



**BetaShares**

# Investing in the companies driving the crypto economy

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Bitwise

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& Capital Markets, BetaShares





# Important information

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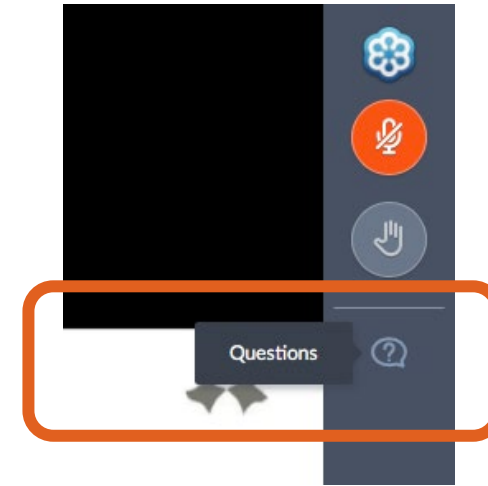
Please note that an investment in CRYP should be considered very high risk. CRYP provides focused exposure to companies involved in servicing crypto-asset markets or which have material investments in crypto-assets. Crypto-assets are highly speculative in nature and such companies can be expected to have a very high level of return volatility. An investment in CRYP should only be made by investors who fully understand the features and risks of companies with significant exposure to crypto-asset markets or after consulting a professional financial adviser, and who have a very high tolerance for risk and the capacity to absorb a rapid loss of some of their investment. An investment in CRYP is not the same as investing directly into cryptocurrency assets. For more information on risks and other features of CRYP, please see the Target Market Determination (TMD) and PDS, available at [www.betashares.com.au](http://www.betashares.com.au).



# Before we start...



A recording of the session will be sent to all attendees at the end of the webinar



Ask a question during the session





# About BetaShares

**64**

Widest range of exchange traded products on the ASX



**Providing intelligent investment solutions**

Built to help **Australian investors** meet their financial objectives.



Founded in **2009**



**+\$22B**

in assets under management



**70+**  
Colleagues across Australia and New Zealand

\* Information as at 30 November 2021. \*\*Awards are only one factor when considering a financial product.



# Today's speakers



**Matt Hougan**

Chief Investment Officer,  
Bitwise



**Alistair Mills**

Director - Institutional Business  
& Capital Markets, BetaShares



# What is the crypto economy?

The crypto economy is all activity relating to the creation, transaction and ownership of digital assets



Digital Assets (e.g. Crypto currencies such as Bitcoin and Ethereum, NFTs, etc )

Infrastructure and Platforms (e.g. Miners, Exchanges, etc)

Investors and participants using Digital Assets as an investment, to store value or as a medium of exchange





# How can you invest in the crypto economy?

## 1. Digital Assets (e.g. Bitcoin, Ethereum)

- ▶ Direct exposure to the price performance of a digital asset
- ▶ Only available in Australia currently via off-market platforms
- ▶ Risk of Private Keys being lost or stolen



## 2. Companies driving the Crypto economy

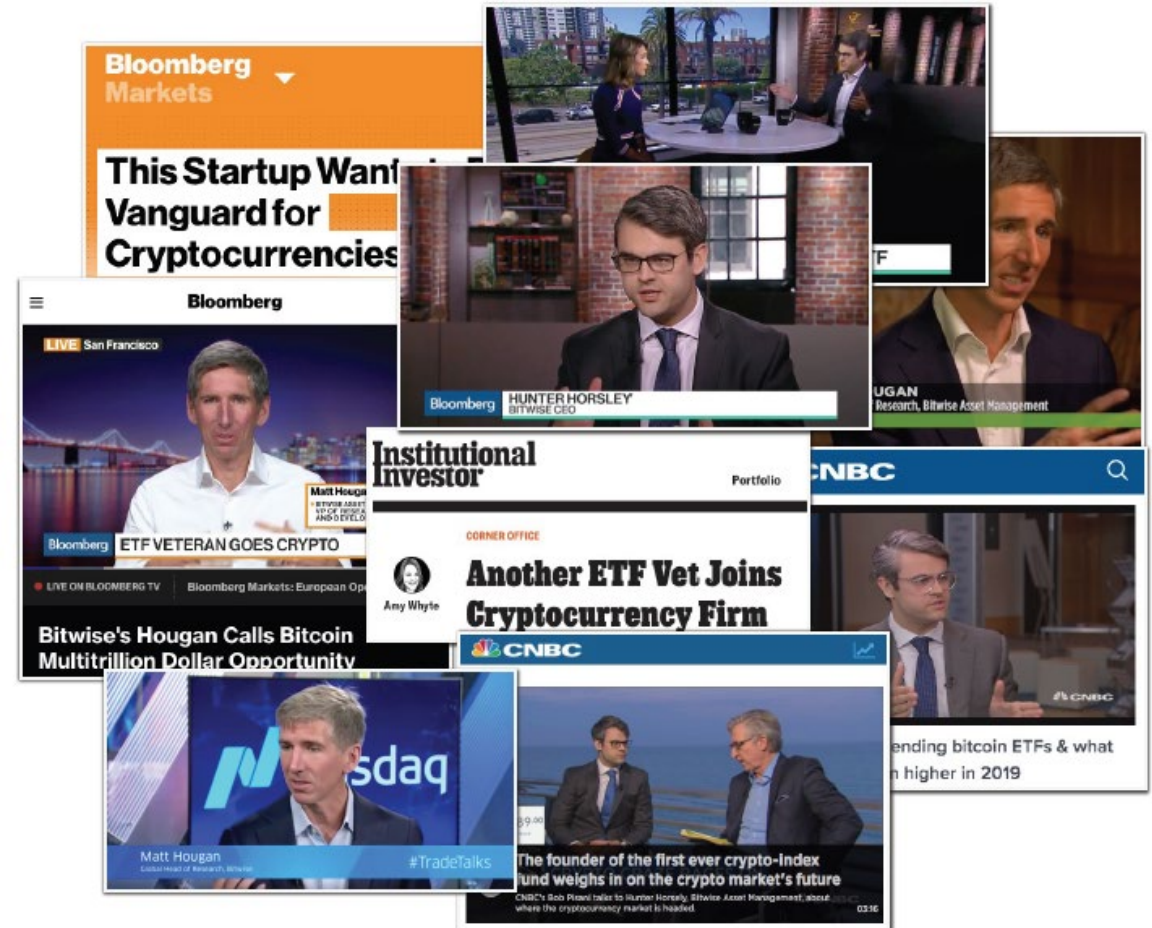
- ▶ Global companies providing core crypto infrastructure
- ▶ Businesses leveraged to the increased adoption and transaction volumes
- ▶ Access through an ETF traded on the ASX





# CRYP's Index Provider: Bitwise at a glance

- ▶ **Pioneer:** Created the first and largest crypto asset index fund\* (ticker BITW), and DeFi index fund. Approx. \$1.7B\* in AUM across fund family.
- ▶ **Leading brand:** Well-known for industry leading research and education. Authored CFA's "Guide to Crypto".
- ▶ **Professional-focused:** Partner to RIAs, institutions, hedge funds and family offices.
- ▶ **Best-of-breed:** Sole focus on crypto asset management, indexing, and research,
- ▶ **Experienced:** 50 person team, with experienced executive leadership and backers, and 3+ year track record.



As of 7 May 2021.



# Executive Team: Bridging expertise in tech, indexing and ETFs



**Hunter Horsley**  
CEO

**Technology Expertise**

Product Manager, Facebook  
Product Manager, Instagram  
Economics, Wharton  
Forbes 30 Under 30



**Teddy Fusaro**  
President

**Expert in Alts Portfolio Management**

10-year ETF Veteran  
SVP, NYLife Investments (\$550B AUM)  
SVP & Head of PM, IndexIQ (\$5B AUM)  
VP & Senior PM, Direxion (\$10B AUM)  
Analyst, Goldman Sachs



**Matt Hougan**  
Chief Investment Officer

**Famous ETF Educator & Expert**

15-year ETF Veteran  
Author of CFA's first book on crypto  
CEO, ETF.com  
CEO, Inside ETFs (largest ETF event)  
Co-author, CFA Institute's monograph on ETFs  
Columnist, Forbes



**Mick McLaughlin**  
Managing Director, Head of Business Development

**Built \$20B ETF Franchise from \$0**

15-year ETF Veteran  
MD, Head of ETF Sales, Deutsche (\$20B)  
Manager, Russel Investments (\$300B)  
Director, BlackRock iShares (\$6T)



**Hong Kim**  
Chief Technology Officer

**Software Security Expertise**

Software Security Research, Korean Military  
Software Engineer, Google  
Teaching Assistant, University of Pennsylvania  
Computer Science, University of Pennsylvania



**Katherine Dowling**  
General Counsel, CCO

**Former Federal Prosecutor**

10-years as Assistant US Attorney, prosecuting financial crimes  
General Counsel, True Capital  
Managing Director, Luminate Capital  
Director, Thoma Bravo  
Harvard Law School





# Industries driving the Crypto economy

## Exchanges & Custodians

Providers of the on- and off-ramps that facilitate the trading and secure storage of crypto assets.



## Trading & Asset Management

Firms trading on a proprietary basis or providing fund solutions and investing in crypto assets on behalf of customers.



## Crypto Miners

Companies engaged in the process of securing the Network by verifying transactions and recording them in the public blockchain ledger, who are in return rewarded with newly created crypto assets.



## Mining Equipment Manufacturers

Creators of components and specialised hardware used to mine or store crypto assets, such as semiconductor chips and ASICs (Application Specific Integrated Circuits).



## Treasury Holdings

Companies that have 75%+ in bitcoin and other liquid crypto assets on their corporate balance sheet.



## Supporting Services

Banking and financial services for companies and institutions dealing with crypto assets.



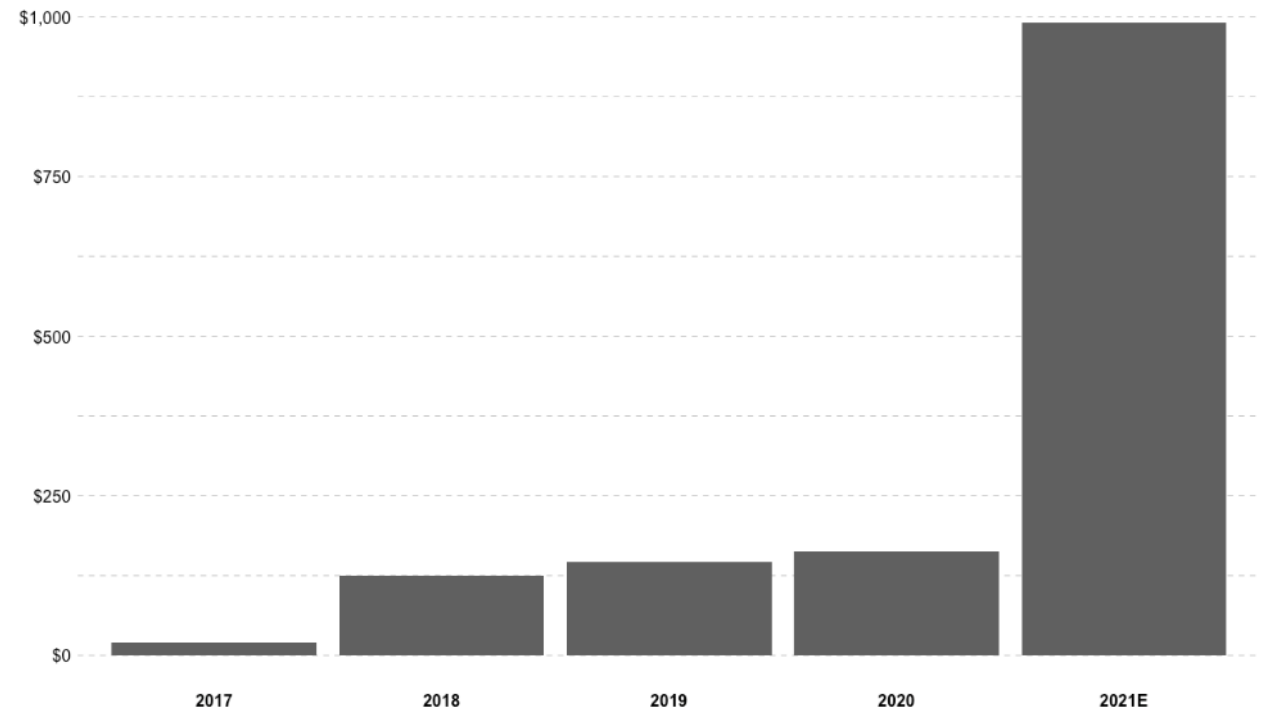


# Crypto miners: Securing the crypto ecosystem

- ▶ **Role:** Process transactions and contribute to the security of public blockchains
- ▶ **Change:** Mining has evolved into an industrial-scale business, with high capital intensity
- ▶ **Insight:** Publicly traded crypto miners are forecast to reach aggregate revenues of about \$1.0 billion in 2021, up from \$163 million in 2020

## Miner Revenues Are Forecast To Reach \$1 Billion in 2021

Aggregate annual miner revenues between 2017 and 2021 in USD millions. 2021 data based on FactSet analyst consensus estimates.



Source: Bitwise Asset Management with data from FactSet

Nothing contained herein is intended to predict the performance of any investment. There can be no assurance that actual outcomes will match the assumptions or that actual returns will match any expected returns.

# Crypto mining equipment manufacturers: Powering crypto miners



- ▶ **Role:** Provide infrastructure, such as specialized hardware or hosting services, to crypto miners
- ▶ **Change:** Data center providers emerging with installed hosting capacity
- ▶ **Insight:** Infrastructure is sold in long-term contracts, which allows these firms to be less exposed to crypto's daily price fluctuations



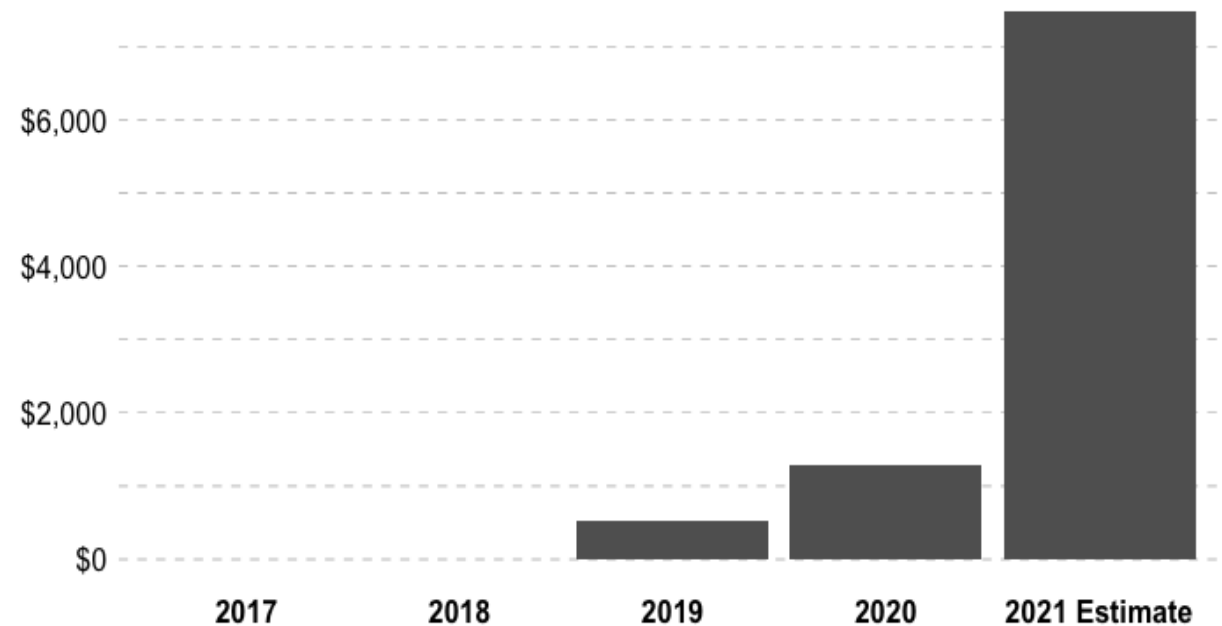


# Exchanges and custodians: Coinbase et al.

- ▶ **Role:** Provide on- and off-ramps for trading and safe cryptoasset storage
- ▶ **Change:** Coinbase's IPO has shined a light on the impressive economics of this segment
- ▶ **Insight:** Headlined by Coinbase, publicly traded crypto exchanges are forecast to reach aggregate revenues of about \$7.5 billion in 2021, up from \$1.3 billion in 2020

## Coinbase Is Forecast To Lead Revenue of Listed Crypto Exchanges Past \$7 Billion in 2021

Aggregate annual revenues for exchanges and custody constituents between 2017 and 2021 in USD millions. 2021 data based on FactSet analyst consensus estimates.



Source: Bitwise Asset Management with data from FactSet

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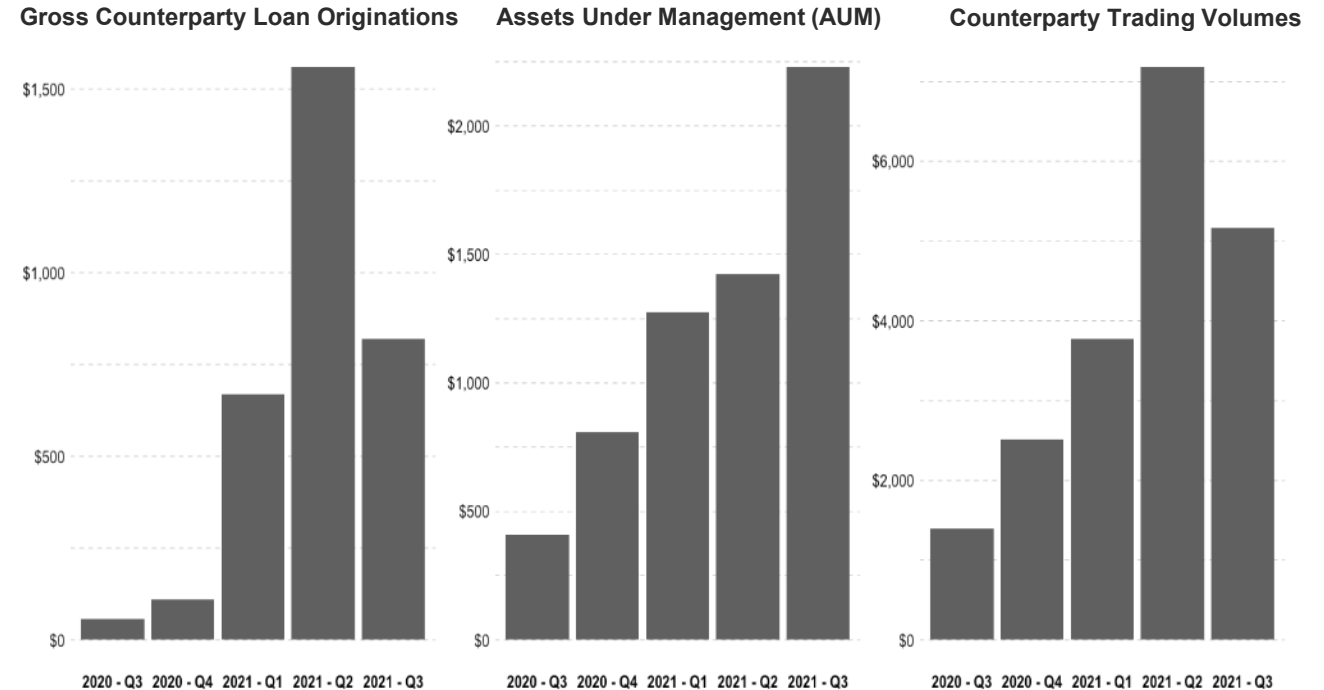


# Trading and asset management: A growing space

- ▶ **Role:** Trade proprietary capital or provide funds, services, and other tools that help investors access this space
- ▶ **Change:** An emerging subsector that can be leveraged to crypto prices
- ▶ **Insight:** Galaxy grew all of its main operating metrics by over 100% over the last 12 months

## Galaxy Has More Than Doubled Its Main Operating Metrics Over the Last 12 Months

Gross counterparty loan originations, assets under management, and counterparty trading volumes per quarter in USD millions



Source: Bitwise Asset Management with data from Galaxy Digital

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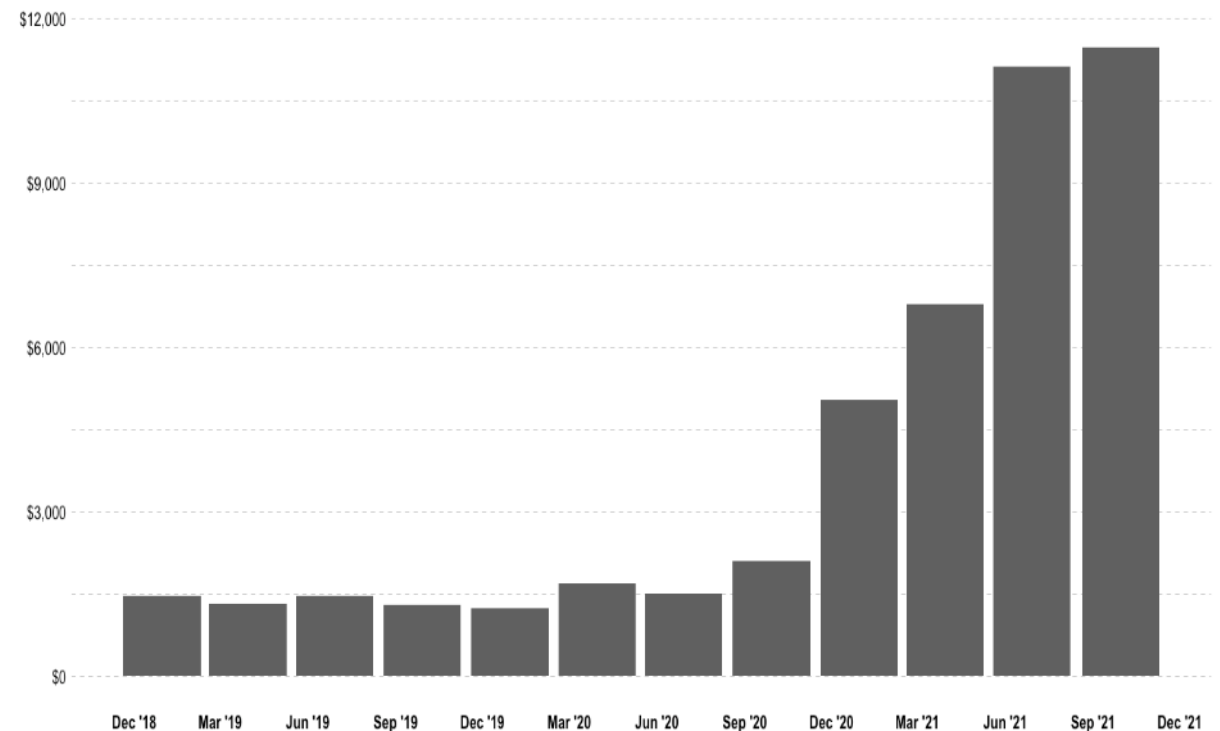


# Supporting services: Banking and more

- ▶ **Role:** This subsector connects crypto to the traditional financial world. Today it is comprised of only one company, Silvergate (SI).
- ▶ **Change:** Silvergate was one of the first banks to service crypto firms. Since then, it has leveraged this position to build a competitive moat.
- ▶ **Insight:** The Silvergate Exchange Network (SEN) provides real-time, 24/7 USD-crypto transactions between institutional investors and crypto exchanges.

## Silvergate Has a Strong Market Share in the Crypto Banking Market

Quarterly digital asset deposits, in USD millions



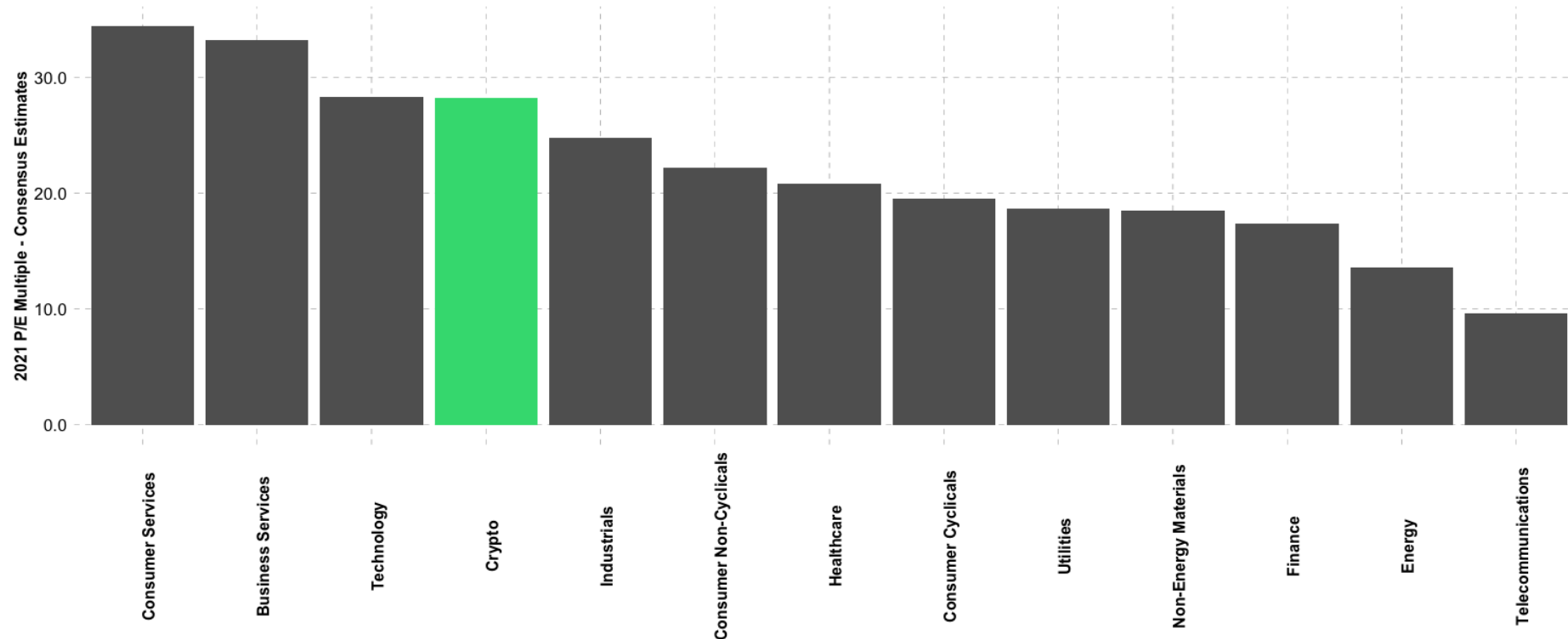
Source: Bitwise Asset Management with data from FactSet and Silvergate

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# Favorable growth and profitability dynamics are not reflected in 2021 P/E multiples

**Crypto Equities Are Reasonably Priced Against Other Industries as Measured by 2021 P/E Multiples**



Source: Bitwise Asset Management with data from FactSet

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# Risk factors

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- ▶ **Crypto equities are still linked to crypto:** The long-term success of these companies relies on a positive outlook for crypto. Regulation, market infrastructure, critical technical developments, and general user adoption for crypto will impact results.
- ▶ **Crypto is a volatile asset class:** The exceptional returns of recent years may not repeat, and volatility will impact this market.
- ▶ **Analyst coverage is limited:** Many stocks have little or no analyst coverage, and even those that do have wide-ranging estimates.
- ▶ **Competition is rising:** Large-cap competitors are entering this market and could compete with crypto-specific firms.



# CRYP Index Methodology summary: Bitwise Crypto Innovators Index

## Index Universe | Companies that are defined as a Crypto Innovator:

- ▶ Servicing cryptocurrency markets and/or focus on crypto ecosystem: Mining, Asset Management, Trading & Custody, Financial Services, Industry Services, Mining Equipment Suppliers, or
- ▶ Significant liquid cryptocurrency holding
- ▶ **Geography:** Listed on developed market country exchange
- ▶ **Size:** Minimum US\$100M market capitalisation
- ▶ **Liquidity:** Minimum 3 month US\$0.5M ADV

## On quarterly rebalance

### At least 85% allocation to pure-plays, Tier 1 Crypto Innovators:

- ▶ 75% of revenue, or
- ▶ 75% of net asset treasury holding
- ▶ Mkt cap weighted with 10% single stock cap

### Up to 15% allocation to Tier 2 Crypto Innovators:

- ▶ Minimum US\$10B market cap
- ▶ Significant dedicated business initiative focussed on crypto
- ▶ Equal weighted with a cap of 10 stocks

Index consists of up to  
50 stocks from the  
combined Tier 1 and Tier  
2 buckets

## Fast Entry rule

New US\$10B+ Tier 1  
Innovators can be included  
day 2 of listing

Next quarterly  
rebalance





# Pipeline of potential listings of crypto companies



Digital Assets arm of ICE, the parent company of the NYSE, founded in partnership with companies like Starbucks, Microsoft, and BCG. Expected to IPO via a SPAC.

SPAC deal value:  
\$2 .1 billion (Jan '21)



Exchange backed by prominent investors, designed to combine central order book technology with the benefits of decentralized finance (DeFi). Expected to IPO via a SPAC.

SPAC deal value:  
\$10 billion (May '21)



Company focused on leveraging traditional payment rails through blockchain technology. Issuer of the USDC stablecoin, which has over \$25 billion in market value.

SPAC deal value:  
\$4.5 billion (Jul '21)



The largest crypto mining company in North America with over 550 MW of power under contract and options secured to expand capacity to over 1,000 MW.

SPAC deal value:  
\$4.3 billion (Jul '18)



Second largest U.S. cryptocurrency exchange in terms of volume traded, founded in 2011. Is said to be considering a direct listing following the success of rival Coinbase.

Most recent valuation milestone:  
\$4 billion (Jun '19)



One of the first crypto wallets, with more than 31 million verified users in over 200 countries. Currently also operates an exchange, an OTC desk and a venture capital fund.

Most recent valuation milestone:  
\$5 billion (Feb '21)



Leading provider of credit services to the crypto ecosystem with over \$10 billion in outstanding loans and more than \$15 billion in assets.

Most recent valuation milestone:  
\$3 billion (Mar '21)



The world's largest producer of bitcoin mining machines and operator of mining pools. Could come to the market after a corporate restructuring finalized in January 2021.

Most recent valuation milestone:  
\$12 billion (Aug '18)



# BetaShares Crypto Innovators ETF (ASX: CRYP)

## Investment Objective

Aims to track the performance of an Index (before fees and expenses) that provides exposure to up to 50 global companies at the forefront of the crypto economy.

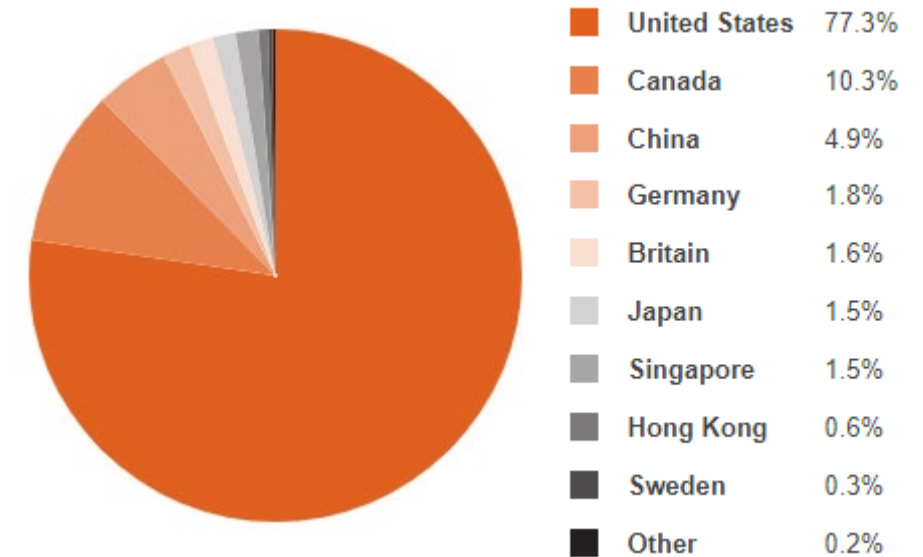
## Key Information

<b>ASX Code</b>	CRYP
<b>Index Name</b>	Bitwise Crypto Innovators Index
<b>Bloomberg Code</b>	CRYP AU
<b># of components</b>	32
<b>Asset backing</b>	Equities
<b>Management Fee</b>	0.67% p.a.
<b>ETF Inception Date</b>	November 4 <sup>th</sup> , 2021

## Top 10 Index constituents\*

	Weighting
<b>Silvergate Capital</b>	13.2%
<b>Marathon Digital Holdings</b>	10.5%
<b>Coinbase Global</b>	10.2%
<b>Galaxy Digital Holdings</b>	10.1%
<b>Microstrategy</b>	8.7%
<b>Riot Blockchain</b>	6.8%
<b>Voyager Digital</b>	4.7%
<b>Hut 8 Mining</b>	3.9%
<b>Canaan Inc</b>	3.8%
<b>Hive Blockchain Technologies</b>	3.2%

## Index Country allocation\*

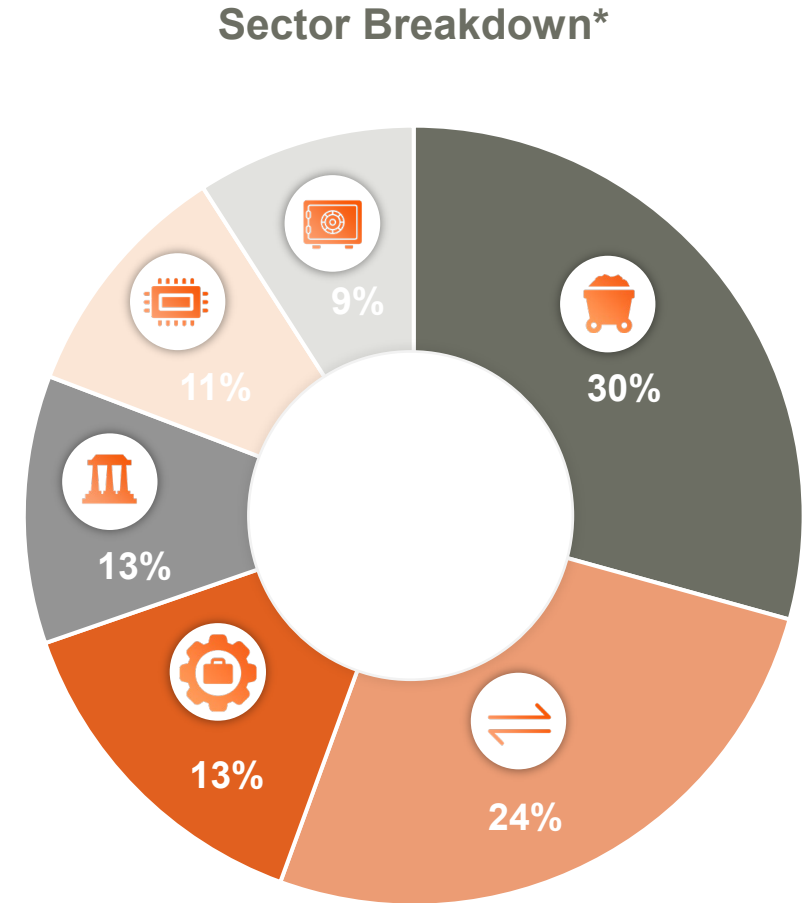


\*As at 30 November 2021



# CRYP's Index: illustrative holdings

	Sector	Company Name	Country
	<b>Crypto Miners</b>	Marathon Digital Holdings	U.S.
		Riot Blockchain	U.S.
		Argo Blockchain	United Kingdom
	<b>Exchanges and Custodians</b>	Coinbase Global	U.S.
		Voyager Digital	Canada
		PayPal Holdings	U.S.
	<b>Treasury Holdings</b>	Microstrategy	U.S.
	<b>Mining Equipment Manufacturers</b>	Canaan	U.S.
		Northern Data	Germany
	<b>Trading and Asset Management</b>	Galaxy Digital	Canada
		Arcane Crypto	Sweden
	<b>Supporting Services</b>	Silvergate Capital	U.S.
		Signature Bank	U.S.

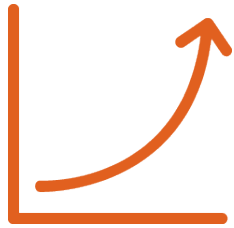


\* As at 23 November 2021.



# Benefits of ASX:CRYP

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## Invest in a sector with strong growth potential

The crypto economy has been growing strongly, aided by the performance of Bitcoin, Ethereum and other digital assets over the past ten years. This growth is anticipated to continue.



## Exposure to crypto core infrastructure

CRYP provides 'picks and shovels' exposure to the companies building crypto mining equipment, crypto trading venues, and other key services that allow the crypto economy to thrive.



## Convenient, cost-effective exposure to the crypto economy

CRYP provides focused exposure to the crypto economy within the familiar ETF structure. You can invest in CRYP as simply as buying any share on the ASX.

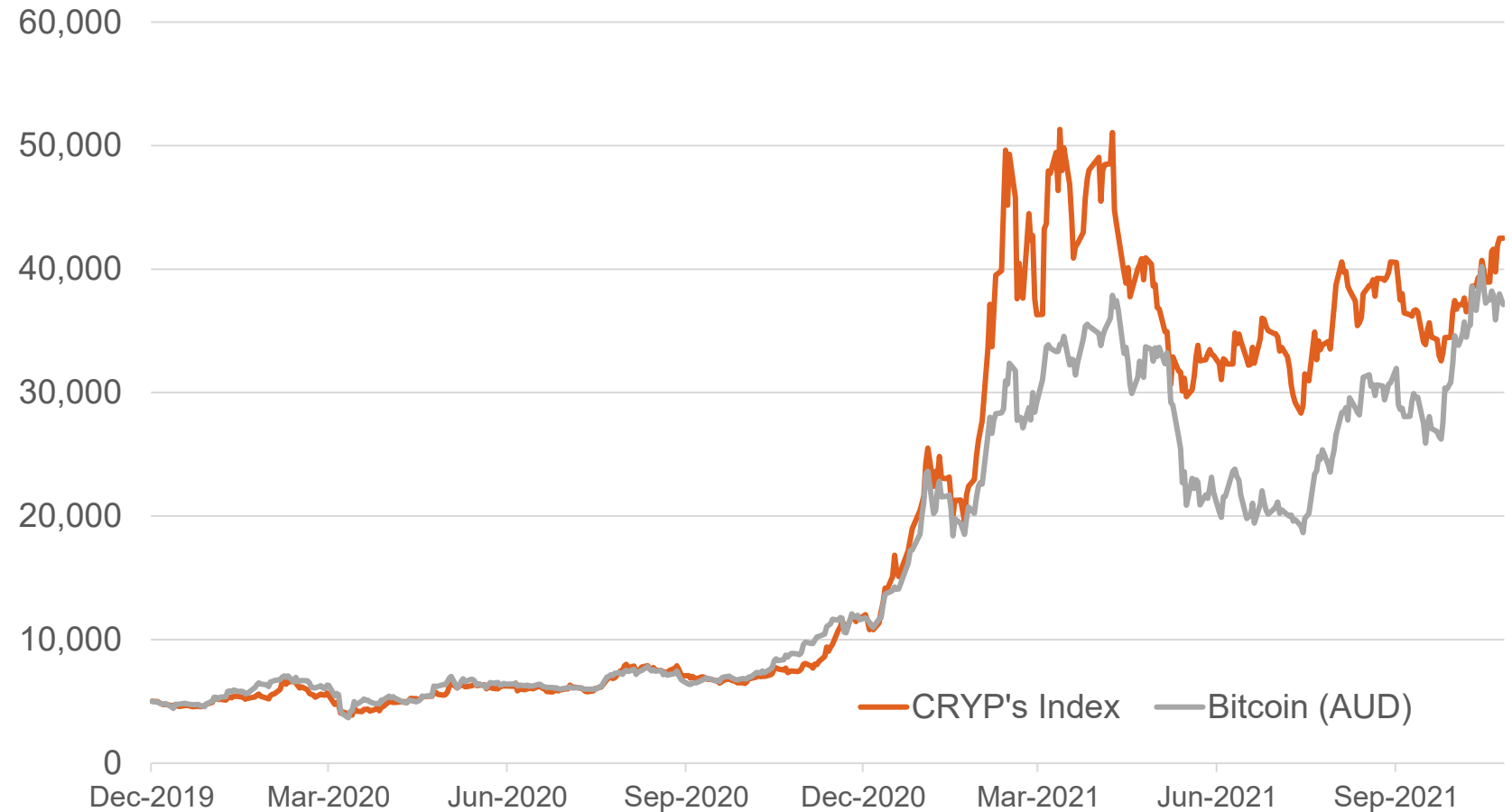
# An investment in CRYP is not the same as investing in crypto-currencies



## CRYP's Index vs Bitcoin: historical performance

### CRYP's Index Total Returns versus BTC Price (AUD)

(Since inception 6 Dec 2019 to 31 Oct 2021)



	CRYP's Index	BTC Price (in AUD)
Annualised Return	208%	187%
Annualised Volatility	72%	70%

Performance shown for illustrative purposes. CRYP's Index has a relatively short performance history and should therefore be viewed with caution. Source: Bloomberg, as at 31/10/2021. CRYP's Index is the Bitwise Crypto Innovators Index. You cannot invest directly in an index. Performance excludes the impact of ETF fees and expenses. Past performance is not an indication of future performance of the Index or the ETF. Index inception was 6 December 2019.





# Coming soon... subject to regulatory approval





# Things to consider

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- ▶ Risk level: An investment in CRYP should be considered very high risk. Crypto-assets are highly speculative in nature & companies with significant exposure to crypto-asset markets can be expected to have a very high level of return volatility.
- ▶ Intended use: CRYP should only be considered as a small component of an investor's overall portfolio.
- ▶ Crypto-companies v crypto-assets: CRYP is not the same as investing directly in crypto-currencies and should not be expected to track price movements of any crypto-currencies.
- ▶ Other investment risks include:
  - Market risk with equities
  - Small-mid cap companies risk
  - Crypto-asset/blockchain technology is still new & many of its uses untested
  - Currency risk with international investments
- ▶ General information only: Today's discussion does not take into account any person's individual circumstances and is not personal financial advice.
- ▶ Professional advice: Investors should seek professional financial advice before investing.
- ▶ Research: See the PDS for more information about risks and other features of the fund. PDS and Target Market Determination (TMD) available at [www.betashares.com.au](http://www.betashares.com.au).

# Q&A

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Officer,  
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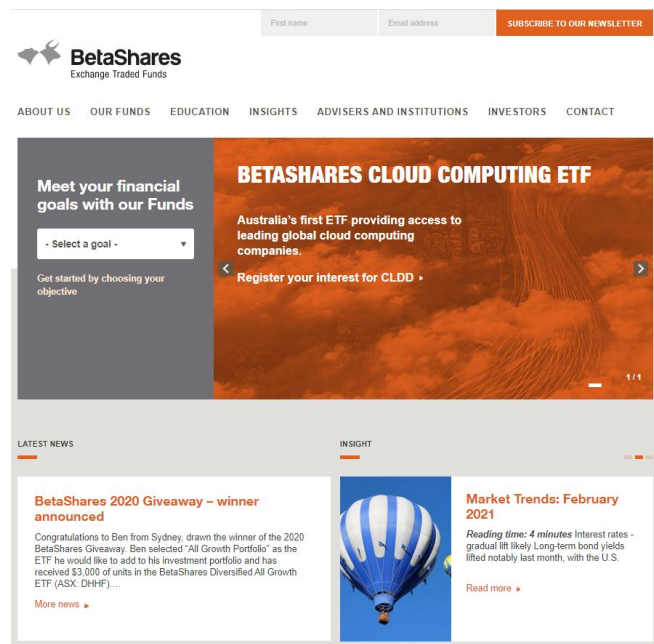
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BetaShares

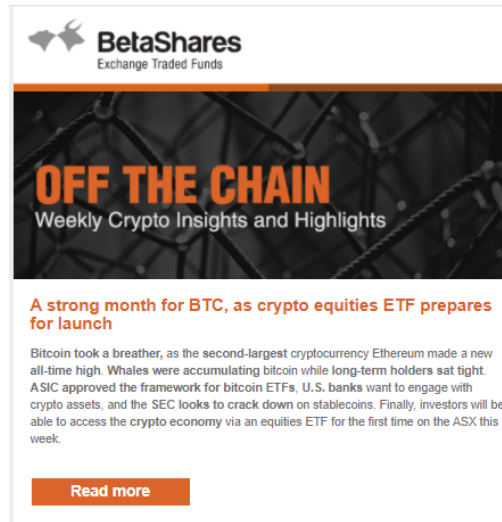


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