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A Crypto Thesis: Open Financial Systems

By Joey Krug Executive Summary

New Financial Infrastructure and Multi-sided marketplaces

- Blockchain technology is the underpinning of a new financial infrastructure, just as the internet was the underpinning of a new information infrastructure. Neither was, nor will be, built overnight;
- To date, finance has not transformed at its most critical point: the creation of new instruments, contracts, and agreements. By opening access to democratize the creation of new financial markets, Blockchain will benefit society on the scale brought by the information revolutions in the past. But this time, it will transform value, money, and finance;
- The Blockchain community today is building the foundation and infrastructure required to host the necessary tool set of a functioning financial system and any number of multi-sided marketplaces.

Not all traditional assets will migrate

- Not all traditional assets will migrate to blockchains, and ones that do will have restrictions on them since they frequently touch the real world;
- Other use cases where Blockchain tech will be impactful include file storage markets, computational markets, markets for items in video games, namespaces, regular betting/gambling, and sharing economy protocols;
- These projects will fuel a classic disintermediation play: cut out the existing profit-seeking corporations and replace them with software;
- Cash and payments will be one of the last areas impacted by blockchain. While Bitcoin may win digital gold, it will unlikely succeed as money: it is too volatile, has no dynamic monetary policy, and was not designed to be money.

Companies on top of protocols

- In the traditional company space, easy-to-use interfaces developed on top of protocols will capture significant value in the medium to long-term—particularly in the areas where consumers interact the most.
- There are almost limitless opportunities for companies to offer value-added services that capture value in a non-rent seeking fashion;
- Examples include making it easier to construct smart contracts, providing tools for writing smart contracts more securely, Stripe style KYC/AML compliance and onboarding, better exchanges, custody solutions, dispute resolution and arbitration tools, remittance companies, asset management tools, among others;

Liquidity will be critical

- A new blockchain-driven financial system will be useless without underlying liquidity. The inability to trade quickly and make markets because execution is slow or expensive prevents bootstrapping any marketplace. Its absence today represents a binding constraint;
- To promote liquidity, markets need to trade fairly, easily, cheaply, and quickly. Consequently, liquidity will not materialize—nor will widespread tech adoption take place—until Blockchain-based financial markets possess most of these characteristics;
- Once these underlying problems are solved, we will witness one of the sharpest S curve shifts ever seen in adoption.

Barriers to adoption

- Today there are three primary barriers to both feasibility and adoption of blockchain tech: Scalability, nascent Infrastructure, and fiat (to crypto) on-ramps;
- Scalability challenges come down to networking, storage, and computational power;
- Of these, networking (broadly defined as propagation times to send block data around the network) is the

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- biggest bottleneck. If reduced, increase throughput and speed will result;
- Two technologies could essentially solve all Layer 1 scalability problems: Sharding and STARKS. Both are roughly three years away from wide scale production and use;
- Layer 2 involves protocols and technology stacks above, or on top of, Layer 1. These technologies include the following systems: State/payment channels, sidechains, and Plasma. All of these systems support smart contracts without certain limitations of scalability, and each has different trade-offs;
- In short, although barriers exist today that prevent the tech from scaling, there are several innovations and solutions on the horizon that are expected to address many of these issues.

Investment themes:

- It is easy to just buy bitcoin and hope that digital gold will be the end-all, be-all. However, we are standing on the precipice of something much, much bigger than that: The early beginnings of a revolution of the entire financial system;
- Some people ask if they should invest in tokens (open source projects) or equity in Blockchain-related companies. Invest in both. Although they are at different stages with varying liquidity profiles, the underlying assets support the same secular themes;
- The market today does not recognize the idiosyncratic attributes of many projects that are actually useful, have strong development teams, and can attract users;
- Although current asset prices reflect a beauty contest based primarily on branding, as opposed to utility, investors should buy projects with strong fundamentals such that, as the scalability and on-ramp barriers are lifted, the market will begin to recognize which projects have merit and which do not;
- The nascent nature of the market will frequently require a longer reaction lead-time to positive developments in the underlying fundamentals. It means having a longer time horizon (think on the scale of three years), as these things take time to play out;
- An investor should invest if they believe the technology will scale. The killer apps from the decentralized/parallel financial system use cases *are already live*. They work—but are just slow and expensive;
- The cool part about crypto is that the catalysts for most projects are tied together. As an investor, you can figure out who is good at execution and building things you think will have a long-term value for the ecosystem; and with a solid team, tech, and economic fundamentals behind them;
- Then your bet is essentially that, if these problems are solved, that team will succeed from the utility of what they have built being enabled by scale. In other words, pick investments that stand to benefit the most from those problems being solved and that are either creating this future, or allowing it.