



free to prosper

The Digitization of Finance
How CryptoFinance will transform the world

Johann Gevers, Founder and CEO

johann.gevers@**monetas.swiss**

Accelerating Shift from Physical to Digital

Prehistory: **hunter-gatherers**

10 000 years ago: **agricultural** revolution

250 years ago: **industrial** revolution

60 years ago: **computers** > digital production

25 years ago: **internet** > digital communication

8 years ago: **bitcoin** > digital finance

1 year ago: **DAOs** > digital law

Intangible assets
make up 47% of all enterprise value

— Global Intangible Financial Tracker 2016 report

Intellectual capital is recognized as the most important asset of many of the world's largest and most powerful companies.

— World Intellectual Property Organization

The Evolution of Finance

**Physical
Peer-to-Peer**

pre-automation



**Switching,
Clearing &
Settlement**

partial automation

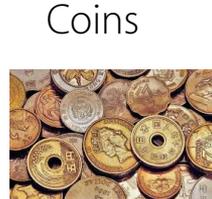


**Digital
Peer-to-Peer**

full automation



In the beginning



500 BC



1694



1717

Cheques	Credit cards	Debit orders	ATM cards	Debit cards	Real-time interbank settlement	Internet banking	RTC
1960	1975	1980	1983	1994	1996	2000	2005

Consensus blockchains



2009



ethereum

2013

Federated contract systems



powered by
monetas

2017

Total Cryptocurrency Market Capitalization



Global Financial Statistics

ASSETS

0.1 tr = bitcoins

5 tr = cash

8 tr = gold

70 tr = stock markets

223 tr = financial assets excl. derivatives

775 tr = forex and derivatives contracts

1 quadrillion = Total financial assets

TRANSACTIONS

0.4 tr = bitcoin payments

672 tr = all payments

10 quadrillion = Total financial transactions

We're rapidly moving into a future where almost all assets — over 99% — are digital.

What CryptoFinance enables:

Integrity.

Economics *always* wins.

Wealth creation
is the fundamental driver
of individual and social well-being.

How do we build wealth?

1. Greater security of property
2. Lower transaction costs
3. Larger economic networks

⇒ Greater division of labor and specialization

⇒ Higher productivity

⇒ Rising wealth creation and standard of living

1. Secure Property Rights

Development is very complex. But if you do not have an order that tells you who owns what, none of the rest works.

— *Hernando de Soto*

Two-thirds of the world's population — four billion people — are locked out of the capitalist system.

Efficient Trade

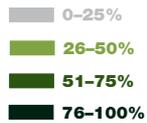
A mere 0.1% reduction in transaction costs quadruples a country's wealth — taking it from poor to rich.

Low transaction costs are the fundamental driver of economic growth.

3. Economic Network Size => Global Financial Inclusion

Counting the world's unbanked

Percentage of total adult population who do not use formal or semiformal financial services

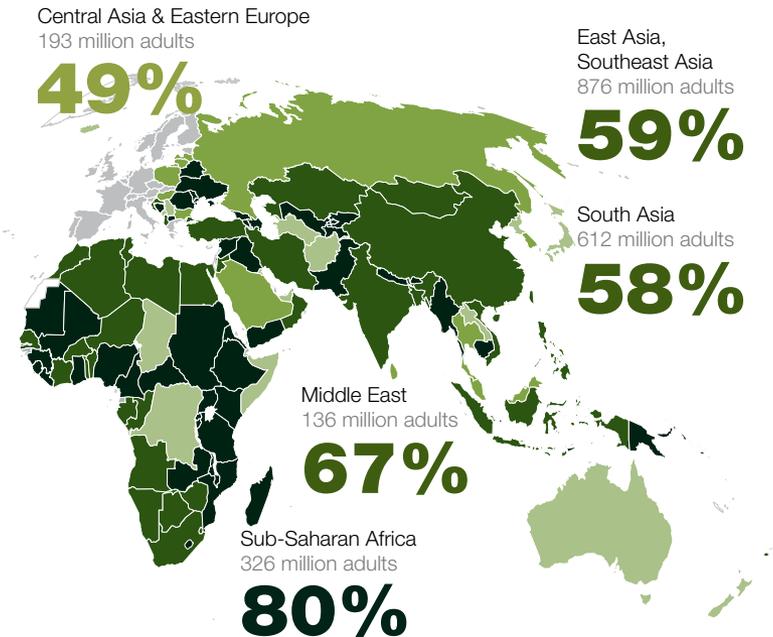


Estimates used to calculate regional averages



Total
2,455 million adults

53%



CryptoFinance

Uses ***cryptographic (encryption) algorithms*** to:

- secure property
- reduce trading costs
- enlarge economic network size

and thereby:

- ⇒ extends division of labor & specialization
- ⇒ raises productivity of labor
- ⇒ dramatically boosts wealth creation and quality of life.

The world's global distribution platform:

The mobile phone

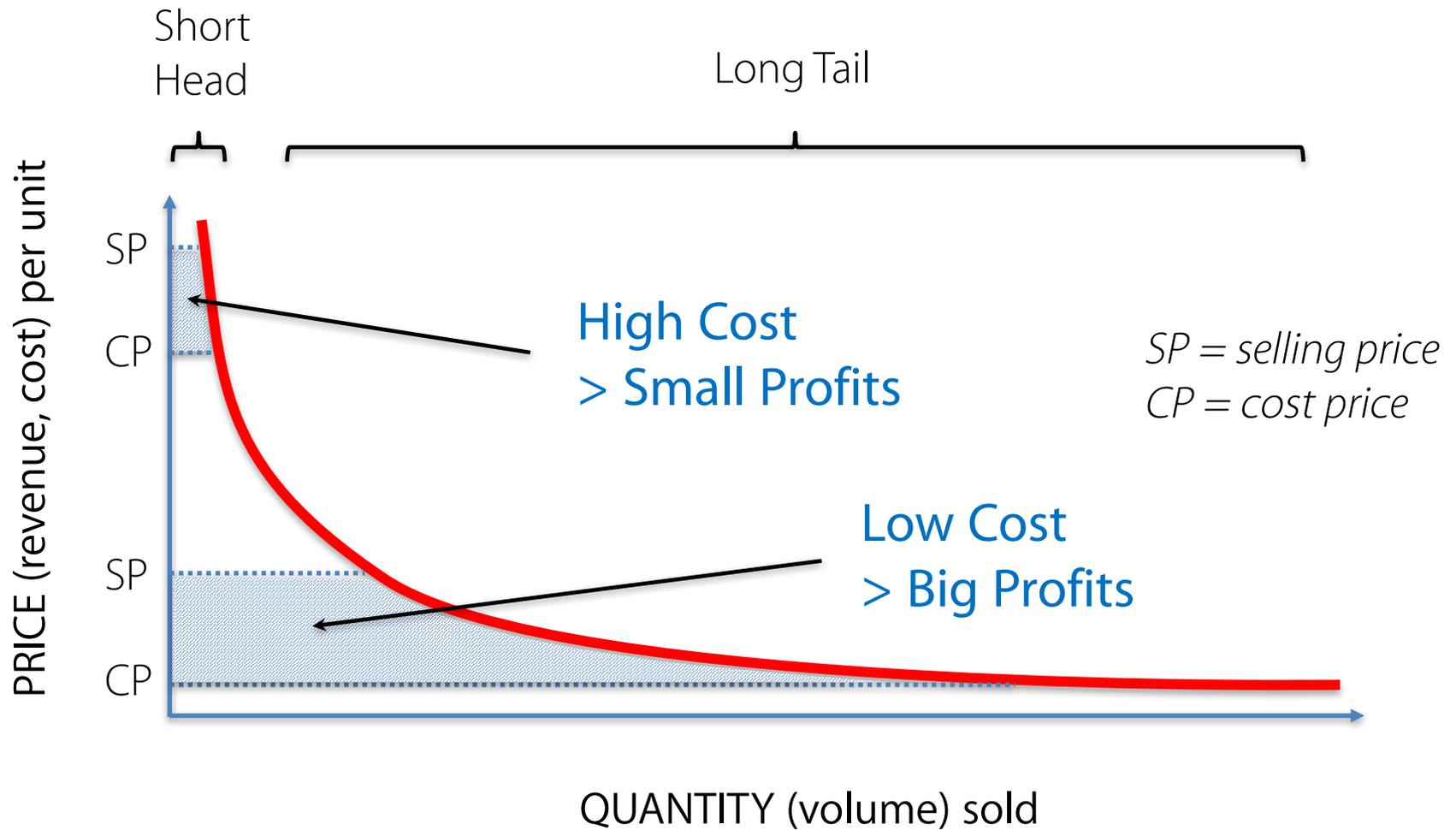
Cryptographically secure, decentralized
communication and trading systems
— delivered globally via the mobile phone —
become the enabler of
individual freedom and prosperity.

CryptoFinance

will catalyze

the greatest explosion of wealth
creation the world has ever seen.

The Long Tail of the efficient digital economy



Finance 2.0

The Democratization of Finance

The financial system is at the epicenter of a **fundamental transformation** that is radically changing geopolitics.

Digitization enables tremendous **efficiency gains** and **universal financial inclusion**

resulting in vastly greater wealth creation and the elimination of poverty.





Radical Transformation of

Financial systems

Communications systems

Production systems

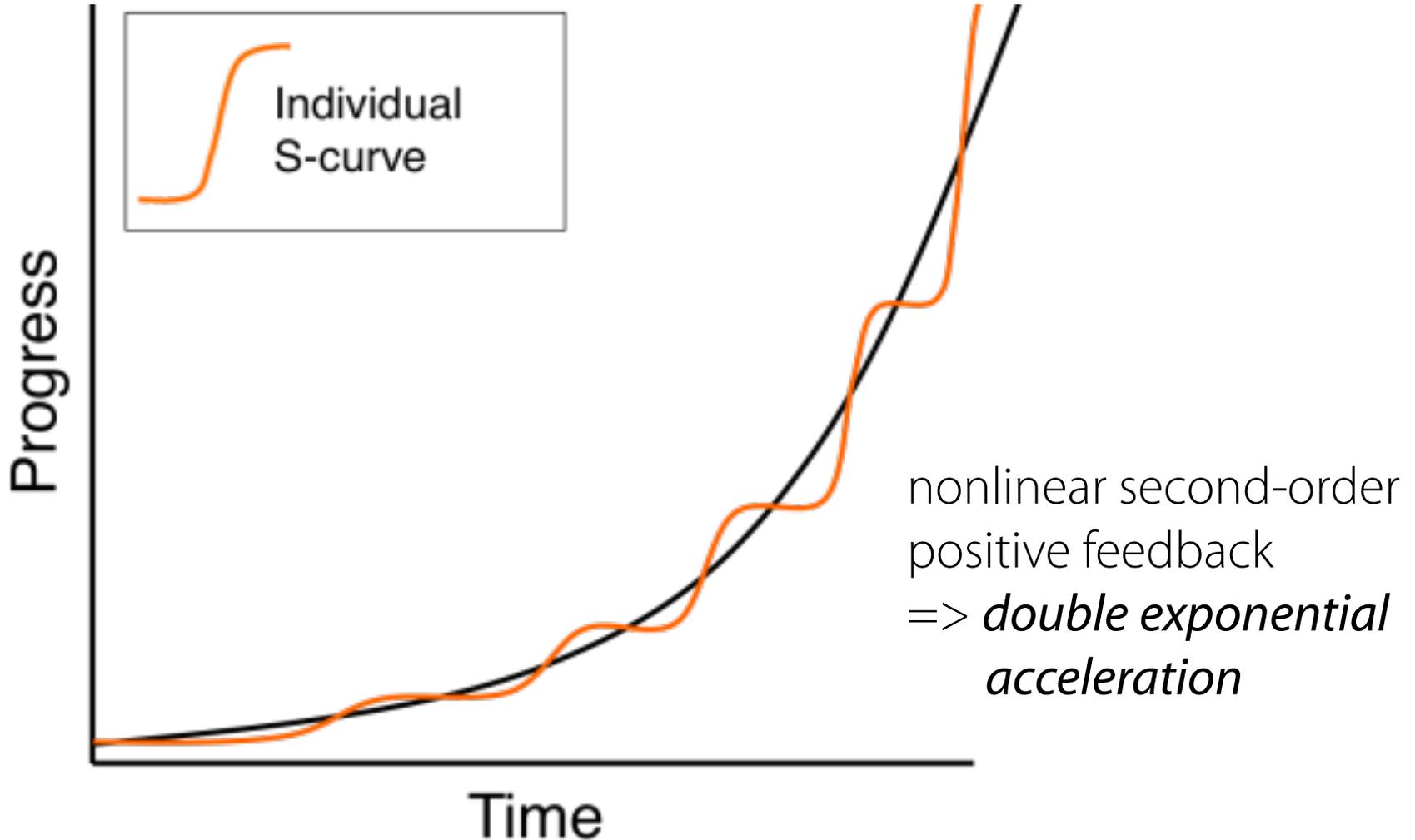
Governments and Legal systems



Explosion of Wealth creation

How fast is this coming?

Kurzweil's Law of Accelerating Returns



Progress at rate of year 2000:

- 25 years in 20th century
- **20 000 years in 21st century**

Facebook went from startup in 2004
to \$100 billion global giant **in 7 years**

iPhone launched in 2007
and transformed the world **in 5 years**

Cryptofinance services launching in 2018
will transform finance **by 2022**

The Future of Cash

The Shift from Physical to Digital

The Hidden Cost of Physical Cash

Developed countries: **1–2% of GDP**

Developing countries: **5–7% of GDP**

— *Reserve Bank of India*

Billions of people are un(der)banked — no access to formal financial services (savings products, insurance, etc.)

The unbanked **lose 15–25% of their savings** every year

Why save if the savings will be lost anyway?

=> The un(der)banked stay poor

The Promise of Digital Cash

Central bank digital currency will lead to an increase in the steady-state level of GDP of almost **3%**.

— *Bank of England*

Digital Cash vs Physical Cash

Physical Cash	Digital Cash
Expensive	Cheap
Insecure	Secure
Local face-to-face only	Local and remote transactions
Simple payments only	Advanced financial services
Untraceable > crime	Traceable > accountability

Central banks shifting to digital systems

The majority of the world's central banks (over 90) are now working on a central bank digital currency.

— *World Economic Forum*

The Money of the Future

Cryptocurrency?

What is Money?

Functions of Money

1. medium of exchange
2. standard of value
3. store of value

Properties of Money

1. fungible
2. durable
3. portable
4. cognizable
5. stable

The Future of Money

- One dominant global reserve currency
- Many local niche currencies

All of the above will be cryptourrencies.

What is a transaction?

A transaction is a legal agreement

> a *contract*

Transaction systems are

contracting systems.

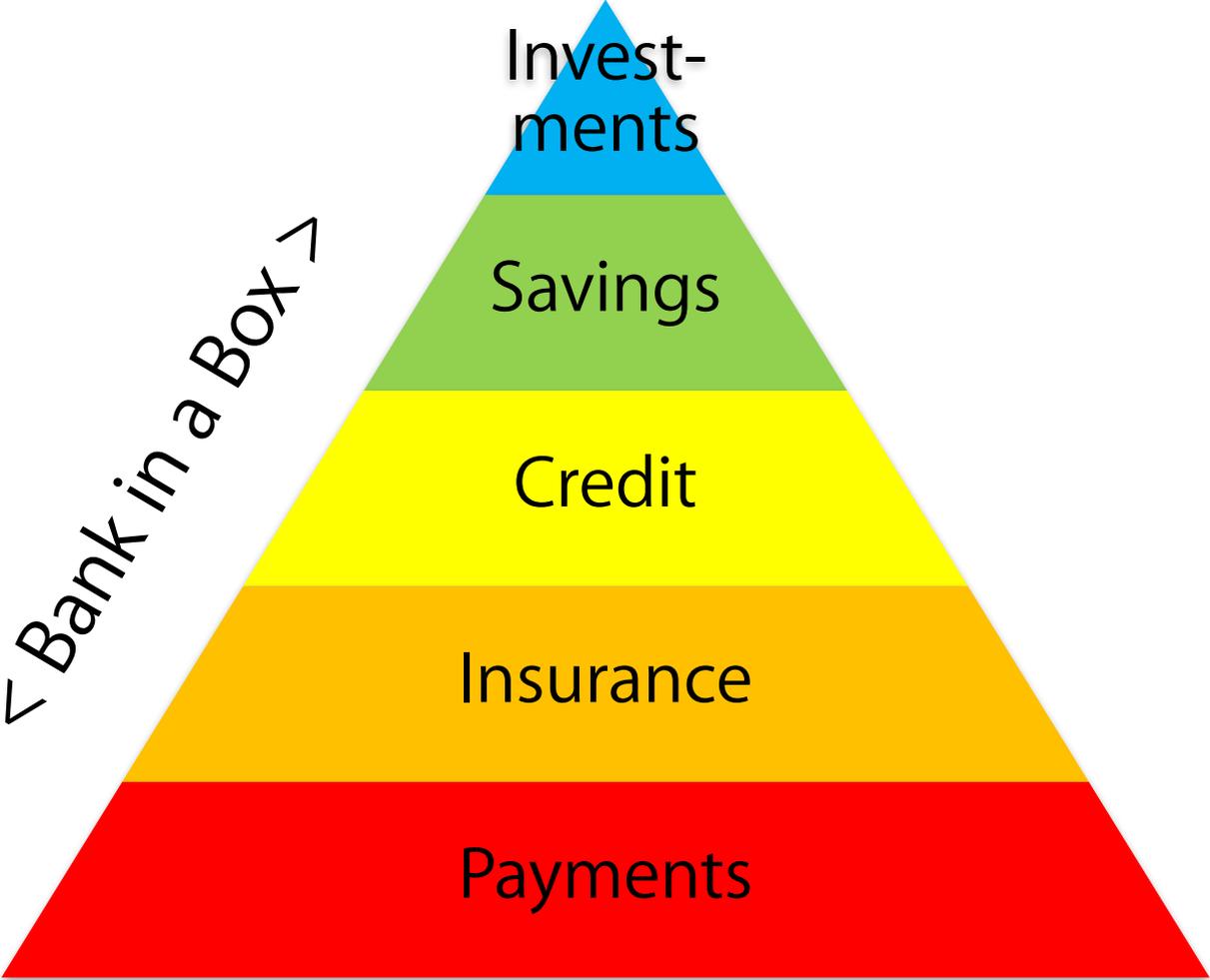
Today's transaction systems can only handle narrow categories of transactions, leading to a ***fragmented, inefficient*** transaction ecosystem.

The universal contracting platforms of the future

will handle all types of transactions
on a *unified, efficient, open* global platform.

A universal platform for global commerce.

Financial Services Pyramid



Standardized Financial Contracts

Major breakthrough

- 5 fundamental building blocks
- 32 standard contracts cover all use cases

*Dramatic simplification, standardization, risk reduction,
and efficiency gains across the financial system*

The Power of Good Law and Good Finance

Over five centuries, from the 900s to the 1400s, the tiny city-state of **Venice** grew to dominate international trade, becoming the richest place on earth.

Why? Because it was a republic run by and for entrepreneurs who understood the value of **a rational, stable legal-financial system** with:

- rule of law
- security of property
- innovations:
 - contracting
 - financial instruments
 - double-entry accounting
 - limited liability entities
- sophisticated markets
- stable currency
- economic and political mobility

Who will be the Venice of the future?

Switzerland?

The Democratization of Finance

A new era in human social evolution

Money set free





free to prosper

Johann Gevers, Founder and CEO
johann.gevers@**monetas.swiss**