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CFM Columbia-PER Alternative Data Initiative

Alternative Data in Crypto Markets

Presented by
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I. Crypto as an asset class

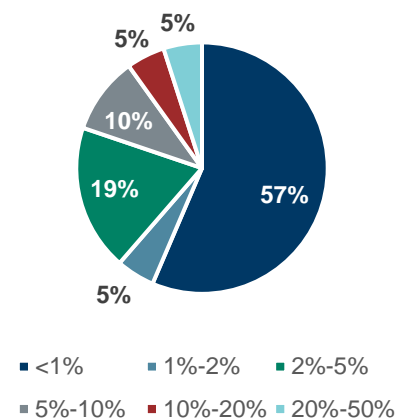
A few stats – still in nascent phase...

Still in nascent phase...

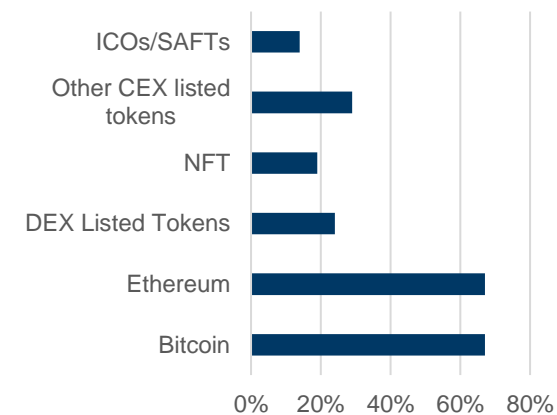
- Some stats...
 1. AUM of crypto HFs: \$4bn
 2. Of crypto HFs: Largest investors are HNWI, 53%
- Probably because of some challenges with trading crypto that we also recognise
 1. Regulation
 2. Accounting / Tax
 3. Custody
 4. Fragmentation
 5. Liquidity...?
- Other features?

Source: 4th Annual PWC AIMA Global Crypto Hedge Fund Report 2022

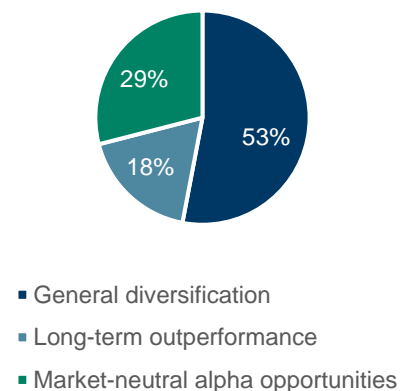
% of AUM



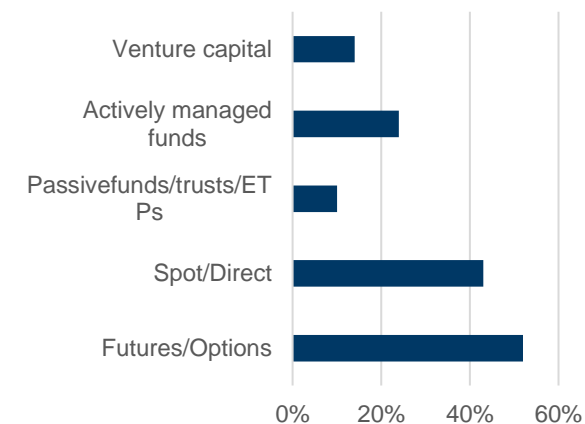
How are HFs invested?



Reason for investing

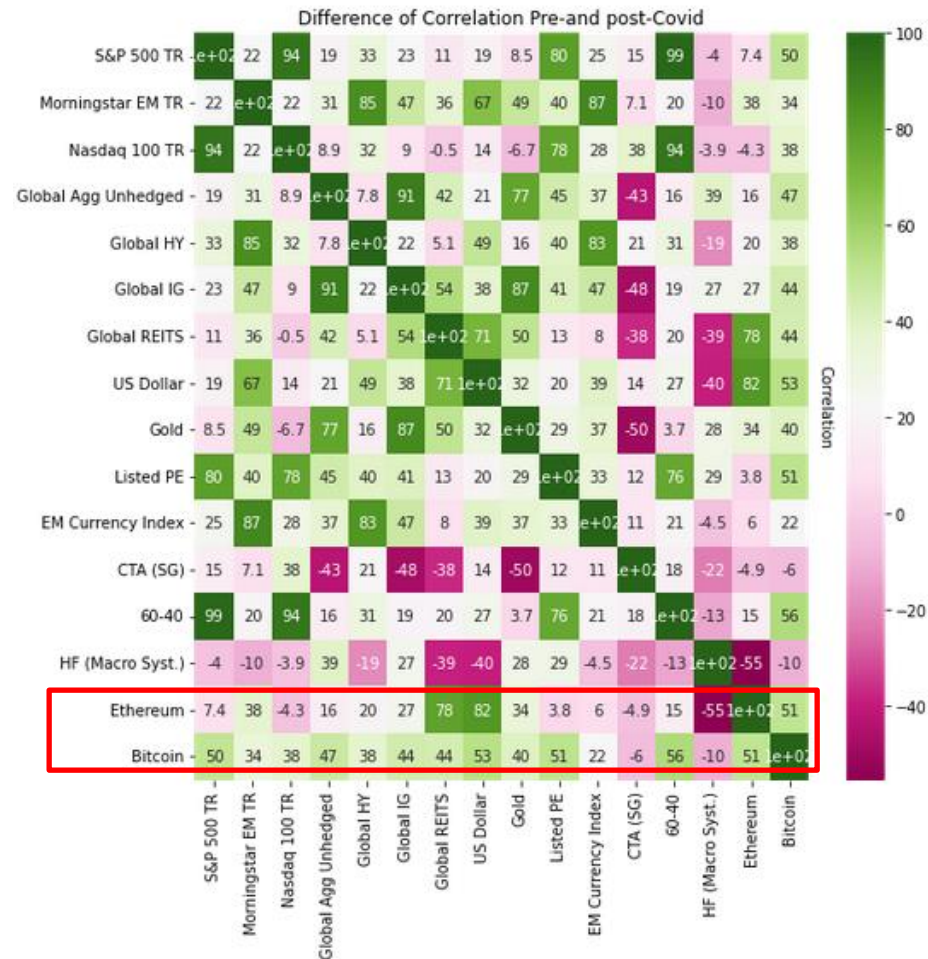


Gaining exposure...



I. Crypto as an asset class

Market features



Source: Bloomberg, CFM

II. Crypto as a source of alternative data

Exchange data / Order book data

Crypto data can be used to inform on trading in other asset classes...

- Exchange data
 1. Developing crypto-based indicators of sentiment
 2. Using correlations and other statistical methods to:
 - > Monitor evolution with more traditional asset classes
 - > Build crypto-based strategies for trading traditional asset classes
- Order book data
 1. Study the anatomy of market structure
 2. Bitcoin makes for a unique study, given the behavioural – fundamental dichotomy vis-à-vis ‘news’
 3. The research found what caused the crash was not the selling pressure per se, but rather the dearth of buyers that stoked the panic.
 4. A large fraction of the liquidity is not latent, but posted in the order book – possibly resulting from less strategic participants
Gain liquidity insight into the Bitcoin market to predict market crashes

Why Do Markets Crash ? Bitcoin Data Offers Unprecedented Insights

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Abstract

Crashes have fascinated and baffled many canny observers of financial markets. In the strict orthodoxy of the efficient market theory, crashes must be due to sudden changes of the fundamental valuation of assets. However, detailed empirical studies suggest that large price jumps cannot be explained by news and are the result of endogenous feedback loops. Although plausible, a clear-cut empirical evidence for such a scenario is still lacking. Here we show how crashes are conditioned by the market liquidity, for which we propose a new measure inspired by recent theories of market impact and based on readily available, public information. Our results open the possibility of a dynamical evaluation of liquidity risk and early warning signs of market instabilities, and could lead to a quantitative description of the mechanisms leading to market crashes.

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3	Three definitions of “liquidity”	3
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II. Crypto as a source of alternative data

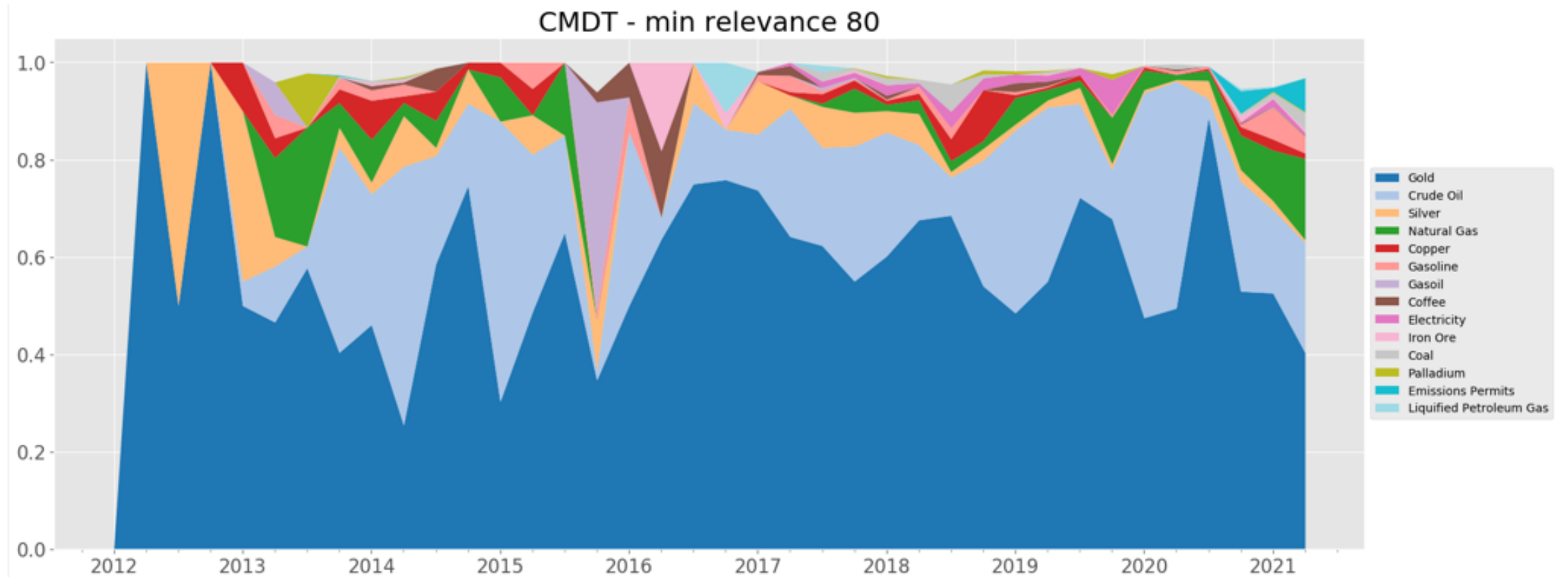
'Off-chain data'

- Media
- Search activity
- Web traffic to crypto domains
- Development activity
- Consumer / trading transactions - deposit and withdrawal volumes
- Crowdsourcing and surveys

II. Crypto as a source of alternative data

Textual analysis

Co-Occurrence of Key Terms



Source: Bloomberg, CFM

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