Analysis overview

Investments in digital assets are here to stay. Nearly all (82%) respondents say they are allowed to have exposure to cryptocurrencies, though only 21% can hold them directly. Looking ahead, 70% will increase their allocation next year, and 81% will increase allocation over the next two to five years. Q4, Q5, Q6

Bitcoin continues to dominate the cryptocurrency space. Asset managers are in search of outsized gains from investing in Bitcoin—53% of respondents are interested in the cryptocurrency, and 41% of those respondents say they are exposed to Bitcoin for its potential for outsized returns. Q9, Q10

Most are bullish about cryptocurrency’s future—but knowledge lags. A slim majority (56%) expect cryptocurrencies to be a common feature of modern portfolios in the next three years, and slightly fewer expect them to be a common feature of company balance sheets. However, few respondents have detailed knowledge of the technology and concepts that underpin digital assets—49% say they have moderate or expert knowledge on how blockchains underpin cryptocurrencies, but just 28% have the same level of knowledge of cryptocurrency mining. Q23, Q16

Asset managers are worried about cybersecurity, transparency, and regulations. Cybersecurity concerns top the list, while few are worried about digital assets’ carbon footprint or a lack of rigorous tools or research. Q13

The results in this presentation are based on a survey of 300 institutional investors conducted by State Street and Oxford Economics in October 2021
Findings by AUM and institution type

The largest institutions in our survey (by AUM) have a more sophisticated understanding of digital assets—and are far more bullish on their prospects. These organizations (with more than $500 bn in assets) are more likely to be able to hold digital assets directly (55%). They are also more likely to have dedicated staff to monitoring the space (64% vs. 30% total).

- These largest funds are bullish on cryptocurrencies—42% see the most potential value in this area of digital assets. More than three-quarters (85%) are interested in investing in Bitcoin (vs. 52% total).

- More than half of the largest funds think that it is equally likely that traditional markets will list digital assets and that new digital exchanges list traditional assets in tokenized form (42%, vs. 18% total). Nearly three-quarters (73%) of the largest funds think that crypto will be a common feature of modern portfolios in 3–5 years (vs. 56% total).

Results by institution type are mostly directional, due to small sample sizes. However, in general, asset managers are the most likely group to be allowed to hold digital assets directly (36% vs. 21%); only 5% of SWFs are allowed to (and 55% cannot at all).

- More than half of SWFs had no allocation in digital assets over the past year—but that will change soon. No SWFs will be out of the space within two years.
Findings by geography

**Strategizing for digital assets.** Across geographies, respondents are mostly on the same page. They are reducing their exposure to asset classes like fixed income, cash/cash equivalents, and hedge funds, and agree that the optimal way of gaining exposure to digital assets from a risk/return perspective is to hold them directly. They also share similar concerns when it comes to investing in cryptocurrencies. Almost half of respondents in Americas cite transparency as their chief concern. EMEA (42%) and APAC (53%) respondents both cite cybersecurity as their main concerns. Q7, Q13, Q14

**Increasing resource allocation.** Respondents from the Americas lead the group in their allocation to digital assets. In the next year, two-thirds of respondents from the Americas expect to increase their allocation slightly (whereas 47% of respondents from EMEA and 42% from APAC expect to do the same). In the next two to five years, 48% of Americas respondents say they will increase their allocation significantly (vs. 38% EMEA, 31% APAC). But only half of respondents from the Americas agree that cryptocurrencies will be a common feature of modern portfolios in the next three years. Similarly, they see a greater risk in digital assets than other respondents—more than half agree that the growth in market cap, along with increased institutional adoption of cryptocurrency, means that a crypto market crash would pose significant risks. Q5, Q6, Q23

**Assigning custodians.** Respondents across all regions expect that they will need financial services for digital assets for markets within their region and major markets globally. While they need custodians in the same areas, they look for different qualities. More than half of respondents in the Americas prioritize the ability to exchange data with other industry platforms in real time. Almost half of EMEA respondents say the same, followed closely by ease of onboarding new asset classes/investment products (47%), whereas 51% of APAC respondents prioritize robust cybersecurity. Q24, Q25
Findings by title

Allocation of resources increases incrementally. In the short term, respondents agree when it comes to the allocation of resources—with just under half saying it increased only slightly over the past 12 months and about half expecting the same going forward a year. But in the long term their visions diverge—C-level executives (50% vs. 39% total) plan on significant increases, while investment managers (54%) are more likely to believe the increase will be more modest. Q4, Q5, Q6

Custody is essential. Across the board, regardless of title, respondents are in lockstep that the responsibility for monitoring the digital asset space falls to investment staff as part of their jobs. They cite the ability to seamlessly exchange data with other industry platforms in real time (51%) as the most important quality for a custodian of digital assets, followed by the ease of bringing on new asset classes/investment products (48%) and robust cybersecurity (45%). Q24, Q25

Digital currency will be disruptive. Respondents acknowledge that digital assets will shake up markets in the future but differ on what they think will drive or accelerate adoption—40% of those in investment operations and technology see cryptocurrency as part of their future portfolios. And more than half of all respondents (53%) expect new digital exchanges to list traditional assets in tokenized forms to accelerate adoption, though investment managers cite this more often (61%) than top executives (51%) and operations and IT (42%). That action will be an accelerator, according to 63% of IT/Operations, 61% of investment managers, and 55% of executives. Q17, Q18, Q19, Q20
A slim majority increased their allocation last year…

Q4. How did your allocation of digital assets, cryptocurrencies, or related funds/products change in the previous 12 months?

- 20% We did not have any allocation
- 11% We invested in this space for the first time
- 46% We increased our existing allocation significantly
- 9% We increased our existing allocation slightly
- 9% Our allocation was changed
- 5% We decreased our allocation slightly
…with nearly two-thirds increasing allocation next year…

Q5. How do you expect your allocation of digital assets, cryptocurrencies, or related funds/products to change over the next 12 months?

![Bar Chart]

- 5% We have no allocation and no plans to invest
- 14% We will invest in this space for the first time
- 51% We will increase our current allocation slightly
- 19% We will increase our current allocation significantly
- 10% Our allocation will stay the same
- 2% We will decrease our allocation slightly
…and few plan to decrease allocation going forward

Q6. How do you expect your allocation of digital assets, cryptocurrencies, or related funds/products to change over the next two to five years?

- 42%: We will increase our current allocation slightly
- 39%: We will increase our current allocation significantly
- 12%: Our allocation will stay the same
- 5%: We will invest in this space for the first time
- 1%: We will decrease our allocation slightly
- 1%: We will decrease our allocation significantly
Bitcoin occupies the biggest mindshare…

Q9. Which cryptocurrencies is your firm interested in investing in?
Select all that apply

53% Bitcoin
40% Ethereum
21% Other
11% None
…for its potential for outsized returns

Q10. What do you consider the primary case for having exposure to Bitcoin?

- **41%** Potential for outsized returns (i.e., as a speculative asset)
- **23%** It is a hedge against inflation risk
- **22%** It is a store of value, i.e., "digital gold"
- **8%** It is useful for transacting across borders
- **6%** It is not correlated to traditional assets and thus can improve risk-adjusted returns of a portfolio, i.e., a diversifier
Other cryptocurrencies are used as a hedge

Q12. What do you consider the primary case for having exposure to [other cryptocurrencies]?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Case Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>37%</td>
<td>It is a hedge against inflation risk</td>
</tr>
<tr>
<td>27%</td>
<td>It is a store of value i.e., &quot;digital gold&quot;</td>
</tr>
<tr>
<td>23%</td>
<td>Potential for outsized returns (i.e., as a speculative asset)</td>
</tr>
<tr>
<td>10%</td>
<td>It is useful for transacting across borders</td>
</tr>
<tr>
<td>3%</td>
<td>It is not correlated to traditional assets and thus can improve risk-adjusted returns of a portfolio, i.e., a diversifier</td>
</tr>
</tbody>
</table>
Cybersecurity and transparency concerns overshadow others

Q13. What are your chief concerns about investing in cryptocurrencies?

Top three ranked

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cybersecurity</td>
<td>44%</td>
</tr>
<tr>
<td>Transparency</td>
<td>41%</td>
</tr>
<tr>
<td>Regulatory treatment</td>
<td>39%</td>
</tr>
<tr>
<td>Lack of rigorous tools, analytics, and research</td>
<td>38%</td>
</tr>
<tr>
<td>Volatility</td>
<td>34%</td>
</tr>
<tr>
<td>24/7 trading</td>
<td>30%</td>
</tr>
<tr>
<td>Potential technological obsolescence</td>
<td>24%</td>
</tr>
<tr>
<td>Carbon footprint</td>
<td>21%</td>
</tr>
<tr>
<td>Market manipulation</td>
<td>20%</td>
</tr>
<tr>
<td>Transcripts</td>
<td>9%</td>
</tr>
</tbody>
</table>
Most want to directly hold digital assets

Q14. What do you see as the optimal way(s) to gain exposure to digital assets from an overall risk/return perspective?
Select all that apply

- Direct holding of digital assets: 53%
- ETF basket containing top crypto(s): 35%
- Investment trust: 30%
- Through indirect exposure to digital assets prices: 28%
- Through a specialist hedge fund: 25%
- Through exposure to companies operating in the digital assets space: 13%
Very few have expert-level knowledge of digital assets

Q16. Please rate your level of knowledge of the following concepts and terms related to digital assets

<table>
<thead>
<tr>
<th>Concept</th>
<th>None</th>
<th>Surface-level</th>
<th>Some knowledge</th>
<th>Moderate</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributed Ledger Technology (DLT) as a cryptocurrency</td>
<td>21%</td>
<td>29%</td>
<td>39%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Technical vulnerabilities</td>
<td>12%</td>
<td>22%</td>
<td>29%</td>
<td>31%</td>
<td>6%</td>
</tr>
<tr>
<td>Proof of Work (PoW) vs Proof of Stake (PoS) validation</td>
<td>24%</td>
<td>40%</td>
<td>30%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Distributed Ledger Technology (DLT) as a platform for decentralized applications</td>
<td>6%</td>
<td>17%</td>
<td>36%</td>
<td>35%</td>
<td>6%</td>
</tr>
<tr>
<td>Mining</td>
<td>9%</td>
<td>29%</td>
<td>33%</td>
<td>23%</td>
<td>5%</td>
</tr>
<tr>
<td>Smart contracts</td>
<td>26%</td>
<td>33%</td>
<td>35%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Storage (cold and hot wallets, private and public keys, etc.)</td>
<td>10%</td>
<td>26%</td>
<td>35%</td>
<td>24%</td>
<td>5%</td>
</tr>
</tbody>
</table>
DeFi tokens and NFTs may be the biggest disruptors

Q17. Which area of the digital assets space do you think will be the greatest disruptor to traditional finance in the next 1–2 years? 3–5 years?

- Decentralized Finance (DeFi) tokens/applications: 19% (1-2 years), 24% (3-5 years)
- Non-fungible tokens (NFTs): 18% (1-2 years), 23% (3-5 years)
- Cryptocurrencies: 18% (1-2 years), 17% (3-5 years)
- Stablecoins: 9% (1-2 years), 18% (3-5 years)
- Central bank digital currencies (CBDCs): 14% (1-2 years), 17% (3-5 years)
- Tokenization of traditional assets: 10% (1-2 years), 12% (3-5 years)
- None: 0% (1-2 years), 12% (3-5 years)
Tokenization may bring transparency and liquidity

Q20. What do you see as the primary benefits from the tokenization of traditional financial assets? Select all that apply

- Increased transparency: 54%
- Improved risk management: 52%
- Increased liquidity: 50%
- Greater access to private markets for retail investors: 39%
- Increased efficiency: 25%
- Enhanced security: 21%
Most think blockchains are key to real-time settlement

Q21. How do you think market structure will evolve to enable real-time settlement?

52% 
Market structure will be overhauled using distributed ledger technology (DLT) to enable real-time settlement

31% 
Existing technology, organizations and frameworks will be improved to enable real-time settlement

17% 
Markets work well today; real-time settlement is unnecessary
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