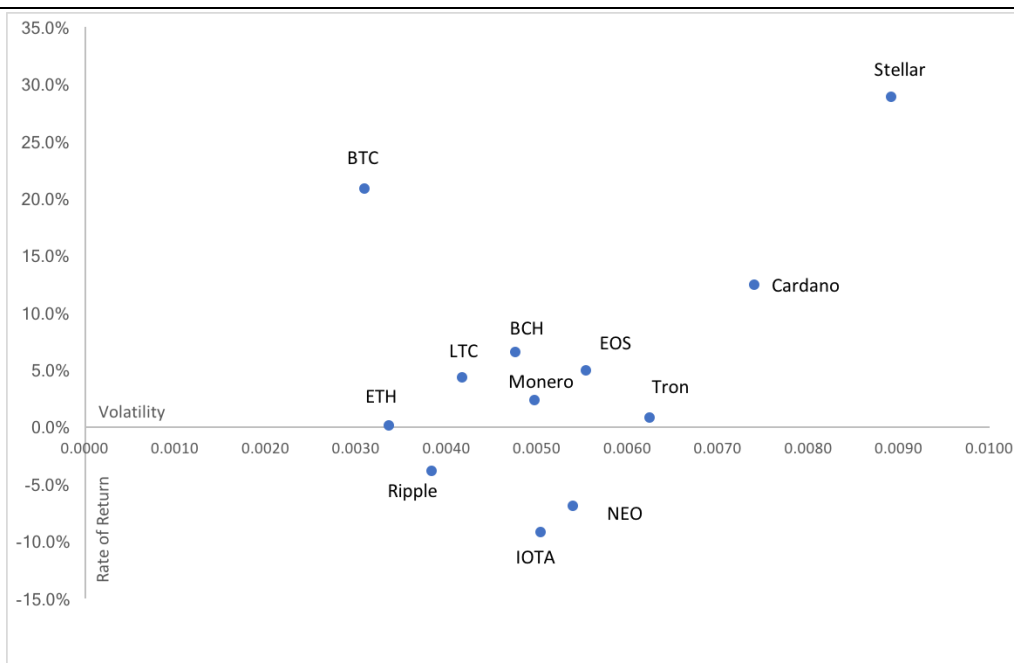


Data Source: Huobi Research, Coinmarketcap

### 3.2 Turnover

**EOS**, **TRON** and **LTC** are the three cryptocurrencies with the largest turnover this week, each with 52.7% (52% last week), 37.3% (35.8% last week), and 5.4% (5.7% last week) respectively. **Stellar**, **Ripple** and **IOTA** have the smallest turnovers this week, each with 5.4% (compared to 5.7% last week), 7.4% (compared to 6.7% last week) and 9.2% (compared to 8.2% last week), respectively. In general, overall turnover of top 10 cryptocurrencies have been

similar compared to last week.

Figure 26: Rate of Return vs Turnover
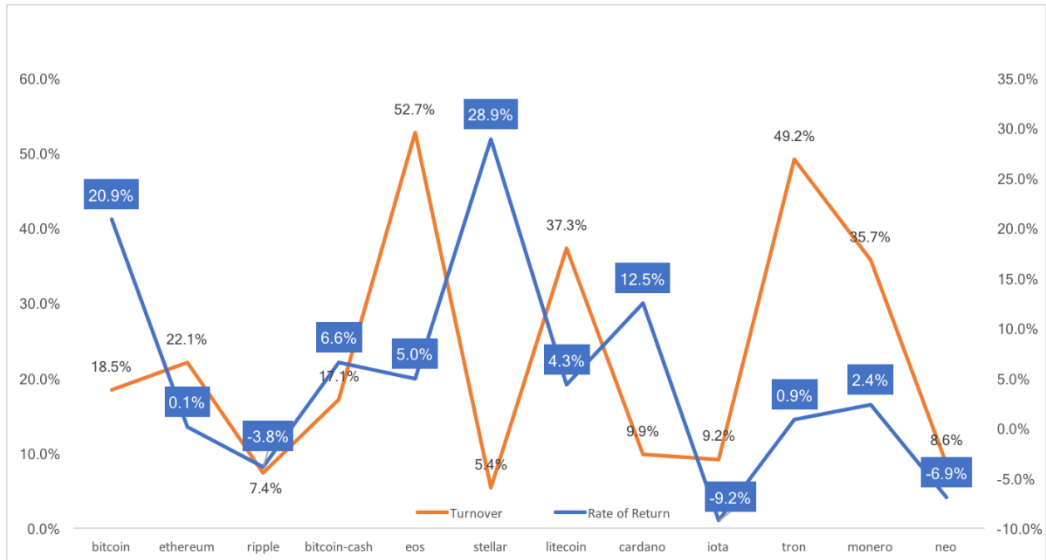


Data Source: Huobi Research, Coinmarketcap

## 3.3 Cryptocurrency Price Correlations

Correlation amongst assets is the degree to which they move in tandem. The matrices above show Pearson correlations and p-values that are computed from log-returns of volume-weighted average daily prices over the past week.

This week, there is high correlation between the price of all top 10 Cryptocurrencies except for BTC and Stellar. BTC/IOTA and BTC/TRON had the lowest correlation coefficient of -0.47 and -0.34, while ETH/Ripple and LTC/EOS had the highest correlations coefficient of 0.95

Figure 27: Pearson Correlations Matrix between Cryptocurrencies

|          | bitcoin | ethereum | ripple | BCH  | eos  | stellar | litecoin | cardano | iota  | tron  | monero | neo   |
|----------|---------|----------|--------|------|------|---------|----------|---------|-------|-------|--------|-------|
| bitcoin  | 1.00    | -0.18    | -0.31  | 0.22 | -0.15| 0.38    | 0.01     | 0.04    | -0.47 | -0.34 | 0.05   | -0.39 |
| ethereum | -0.18   | 1.00     | 0.95   | 0.88 | 0.94 | -0.18   | 0.93     | 0.54    | 0.92  | 0.90  | 0.83   | 0.94  |
| ripple   | -0.31   | 0.95     | 1.00   | 0.83 | 0.95 | -0.15   | 0.92     | 0.63    | 0.97  | 0.96  | 0.86   | 0.98  |
| BCH      | 0.22    | 0.88     | 0.83   | 1.00 | 0.87 | 0.07    | 0.95     | 0.67    | 0.73  | 0.79  | 0.88   | 0.79  |
| eos      | -0.15   | 0.94     | 0.95   | 0.87 | 1.00 | -0.03   | 0.95     | 0.71    | 0.92  | 0.95  | 0.87   | 0.95  |
| stellar  | 0.38    | -0.18    | -0.15  | 0.07 | -0.03| 1.00    | 0.01     | 0.53    | -0.18 | -0.06 | -0.03  | -0.15 |
| litecoin | 0.01    | 0.93     | 0.92   | 0.95 | 0.95 | 0.01    | 1.00     | 0.68    | 0.86  | 0.89  | 0.92   | 0.90  |
| cardano  | 0.04    | 0.54     | 0.63   | 0.67 | 0.71 | 0.53    | 0.68     | 1.00    | 0.58  | 0.70  | 0.64   | 0.62  |
| iota     | -0.47   | 0.92     | 0.97   | 0.73 | 0.92 | -0.18   | 0.86     | 0.58    | 1.00  | 0.96  | 0.78   | 0.99  |
| tron     | -0.34   | 0.90     | 0.96   | 0.79 | 0.95 | -0.06   | 0.89     | 0.70    | 0.96  | 1.00  | 0.82   | 0.97  |
| monero   | 0.05    | 0.83     | 0.86   | 0.88 | 0.87 | -0.03   | 0.92     | 0.64    | 0.78  | 0.82  | 1.00   | 0.83  |
| neo      | -0.39   | 0.94     | 0.98   | 0.79 | 0.95 | -0.15   | 0.90     | 0.62    | 0.99  | 0.97  | 0.83   | 1.00  |

Data Source: Huobi Research

# Huobi Research

**About Us：**

Huobi Research was founded in April 2016 and started research and explorations in various aspects in Blockchain area since March 2018. We cover various fields such as Blockchain technology research, industry analysis, application innovation and economic model explorations. We aim to establish a research platform and to offer theoretical foundations as well as judgements of trends in Blockchain to the public, ultimately promoting the development of the Blockchain industry.

*Huobi Data Analytics Weekly* aims to provide participators of the cryptocurrency market with the most up-to-date and comprehensive database to help them facilitate decision-making process.

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