



#DeFi



Dec 16th, 2020 by Maple Leaf Capital

Web3 thematic: The emerging valuenet and “Wallstreet API”

Prospective investors should not construe the contents of this presentation as legal, tax, investment or other advice. Maple Leaf Capital is not compensated by any parties. We cannot guarantee the accuracy of information within this presentation. All opinions are our own and do not serve as endorsement to any projects mentioned

Disclaimer



The information provided in this presentation pertaining to any crypto assets its business assets, strategy and operations is for general informational purposes only and is not a formal offer to sell or a solicitation of an offer to buy any securities and/or tokens, options, futures, or other derivatives related to securities and/or tokens in any jurisdiction and its content is not prescribed by securities and/or tokens laws. Information contained in this presentation should not be relied upon as advice to buy or sell or hold such securities and/or tokens or as an offer to sell such securities and/or tokens. This presentation does not take into account nor does it provide any tax, legal or investment advice or opinion regarding the specific investment objectives or financial situation of any person. While the information in this presentation is believed to be accurate and reliable, Maple Leaf Capital ("MLC" or the "Presenter") and its agents, advisors, directors, officers, employees and shareholders make no representation or warranties, expressed or implied, as to the accuracy of such information and crypto assets expressly disclaims any and all liability that may be based on such information or errors or omissions thereof. MLC and crypto assets reserves the right to amend or replace the information contained herein, in part or entirely, at any time, and undertakes no obligation to provide the recipient with access to the amended information or to notify the recipient thereof.

The information contained in this presentation is intended only for the persons to whom it is transmitted for the purposes of evaluating the Presenter. The information contained in this presentation supersedes any prior presentation or conversation concerning the Presenter. Any information, representations or statements not contained herein shall not be relied upon for any purpose.

Neither we nor any of crypto assets's representatives shall have any liability whatsoever, under contract, tort, trust or otherwise, to you or any person resulting from the use of the information in this presentation by you or any of your representatives or for omissions from the information in this presentation. Additionally, the Presenter undertakes no obligation to comment on the expectations of, or statements made by, third parties in respect of the matters discussed in this presentation. Confidentiality • This presentation is confidential and is intended, among other things, to present a general outline of the Presenter. The contents are not to be reproduced or distributed to the public or press. Each person who has received a copy of this presentation (whether or not such person purchases any securities and/or tokens / tokens) is deemed to have agreed: (i) not to reproduce or distribute this presentation, in whole or in part, without the prior written consent of the Presenter, other than to legal, tax, financial and other advisors on a need to know basis, (ii) if such person has not purchased securities and/or tokens, to return this presentation to the Presenter upon its request, (iii) without the prior written consent of the Presenter, not to disclose any information contained in this presentation except to the extent that such information was (a) previously known by such person through a source (other than the Presenter) not bound by any obligation to keep such information confidential, (b) in the public domain through no fault of such person, or (c) lawfully obtained at a later date by such person from sources (other than the Presenter) not bound by any obligation to keep such information confidential, and (iv) to be responsible for any disclosure of this presentation, or the information contained herein, by such person or any of its employees, agents or representatives.

Forward Looking Statements and Financial Projections • Certain information in this presentation and oral statements made in any meeting are forward-looking and relate to Crypto and its anticipated financial position, business strategy, events and courses of action. Words or phrases such as "anticipate," "objective," "may," "will," "might," "should," "could," "can," "intend," "expect," "believe," "estimate," "predict," "potential," "plan," "is designed to" or similar expressions suggest future outcomes. Forward-looking statements and financial projections include, among other things, statements about: Crypto's expectations regarding Crypto's expenses, sales and operations; Crypto's future customer concentration; Crypto's anticipated cash needs, Crypto's estimates regarding Crypto's capital requirements, Crypto's need for additional financing; Crypto's ability to anticipate the future needs of Crypto's customers; Crypto's plans for future products and enhancements of existing products; Crypto's future growth strategy and growth rate; Crypto's future intellectual property; and Crypto's anticipated trends and challenges in the markets in which we operate. Forward-looking statements and financial projections are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated in the forward-looking statements and financial projections. Although we believe that the expectations reflected in the forward-looking statements and financial projections are reasonable, there can be no assurance that such expectations will prove to be correct. We cannot guarantee future results, level of activity, performance or achievements and there is no representation that the actual results achieved will be the same, in whole or in part, as those set out in the forward-looking statements and financial projections.

By their nature, forward-looking statements and financial projections involve numerous assumptions, known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other forward-looking information will not occur, which may cause the Crypto's actual performance and financial results in future periods to differ materially from any estimates or projections of future performance or results expressed or implied by such forward-looking statements and financial projections. Important factors that could cause actual results to differ materially from expectations include, but are not limited to: business, economic and capital market conditions; the heavily regulated industry in which the Crypto carries on business; current or future laws or regulations and new interpretations of existing laws or regulations; legal and regulatory requirements; market conditions and the demand and pricing for Crypto's products; Crypto's relationships with Crypto's customers, developers and business partners; Crypto's ability to successfully DeFine, design and release new products in a timely manner that meet Crypto's customers' needs; Crypto's ability to attract, retain and motivate qualified personnel; competition in Crypto's industry; technology failures; failure of counterparties to perform their contractual obligations; systems, networks, telecommunications or service disruptions or failures or cyber-attack; ability to obtain additional financing on reasonable terms or at all; Crypto's ability to manage risks inherent in foreign operations; litigation costs and outcomes; Crypto's ability to successfully maintain and enforce Crypto's intellectual property rights and defend third party claims of infringement of their intellectual property rights; Crypto's ability to manage foreign exchange risk and working capital; and Crypto's ability to manage Crypto's growth. Readers are cautioned that this list of factors should not be construed as exhaustive.

The forward-looking statements and financial projections contained in this presentation are expressly qualified by this cautionary statement. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. Readers are cautioned not to place undue reliance on forward-looking statements or financial projections. Prospective investors should not construe the contents of this presentation as legal, tax, investment or other advice. All prospective investors should make their own inquiries and consult their own advisors as to legal, tax, investment, and related matters concerning an investment in the securities and/or tokens of the Crypto.

Executive Summary



Since our [last report](#) published on July 4th, 2020, Both the #DeFi space and our mental framework had evolved meaningfully enough to prompt another iteration as you see today. The piece is divided into 2 sections – the 1st part covers how we define a crypto-network, how the space may evolve with new actors entering, and what the broad-stroke opportunities are as we see them, whereby the 2nd part delves into the ETH-based #DeFi ecosystem, talks about a few projects at length, pontificates on a few hotly debated subjects, and what else we find interesting. We continue to hope this serves as a non-technical, thematic primer to anyone who may be interested in the space.

- The game-theoretic guarantee of crypto offers a transparent, open-market-priced alternative to value-transfer. Given human ingenuity and market competition, such a cost should granularize and decrease overtime without sacrificing the same level of security guarantees. As such value-transfer cost evolution occurs, what was cost-prohibitive may no longer be so, and new TAM / new economic frontiers could leap into reality – much like what the internet did to our world as the cost of information transfer got reduced an orders of magnitude.
- We view the entrance of corporates and sovereign nations as inevitable, with a siloed future that looks like that of US / Chinese internet. We suspect that the talent-drain and ingenious evolution of permissionless valuenet would be counterbalanced by rapid commercialization and customer reach of the open / closed permissioned valuenets.
- We feel that the fruitful hunting-ground within such valuenets could be infrastructure / tool plays, Web2.0 network effect businesses upselling customers with valuenet enabled, and/or new network effect businesses reimaged benefiting most stakeholders (perhaps except for shareholder). Maximum flexibility needed to straddle across instruments and geographies.
- We believe that the “Wallstreet API” at scale could help facilitate any value-transfer for any entities; while it is an ETH specialty today, we believe such #DeFi ecosystem can exist on any layer-0 / layer-1s, where protocols duke it out on cost, temper-proof / flexibility balance, incentive structure, community, and network effects.
- We believe that the winners on the ETH #DeFi ecosystem have already emerged, whereby these protocols will expand into financial conglomerates (instead of just 1-2 core niche functions). We expect the battle amongst exchange, derivative, and lending/borrowing protocols/platforms to really heat up over the next 12 months.
- We believe credit on valuenet will remain niche at first but could see a phase-change once the over-collateralized lending niche overtakes the real-world pool; we are still in the camp of centralized stablecoins will remain dominant for a very long time; we feel like insurance is a fruitful design space and a break-through could happen in the next 12 months; and we are highly intrigued by emerging middleware / tools, cross-chain custodian solutions, and B2B “Wallstreet API” aggregators to serve real business applications.

Table of Content



Section 1 – the emerging valuenet

- 5 - Game-theoretic guarantee of crypto offers an open-market-priced alternative to value-transfer
- 6,7 - Per-unit cost of value-transfer should continue to granularize and decrease overtime
- 8 - There likely remains significant whitespace for value-transfer prohibited due to cost reasons
- 9,10 - New economic frontiers thanks to cheap value-transfer, like what the internet did to cheap information
- 11-13 – 3 types of valuenets to emerge, a flexible, hybrid approach to token + equity may be preferred
- 14-17 – Risk of Web3 investing, and the 3 main buckets we consider the most fertile hunting ground

Section 2 – #DeFi, the emerging “Wallstreet API”

- 19 – How the value-transfer map looks today, and where the #DeFi “Wallstreet API” sits
- 20 – ETH-based #DeFi token comparable and brief description / comments
- 21 – Q&A: What changed vs. the July 4th iteration of projects?
- 22 – Cost, balance, incentives, community, and network effect as transitory advantages for #DeFi protocols
- 23– The unavoidable crisscross of ETH-based leading DeFi protocols (YASU) and the rise of entry barriers
- 24-27 – More detailed comments on Aave, Uniswap, Yearn, and Synthetix.
- 28 – Co-opetition to heat up amongst #DeFi protocols where conglomerates emerge to straddle functions
- 29 – Q&A – Can credit ever exist on the blockchain?
- 30 – Q&A - What will happen to stablecoins?
- 31 – Q&A - When can we have good crypto insurance?
- 32-34 – Q&A - What else is interesting to you today?
- 35 – Q&A: What could others find interesting that you don't?



Section 1 – the emerging valuenet

A crypto-network's game-theoretic guarantee* offers a transparent, market-priced alternative to value-transfer with a different cost function vs. legacy means of recourse-detering guarantees

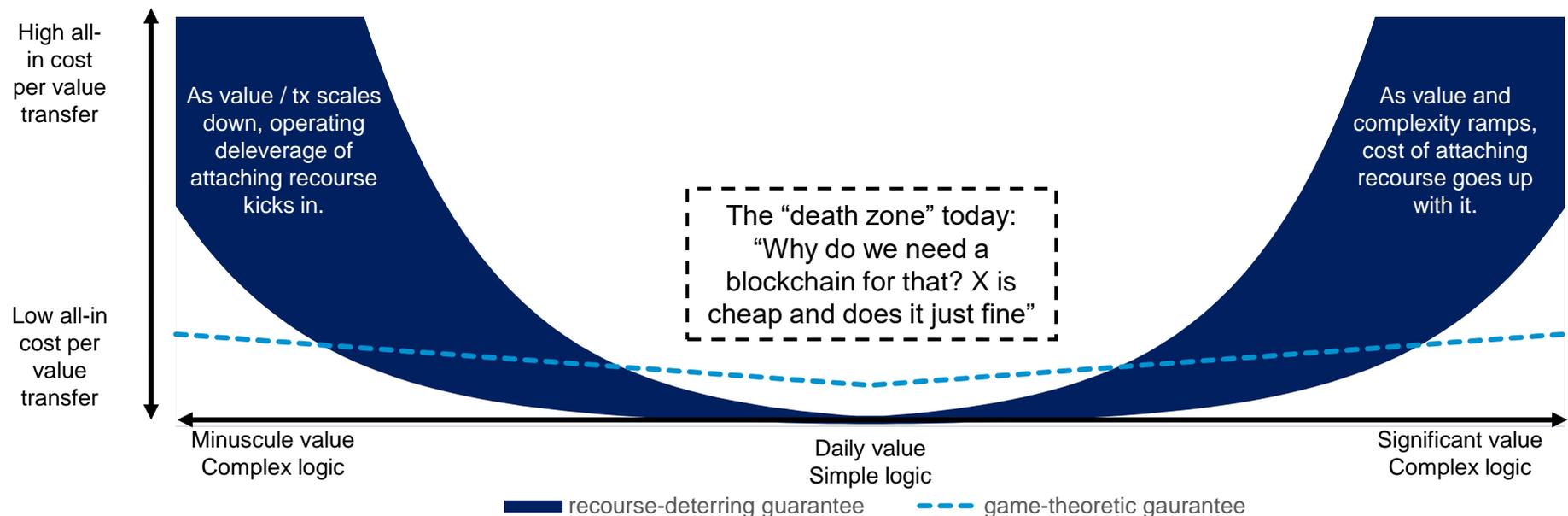


* Many thanks to Chris Dixon of A16Z for coining the term, I'm stealing it

For a long time, guarantee to value-transfer comes from trusted 3rd parties with centralized ledgers (ex: JP Morgan Chase) backstopped by legal constructs and recourse enforced by government with somewhat intransparent cost.

In a crypto network, any action performed by the hardware / nodes are token-incentivized to achieve game-theoretic guarantees that are cost-prohibitive and/or cumbersome to reverse / temper. Such guarantee can thereby be entrusted with very specific kinds of information -- line items on a ledger, aka monetary value of credits and debits -- and carries a transparent, market-driven cost.

Therefore, a truly distributed crypto network offers a nascent, transparently-priced alternative to the recourse-detering guarantee we have been using. One can envision that every value-transfer action we perform carries a cost (disclosed or hidden), and the birth of game-theoretic guarantees opens new frontiers of value-transfer otherwise impossible and/or cost-prohibitive today, as illustrated by the Value-transfer-cost U-curve below:



The Moore's law of permissionless valuenets – cost of recourse-detering guarantee remains analog (i.e. inflexible / doesn't scale), cost of game-theoretic guarantee scales and will be granularized for use-cases.



While ensuring sufficient level of guarantee, the per-unit cost of value-transfer should continue to granularize (fitting for the security needed) and decrease overtime via a myriad of interconnected, improving “valuenets”.

Case 0: Bitcoin

Use-case: convenient and defensible resistance to undesired / unintended value-transfer, which conveniently becomes store-of-value

Crypto cost = block reward on inflation schedule + transaction fee, as a function of bitcoin price (higher price, more secured it is) and electricity.

Legacy cost = political power / freedom of borders, weapons (guns, missiles, nuclear weapon, etc), bodyguards, media, taxation, etc.

∴ Legacy cost >> crypto cost on individual basis

Case 1: Ethereum + #DeFi

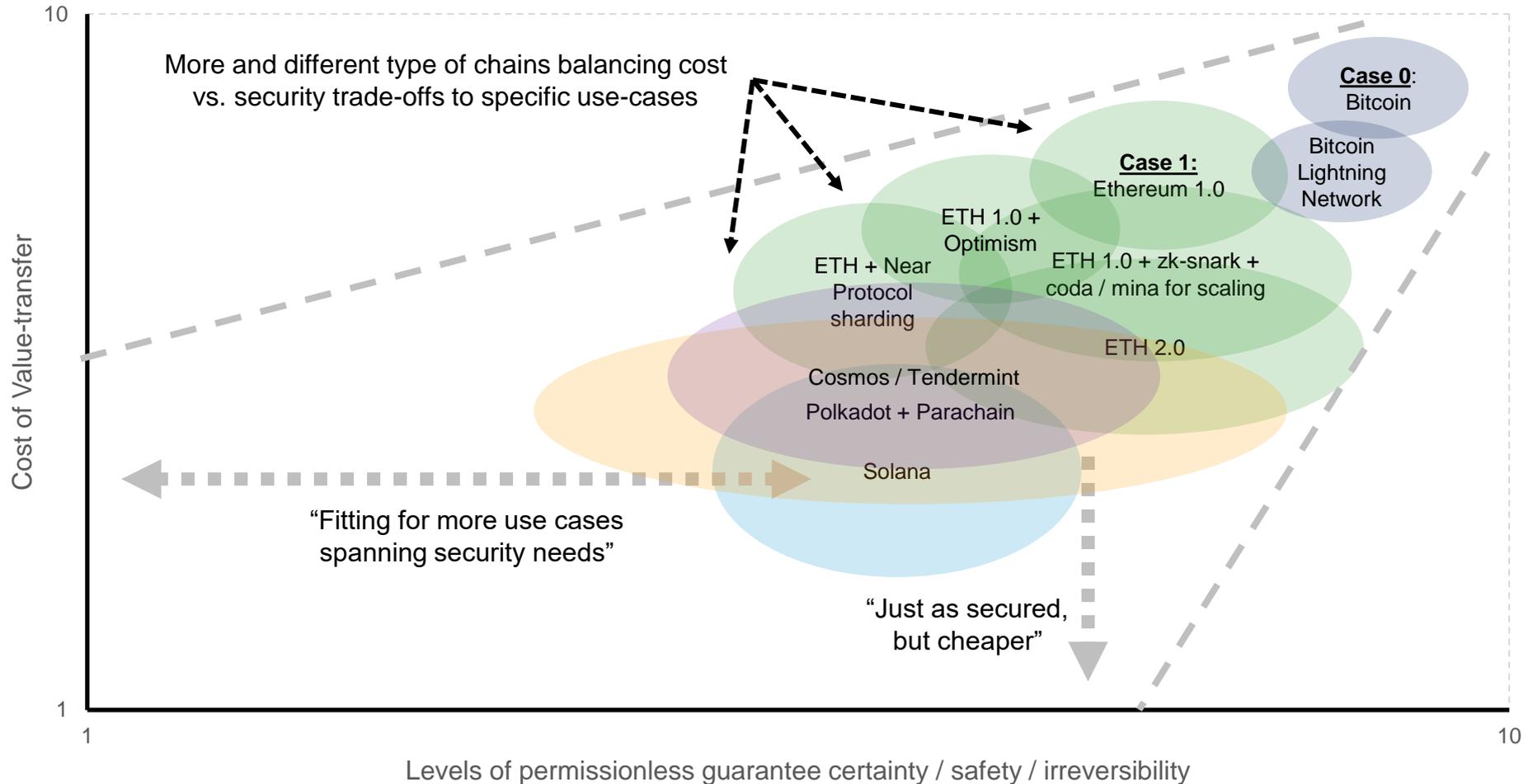
Use-case: more complex rule-based value-exchange re: financial use-cases (for now)

Crypto cost = block reward on inflation schedule + gas fee. Tweaks of ETH 2.0 node operators.

Legacy cost = legal cost, financial infrastructure fixed cost, labor cost within Fintech firms, regulatory compliance cost, etc

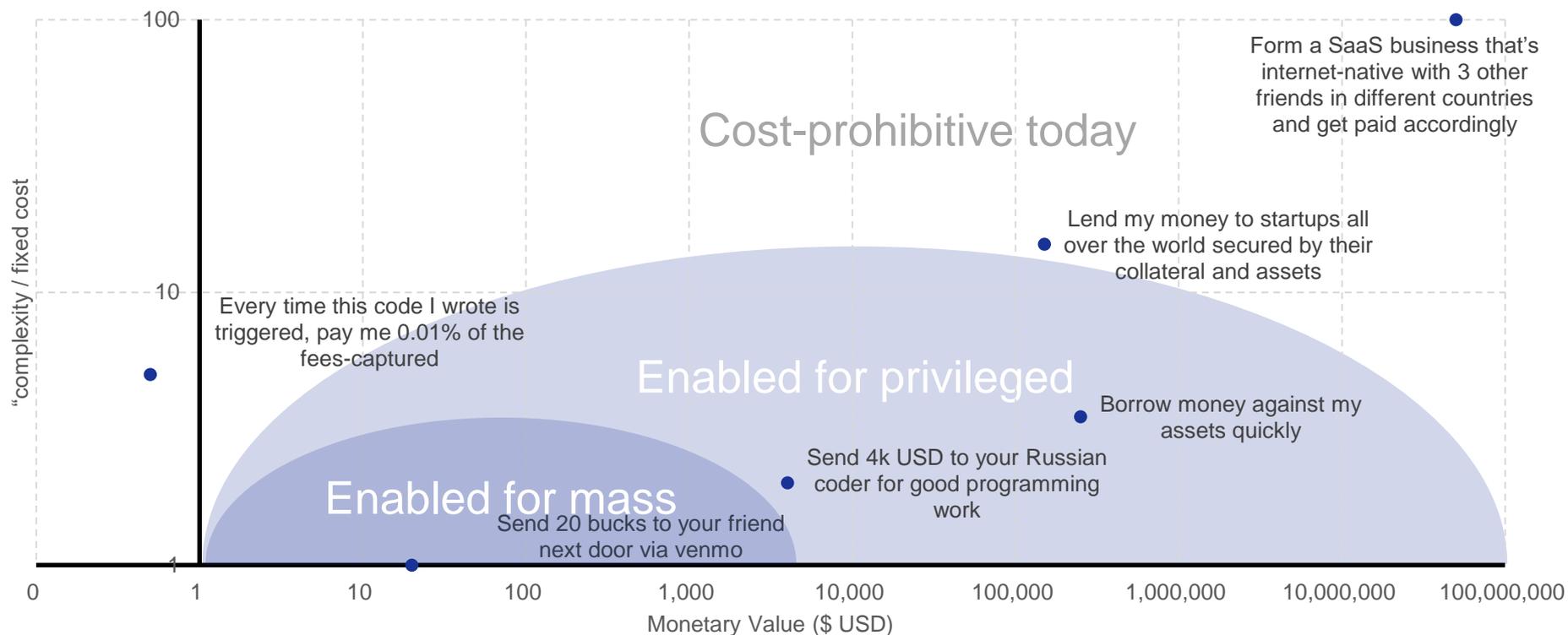
∴ Legacy cost >> crypto cost for select on-chain use-cases today.

While ensuring sufficient level of guarantee, the per-unit cost of value-transfer should continue to granularize (fitting for the security needed) and decrease overtime via a myriad of interconnected, improving “valuenets”.



Note: not drawn to scale, illustrative purpose only

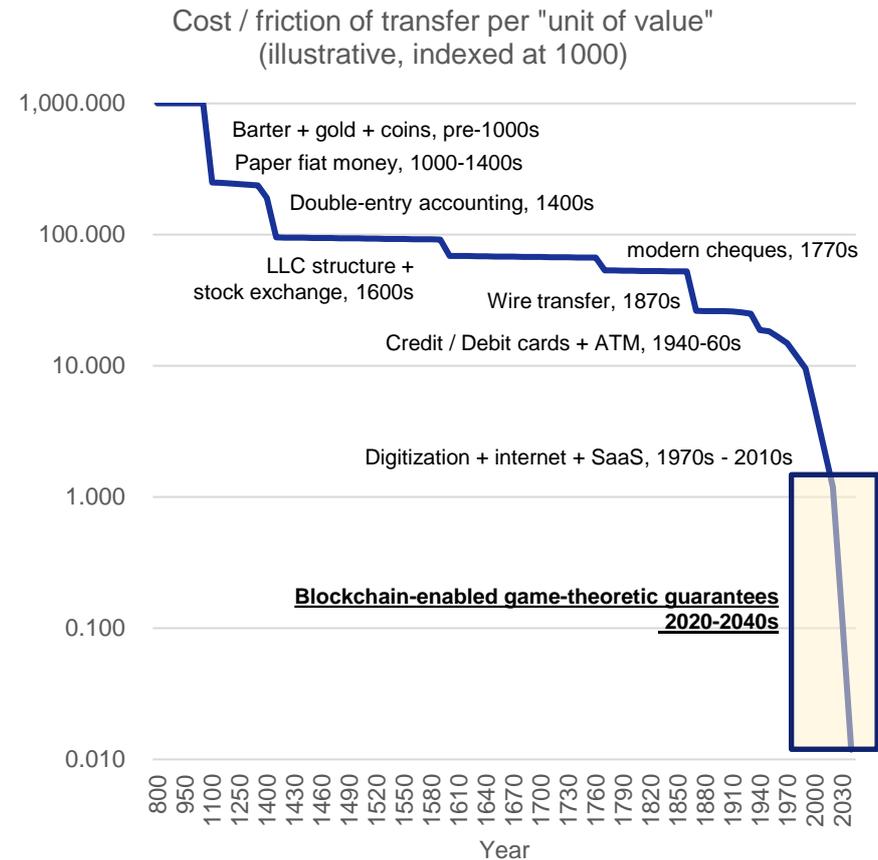
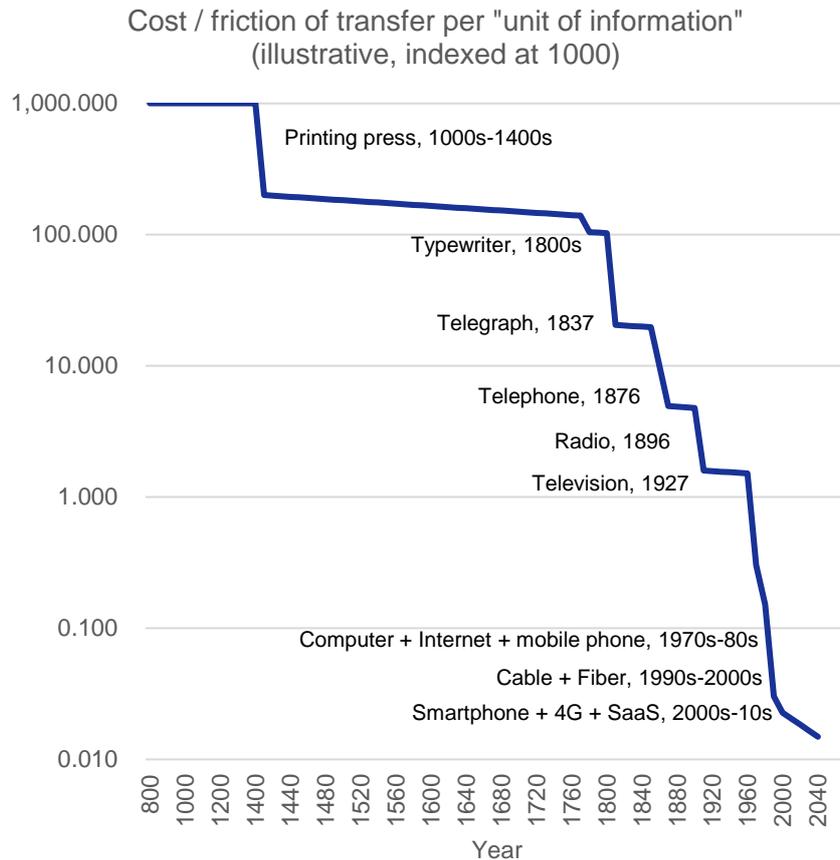
There likely remains significant whitespace for use-cases that are cost-prohibitive to implement in legacy systems



An illustration of use-case above shows how much value is being transferred (x-axis), and the complexity of such transfer (y-axis). While some use-cases are clearly enabled today, we could imagine that many use-cases are simply too cost-prohibitive to implement. Finance is very much a local market today, and any transfers of value cross-border or near-instantaneous are still cumbersome. Financial APIs have accrued meaningful value (ie. Plaid) but the system is still very much a patchwork of fragmented and outdated systems trying to catch up to the internet, even on a local level.

Complexity depends on vectors such as time (agreement spanning long time horizons vs. instantaneous) and nested conditions (complex if / then + loops vs. 1-line statement).

Granularization and reduction of value-transfer cost will open new economic frontiers to our society, much like what the internet did.



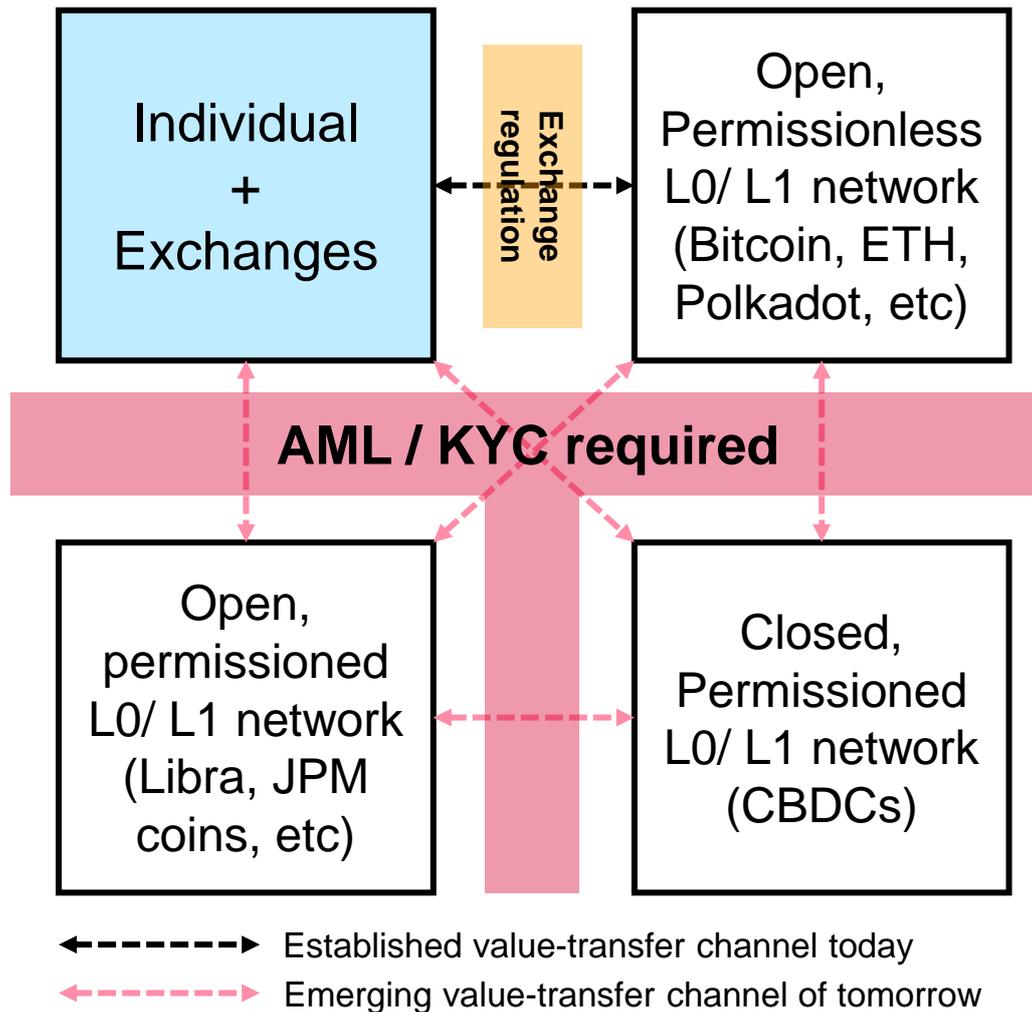
As alternatives to a legacy system emerge and mature, new frontiers of addressable market leap into reality as cost / friction to realize them diminish. In the two illustrative charts above, we roughly delineated how the cost and friction to transfer per unit of information and value evolved overtime (with omission of breakthroughs in foundational science and semiconductors for the sake of simplicity).

We feel strongly that blockchain-enabled game-theoretic guarantees is an enabling technology to drive the next frontier of cost / friction reduction in value-transfer, thereby opening TAMs not previously fathomed.

Dream bigger on what low-cost, game-theoretic-guaranteed “value-transfer” can do to the world.



We envision there will likely exist 3 types of valuenets in the foreseeable future. The best VC bet may be one that emerges from the permissionless ones (for ingenuity) but can straddle all 3.



Unlike the information-network that attracted measured regulation, when it comes to this emerging valuenet, it appears highly likely to us that centralized actors (such as corporates and governments) would attempt to heavily re-create their own:

- Synergies: The historical sunk cost of user acquisition can be salvaged again to immediately capture value (i.e. Facebook spent a ton of money acquiring users, now such users can pay a toll to FB's valuenet), or that legacy mechanism can immediately rent-seek.
- Ease & desire to control: The transparency offered by permissioned nodes grants central authority surveillance, taxation, and sanctioning power. Such convenience may be too great to pass up.
- Competitive measures: If one company / country refuses to adapt, its competing rivals may. Being first could mean a competitive advantage as well as exerting a nation's power onto other nations (i.e. colonializing them by weakening the native government's ability to control and tax). Additionally, the competition for talent and capital in this web3 world could force nations to adopt a more open-mandate, which ultimately will trump any regulatory actions trying to clamp down this movement. Countries like Estonia and Singapore are already benefiting from being pro-crypto.

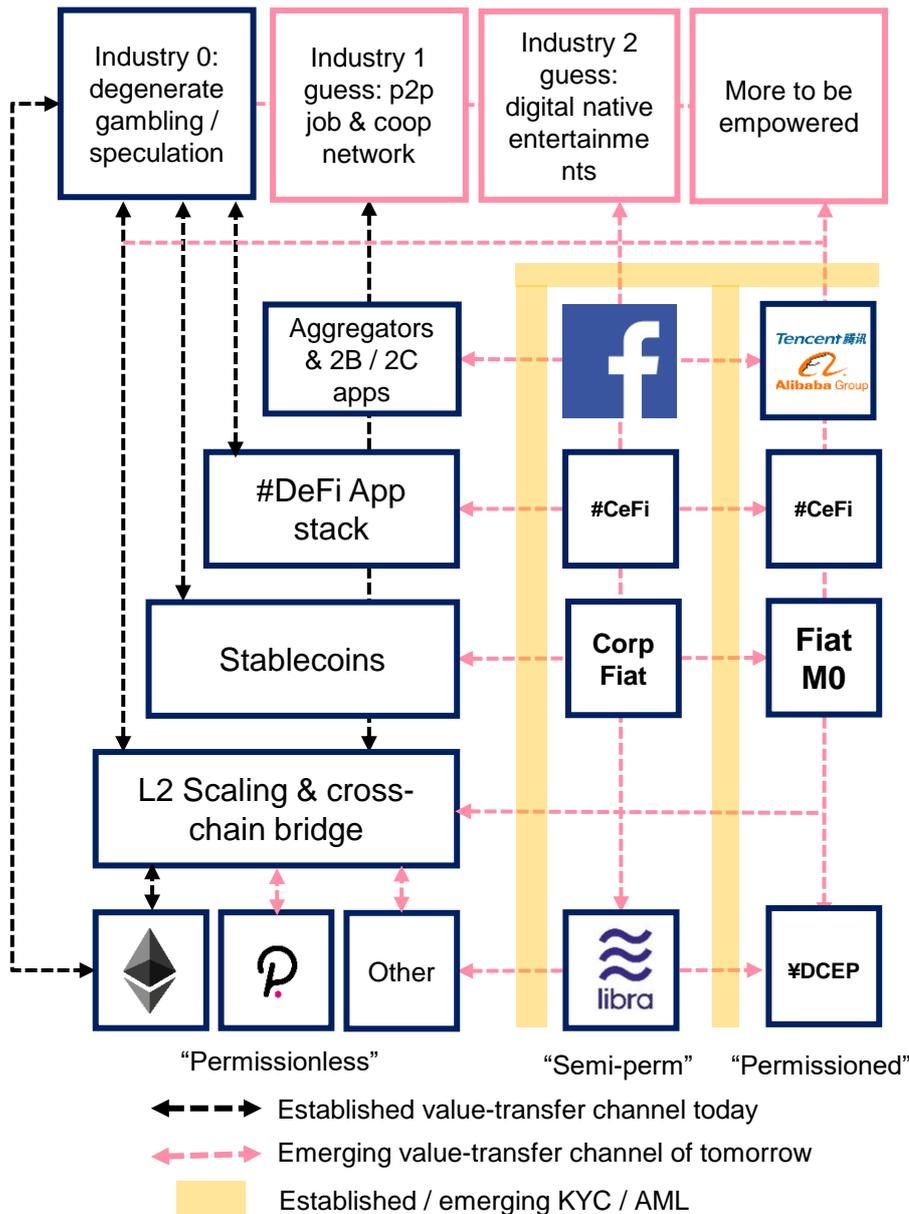
* Note: the difference of networks basically comes down to (a) how data-processing nodes are selected and (b) the ease of ledger alteration & censorship. Open, permissionless = free agents as nodes, open, permissioned = corporate as nodes, closed, permissioned = state-controlled actors as nodes

A hybrid approach to token + equity with keen attention to permissionless L0/L1 for innovation + open, permissioned L0/L1 for rapid-scaling may be optimal



	What's next	Strength	Weakness / risk	Instruments
<p>Open, permissionless L0/ L1 network (Bitcoin, ETH, Polkadot, etc)</p>	<ul style="list-style-type: none"> Continued scaling (ETH 2.0 + Polkadot) will likely deliver “cheap enough” value-transfer experience to rival the 2 networks below 	<ul style="list-style-type: none"> Rapid iteration with ingenious designs Blackhole of talent & liquidity Paradigm-shifting apps may emerge here first 	<ul style="list-style-type: none"> Good ideas can be forked by FAANGs that run on open perm. networks. Consensus mechanisms still need work Regulatory risk 	<p>What to back:</p> <ul style="list-style-type: none"> Focus on human ingenuity & biz logics impossible in current paradigm Good teams that can straddle L1's
<p>Open, permissioned L0/ L1 network (Libra, JPM coins, etc)</p>	<ul style="list-style-type: none"> Likely immediate stablecoin & merchant on-board + finance with smooth user experience Will be used for colonizing / political tools to encroach on tier-2 country's financial sovereignty 	<ul style="list-style-type: none"> Fastest commercial-grade products w/ Web2 + value features Will likely be most people's 1st foray into crypto (early to late majority) 	<ul style="list-style-type: none"> Progress could be really held up due to regulation. Potential significant talent drain to open permless L0/L1 Innovator's dilemma 	<p>What to back:</p> <ul style="list-style-type: none"> Equity of listed / subsidiary startups that are infra + app plays leveraging the user base + fast permissioned rail Could own stocks
<p>Closed, permissioned L0/ L1 network (CBDCs)</p>	<ul style="list-style-type: none"> Given the permissioned nature, could look v. different vs. the #DeFi movement in permless networks 	<ul style="list-style-type: none"> Will offer “recourse” service for mass-adoption Government can force adoption when collaborated well 	<ul style="list-style-type: none"> Significant risk of breaking financial pipes / under-attack if mismanaged All the problems related to government projs 	<p>What to back:</p> <ul style="list-style-type: none"> Equity of infra players that help / work with B2C apps / biz that leverage this rail. Likely won't have tokens

Hypothetical Web3 factions – wild forest (permissionless) and walled gardens (permissioned). Much like US / China internet ecosystems



- We suspect these permissioned networks will be offering recourse / enforcement as a service and, alongside significant customer end-point adoption of Web2 apps, FDIC insurance, one-stop-shop services, etc could attract meaningful end-user adoption as their 1st foray into “blockchain stuff”. Hard to call winner among permissioned / permissionless networks, but we suspect that (a) permissionless open-networks with projects on them will iterate faster towards PMF, and (b) best projects / investments would straddle all types of networks.
- We believe rapid iterations build strength to the open-sourced system.
- We suspect that the permissioned valuenets will be walled to start with – i.e. initially not communicate with each other (or they would but with significant barrier), and that sovereign nations will fight vehemently to gate / regulate these valuenets’ encroachment, thereby coincidentally opening room for permissionless valuenets to grow unencumbered.

The distinct risks of backing Web3 startups today and the mitigants we think may apply. Ignore if you are an experienced VC.



While one may be certain of the future in 20-30 years (“blockchain-enabled valuenets powering new use-cases and leading to TAMs unimaginable today), the risks to investing in the space are always:

- Wrong idea (we don’t really know what this can be yet)
- Too early (right idea, but infrastructure not ready. General Magic anyone?) + crushed by late-comers (FAANGs and Alibaba / Tencent just copies and plug into their billions of user)
- Wrong ecosystem / platform (think building apps on Symbian / Blackberry vs. iOS)
- Bad execution (token, economics, go-to-market, etc)
- Went down a path of unforeseen regulatory scrutiny.

It’s not going to be easy, but we feel like there are also some guiding principles to combat the risks:

- Tokens are effectively publicly-listed VC bets. The liquidity afforded may allows one to be nimble at times / express views with liquid derivs (whether a VC chooses to do so is another story, but the point is they can). Additionally, how emission, vesting, and stakeholder composition are handled also matter much earlier on.
- This one is truism, but founders really really matter – both in ethics / grit and capability. Ethics/ grit mean they stick around when times get tough, and capability means solid risk mitigants like (a) pivoting when wrong, (b) having the chops to jump ecosystem when the same platform is sinking. A hybrid team that understands product, incentives / economics, and community building / messaging (for arriving at PMF) is rather rare.
- Look for founders who think deeply about mechanism designs and user-incentives via value-transfer. This could be the ultimate edge in combating the incumbent tech giants (assuming product is already A+).
- Here are some initial ideas for capital deployment:
 - Go for “pick and shovel” plays that are layer-1 agnostic with an evergreen use-case.
 - Go for proven Web 2.0 ideas, but with valuenet enabled, can drive significant user monetization.
 - Go for network effect businesses that benefit all stakeholders reasonably (and not just shareholders).

Best target 1 - one of the “lower risk” ways to play the “polychain” future may be to buy the tool + infrastructure stack and remain chain-agnostic



With at least 3-types of L0/L1 valuenets and each with their own subsets of designs, we feel that an easier way to lessen platform risk would be to invest in XaaS companies that provide definitive, network-agnostic value to stakeholders. The main buckets (and by no means exhaustive) are as below – these investments tend to have very clean business models / value-capture mechanisms with a straight-shot towards IPO / take-out – and could be a less “risky” way to play the industry’s secular growth.

The risks here, as always, is that one may miss out on the true 0-to-1, world-changing ideas that appear ludicrous to the old paradigm. These plays could underperform liquid token baskets.

- On/off-chain data-feed (both-directions): Chainlink*, etc.
- On/off-chain data-caching / query: Graph protocol*, dFuse, Marlin*, Dune Analytics, etc.
- Onboarding / out-sourced trust: BitGo, Genesis, Anchorage, BisonTrails, BlockFi, Paxos, etc.
- On-chain analytics: Chainalysis, Ciphertrace, Nansen, Skew, Glassnode, Messari, etc.
- Web3-native simulation: Gauntlet Network
- Development environment / platform / developer networks: Gitcoin
- Compliance-related service: Coinlist (on ICO), TokenTax (on taxes), Securitize
- Valuenet specific services: Trail of Bits / OpenZepplin / etc (audits)
- Compliant stablecoin: Circle (USDC)

* Has tokens on permissionless L1

Best target 2 – proven Web 2.0 info-network-effect businesses with valuenet features enabled = colossal user monetization bump



The other interesting play would be to go long Web 2.0 companies with network-effects and a sizable user base that can immediately enjoy ASP / ARPU uplift with valuenet features. The emerging valuenet is the missing piece of puzzle for the internet (“infonet”)

For any Web 2.0 network-effect companies that built a business that monetizes information:

- Facebook: information of associated real people, monetized through ads
- Google: information in most deliverable and searchable form, monetized through ads
- Uber: information for immediate traffic needs, monetized through fees per transaction
- LinkedIn: information for jobs, monetized through advertising, recruitment services, and membership privileges

The ability to enable value-transfer for its users opens tremendous design primitives for sunk customer-acquisition cost. A few crude examples may include:

- Facebook allowing users to enter into credit-based crowd-funding for various initiatives.
- Google enabling search for “value” – allowing individuals to directly buy pieces of cap-stack.
- Uber users financing drivers’ cars; drivers raising SPV for their venture with autonomous cars.
- LinkedIn allowing direct investments & deal-sourcing on-platform, leveraging social connections.

The point isn’t whether these examples above are business-savvy or not, but that some alterations of such could become possible when the cost of value-transfer granularizes and decreases. The incumbent Web 2.0 giants may stand to massively benefit via sizable ARPU / Monetization lift. The key debate is also whether these Web 2.0 businesses’ network effect could be eroded also when the users become more sovereign.

Best target 3 - Network-effect, capital-lite businesses that benefit all stakeholders (and not just shareholders)



Cooperatives had long existed for the benefits of all stakeholders (not just equity-holders in typical corporates). While such a structure had been proven generally uncompetitive today for a variety of reasons (talent attraction and capital needed to compete being 2), we feel such a collaboration mechanism could be rekindled. In particular, we wonder if certain internet-native network-effect businesses where shareholders extract significant rent from the users / suppliers (despite latter groups contributing to most of network's value) could be ripe for disruption when costs for value-transfer (amongst the latter groups) and governmental-votes diminish. The new primitive could be cooperatives powered by tokens which are elegant instruments to capture and distribute value in a provably equitable and incentivized manner. This kind of “stakeholder-mutual” could be rather potent when participants reap significantly more benefits by being a part of the network vs. just being offered a free or cheap service.

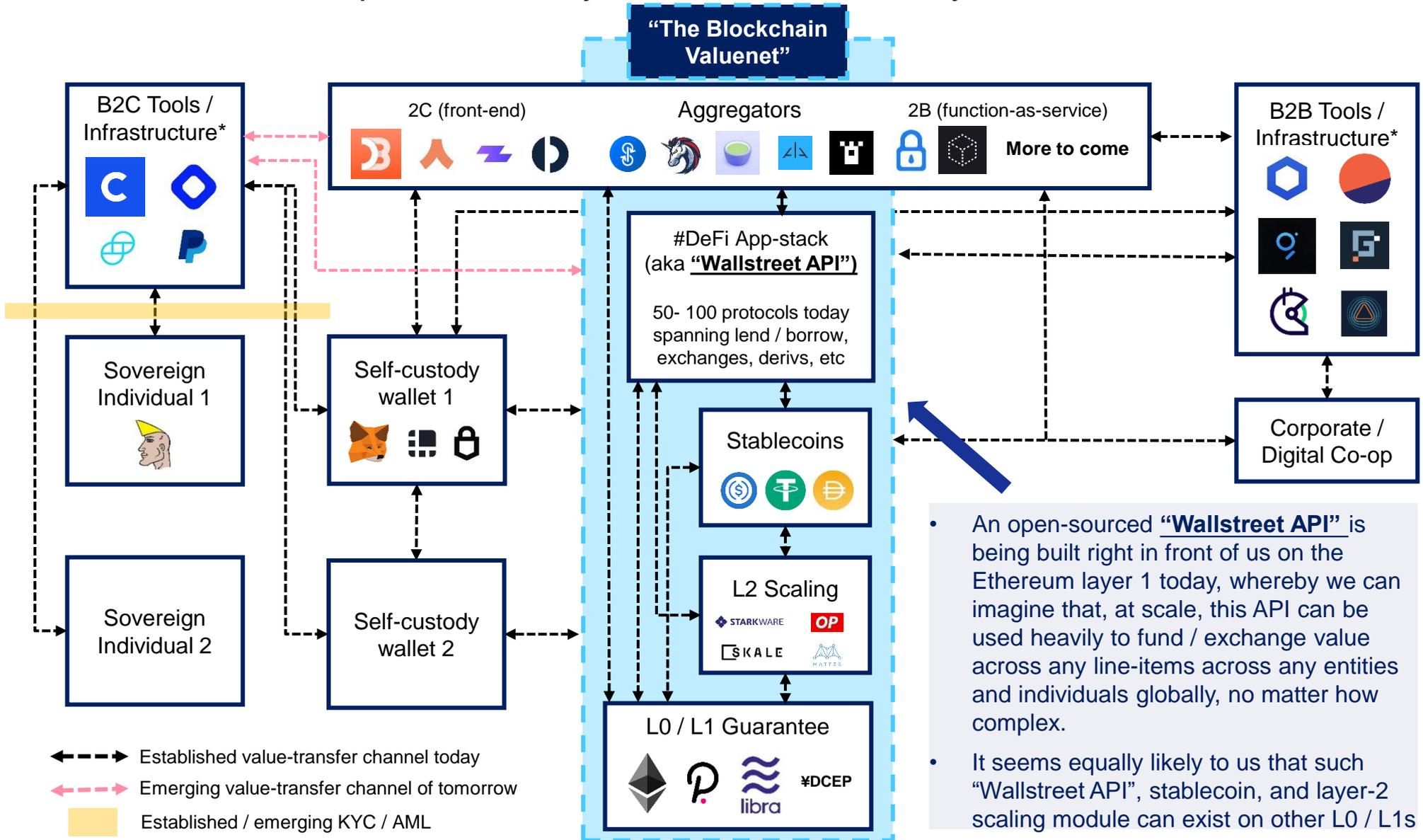
Of course, the realization of such hypothesis has more to do with mechanism / incentives design than technology when the Web3 tech stack is matured, with some glaring issues.

- Equity-owners bore the cost to scale + risk of permanent impairment in exchange for the upside of “reasonable margins” that average out to likely small amounts per stakeholder. Whether value offered by competing network would be enough + who funds “cost-to-scale” could be of real questions.
- Stakeholders may actually prefer a cheap / free service vs. the minuscule benefits / fees introduced (which may come along with a lot of unwanted responsibilities / burdens).
- Stakeholders’ role evolve overtime – and their value generated to the network may differ wildly vs. the value and governmental rights offered to them. The mismatch calls for careful designs.
- Time horizon, vision, and outside economic / competitive interest mismatch for stakeholders could also require vetting as well as good mechanism design along the way.

We have a few ideas on what these businesses may be but forgive us for not telling!

Section 2 - the emerging “Wallstreet API”

The emerging #DeFi “Wallstreet API” built on the ETH today already enables a flourishing ecosystem for value-transfer, which at scale could help facilitate any value-transfer for any entities.



- An open-sourced “**Wallstreet API**” is being built right in front of us on the Ethereum layer 1 today, whereby we can imagine that, at scale, this API can be used heavily to fund / exchange value across any line-items across any entities and individuals globally, no matter how complex.
- It seems equally likely to us that such “Wallstreet API”, stablecoin, and layer-2 scaling module can exist on other L0 / L1s

#DeFi token comps – burgeoning space with potential omission for new / small / non-US projects. Prefer category-leaders / creators with circulating market-cap close to diluted market cap



USD in mm unless otherwise stated, datasource from CoinGecko, blue items our estimates

Ticker	Name	Sector	Last Price	Mkt Cap		Float	Diluted	Comments
				Est. Circ	Est. Dilut			
AAVE	aave	lend / borrow	\$87.71	1,051	1,403	11.99	16	Fastest horse in lending, continuous push needed for features / touchpoints
COMP	compound	lend / borrow	\$154.31	630	630	4.08	4.08	Upgrades needed, potential cross-chain + Tradfi link coming as catalyst
UNI	uniswap	dex / amm	\$3.45	742	3,450	215.06	1,000.00	Leader in AMM but valuation reflects it. Wait for v3 roadmap
SUSHI	sushi	dex / amm	\$2.86	364	715	127.24	250	Momentum thanks to YFI alliance, more feature-adds good but need users
KNC	kyber-network	dex / amm	\$0.94	188	211	200.44	226	Upgrades needed to compete against top 2 AMM + aggregators
CRV	curve-dao-token	dex / amm	\$0.64	99	99	155.51	155.51	Feature competition incoming, could be rich vs. positioning
BAL	balancer	dex / amm	\$13.95	146	1,395	10.43	100	Feature competition incoming, could be rich vs. positioning
BNT	bancor	dex / amm	\$1.59	135	135	85.12	85.12	Upgrades needed with formula & think about where direction is
DODO	dodo	dex / amm	\$0.17	4	171	22.96	1,000.00	Upgrades needed with formula + manager-driven pools
ZRX	0x	aggregator	\$0.41	306	408	749.77	1,000.00	matcha solid launch, could see potential with token revamp + push
1INCH	1inch exchange	aggregator			1,500			Token launch coming and like rich. Definitely watch for competition
YFI	yearn-finance	manager	\$27,157.00	815	815	0.03	0.03	May need inclusivity to devs, pro-cyclical, veblen good, monitor closely
INDEX	index-cooperative	manager	\$6.65	7	67	1.12	10	Need more & clever products / token usage included, could be interesting
DHT	dhedge-dao	manager	\$1.19	8	119	6.58	100	Solid pair combo with SNX as the new KOL + Degen decentralized Bitmex
ALPHA	alpha-finance	manager	\$0.24	42	42	174.14	174.14	Fast horse in pushing strategies, definitely watch for Perp launch
ROOK	keeperdao	manager	\$95.78	11	96	0.11	1	Could fix fee structure, highly interesting "hedge fund" with internal strat
MKR	maker	stablecoin	\$534.05	483	537	0.91	1.01	Monitor closely for further biz-dev work, increasingly interesting w/ fixes
ESD	empty-set-dollar	stablecoin	\$1.33	266	266	200.33	200.33	Strong backers make the model interesting, many biz dev catalysts coming
BAS	basis-share	stablecoin	\$0.00	0	0	0.11	1	Potentially too ponzi to be worthwhile, remain to be convinced
NXM	nexus-mutual	insurance	\$0.00	0	0	6.71	6.71	Need token-economics rework, sizable treasury means optionality
COVER	cover-protocol	insurance	\$1,203.06	65	108	0.05	0.09	On right track to solve insurance problem, fast shipment & solid integration
SNX	synthetix	derivative	\$5.28	734	1,118	139.04	211.69	Await L2 + futures product to be feature-complete, solid team
PERP	perpetual-protocol	derivative	\$1.35	21	203	15.27	150	Await product roll-out + tokeneconomics to decide PMF
NEC	deversifi	derivative	\$0.17	27	105	158.33	618.13	Await product roll-out + tokeneconomics to decide PMF
HEGIC	hegic	derivative	\$0.00	0	0	306.28	3,012.01	Highly interesting design: pooled seller + pegged IV for buyer. Volatile founder
GRT	graph-protocol	middleware	\$0.25	375	2,500	1,500.00	10,000.00	Likely come rich as instrumental middleware for #DeFi protocols
LINK	chainlink	middleware	\$13.30	5,274	13,300	396.51	1,000.00	The go-to for price feed, competition awaits but so far no contention
KP3R	keep3rv1	middleware	\$545.82	110	110	0.2	0.2	Pending biz dev for 2-sided network adoption; highly interesting new model

Q: What changed vs. your July 4th iteration of projects?

A: MKR & COMP more interesting, underest. challenge faced by BNT and KNC, view on BAL, CRV, UMA unchanged; continue to like LEND, SNX, REN, RUNE.



MLC Reveiwed Projects , data as of July 4th, 2020

USD in mm unless otherwise stated, datasource from Messari, Etherscan, Coingecko

Ticker	Name	Category	Last Price	Mkt Cap Est. Circ	Mkt Cap Est. Dilut	1-liner
MKR	Maker	Lend / Borrow	\$482.30	435	435	Uninvestible until tokeneconomics change, hard to scale DAI
COMP	Compound	Lend / Borrow	\$178.46	664	1,785	Supply schedule overhang + optionality priced too rich. Uninvestible today
LEND	Aave	Lend / Borrow	\$0.15	194	194	Interesting - benefits from COMP mining and go imitate liquidity mining
	Uniswap	AMM				Kingpin still with flaws, watch for upgrades & token
BNT	Bancor	AMM	\$1.41	97	97	V2 upgrade enticing with staking for fee, inflation, and interest, solid setup
BAL	Balancer	AMM	\$11.52	415	1,152	Similar to COMP comment, uninvestible today
CRV*	Curve	AMM	\$0.35	350	1,061	Likely comes rich when-traded, monitor for biz-dev. Token burn solid
KNC	Kyber	Aggregator	\$1.69	307	356	Potential post-Katalyst dip, solid execution and value-capture
ZRX	0X	Deriv / Aggregator	\$0.39	270	387	Questionable capture, good infra, wait for hints of token reform
SNX	Synthetix	Derivative	\$2.39	258	586	Best-in-class team, rich valuation but could be worth paying for optionality
UMA	UMA	Derivative	\$2.13	111	213	Still searching for PMF / as questionable as REP. Liquidity mining catalyst
REN	Ren	Wrapping	\$0.17	146	167	Solid value capture but further tweaks needed, cross-chain as catalyst
RUNE	Thorchain	Crosschain AMM	\$0.48	81	239	VC project but good value-capture, herculean execution needed for it to work

- We are slightly warming up to MKR given the continuous increased usage of DAI + now somewhat low valuation. We believe MKR should go a lot more aggressive on (a) biz dev of adoption and (b) cross-chain). Question remains on centralized assets.
- We feel it only natural that LEND eclipsed COMP given token-economics and pace of shipment. It's a 2-horse race now. COMP with cross-chain + fast shipment + more products could still do well, but we desire to see more from the team on progress.
- We were wrong about BNT / KNC and underestimated the competitiveness of the space. Generally feel natural that BAL + CRV underperformed and expect them to continue to do so, that said, veCRV is a very neat cash-flow vehicle and worth digging into.
- We were wrong about UMA but still feel like it's a scientific experiment. Continue to like SNX, REN, and RUNE.

Q: What kind of competitive advantage can a #DeFi protocol possess?
A: Transitory cost, balance, incentives, community, and network effect.



We feel that there are 5 types of competitive advantages that a specific protocol may possess today (see below). However, while there is some first-mover advantage in crypto (Bitcoin as a SoV, Ethereum for financial internet) and Lindy Effects (security is a function of time), the space is very nascent. Perhaps the biggest challenge in open, decentralized networks is the ability to copy and fork open-source code. Specific to DeFi, liquidity is a transient moat. We continue to believe the defensible moats in Web3 are (1) team quality, (2) community, and (3) network effects. Ethereum's composability is powerful but poses challenges as it lowers the barriers for new entrants. Where value will accrue in the Web3 stack is the biggest open question (Web2 + bridge, Web3 layer 1, Web3 layer 2, Web3 front-end aggregation layer, etc)

- Cost advantage – lower gas / process fee, Layer-2, lindy of trust, laziness / mindshare, knitted integration
 - Cost of doing business on ETH could be bound by ETH's system constraint itself. Cost function is an “optimizing” feature that may not be top-priority for bliz-scaling startups.
 - Generally sticky / good moat if 2C until either (a) use case no longer relevant or (b) next 10x incremental users get capture by someone else; need to defend with continuous shipments.
- A strong balance between temper-resistance and flexibility on growth / evolution
 - A delicate balance is needed for the protocol to withstand attacks but flexible enough to evolve.
- Well-designed and aligned incentives for stakeholders
 - We generally feel the token and stake-holder incentive mechanisms are still evolving, so current iterations most likely not in ideal form. Flexibility would be needed going forward re: value-capture, vesting, launch method, etc
- Developer / community affinity and pace of core-team shipment
 - Perhaps the only defensible competitive advantage. The right team & community could help a protocol pivot multiple times and find PMF. Quality of teams generally increasing with each wave so need to foster strong community / developer network to retain the lead.
- Two-sided network effect for the business model
 - A rare find and could still wobble when combined with (a) aggressive and continuous money-flow being showered by competitors and (b) competition L1 network that onboards multiples more users, thereby creating another competing network effect business that dwarves this one.

The unavoidable crisscross of ETH-based leading DeFi protocols (YASU) means best teams pull ahead while raising barrier for smaller competitors



When it comes to this #DeFi stack / Wallstreet API on Ethereum, the clear leaders / “blue-chips” (measured by circulating market cap, value-entrusted, monthly unique users, etc.) may have already emerged. Whilst they each started with their own feature-sets targeting specific finance niches, borders continue to blur as protocols monetize further on attention captured via horizontal or vertical expansions. We expect the #YASU to continue on the warpath to both (a) vertical acqui-hire / expand, (b) platform-build to empower other projects on top, (c) express-ship on L2 scaling – thereby raising the barrier for other #DeFi projects to compete.

As of Nov 29 th 2020	Aave	Uniswap / UNI	yearn / YFI	Synthetix / SNX
Circulating MC (\$ mm)	1,000 mm	720 mm	800 mm	650 mm
Entrusted Value (\$ mm)	1,700 mm	1,250 mm	425 mm	750 mm
Segments covered:				
Lending / Borrowing	<ul style="list-style-type: none"> Collateralized variable rate + flash loan, adding credit delegation, fixed rate, private markets 	<ul style="list-style-type: none"> Potentially allowing liquidity pool to be lent out for interest 	<ul style="list-style-type: none"> Derivswap launch with liquidity pool lent for interest Collaboration with Cream 	
Spot exchange	<ul style="list-style-type: none"> Tokenization & Lent token exchange (stable:stable like CRV) 	<ul style="list-style-type: none"> Liquidity pool for “vending machine” like token exchange 	<ul style="list-style-type: none"> Derivswap collaboration w/ Sushi. 	<ul style="list-style-type: none"> Potentially enabling swaps via platform
Asset Management			<ul style="list-style-type: none"> Automatic yield strategy across protocols, platform coming Collaboration with Pickle 	<ul style="list-style-type: none"> Collaboration with dHedge for discretionary strategies via managers
Derivatives / Risk Management		<ul style="list-style-type: none"> Potentially exploring futures & other derivs 	<ul style="list-style-type: none"> Collaboration with Cover and Hegic on insurance and options, futures likely also coming 	<ul style="list-style-type: none"> 0-slippage exposure to oracle-enabled assets Options & futures
	Core offering	Pending entries		

Aave: faster horse of lending protocol, continuous push needed for more touch-points + more products to attract liquidity / demand



Aave: Still premature to be declared winner vs. Compound (despite faster speed), needs to continuously ship to ensure widest touch-points to funnel of supply/demand and product-suite for users (on anything that generates yield). Need to stay vigilant on whether to open up branches on adjacent L1s.

- Native AMM likely: The sizable collateral pool could immediately enable CRV-like stable:stable swap functions. Currently the “relay-to-Uniswap-and-back” method charging 60 bps of commission cost-prohibitive – don’t see why Aave can’t just fork AMM code and allow exchange of atokens natively (+ plug into aggregators)
- Ecosystem-building: There are multiple other venues we see Aave leveraging its core lending collateral:
 - “Liquidity / leverage” as service: we already see Alpha-network collaboration where ETH is natively borrowed from Aave and then lent to users on Alpha to farm with leverage. We feel like as derivative platforms come to market in 1H20, tapping Aave for leverage funding is only natural.
 - Opt-in yield-enhancement: the depositors of collateral could opt-in for more aggressive usage of their capital provided, ranging from options selling, allocation to asset managers (likely automated, delta-neutral ones such as YFI and ROOK), unsecured-lending (with trusted delegators taking 1st loss), and insurance underwriting. We could imagine higher utilization rate of the liquidity provided for more returns but not essentially putting the larger capital pool at risk (given the risk is opt-in + tranching-out).
 - Add-on modules: DefiSaver (auto-rebalance of leverage) is a good start, but as the product gets more complicated, we could envision more advanced risk-management + analytics tools to ecosystem.
 - All of the products above can take in additional non-Aave native capital for tranching risk, effectively further increasing Aave’s TVL while somewhat maintaining the lendable asset base within Aave.
 - We believe Aave should consider utilizing its treasury to invest / buy into good projects that add value.
- TradFi / use-case exploration: We believe whoever plugs into larger funnels of liquidity first (beyond just DeFi natives) will gather significant competitive advantage. Building ecosystem partners to tap into retail / institutional capital + brainstorming / supporting projects that connects directly with customers (such as say bitcoin mortgage, high-yield accounts, etc) would prove to be highly valuable.

Uniswap: long-tail + mindshare = undisputed leader, v3/ v4 need to push boundary vs. upstream, lending, derivatives for leadership to remain.



Uniswap / UNI: Very much the go-to for alt-coins today replacing tier-2 exchanges, evolution needed to stay in the lead – and very likely (a) taking features within #DeFi that works and (b) making custodied capital more efficient.

- Uniswap is still by far the most widely used product within #DeFi with the highest user-mindshare. Volume / DAU suggests high frequency & broad usage (vs. Sushi concentrated amongst whale users, the difference can be as high as 30-50x). This mindshare is a big advantage in cross-selling new products + very low cost in attracting incremental value-capture from users. We also believe the long-tail nature of altcoins (i.e. non-standardized SKUs) gives the Uniswap “vending machine” solid network effect within the paradigm today. The competitive advantage enjoyed by Uniswap today is, however, by no means entrenched:
 - Disaggregation risk: We could envision AMM liquidity pools losing the user-base to aggregators on-top (similar to Web 2.0) when 10-100x more users rush into the space via the latter channels. In those cases, Uniswap (and other AMM) no longer enjoy the mindshare) + liquidity may move to aggregation layer.
 - Failure to attract new projects: the long-tail is only great when the platform is the go-to. However, despite the disadvantaged position Sushiswap is in, the latter being a part of Andre Cronje’s YFI ecosystem (which captures significant #DeFi mindshare & developer affiliation today) already suggests that new, hot projects may have a preference to aggregate liquidity around Sushiswap. If the battle of legitimate long-tail (and thereby wealth effect) is lost, Uniswap could cede share to the next 1-2 upstarts.
- We strongly believe that in its v3 / v4 roll-out, Uniswap needs to seriously consider the following features – effectively going upstream to aggregators and blurring the boundary with lending and derivative protocols. It’s possible that the rent-seek component (x% of 30 bps commission) don’t come until much later given the competitive pressure within the space, and Uniswap may need to monetize via other means in the interim (such as charging for tools + analytics, take-rate of other project’s airdrop incentives, selling order flows, etc)
 - Lower gas fee / L2 scaling + cross-chain capabilities. Vending machine needs to be all-assets.
 - User-defined / more advanced swapping formula toggle with variable fees, 3rd party token-incentives.
 - Lending capabilities (while LP token within pool) + Futures / derivative capabilities
 - More advanced tooling for risk + analytics + management for everything AMM + capital-raise related. There’s especially a lot to be done such as price charts, richer info page, mobile apps,

Yearn: protocol itself in good direction as manager platform, incentive may still need realignment; definitely watch for ecosystem startups



Yearn / YFI: Leave founder for 0-to-1 and build the team, thesis evolving into HoldCo ecosystem & cyclicity cuts both ways. Key-man + longevity + economics-design risk remain but must pay attention given coolest primitive here

- Founder Andre as a 0-to-1 dev + industry clout ideal for “M&A”. Leave execution & integration to broad base of supporters while focusing on the vision. Yearn protocol after the implementation of 2+20 fee structure with the v2 platform roll-out should become the default go-to for yield strategies. In theory it should possess economies of scale (incumbency + size = higher yield in some protocols like CRV), trust of users (given the long-standing bug-free success, Lindy-effect), and emerging network effect based on strategists seeking profit-maximization. Yearn had developed synergies between protocols and may ultimately become the primary landing spot and hub of DeFi capturing mindshare, talent, and capital. We do see 3 significant risks:
 - Cyclicity / high-beta: YFI should be very pro-cyclical – on upcycles yield tend to be high and yearn as yield-aggregator / asset manager should out-perform, and it cuts on the way down.
 - Incentive mismatch: One could argue core developers of YFI protocol are severely undercompensated vs. the value they bring (whereby YFI holders are earning underserved economic profits). One could argue there is significant risk of breakage during next downturn when token tanks + devs move on. In a sense, a developer + strategist owned fork could make way more sense (i.e. kicking out “equity” holder).
 - Ecosystem alternatives: To the last point, we could see the best coders potentially starting a product on their own vs. leveraging the YFI platform (good examples are PICKLE, ALPHA, etc) – it may just be too lucrative to do so in this bull-market vs. earning a pesky 50% cut on the 2+20 on a strategy within YFI.
- Ultimately YFI’s core proposition should be (a) layer-1 agnostic and (b) most immediately portable to any legacy TradFi funnel as a “set-and-forget” product. One could see YFI evolving into a holding company overtime of various protocols. What YFI itself can become is incredibly fluid (not just asset manager) and is one of the most fascinating stories in #DeFi. **The most innovative opportunities within ETH #DeFi may emerge here.**
- We could argue for an ecosystem “founders fund” native to the YFI community. One can argue being the lynchpin of developers, the insiders would be on the cutting edge of ETH-based #DeFi + App evolution – which bodes well for both early allocation and privileged access to these promising startups translating to significant alpha. We could see this fund being a core perk to attract both developers and strategists to continue work on YFI.

Synthetix: decentralized BitMex / CME in the making with L2 scaling + leverage products. Likely most portable to other chains with global pool.



Synthetix / SNX: Last major step of L2 towards “Decentralized BitMex” on ETH.

- Full speed ahead with Layer-2 scaling to deliver smooth trading experience. One can argue SNX is not feature-complete without L2 and leveraged-futures (v. rich in valuation before these features). With trade-volume rewards + futures / leverage once L2 is turned on, SNX trading volume could soar alongside Dhedge (decentralized hedge fund manager platform as custodian) also turning on referral fee-share. It's possible SNX with low-slippage and already sizable capital pool as counter-party dominates derivatives space that is heating up despite competition.
- Similar to Aave and Uniswap, we see meaningful cross-over in segments for Synthetix:
 - The trading experience needs to be front-and-center
 - More asset types: stocks, bonds, more crypto asset, etc; this one is a given.
 - Broader derivative exposure: aside from futures / leverage, Synthetix capital pool can easily enter into other derivative segments including options, prediction markets, complex swap agreements (like fixed / floating rate interest), as well as more esoteric option instruments. Separate capital pools could be tranching out for experiments here.
 - Further ecosystem build-out: Dhedge as a primer broker / custody solution for managers is great, we could see additional ecosystem projects such as L1/L2 factoring / fast-retrieval product, load-balancing / liquidity-aggregator across derivative platforms. There is I believe room for any user to employ leverage (aside from just say 3x future) with capital coming from outside (such as Aave) so one can go levered long any instrument subject to a DeFi market borrow-rate.
 - Cross-chain: the fundamental property of Synthetix lends itself well for a global capital pool that spans multiple chain -- porting could be straightforward given relative lack of composability need.
 - Treasury management: Allow protocols to allocate their investments to trusted managers without slippage.
- With regulatory crackdown on futures exchanges, SNX could be share-gainer until headwind blows its way too. SEC-scrutiny in our mind remains the single-largest risk to the platform (the 2nd being risk oracle attack).

Q: Can credit ever exist on the blockchain?
A: Gradually, then all at once. RaaS is needed.



Recourse-as-a-Service (“RaaS”)

Noun. when violent recourse is offered as a service for rewards. Government is biggest form of RaaS – demanding tax dollars in exchange for enforcement of law and protection of basic human rights as a “public good”.

We generally believe that without recourse, credit will remain niche and subscale on the valuenet. It will be limited to (a) known actors amongst each other playing repeated games, (b) channels heavily reliant on traditional enforcement rails – such as FICO score penalties, and/or (c) limited niches that are happy to bore predatory interest rates partially given the still very high opportunity cost within the space.

For recourse to be paired with the emerging valuenet, we believe in the following course of events:

- Fully collateralized first (today, with experimental credit on permissionless valuenet.
- Trusted actors / nodes securitize assets on open permissioned valuenet, which then gets wrapped onto permissionless valuenet. This is still over-collateralized but now with trusted actor + oracle price-feed. Meanwhile business activities on both valuenets means a web-native reputation system begins to form.
- With business activity and securitization, more liquidity gets parked on the valuenets, cost of capital comes down meaningfully, which eventually makes cost of borrow in valuenet \leq physical world. ID solution emerges.
- The valuenet ecosystem launches “51% attack” – i.e. a lot of securitized-lending / secured borrowing business in physical world migrate over, leaving the legacy financial players much weaker as assets get drained.
- When the size of collateral and business activity on the valuenet is large-enough vs. physical world with its native reputation layer, the ecosystem can begin to offer much larger fees to local physical governments to enforce recourse / defaults, thereby ultimately toppling what’s left over of legacy financial players.

We suspect that the business relationship would be the most-efficient if it’s 1-to-1, or 1-to-few (i.e. government dealing with a few high-traffic hubs), which lends significant rent-suck opportunity for the bridges and custodians.

Q: What will likely happen to stablecoins?

A: let hundred flowers bloom, but permissioned-ones may take the cake



Stablecoins (USDT, USDC, DAI, etc) rightfully became one of the fastest growing market-cap segments within #DeFi because they are the common medium-of-exchange for most people. We believe this segment will continue to exponentially scale with the entry of open permissioned valuenets (Libra) and permissioned valuenets (DCEP). To keep the peg stable, there are currently 3 ways:

1. A treasury mechanism with fiat 1:1 peg – where you trust the centralized issuer.
2. An over-collateralized mechanism with liquidation – where you trust the team for mechanism design.
3. A pure incentivize mechanism that pushes investors / speculators to rebalance towards peg – where you trust mechanism design and market participants coming together.

We still lean towards the camp where option 1 (wrapped Libra / DCEP and USDC / USDTs of the world) would occupy significant share in this arena:

- Most users are law-abiding actors, so they would happily side with “centralized coins” with convenience, deep liquidity, perceived reputation, strong + stable peg, and use-cases anchored on non-speculative biz activities.
- Any serious attempts will be faced with extraordinary regulatory scrutiny (i.e. Basis) – so if not option 1, then it's likely by anonymous actors that may be undercapitalized via option 2 or 3 – which will show up in
 - Incentive adjustments and pace of collateral expansion may forever lag underlying stablecoin supply / demand swings, leading to perpetual off-pegs – such is the issue with option 2 stablecoins.
 - Lack business development, therefore lack of usage adoption. This could be solved for.
 - Stabilizers may be absent in extreme market climates, which crypto is known for.
 - Lack of trust by mass users, especially when compared to a “reputable” centralized alternative. Both of which could retard market share and contribute to centralize stablecoins' network effect. Could be solved for.

We see very interesting attempts in option 3 (**ESD** especially), whereby the separation of users from speculators / capitalized investors + friction introduction allow for further game-theoretic balance to the peg. We still feel like someone having to play “central bank” in times of distress could break these models, but eagerly await elegant designs that prove us wrong. We could see DeFi-native investment firms + actors coming together as the CB.



Q: When can we have good crypto insurance?

A: Not until either (1) TradFi enters or (2) protocol with partial reserve, market-based pricing, flexible maturity, POS, and appropriate incentives

Insurance in ETH-based #DeFi (mainly for smart-contracts / unintended use) remains an unsolved problem, with 2 solid, albeit still transitory, attempts so far:

- **NXM**'s native token-based capital pool is coupled with a somewhat non-market-driven pricing of premium, leading to frequent sell-out (market believes it's underpriced) situations. Proprietary pricing may be best coupled with proprietary capital (instead of market-contributed liquidity)
- **COVER**'s model separates the token from the capital pool currently – and the pricing of premium is dictated by the market demand (via CLAIM / NOCLAIM token pricing like a prediction market). We now converge to the view where market-based pricing is a better direction.

The COVER model still exposes a few critical issues despite being the fastest horse today in the race:

- A capital pool provider's return function is rightfully [premium – expected loss + collateral yield + inflation from all sources]. We believe that (a) token inflation as subsidy is not sustainable long-term and (b) the capital pool provider is doing pretty much charity work because, given full collateralization, the return ex-inflation may be markedly below the opportunity cost / cost of capital within the space.
- The still inflexible terms – there exists significant demand for say X-hour or X-day insurance that remains unfulfilled, but addressing such need could lead to very fragmented liquidity pools (not ideal).
- Still weak point-of-sale integration. Insurance-sale should be prompted when a user interacts with a protocol.

One solution could be funds pricing insurance risk w/ their model and underwriting with proprietary capital. This could be offered as a service bundled with auditing & invitation to previous rounds as a pre-requisite.

Another solution could be an innovation around something like a contract-default-perpetual swap (“CDPS”), whereby a clever funding model takes care of the duration problem, and a clever token-as-junior-tranche, partial-collateral + liquidation mechanism improves capital efficiency meaningfully. We look forward to experiments in this area.

We also believe that protocols with significant value-in-custody and a wide-ecosystem (i.e. AAVE, UNI, YFI) could be well placed to have opt-in options for insurance underwriting in some form.

Q: What else is interesting to you today?

A: Emerging tool & middleware that are layer-1 agnostic



We believe valuenet middleware represents a potentially overlooked but highly lucrative, layer-1 agnostic niche with network-effect potential. 1 great example is Chainlink, here's 2 more:

Graph Protocol / GRT, 300 mm FDV last raise: decentralized query execution protocol

- As web3 adoption grows, querying for data on the ETH blockchain is a huge hassle. Graph's solution to allow developers quickly and flexibly retrieve well-curated, well-indexed data on its distributed, redundant, permissionless network of nodes is elegant and much needed.
- The GRT token as incentive to encourage curation and indexing of data + a consensus to ensure the retrieved data is accurate is a good one. The protocol reminds us of Chainlink in many ways.
- We believe there is meaningful whitespace in analytics and simulation, as well as marketplace opportunity for user-aggregated data being resold. Value-capture remains outstanding.

Keep3r Network / KP3R, 90-100 mm FDV: two-sided blockchain state-update marketplace

- To update the state of an account on ETH even on mundane tasks, often a transaction is needed (it could be claiming rewards, rebalancing a pool, etc). The Keep3r network is built by Andre & team as a 2-sided marketplace where those that need tasks executed put the job up for anyone who can execute them ("keepers"; the latter group would in-turn be rewarded the KP3R token. The platform is particularly well-suited for tasks that could be time-insensitive but needs continuous execution, and an elegant two-sided network because the job posters would go to the network with the most keepers, and vice versa. We see potential bundling of tasks by other protocol as a keeper.
- This continuous-maintenance-as-a-service network feels like gitcoin in spirit and in our opinion can scale to hundreds, if not thousands projects / keepers on both sides, with millions of transactions processed per day.
- The inflation without value-capture issue had been a sticking point of KP3R. Our view had been morphing – we feel that the token inflation as customer-acquisition-cost may actually be worth it to build the 2-sided network, whereby rent-seek via other means could later be introduced via governance (much similar to Web 2.0 network effect businesses scaling at all cost to build the network effect). Andre with his JV strategy may be the ideal man for the task also. If the network scales like LINK and GRT does (and cross-chain), hard to imagine token not capturing at least some value.

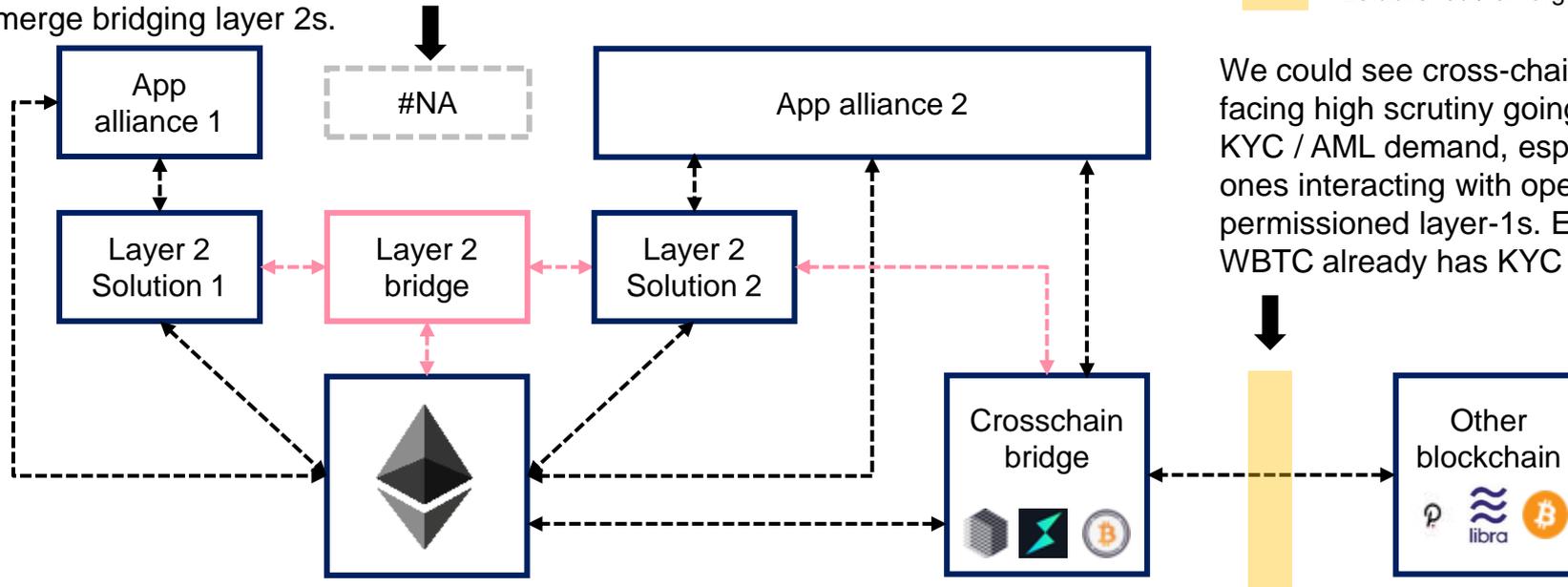
Q: What else is interesting to you today?

A: Emerging bridge / scaling solution as toll-road / AMM / Lender



If 2 apps have layer 2 enabled, they may not be composable with each other unless they are on the same layer 2 instance. We could see apps forming alliances on the same layer 2 to retain composability, as well as new middleware bridges emerge bridging layer 2s.

←---→ Established value-transfer channel today
←---→ Emerging value-transfer channel of tomorrow
Established / emerging KYC / AML



We could see cross-chain bridges facing high scrutiny going forward on KYC / AML demand, especially the ones interacting with open permissioned layer-1s. Examples like WBTC already has KYC

We could see cross-chain bridge becoming a sizable business going forward – they are effectively acting as either game-theoretic (REN, RUNE, MIR, etc) or recourse-detering / trust (WBTC) guarantees to wrap or directly transfer tokens

- We could see the functions of layer-2 scaling solutions and that of cross-chain bridges merging.
- The custodied asset, aside from being traded for fee generation, can also easily be lent out, be enabled as collateral for derivatives, and/or go seek additional yields. With more open permissioned and/or permissioned valuenets, we could also see transferring / wrapping demand exploding (especially with stablecoins and real-world assets)
- We could see significant working capital demand (and services) emerge that effectively offer quick turnaround of tokens (as opposed to waiting days / hours / weeks) for a fee / interest. This is especially potent upon ETH L2.

We could see **REN / RUNE / MIR** extracting significant rent as toll-roads to the multi-layer, multi-chain world.

Q: What else is interesting to you today?

A: Still absent “Wallstreet API” aggregator as B2B service to applications



We suspect that as the #DeFi stack matures (all-in-one conglomerates, fixed-rate products, tranching, full-fledged derivative products, standard practices around capital efficiency, insurance products, etc) while the middleware + tools protocol continue to emerge, the equivalent of B2B all-in-one aggregator suite should emerge similar to the likes of Twillio – a new application should just be able to plug into whatever protocol this aggregator supports, and perform any type of combined finance functions:

- As of today, the way at which protocols interact with each other seems very much “bespoke” – find the protocol of interest, study the code, then hook your structure leveraging the end-points available.
- We suspect that as (a) the applications that look for such functions become less #DeFi and more business-related, and (b) as the #DeFi stack proliferates, it may become increasingly challenging for these new projects to get up to speed + figure out the best way to do something given the myriad of options, thereby opening room for a middle-layer of aggregator that performs the dirty work of end-point curation (could be cross-chain), audits / bug-testing, logic-flow clean-up and standardization, and potentially cost reduction (given bundling of requests at scale + its own layer 2), thereby almost act as an “investment banker” of sorts servicing the myriad of needs of an actual corporate and taking a small fee for the service rendered (can be SaaS ARR based).
- One good example would be that instead of a game building out its auction house / pawn-shop leveraging the ETH blockchain, this B2B aggregator may already “productized” this product need and modularized it to be “plug-and-play” immediately through an API suite (with extensive documentation), with analytical and risk management tools that comes along with it.

We suspect that the existing tools play that directly work with almost all the projects today (**KP3R, Dune, Gauntlet, Infura, even say Etherscan**) are best placed in capturing this kind of demand whenever they surface.

Q: What could others find interesting that you don't?

A: Another AMM / Futures / Derivative protocol – too competitive; fixed / floating + tranching – more features than products; and anon ponzi



We feel like the winners in the following space had either already emerged or would be hard to call given the tough competition, and therefore it would be hard to get excited over “just another x”

- Another AMM / Futures / Derivatives protocol.
 - It may be impossible to count in 2 hands the # of AMM / Futures / Derivative upstarts on ETH today, all with slightly different token design and features. We not only suspect there will be a rapid overlap of products (i.e. they will all converge to doing the same thing), or that perhaps their functions will rapidly overlap with that of aggregators (posing interesting question of disintermediation), but also that there will be a slug-fest of liquidity mining attempting to lure capital. We think it is very hard to call the winner today and suspect that the ultimate champion may be the incumbents with already sizable mindshare, talented team, and liquidity.
- Fixed / floating rate protocol, or another tranching protocol.
 - Similar to the category above, we feel like the fixed / floating rate design and tranching design are features to be had with any financial protocols (and one that can be easily implemented by the likes of Aave / Compound), but not a standalone product / protocol. Whatever competitive advantage they enjoy may be transitory and could quickly dwindle when the model works + gets copied by incumbents.
 - We believe elegant solutions may already exist and will become common-place within the next 6 months
- Another “yield aggregation” + “farming” protocol by anon.
 - We would happily degen and farm + dump fruit / food coins, but we have no interest going deep with anon teams that only seem to be building ponzi with no intention of creating long-term products. There are some non-anon projects that lead with credibility and fast execution (such as Alpha), but we suspect most of these upstarts are in for a quick buck but will buckle when tough times invariably comes.
 - That said, we continue to pay attention and are highly open to token distribution + mechanism + incentive structure experiments. Future projects can salvage whatever didn't work and learn from the mistakes.

Special thanks to those who provided valuable feedback on previous drafts



Ari Paul
@aridavidpaul

Calvin Chu
@calchulus

DegenSpartan
@degenspartan

GT
@GTJOKER_

Matt Casto
@mcasto_

Santiago R Santos
@santiagoroel

Sigil Fund
@fiskantes

Simiao Li
@simiao_Li

Tyler Reynolds
@tbr90