

How Web3 and RWAs unlock exponential wealth via a computable economy.

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Banon

&

Prof.
Jason
Potts

Web3 and RWAs

Exponential growth in wealth

Origin of wealth

Institutional technologies are slow but transformative

Pierre Levy

Metasystem transitions

Evolution of a computable economy

Our claim

Why hard tokenization?

Although many assets can be fully represented on chain with native strong commitments

Physical assets have a 'physical residue' which must be exchanged offchain, which brings challenges.

Challenges with physical asset tokenization

Generic solutions for tokenizing physical assets

Why might this be good?

Why (else) might this be good?

A step-change in human progress

How Web3 and RWAs unlock exponential wealth via a computable economy

Based on the academic paper:

'Digital Institutions Create Wealth by Increasing Economic Computational Complexity'

Co-authored by:



Justin Banon

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BOSON



Fermion



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Digital institutions create wealth by increasing economic computational complexity

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Abstract.

This paper proposes a theory of the global transition from an industrial economy to a digital economy by emphasising the importance and significance of digital institutions. This theory is useful for understanding how this transition will shape wealth and prosperity over coming decades. A full stack of digital institutions (including web3 technologies) facilitates development of a 'computable economy', which enables a significant increase in economic complexity and, from this, wealth. We explain why a critical transition will occur when this institutional computation can be extended from on-chain assets to off-chain real world assets.

JEL: B5, O33, P00

Keywords: evolutionary transitions, institutions, digital economy, web3, real world assets

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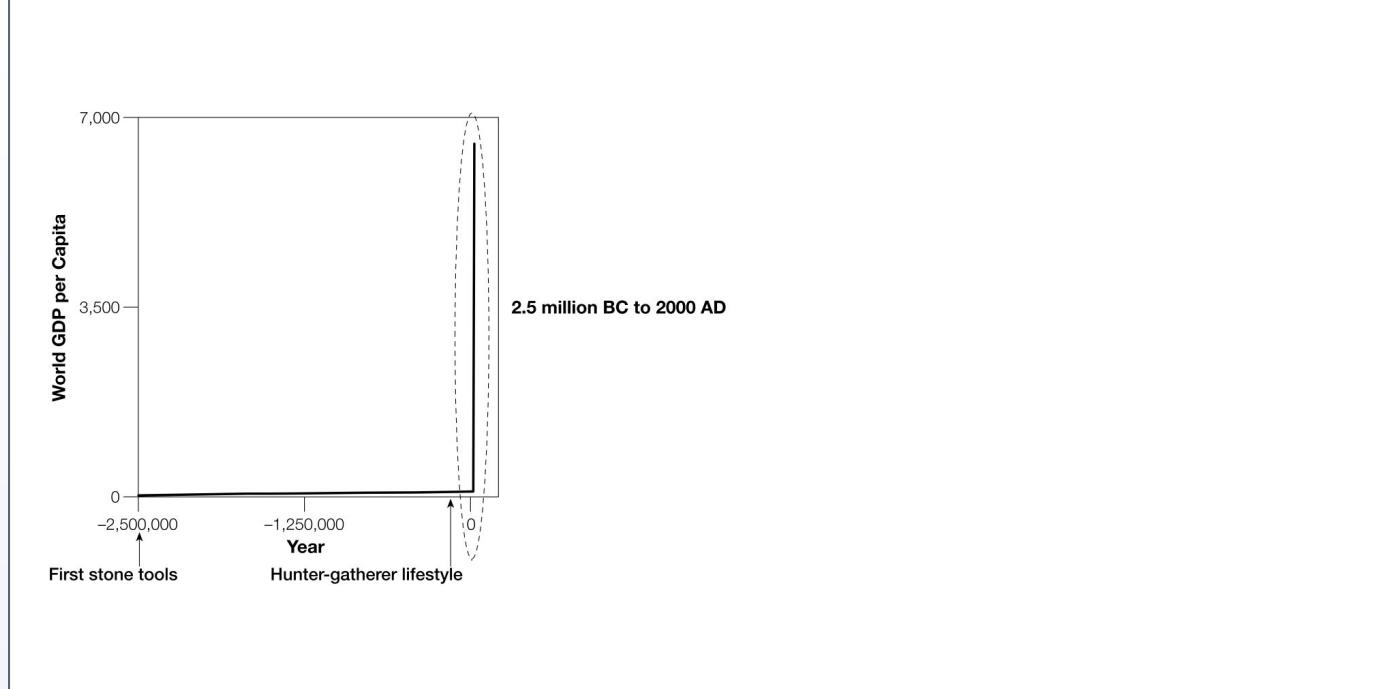
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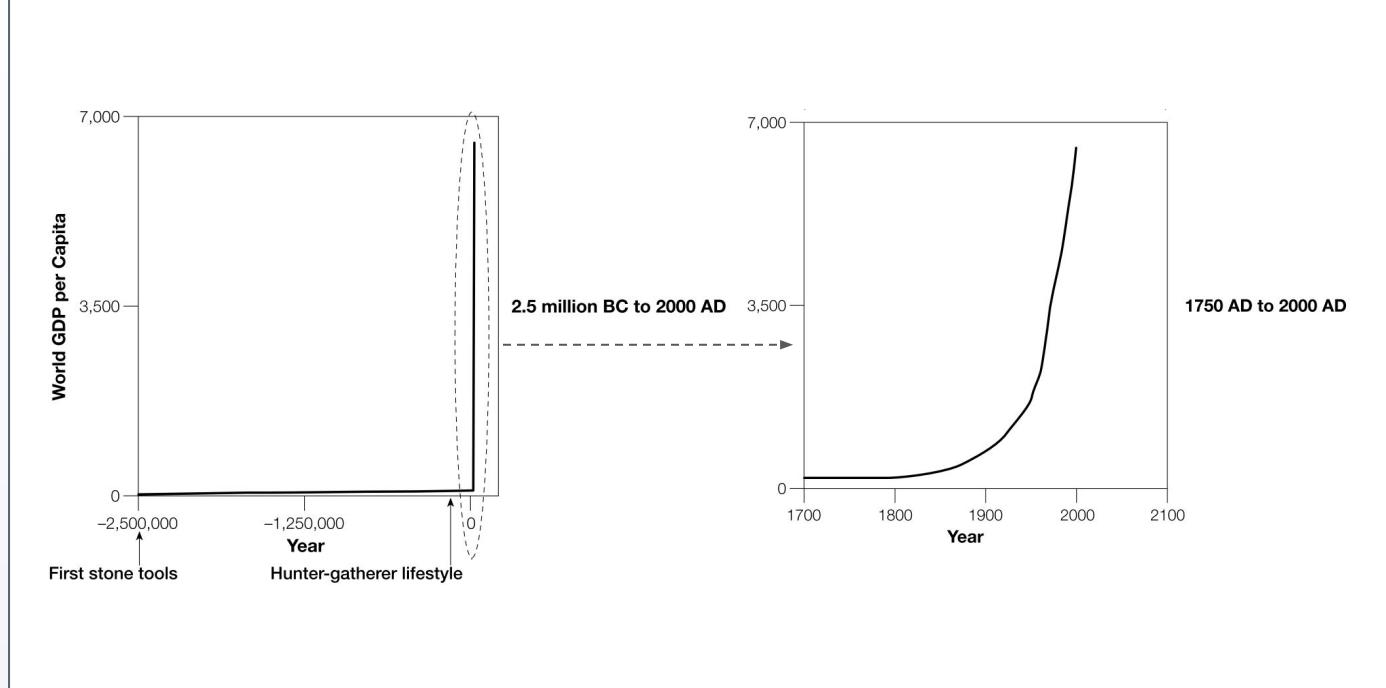
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Source: Beinhocker, Origin of Wealth

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Economic complexity



1. Knowledge

Industrial technologies
(Steam, steel, chemicals, electronics.)

2. Coordination

Institutional technologies
(Markets, organizations and networks.)

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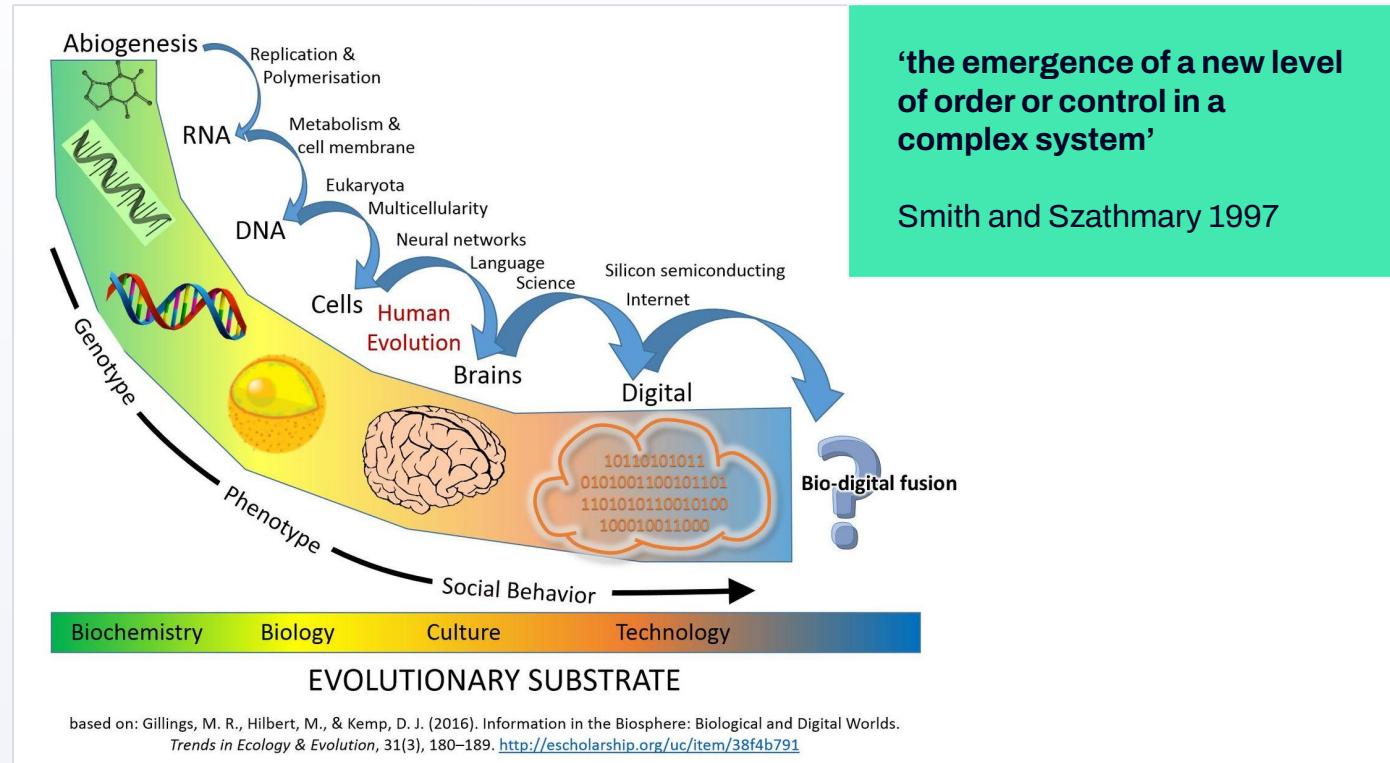
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Metasystem transitions

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"Language which has evolved through DNA, speech, writing and now software at each stage this symbolic code has carried the evolution of order."

Pierre Levy 1999



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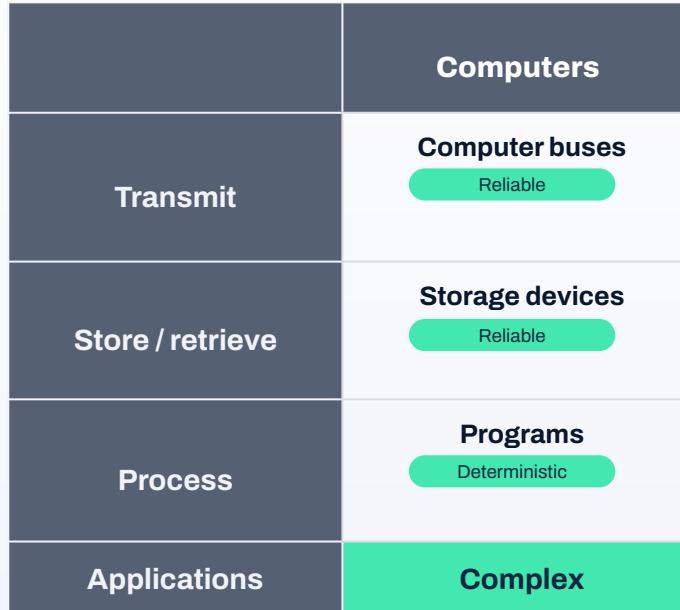
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	Computers	Today's Economy
Transmit	Computer buses Reliable	Intermediaries Error-prone Fees, delays, defaults
Store / retrieve	Storage devices Reliable	Counterparties Error-prone Risk, delays, defaults
Process	Programs Deterministic	Economic systems Fuzzy Contracts, rules, laws
Applications	Complex	Limited

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	Computers	Today's Economy	Computable Economy
Transmit	Computer buses Reliable	Intermediaries Error-prone Fees, delays, defaults	Smart contracts Reliable Transparent, immutable
Store / retrieve	Storage devices Reliable	Counterparties Error-prone Risk, delays, defaults	Tokenized assets Depends on type Reliable if 'hard tokenized'
Process	Programs Deterministic	Economic systems Fuzzy Contracts, rules, laws	Smart contracts Deterministic Rules encoded onchain
Applications	Complex	Limited	Complex

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"Blockchain technology enables a new 'computable economy' and unlocks exponential wealth through increased complexity"

Condition:
all assets must be 'hard tokenized' with strong commitments

Why hard tokenization?

**Computability requires
strong commitments:**



**Trust-
minimised**

Minimal reliance on
trusted parties



**Secure and
verifiable
guarantees of
ownership**

Encoded onchain



**Enforced by
cryptography**

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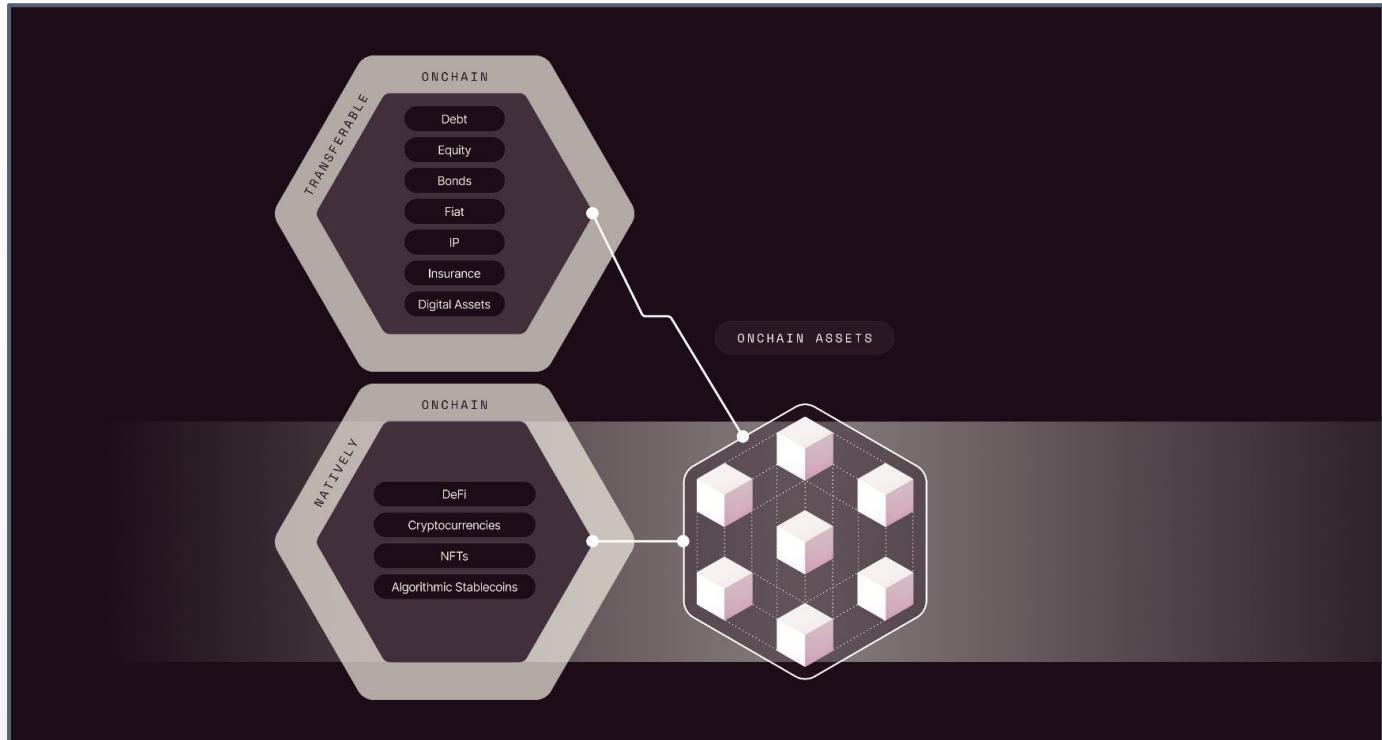
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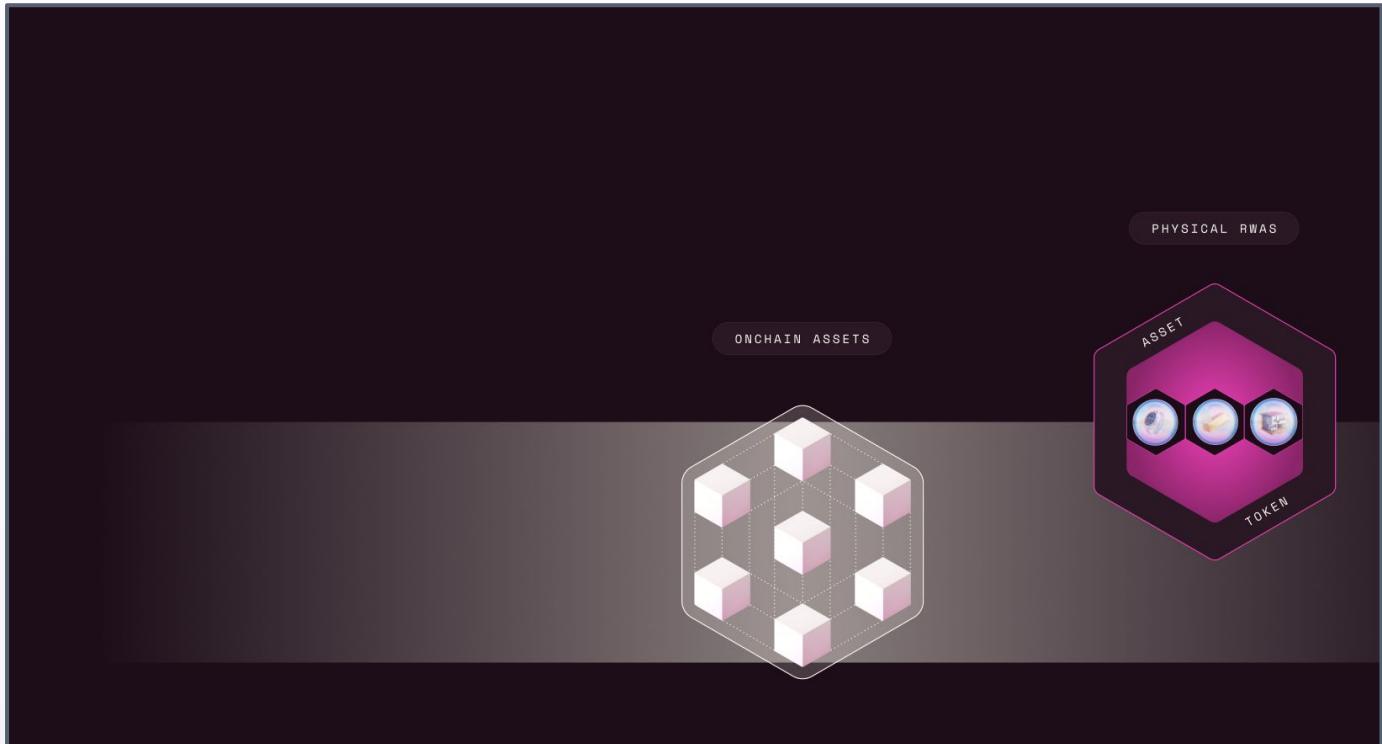
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Physical asset oracle problem

If Alice tokenizes her car and Bob purchases the token, how can Bob be certain he will receive the car?

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Physical asset oracle problem

If Alice tokenizes her car and Bob purchases the token, how can Bob be certain he will receive the car?



Fair exchange problem

How can disputes be resolved if the car does not meet the promised specifications?

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Trust centralized entity	
Cost efficiency	Low
Capital efficiency	High
Economic computability	Low

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	Trust centralized entity	Lock-up funds
Cost efficiency	Low	High
Capital efficiency	High	Low
Economic computability	Low	High Use for low margin assets



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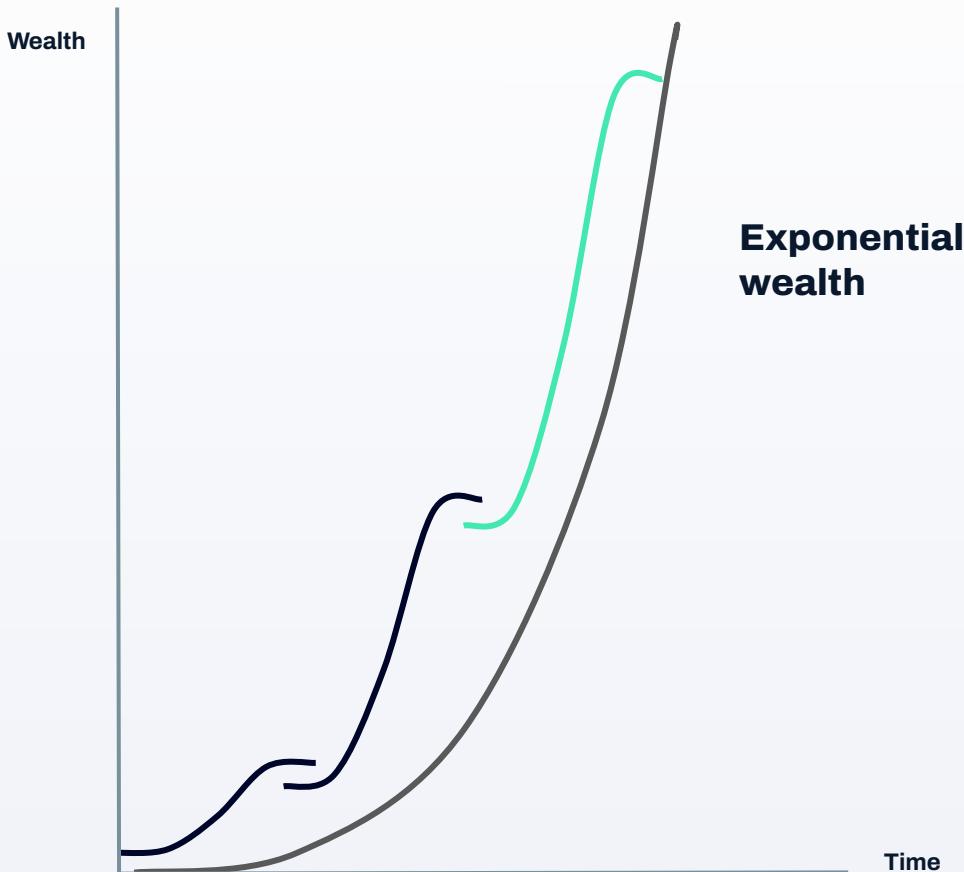
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	Trust centralized entity	Lock-up funds	Covers any physical asset
Cost efficiency	Low	High	Low
Capital efficiency	High	Low	High
Economic computability	Low	High Use for low margin assets	High Use for high-value assets



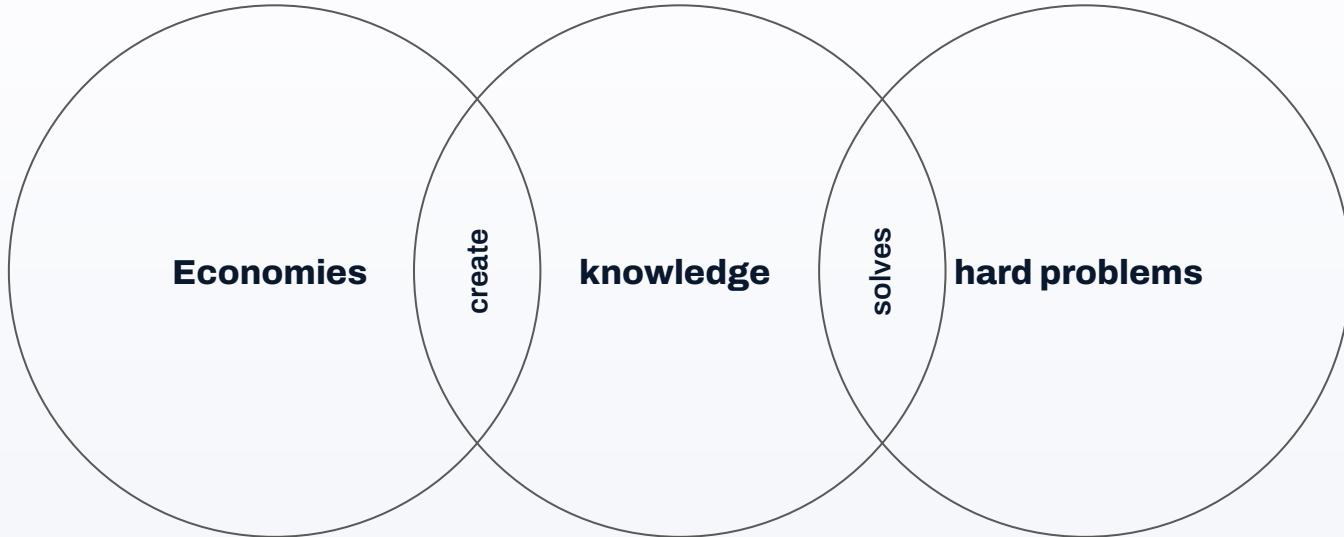
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A computable economy increases our collective ability to solve hard problems.

A step-change in human progress



Internalise economic externalities

- solve environmental sustainability

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Internalise economic externalities

- solve environmental sustainability



Upgrade economic production and allocation

CONCLUDING challenges like becoming a multi-planetary species

A step-change in human progress

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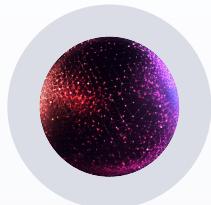
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Internalise economic externalities

- solve environmental sustainability



Evolutionary step-change in innovation

- solve cancer, fusion, Kardishev scale



Upgrade economic production and allocation

over long term challenges like becoming a multi-planetary species

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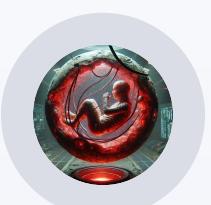
Evolutionary step-change in innovation

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Upgrade economic production and allocation

long term challenges like becoming a multi-planetary species



Resist excessive economic extraction

- Solve global financial inequality

Thanks



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