Benchmark Crypto Indices
Weekly Performance Analysis

<table>
<thead>
<tr>
<th>Crypto Indices</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS CryptoFX 10</td>
<td>+0.4%</td>
</tr>
<tr>
<td>FS CryptoFX 40</td>
<td>+0.7%</td>
</tr>
<tr>
<td>FS CryptoFX 250</td>
<td>-3.1%</td>
</tr>
<tr>
<td>FS CryptoFX 300</td>
<td>+0.3%</td>
</tr>
<tr>
<td>FS CryptoFX Agg</td>
<td>+0.2%</td>
</tr>
<tr>
<td>FS FX Eq Weight</td>
<td>-0.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodities</td>
<td>+0.3%</td>
</tr>
<tr>
<td>Platforms</td>
<td>+1.2%</td>
</tr>
<tr>
<td>Exchanges</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Privacy</td>
<td>+4.0%</td>
</tr>
<tr>
<td>Stable Coins</td>
<td>-1.1%</td>
</tr>
</tbody>
</table>

For Reg AC certification and other important disclosures, see Disclosures, Slide 95.
Research team

Thomas J. Lee, CFA
Co-Founder, Head of Research
In research: 25 years

Prior to founding Fundstrat, Mr. Lee was at J.P. Morgan from 1999 to 2014 and served as Chief Equity Strategist from 2007 to 2014. He was top-ranked by Institutional Investor every year since 1998. Previously served as Managing Director at Salomon Smith Barney. Mr. Lee graduated from the undergraduate program at the Wharton School, University of Pennsylvania.

Sam Doctor
Head of Data Science Research
In research: 18 years

Head of Data Science Research. Former US Small and Mid Cap Technology Analyst and India Small / Mid Cap Strategist at J.P. Morgan Chase.

Rob Sluymer, CFA
Head of Technical Analysis Strategy
In research: 26 years

Head of Technical Research with over 26 years experience writing technical research at RBC Capital Markets

L. Thomas Block
Washington and Policy Strategist
Head of JPM policy: 21 years

Tom had a 21-year career at J.P. Morgan, serving as Global Head of Government Relations. Prior to joining JP Morgan Chase in 1987, he previously worked in Washington and held several positions with members of the House and Senate, serving as Legislative Assistant and Chief of Staff in the House, and Legislative Staff Director in the Senate.

Alex Kern
Research Analyst
In research: 3 years

Previously a Research Analyst with Digital Currency Group. Prior to that, Alex was a Fintech and Payments Equity Research Associate with Cowen & Co. Alex received his B.A. in History from the University of Pennsylvania in 2014.

Ken Xuan
Quantitative Analyst
In research: 4 years

Data scientist with expertise in applied mathematics and statistical analysis. Ken was an operations strategy consultant at West Monroe Partners. Ken received a B.S. degree in Management, Economics from Purdue University in 2013 and an M.S. degree in Operations Research from Columbia University in 2017.

Kelsey Burhans
Research Analyst
In research: 2 years

Previously an Equity Research Associate in Specialty Finance at Stephens Inc. Kelsey received her B.A. degree in Chinese Language & Culture, with a concentration in Economics, from Wellesley College in 2017.
Executive Summary

- Overview

- SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250

- SECTOR: Commodities

- SECTOR: Platforms

- SECTOR: Exchanges

- SECTOR: Privacy

- SECTOR: Stable coins

- Chartbook: FS Large-cap 10 and FS Mid-cap 40
Commentary

Highlighted Moves (Slide 6)

The overall crypto market price (based on the FS Crypto Agg Index) was up by 0.2% in the past week. YTD, the crypto market is down -68.5%.

Correlation BTC vs Asset Classes (Slide 9)

When comparing Bitcoin to other major asset classes (stocks, bonds, hedge funds, oil and gold), Bitcoin has the highest correlation to S&P Risk Parity Index (21.4%) and the lowest correlation to Gold (-16.2%).

• In the past 30D, the notable correlation rise (vs Bitcoin) is Salient Risk Parity Idx (6.6% delta) from 14.9% to 21.4%.

• In the same period, the most notable drop in correlation (vs Bitcoin) is Oil (-2.9% delta) from 19.2% to 16.3%.

Leadership Ratio Rankings (Slide 12)

Ranking cryptocurrencies on win-ratio plus upside/downside volatility, we derive our leadership ratio.

• Top 3 tokens are Dogecoin, Waltonchain and Zilliqa.

• Worst 3 tokens are Ethereum Classic, Zcash and Augur.

Sector Insights (Slide 13)

5 size indices and 4 sector-based indices outperformed BTC in the past week.

• In the past week, the best performing size index was FS CryptoFX 40 with performance of 0.7%, while the worst performing size index was FS CryptoFX 250 with performance of -3.1%.

• In the past week, the best performing sector index was FS CryptoFX Privacy with performance of 4.0%, while the worst performing sector index was FS CryptoFX Exchange with performance of -1.8%.

Correlation Indices to BTC (Slide 9)

We also look at correlation of the sector and size indices to Bitcoin.

• In the past 30D, the most notable rise in correlation (vs Bitcoin) is FS Exchange Index (2.0% delta) from 77.2% to 79.2%.

• In the same period, the most notable drop in correlation (vs Bitcoin) is FS Commodity Index (-0.2% delta) from 99.3% to 99.2%.
## Overview: Where to find these indices

### Figure: The Fundstrat Crypto-currency Indices
Fundstrat reference indices.

<table>
<thead>
<tr>
<th>Index</th>
<th>Description</th>
<th>Index Price</th>
<th>Market Value</th>
<th>% share crypto</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sector Indices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS Crypto Commodity</td>
<td>Likely to be classified as commodities</td>
<td>$88</td>
<td>$128,115</td>
<td>62%</td>
</tr>
<tr>
<td>FS Crypto Platform</td>
<td>Enables decentralized applications</td>
<td>57</td>
<td>$33,785</td>
<td>16%</td>
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<tr>
<td>FS Crypto Privacy</td>
<td>Tokens with anonymity features</td>
<td>53</td>
<td>$4,164</td>
<td>2%</td>
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<tr>
<td>FS Crypto Exchange</td>
<td>Tokens associated with exchanges</td>
<td>82</td>
<td>$2,003</td>
<td>1%</td>
</tr>
<tr>
<td>FS Crypto Stablecoin</td>
<td>Tracks the fiat currencies</td>
<td>100</td>
<td>$2,007</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Market-Cap based Indices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS Crypto 10</td>
<td>Top 10 largest Crypto-currencies</td>
<td>$123</td>
<td>$179,491</td>
<td>86%</td>
</tr>
<tr>
<td>FS Crypto 40</td>
<td>Top 11-50 based on market value</td>
<td>99</td>
<td>$17,087</td>
<td>8%</td>
</tr>
<tr>
<td>FS Crypto 50 Eq Wt</td>
<td>Equal weighted FS Crypto 10 and 40</td>
<td>102</td>
<td>$196,578</td>
<td>95%</td>
</tr>
<tr>
<td>FS Crypto 250</td>
<td>Top 51-300 based on market cap</td>
<td>74</td>
<td>$6,307</td>
<td>3%</td>
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<tr>
<td>FS Crypto 300</td>
<td>FS Crypto 10, 40 and 250</td>
<td>117</td>
<td>#N/A</td>
<td>#N/A</td>
</tr>
<tr>
<td>FS Crypto Aggregate</td>
<td>Aggregate index</td>
<td>117</td>
<td>$207,558</td>
<td>100%</td>
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<table>
<thead>
<tr>
<th>Tickers</th>
<th>Bloomberg</th>
<th>Yahoo! Finance</th>
<th>Trading View</th>
<th>Financial Times</th>
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<tr>
<td>FS Crypto Commodity</td>
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<td>^FSTOKCTB</td>
<td>FSTOKCTB</td>
<td>^FSTOKCTB</td>
</tr>
<tr>
<td>FS Crypto Platform</td>
<td></td>
<td>^FSTOKPLT</td>
<td>FSTOKPLT</td>
<td>^FSTOKPLT</td>
</tr>
<tr>
<td>FS Crypto Privacy</td>
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<td>^FSTOKPVT</td>
<td>FSTOKPVT</td>
<td>^FSTOKPVT</td>
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<tr>
<td>FS Crypto Exchange</td>
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<td>^FSTOKDEX</td>
<td>FSTOKDEX</td>
<td>^FSTOKDEX</td>
</tr>
<tr>
<td>FS Crypto Stablecoin</td>
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<td>FSTOKSTB</td>
<td>^FSTOKSTB</td>
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<td>^FSTOK10</td>
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<tr>
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<td>^FSTOK40</td>
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<tr>
<td>FS Crypto 50 Eq Wt</td>
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<td>^FSTOKEQW</td>
<td>FSTOKEQW</td>
<td>^FSTOKEQW</td>
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<tr>
<td>FS Crypto 250</td>
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<tr>
<td>FS Crypto 300</td>
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<td>^FSTOK300</td>
<td>FSTOK300</td>
<td>^FSTOK300</td>
</tr>
<tr>
<td>FS Crypto Aggregate</td>
<td></td>
<td>^FSTOKAGG</td>
<td>FSTOKAGG</td>
<td>^FSTOKAGG</td>
</tr>
</tbody>
</table>
Over the past 7 days, the FS CryptoFX Agg Index increased by 0.2%, compared with a 2.4% increase for the S&P 500.

The best performing size-based index was FS CryptoFX 40, which was up 0.7%.

The best performing sector index was FS CryptoFX Privacy, which was up 4.0%.
## At a Glance
### State of Indices

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
<th>Price (USD)</th>
<th>Price (BTC)</th>
<th>Composite Technical Rank</th>
<th>90D Win Ratio</th>
<th>90D UV - DV</th>
<th>Price to 21 DMA</th>
<th>Price to 50 DMA</th>
<th>Weekly RSI</th>
<th>5D Return</th>
<th>10D Return</th>
<th>30D Return</th>
<th>21 vs 50 DMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS Privacy</td>
<td>FSTOKPVT</td>
<td>$53.03</td>
<td>0.008318</td>
<td>1</td>
<td>52</td>
<td>(5)</td>
<td>104.2%</td>
<td>96.3%</td>
<td>36</td>
<td>7.0</td>
<td>3.3</td>
<td>(9.5)</td>
<td>7.9%</td>
</tr>
<tr>
<td>FS 10</td>
<td>FSTOK10</td>
<td>$120.95</td>
<td>0.018969</td>
<td>2</td>
<td>50</td>
<td>(11)</td>
<td>100.9%</td>
<td>99.1%</td>
<td>41</td>
<td>3.5</td>
<td>0.8</td>
<td>(4.8)</td>
<td>1.9%</td>
</tr>
<tr>
<td>FS 300</td>
<td>FSTOK300</td>
<td>$115.45</td>
<td>0.018106</td>
<td>3</td>
<td>51</td>
<td>(12)</td>
<td>100.9%</td>
<td>99.1%</td>
<td>40</td>
<td>3.6</td>
<td>0.6</td>
<td>(4.9)</td>
<td>1.8%</td>
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<td>FS AGG</td>
<td>FSTOKAGG</td>
<td>$115.22</td>
<td>0.018070</td>
<td>4</td>
<td>51</td>
<td>(12)</td>
<td>100.9%</td>
<td>99.1%</td>
<td>40</td>
<td>3.5</td>
<td>0.6</td>
<td>(4.9)</td>
<td>1.8%</td>
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<tr>
<td>FS Commodity</td>
<td>FSTOKCTB</td>
<td>$87.46</td>
<td>0.013716</td>
<td>5</td>
<td>50</td>
<td>(13)</td>
<td>100.6%</td>
<td>99.3%</td>
<td>43</td>
<td>2.9</td>
<td>0.4</td>
<td>(3.3)</td>
<td>1.3%</td>
</tr>
<tr>
<td>FS Platform</td>
<td>FSTOKPLT</td>
<td>$56.10</td>
<td>0.008799</td>
<td>6</td>
<td>46</td>
<td>(20)</td>
<td>101.8%</td>
<td>97.5%</td>
<td>35</td>
<td>5.8</td>
<td>1.5</td>
<td>(8.2)</td>
<td>4.3%</td>
</tr>
<tr>
<td>FS Stable Coin</td>
<td>FSTOKSTB</td>
<td>$98.86</td>
<td>0.015504</td>
<td>7</td>
<td>47</td>
<td>(0)</td>
<td>99.9%</td>
<td>99.4%</td>
<td>46</td>
<td>(0.9)</td>
<td>(0.1)</td>
<td>(0.7)</td>
<td>0.5%</td>
</tr>
<tr>
<td>FS 40</td>
<td>FSTOK40</td>
<td>$99.27</td>
<td>0.015568</td>
<td>8</td>
<td>54</td>
<td>(13)</td>
<td>100.8%</td>
<td>97.3%</td>
<td>39</td>
<td>5.6</td>
<td>(0.1)</td>
<td>(8.5)</td>
<td>3.5%</td>
</tr>
<tr>
<td>FS EQW</td>
<td>FSTOKEQW</td>
<td>$101.72</td>
<td>0.015954</td>
<td>9</td>
<td>56</td>
<td>(17)</td>
<td>100.7%</td>
<td>98.8%</td>
<td>38</td>
<td>4.5</td>
<td>(0.2)</td>
<td>(6.2)</td>
<td>1.9%</td>
</tr>
<tr>
<td>FS 250</td>
<td>FSTOK250</td>
<td>$74.30</td>
<td>0.011653</td>
<td>10</td>
<td>57</td>
<td>(19)</td>
<td>99.8%</td>
<td>102.5%</td>
<td>38</td>
<td>1.4</td>
<td>(2.0)</td>
<td>(0.2)</td>
<td>(2.7%)</td>
</tr>
<tr>
<td>FS Exchange</td>
<td>FSTOKDEX</td>
<td>$82.12</td>
<td>0.012879</td>
<td>11</td>
<td>48</td>
<td>(11)</td>
<td>98.1%</td>
<td>99.5%</td>
<td>42</td>
<td>2.0</td>
<td>(2.4)</td>
<td>(3.3)</td>
<td>(1.4%)</td>
</tr>
<tr>
<td>Bitcoin</td>
<td>BTC</td>
<td>$6,376.13</td>
<td>1.000000</td>
<td>12</td>
<td>51</td>
<td>(12)</td>
<td>98.8%</td>
<td>98.1%</td>
<td>44</td>
<td>0.7</td>
<td>(1.5)</td>
<td>(3.7)</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
At a Glance

Correlation

Within major asset classes, Bitcoin is most correlated to S&P Risk Parity Index with a 90D correlation of 21.4%.

In the past week, the largest change in correlation was S&P Risk Parity Index (+9.2%).

Bitcoin is most correlated to the size index, FS 10 with a 90D correlation of 93.8%.

In the past week, the largest change in correlation was FS EQ WT (+0.7%).

Bitcoin is most correlated to the sector index, FS Commodity with a 90D correlation of 99.2%.

In the past week, the largest change in correlation was FS Exchange (+4.0%).

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
### At a Glance

#### State of Tokens 1 of 2

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
<th>Price (USD)</th>
<th>Price (BTC)</th>
<th>Market Cap ($B)</th>
<th>Coin Supply</th>
<th>Current Score</th>
<th>90D Win</th>
<th>90D Price to 21 DMA</th>
<th>90D Price to 50 DMA</th>
<th>Weekly Return</th>
<th>5D Return</th>
<th>10D Return</th>
<th>30D Return</th>
<th>21 vs 50 DMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitcoin Cash</td>
<td>BCH</td>
<td>$560.18</td>
<td>0.087856</td>
<td>17,429,163</td>
<td></td>
<td>1</td>
<td>47</td>
<td>21</td>
<td>124.9%</td>
<td>118.5%</td>
<td>39</td>
<td>32.8</td>
<td>27.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Basic Attention</td>
<td>BAT</td>
<td>$0.29</td>
<td>0.000045</td>
<td>1,500,000,000</td>
<td></td>
<td>2</td>
<td>50</td>
<td>9</td>
<td>116.9%</td>
<td>143.2%</td>
<td>57</td>
<td>16.8</td>
<td>7.8</td>
<td>60.2</td>
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<tr>
<td>Monero</td>
<td>XMR</td>
<td>$111.80</td>
<td>0.017534</td>
<td>16,527,938</td>
<td></td>
<td>3</td>
<td>52</td>
<td>(9)</td>
<td>106.1%</td>
<td>101.5%</td>
<td>42</td>
<td>9.0</td>
<td>5.2</td>
<td>(2.7)</td>
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<td>Bitcoin Gold</td>
<td>BTG</td>
<td>$29.41</td>
<td>0.004613</td>
<td>17,408,336</td>
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<td>48</td>
<td>13</td>
<td>110.1%</td>
<td>116.0%</td>
<td>45</td>
<td>13.6</td>
<td>8.6</td>
<td>7.7</td>
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<td>Waltonchain</td>
<td>WTC</td>
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<td>70,000,000</td>
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<td>51</td>
<td>24</td>
<td>107.1%</td>
<td>110.5%</td>
<td>40</td>
<td>0.9</td>
<td>9.8</td>
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<td>52</td>
<td>(23)</td>
<td>105.4%</td>
<td>105.1%</td>
<td>41</td>
<td>7.3</td>
<td>7.9</td>
<td>3.2</td>
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<td>Zilliqa</td>
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<td>52</td>
<td>16</td>
<td>103.8%</td>
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<td>4.9</td>
<td>4.4</td>
<td>(1.1)</td>
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<td>44</td>
<td>14</td>
<td>103.2%</td>
<td>102.2%</td>
<td>48</td>
<td>7.4</td>
<td>2.5</td>
<td>(1.4)</td>
</tr>
<tr>
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<td>ADA</td>
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<td>0.000012</td>
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<td>48</td>
<td>(6)</td>
<td>103.3%</td>
<td>98.4%</td>
<td>40</td>
<td>9.5</td>
<td>3.2</td>
<td>(8.1)</td>
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<tr>
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<td>22</td>
<td>104.8%</td>
<td>94.5%</td>
<td>35</td>
<td>6.4</td>
<td>5.2</td>
<td>(10.5)</td>
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<td>48</td>
<td>(11)</td>
<td>101.8%</td>
<td>99.1%</td>
<td>43</td>
<td>6.0</td>
<td>1.5</td>
<td>(6.2)</td>
</tr>
<tr>
<td>TRON</td>
<td>TRX</td>
<td>$0.02</td>
<td>0.000004</td>
<td>99,999,999,999</td>
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<td>12</td>
<td>53</td>
<td>5</td>
<td>99.2%</td>
<td>101.4%</td>
<td>43</td>
<td>4.9</td>
<td>0.6</td>
<td>(0.0)</td>
</tr>
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<td>0.000073</td>
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For exclusive use of Fundstrat clients
## At a Glance

### State of Tokens 2 of 2

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<th>Name</th>
<th>Symbol</th>
<th>Price (USD)</th>
<th>Price (BTC)</th>
<th>Market Cap ($B)</th>
<th>Current Coin Supply</th>
<th>Composite Technical Score</th>
<th>90D Win</th>
<th>90D Price to 21 DMA</th>
<th>Relative Price to 50 DMA</th>
<th>Weekly RSI</th>
<th>5D Return</th>
<th>10D Return</th>
<th>30D Return</th>
<th>21 vs 50 DMA</th>
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<td>97.3%</td>
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<td>4.0</td>
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<td>95.7%</td>
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<td>(5.0)</td>
<td>(14.6) 5.4%</td>
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For exclusive use of Fundstrat clients
FS CryptoFX 10 and 40 members ranked by Win Ratio and Upside less Downside Vol

How to read this: the “Highest/Lowest Win Ratio” based on past 90-day daily return. High Win Ratio means the cryptocurrency has more positive return days.

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<th>Rank</th>
<th>Win Ratio</th>
<th>90 Day %</th>
<th>Rank</th>
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<td>47 (31)</td>
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<td>43 (27)</td>
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<td>44</td>
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<td>43 (24)</td>
<td></td>
</tr>
<tr>
<td><strong>20</strong> EOS 48 (23)</td>
<td>45</td>
<td>XRP</td>
<td>43 (12)</td>
<td></td>
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<tr>
<td><strong>21</strong> OmiseGO 48 (37)</td>
<td>46</td>
<td>Bittshares</td>
<td>42 (50)</td>
<td></td>
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<tr>
<td><strong>22</strong> Cardano 48 (42)</td>
<td>47</td>
<td>Ethereum Classic</td>
<td>41 (50)</td>
<td></td>
</tr>
<tr>
<td><strong>23</strong> Bytecoin 48 (42)</td>
<td>48</td>
<td>Zcash</td>
<td>40 (46)</td>
<td></td>
</tr>
<tr>
<td><strong>24</strong> Dash 47 (19)</td>
<td>49</td>
<td>Huobi Token</td>
<td>40 (27)</td>
<td></td>
</tr>
<tr>
<td><strong>25</strong> Lisk 47 (18)</td>
<td>50</td>
<td>Lisk</td>
<td>39 (27)</td>
<td></td>
</tr>
</tbody>
</table>

For exclusive use of Fundstrat clients
Overview

Performance Quilt

Here we look at the relative performance of our benchmark indices using a performance quilt.

The best performing was FS CryptoFX Privacy Index which was up 4.0%. In the prior week, this index was down 0.3%.

The worst performing was FS CryptoFX 250 Index, which was down 3.1%. In the prior week, this index was up 3.1%.

Source: Fundstrat, Bloomberg.
SIZE

Indices vs BTC

The 6M price performance of the size-weighted indices are plotted.

Over the past week, the best performing of the size indices was FS CryptoFX 40 which was up 2.4%. The worst performing over that timeframe was FS CryptoFX 250 which was down 1.4%.

Over the past month, the best performing of the size indices was FS CryptoFX 250 which was up 3.6%. The worst performing over that timeframe was FS CryptoFX 40 which was down 5.0%.
Size Rotation
Size Pairs

Over the past week, relative performance of mid-cap vs large-cap was up 0.3%.

Over the past week, relative performance of small-cap vs large-cap was down 3.5%.

Over the past week, relative performance of small-cap vs mid-cap was down 3.7%.
Sectors

Sectors vs BTC

The 6M price performance of the sector indices are plotted.

Over the past week, the best performing of the sector indices was FS Privacy Index which was up 5.8%. The worst performing over that timeframe was FS Exchange Index which was down 0.1%.

Over the past month, the best performing of the sector indices was FS Exchange Index which was up 0.4%. The worst performing over that timeframe was FS Privacy Index which was down 6.0%.
Sector Rotation
Sector Pairs

Over the past week, relative performance of Platforms vs Commodities was up 0.9%.

Over the past week, relative performance of Platforms vs Exchanges was up 3.1%.

Over the past week, relative performance of Privacy vs Commodities was up 3.7%.
## Cross Asset Classes Correlation Matrix

*Figure: FS Crypto FX Indices Correlation Matrix against Major Asset Classes (%)*

Based on the daily return of last 90 days

<table>
<thead>
<tr>
<th></th>
<th>FS CryptoFX 10</th>
<th>FS CryptoFX 40</th>
<th>FS CryptoFX 250</th>
<th>FS CryptoFX 300</th>
<th>FS CryptoFX Agg</th>
<th>FS CryptoFX Eq Wt</th>
<th>FS CryptoFX Commodity</th>
<th>FS CryptoFX Privacy</th>
<th>FS CryptoFX Exchange</th>
<th>FS CryptoFX Stablecoin</th>
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<tr>
<td>Bitcoin</td>
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<td>100</td>
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<td>(24)</td>
<td>17</td>
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<td>(10)</td>
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<td>18</td>
<td>7</td>
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</tr>
</tbody>
</table>

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
### Cross Token Correlation Matrix

**Figure: Correlation Matrix (%)**

Based on the daily return of last 90 days

---

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.

---

The 3 tokens with lowest overall correlation (to other tokens) are:
- **Bitcoin Diamond @ -4.7% overall**;
- **Dogecoin @ 27.1% overall**;
- and **Metaverse ETP @ 35.7% overall**.
Executive Summary

• Overview

- SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250

- SECTOR: Commodities

- SECTOR: Platforms

- SECTOR: Exchanges

- SECTOR: Privacy

- SECTOR: Stable coins

- Chartbook: FS Large-cap 10 and FS Mid-cap 40
Large-cap FS CryptoFX 10

The FS CryptoFX 10 index is designed to track the performance of the top 10 largest and most liquid Crypto-currencies.

Over the past week, the FS CryptoFX 10 index was up 2.1% Relative to BTC. Over the past month, this index was down 1.1% Relative to BTC.

The two best performing constituents this index in the past week are Bitcoin Cash up 27.0% and Dash up 4.2%.

The two worst performing constituents this index in the past week are Ethereum Classic down 2.5% and Bitcoin down 1.7%

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Correlation
FS CryptoFX 10

The FS CryptoFX 10 index is designed to track the performance of the top 10 largest and most liquid Crypto-currencies.

The FS CryptoFX 10 Index is most correlated to S&P Risk Parity Index with a 90D correlation of 28.4%.

The FS CryptoFX 10 Index is least correlated to Gold with a 90D correlation of -17.8%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Mid-cap
FS CryptoFX 40

The FS CryptoFX 40 index is designed to track the performance of the top 11-50 Crypto-currencies based on market value and liquidity.

Over the past week, the FS CryptoFX 40 index was up 2.4% Relative to BTC. Over the past month, this index was down 5.0% Relative to BTC.

The two best performing constituents this index in the past week are Basic Attention Token up 15.8% and Bitcoin Gold up 8.7%.

The two worst performing constituents this index in the past week are Siacoin down 10.2% and Dogecoin down 9.5%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Correlation
FS CryptoFX 40

The FS CryptoFX 40 index is designed to track the performance of the top 11-50 Crypto-currencies based on market value and liquidity.

The FS CryptoFX 40 Index is most correlated to S&P Risk Parity Index with a 90D correlation of 29.5%.

The FS CryptoFX 40 Index is least correlated to Gold with a 90D correlation of -12.9%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Small-cap
FS CryptoFX 250

The FS CryptoFX 250 index is designed to track the performance of the top 51-300 Crypto-currencies based on market value and liquidity.

Over the past week, the FS CryptoFX 250 index was down 1.4% Relative to BTC. Over the past month, this index was up 3.6% Relative to BTC.

The two best performing constituents this index in the past week are Oyster up 156.0% and NKN up 54.4%.

The two worst performing constituents this index in the past week are Docademic down 100.0% and Docademic down 100.0%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Correlation
FS CryptoFX 250

The FS CryptoFX 250 Index is designed to track the performance of the top 51-300 Crypto-currencies based on market value and liquidity.

The FS CryptoFX 250 Index is most correlated to S&P Risk Parity Index with a 90D correlation of 25.5%.

The FS CryptoFX 250 Index is least correlated to Gold with a 90D correlation of -14.0%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Executive Summary

• Overview

• SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250

• SECTOR: Commodities

• SECTOR: Platforms

• SECTOR: Exchanges

• SECTOR: Privacy

• SECTOR: Stable coins

• Chartbook: FS Large-cap 10 and FS Mid-cap 40
Over the past week, the FS CryptoFX Commodity index was up 2.0% Relative to BTC. Over the past month, this index was up 0.4% Relative to BTC.

The two best performing constituents this index in the past week are Bitcoin Cash up 27.0% and Monero up 6.5%.

The two worst performing constituents this index in the past week are Bitcoin down 1.7% and Litecoin up 3.2%
Correlation
FS Commodity

The FS CryptoFX Commodity index is designed to track the performance of the tokens which are viewed purely as digital currencies and/or commodities.

The FS Commodity Index is most correlated to S&P Risk Parity Index with a 90D correlation of 23.0%.

The FS Commodity Index is least correlated to Gold with a 90D correlation of -17.7%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Executive Summary

• Overview

• SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250

• SECTOR: Commodities

• SECTOR: Platforms

• SECTOR: Exchanges

• SECTOR: Privacy

• SECTOR: Stable coins

• Chartbook: FS Large-cap 10 and FS Mid-cap 40
Over the past week, the FS CryptoFX Platform index was up 2.9% Relative to BTC. Over the past month, this index was down 4.7% Relative to BTC.

The two best performing constituents this index in the past week are Cardano up 4.2% and Stellar up 3.8%.

The two worst performing constituents this index in the past week are Waves down 8.1% and Qtum down 6.9%.
Correlation
FS Platform

The FS Crypto Platform index is designed to track the performance of cryptocurrencies which enable developers to create and use decentralized applications (dApps).

The FS Platform Index is most correlated to S&P Risk Parity Index with a 90D correlation of 29.7%.

The FS Platform Index is least correlated to Gold with a 90D correlation of -17.9%.

Figure: 90D Rolling Correlation - FS Crypto Platform Correlation against Major Asset Classes
Over last 100 days

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.

For exclusive use of Fundstrat clients
Executive Summary

- Overview

- SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250

- SECTOR: Commodities

- SECTOR: Platforms

- SECTOR: Exchanges

- SECTOR: Privacy

- SECTOR: Stable coins

- Chartbook: FS Large-cap 10 and FS Mid-cap 40
Sectors

Exchanges

The FS Crypto Exchange index is designed to track the performance of cryptocurrencies/tokens associated with crypto centralized or decentralized exchanges.

Over the past week, the FS CryptoFX Exchange index was down 0.1% Relative to BTC. Over the past month, this index was up 0.4% Relative to BTC.

The two best performing constituents this index in the past week are AirSwap up 5.9% and Bancor up 2.3%.

The two worst performing constituents this index in the past week are Huobi Token down 5.0% and 0x down 4.6%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
The FS Exchange Index is most correlated to S&P Risk Parity Index with a 90D correlation of 29.7%.

The FS Exchange Index is least correlated to BBG US Agg Bond Index with a 90D correlation of -3.1%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Executive Summary

• Overview

• SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250

• SECTOR: Commodities

• SECTOR: Platforms

• SECTOR: Exchanges

• SECTOR: Privacy

• SECTOR: Stable coins

• Chartbook: FS Large-cap 10 and FS Mid-cap 40
Sectors

Privacy

The FS Crypto Privacy index is designed to track the performance of cryptocurrencies with anonymity or privacy features.

Over the past week, the FS CryptoFX Privacy index was up 5.8% Relative to BTC. Over the past month, this index was down 6.0% Relative to BTC.

The two best performing constituents this index in the past week are Monero up 6.5% and Dash up 4.2%.

The two worst performing constituents this index in the past week are Zcash down 2.4% and Bytecoin up 3.7%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
The FS Crypto Privacy index is designed to track the performance of cryptocurrencies with anonymity or privacy features.

The FS Privacy Index is most correlated to S&P Risk Parity Index with a 90D correlation of 22.3%.

The FS Privacy Index is least correlated to Gold with a 90D correlation of -13.3%.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Executive Summary

• Overview

• SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250

• SECTOR: Commodities

• SECTOR: Platforms

• SECTOR: Exchanges

• SECTOR: Privacy

• SECTOR: Stable coins

• Chartbook: FS Large-cap 10 and FS Mid-cap 40
Sectors

Stable Coins

The FS CryptoFX Stable index is designed to track the performance of cryptocurrencies which are designed to be “stable”.

Over the past week, the FS CryptoFX Stable Coin index was up 0.7% Relative to BTC. Over the past month, this index was up 3.1% Relative to BTC.

In the past week, Tether was down 1.0% and DAI was down 2.1%, in dollar terms.

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Correlation
FS Stable Coin

The FS CryptoFX Stable index is designed to track the performance of cryptocurrencies which are designed to be “stable”.

The FS Stable Coin Index is most correlated to BBG US Agg Bond Index with a 90D correlation of 18.5%.

The FS Stable Coin Index is least correlated to S&P 500 with a 90D correlation of -9.0%.

The FS CryptoFX Stable index is designed to track the performance of cryptocurrencies which are designed to be “stable”.

Figure: 90D Rolling Correlation - FS Crypto Stable Correlation against Major Asset Classes
Over last 100 days

Source: Coinmarketcap.com, Bloomberg, other sources and Fundstrat.
Executive Summary

- Overview
- SIZE: FS Large-cap 10, FS Mid-cap 40, FS small-cap 250
- SECTOR: Commodities
- SECTOR: Platforms
- SECTOR: Exchanges
- SECTOR: Privacy
- SECTOR: Stable coins

Chartbook: FS Large-cap 10 and FS Mid-cap 40
TECHNICAL: FS Crypto FX 10 Index Currency Charts - Ethereum

Token pricing as of midnight UTC

Ethereum - ETH Daily Bar Chart 50 dma 100 dma 200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10 15-dma

Volume

For exclusive use of Fundstrat clients
For exclusive use of Fundstrat clients
Token pricing as of midnight UTC
Token pricing as of midnight UTC

**EOS - EOS Daily Bar Chart**
50dma  100dma  200dma

**14 RSI**

**Relative to Fundstrat’s FS CryptoFX 10**
15-dma

**Volume**

---

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 10 Index Currency Charts - Stellar

Token pricing as of midnight UTC

Stellar - XLM Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume
TECHNICAL: FS Crypto FX 10 Index Currency Charts - Dash

Token pricing as of midnight UTC

Dash - DASH Daily Bar Chart
50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10 15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 10 Index Currency Charts - TRON

Token pricing as of midnight UTC

TRON - TRX Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
Technical Charts

FS CryptoFX 10 Index Component Coin Charts

FS CryptoFX 40 Index Component Coin Charts
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Aeternity

Token pricing as of midnight UTC

Aeternity - AE Daily Bar Chart 50 dma 100 dma 200 dma

14 RSI

Relative to Fundstrat's FS CryptoFX 10 15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Augur

Token pricing as of midnight UTC

Augur - REP Daily Bar Chart 50 dma 100 dma 200 dma 4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10 15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts – Basic Attention

Token pricing as of midnight UTC

Daily M5,15 MACD ROC[ 11 | 14 ][ 10 ]

Basic Attention - BAT Daily Bar Chart M50 M200 M15

Basic Attention - BAT Relative To SPX Index(normalised) 31/12/14 M15

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts – Binance Coin

Token pricing as of midnight UTC

Binance Coin - BNB Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
Token pricing as of midnight UTC
Token pricing as of midnight UTC

**Bitcoin Gold - BTG Daily Bar Chart**

- 50 dma
- 100 dma
- 200 dma

**14 RSI**

**Relative to Fundstrat’s FS CryptoFX 10**

**15-dma**

**Volume**

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - BitShares

Token pricing as of midnight UTC

BitShares - BTS Daily Bar Chart  50 dma  100 dma  200 dma  

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL : FS Crypto FX 40 Index Currency Charts - DigiByte

Token pricing as of midnight UTC

DigiByte - DGB Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat's FS CryptoFX 10  15-dma

Volume
Token pricing as of midnight UTC

TECHNICAL: FS Crypto FX 40 Index Currency Charts - Dogecoin

Dogecoin - DOGE Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

Fundstrat

For exclusive use of Fundstrat clients
TECHNICAL : FS Crypto FX 40 Index Currency Charts - Holo

Token pricing as of midnight UTC

Holo - HOT Daily Bar Chart  50dma  100dma  200dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume
TECHNICAL: FS Crypto FX 40 Index Currency Charts – Huobi Token

Token pricing as of midnight UTC

Huobi Token - HT Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Hypercash

Token pricing as of midnight UTC

HyperCash - HC Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume
Token pricing as of midnight UTC

IOST - IOST Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume
Token pricing as of midnight UTC

IOTA - MIOTA Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Metaverse

Token pricing as of midnight UTC

Metaverse ETP - ETP Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Mithril

Token pricing as of midnight UTC

Mithril - MITH Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15 dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Monero

Token pricing as of midnight UTC

Monero - XMR Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Nano

Token pricing as of midnight UTC

NANO Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Nebulas

Token pricing as of midnight UTC

Nebulas - NAS Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume
TECHNICAL: FS Crypto FX 40 Index Currency Charts - NEM

Token pricing as of midnight UTC

NEM - XEM Daily Bar Chart 50 dma 100 dma 200 dma 4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10 15-dma

Volume

For exclusive use of Fundstrat clients
Token pricing as of midnight UTC

ONTology - ONT Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
Token pricing as of midnight UTC

**Qtum - QTUM Daily Bar Chart**

50 dma | 100 dma | 200 dma
---|---|---

**14 RSI**

**Relative to Fundstrat’s FS CryptoFX 10**

15-dma

**Volume**
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Siacoin

Token pricing as of midnight UTC

Siacoin - SC Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Steem

Token pricing as of midnight UTC

Steem - STEEM Daily Bar Chart  50 dma  100 dma  200 dma  4 Nov 2018

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Verge

Token pricing as of midnight UTC

Verge - XVG Daily Bar Chart 50 dma 100 dma 200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10 15-dma

Volume
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Waltonchain

Token pricing as of midnight UTC

Waltonchain - WTC Daily Bar Chart  50 dma  100 dma  200 dma  

14 RSI

Relative to Fundstrat’s FS CryptoFX 10  15-dma

Volume

For exclusive use of Fundstrat clients
Token pricing as of midnight UTC.

**Zcash - ZEC Daily Bar Chart**
- 50 dma
- 100 dma
- 200 dma

*Updated 4 Nov 2018*

**14 RSI**

**Relative to Fundstrat’s FS CryptoFX 10 - 15-dma**

**Volume**

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For exclusive use of Fundstrat clients
TECHNICAL: FS Crypto FX 40 Index Currency Charts - Zilliqa

Token pricing as of midnight UTC

Zilliqa - ZIL Daily Bar Chart  50 dma  100 dma  200 dma

14 RSI

Relative to Fundstrat’s FS CryptoFX 10   15-dma

Volume
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