CRYPTOCURRENCIES & GLOBAL GOVERNANCE

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RISE OF THE GLOBAL CASINO 1990-2008

World trade in merchandise and services – 4 X

Foreign direct investment – 7 X

International financial assets – 3·5 X

Foreigners share in global equities markets – 3·5 X

INTERNATIONAL MONEY TRANSACTIONS 2016

Global Financial Flows = 114 X World Trade

Global Financial Flows = 1300 X FDI

International Currency Transactions > $150 trillion

Commissions on Individual Transactions > $3 trillion

CHARACTERISTICS OF MONEY

- Social institution promoting economic relationships by TRUST
- Networking tool like language and the Internet
- Money has evolved from physical commodities & precious metals to symbolic forms of fiat currency with no inherent value of their own
- Value of money depends on the size of population which accepts to use it, physical-social-human resources on which it is based, the productive capacity of the economic zone and the level of trust/integrity.

CHARACTERISTICS OF CRYPTOCURRENCIES

- Subclass of digital currencies used as medium of exchange over Internet
- Peer-to-peer transfers without mediation of financial institutions
- Instantaneous electronic transfer and exchange globally
- Transactions recorded with blockchain technology (DTL) by general public
- Use cryptographic algorithms to define when & how money is created
- Ownership can be determined and modified cryptographically
- NOT issued by central banks, credit or e-money institutions
- Transaction records do NOT identify the parties involved
- 1000+ CCs in circulation with total market cap > $350 billion USD

CONVENTIONAL VS CRYPTO CURRENCIES

Conventional Currencies

- Trusted 3rd party intermediaires and record keepers
- Exchange transactions involve time and significant cost
- Exchange transactions involve 2 or more currencies with fluctuating exchange rates

Crypto Currencies

- Blockchain records transactions and records
- Transactions are instantaneous and very low cost
- Transactions can be done in a single currency without conversion

REGULATORY CONCERNS

- No Central Bank control of money supply or interest rates
- Could lower government's seigniorage income
- Could limit government's ability to generate tax revenues
- Anonymity encourages use of CCs for illegal activities
- Soaring value of CCs in 2017 due to speculation, not exchange
- Behavior of CCs mimics characteristics of Ponzi/ pyramid schemes

REGULATORY OPPORTUNITIES

- Central Bank Digital Currencies could provide direct channel for monetary policy without intermediation of banks
- As a replacement for physical currency, it could facilitate use of negative interest rates as a monetary stimulus
- Could enable Central Banks to replace fractional reserve bankings system for money creation, reducing power of private financial institutions

VALUE OF CRYPTO CURRENCIES

- Medium of Exchange
- Financial inclusion
- Utilization & Creation of Economic Potential
- International reserve medium

MEDIUM OF EXCHANGE

- Low cost, high speed medium for international transactions
  - Transaction fees for CCs 0.1% - 1% vs 5.5 to 7% for conventional currencies
  - Transaction time averages 10 minutes vs 3 to 7 days for most international bank transfers
- Businesses with high level of for-ex transactions such as financial services, trading conglomerates, airlines, oil, shipping, automotive, electronics, and cinema could significantly lower costs

FINANCIAL INCLUSION

CCs have the capacity to promote financial inclusion of the 2.5 billion people who do not currently operate bank accounts due to the high cost of bank charges or the paucity of banks in remote areas.

"The technology behind these assets—including blockchain—is an exciting advancement that could help revolutionize fields beyond finance. It could, for example, power financial inclusion by providing new, low-cost payment methods to those who lack bank accounts and in the process empower millions in low-income countries."

Christine Lagarde, IMF Managing Director

UTILIZATION & CREATION OF ECONOMIC POTENTIAL

- Operate on same principle as complementary/local currencies but on a global scale
- Extend trust and credit for new transactions
- Utilize untapped social potential like Uber and AirBnB
- Stimulate fuller utilization of the world's 200 million unemployed
- Support specific socially-beneficial investments e.g. education loans
- Provide funds for socially beneficial investments, e.g. financing UN Sustainable Development Goals
- Support a universal basic minimum income system

INTERNATIONAL RESERVE MEDIUM

- Proposals by UK and USA at Bretton Woods Conference in 1944
- Advocated by numerous Nobel Laureates in Economics since then
- A basket or polyculture of CCs could promote experimentation and moderate the risks of depending on a single monopolistic CC

OTHER ECONOMIC APPLICATIONS OF BLOCKCHAIN

- Cross-border financial transactions in conventional currencies
- Direct intl links between financial institutions without intermediaries
- Enterprise platform for common globally interoperable financial network (e.g. R3's Corda, Linux Hyperledger)
- Client background checks for identity verification
- Instantaneous escrow clearance system
- International payroll services for MNCs
- Smart contracts to avoid multiple claims & new types of firms
- Cybersecurity of customer account information
- Transparent real-time financial reporting, accounting, audit
- Trading platforms, International IPOs, Patent registry

GOVERNANCE CHALLENGES

- The lack of a proper legal structure for stewardship
- Premature legislation or regulation could stifle blockchain innovation
- Business development outpaces scientific research
- Powerful incumbents may usurp unregulated domains
- Lack of diversity of viewpoints may stifle opportunities

LEVELS OF BLOCKCHAIN GOVERNANCE

- TECHNOLOGY PLATFORM – protocols
  - Bitcoin
  - Ethereum – EE Alliance, Microsoft
  - Hyperledger – Linux, IBM, Intel, JP Morgan
- DISTRIBUTED APPLICATIONS – smart contracts, identity
  - Cryptocurrencies, payments, securities clearance, insurance, digital rights, venture funds
  - DAOs – decentralized autonomous organizations (e.g. BitTorrent) – ICOs, b-AirBnB, b-Uber, banking
- ECOSYSTEM
  - Legal regulation
  - Taxation
  - Privacy

BLOCKCHAIN NETWORK GOVERNANCE CONCEPT

TYPES OF NETWORKS

- Standards – platform
- Delivery – applications
- Advocacy – multiple objectives
- Knowledge – education & research
- Policy – privacy, energy
- Watchdog – human rights, corruption
- Networked institutions – WEF, OECD
- Governance – includes all the others

KEY STAKEHOLDERS

- Citizens
- Customers
- Developers
- Employees
- Entrepreneurs
- Government
- Investors
- NGOs

ROLE OF IGOs IN GLOBAL ECONOMIC AND FINANCIAL MANAGEMENT

- Foster global monetary cooperation
- Promote exchange stability
- Support orderly correction of balance of payments problems
- Secure financial stability
- Supervise and liberalize international trade
- Protect human rights – e.g. fair access, privacy, right to information
- Reduce poverty and inequality
- Promote sustainable economic & social well-being of all
- Fight corruption, tax evasion and other forms of crime

CRYPTO-CURRENCIES & GLOBAL GOVERNANCE

- Caution is needed in this nascent period to allow innovation and development of new platforms and applications
- Multilevel governance regime will be needed which encourages multistakeholder network self-governance as far as practicable
- Speculation in CCs can be controlled by tax on high frequency trading and by algorithms that stabilize exchange rate against a basket of currencies
- Ownership transparency can be achieved by linking CCs to bank accounts
- Implementation requires a coalition of nation-states and role for international financial institutions
- Like climate challenge, CCs compel evolution of global governance beyond institutions controlled by nation states.