

مباحثات بین‌المللی

نیشته‌های تخصصی بین‌المللی



موضوع:
الزامات انتشار منکوک و اوراق قرضه بر بستر بلاک چین





سخنران:
هریس عرفان

- ✓ ریاست بخش بانکداری و مالی شرکت خدماتی تخمسی Gateway LLP لندن
- ✓ ریاست هیات مدیره پتل فین تک اسلامی انگلستان، موسس شرکت مشاوره ای فین تک اسلامی Cordoba Capital لندن و عضو هیات مدیره چندین شرکت فین تک دیگر
- ✓ تألیف کتاب پرفروش Heaven's Bankers: Inside the Hidden World of Islamic Finance سال 2014؛ تنها روایتی که درباره این صنعت توسط یک متخصص پیش‌تاز نگاشته شده
- ✓ بنیانگذاری مشترک تیم مالی اسلامی دوپچه بانک آلمان و ریاست اتاق فکر مالی اسلامی بانک
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- ✓ هریس دارای مدرک لیسانس و فوق لیسانس فیزیک از دانشگاه آکسفورد می باشد.

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مکان: تهران، بزرگراه حقانی، نرسیده به چهارراه جهان کودک نیش دیدار شمالی پلاک ۱، شرکت فرابورس ایران



How to decide if you need blockchain^{*}



Discussions about blockchain are mostly hype

What is blockchain?

- A distributed, decentralised public ledger
- The “block” is digital information stored in a public database (the “chain”)
- Blocks store information about transactions, e.g. date, time, value
- Transactions have a unique digital signature
- Each block stores a unique code called a “hash” which identifies it
- Each transaction is stored in a block and that transaction must be verified by a network of computers
- Once verified, the block is given a hash (unique identifying code) and added to the blockchain
- Each computer in the network holds exactly the same copy of the blockchain – there may be millions of these “nodes”
- This form of distributed ledger means it is extremely difficult to manipulate the blockchain (change information)

Advantages of blockchain

- “Trustless” = no need for third party intermediation
- Individual sovereignty over protocol
- Censorship resistant
- Immutable money supply growth and technical parameters

Disadvantages of blockchain

- Much larger processing power for same work
 - Removes all human discretion
 - Not efficient (in most applications)
 - Not cheap (in most applications)
 - Not fast (in most applications)
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- **Blockchain is a technology specifically designed to eliminate third party intermediation.**
 - Making the system trustless requires massive processing power.
 - Centralised solutions are generally faster, cheaper and more efficient where there is a trusted third party intermediary.
 - Every single example of blockchain I have seen involves a **third party**.
 - Gains from decentralisation must be compelling enough to justify extra costs and loss of efficiency (hence why it works for BTC).



Potential uses of blockchain

1. Digital payments eg BTC
2. Smart contracts eg Ethereum
3. Database and record management

Smart contracts

- Ethereum is a smart cryptographic system that encodes contracts into a blockchain to make them self-executing
- There is no possibility of appeal or reversal, and no oversight by courts or police
- If there are bugs in the software this may lead to a defective contract
- Ethereum's ecosystem has failed once before: a hack caused by a design flaw in the code. The code is not law!
- If courts are replaced with code, then programmers have replaced lawyers
- What if something goes wrong? Don't we need courts?
- Possible uses: in the future, when code literacy is common and code is more predictable and reliable. Today, it is mostly hype unless the contracts are simple and the code can be easily verified and understood.

Database and record management

- Blockchain is a reliable database or asset register in the native currency
- This assumes the currency is resistant to attack
- The blockchain is **ONLY AS RELIABLE AS THE PARTY GRANTING PERMISSION TO WRITE TO THE CHAIN**

Using blockchain for smart sukuk

- Gains from decentralisation must be compelling enough to justify extra costs
- Contracts dealing with real world business under legal jurisdictions require legal oversight that **overrides network consensus**
- Centralising the network over a few large nodes owned and operated by large institutions defeats the point
- Some industry participants advocate **SMART SUKUK CONTRACTS** on the Ethereum blockchain
- Smart sukuk for smaller issuers looks like a standardisation project / crowdfunding investment platform
- Standardised contracts reduce legal and structuring costs for issuers
- The platform provider promises to handle regulatory and tax matters: they act as a trusted intermediary!
- The blockchain itself reinforces the contract rules regarding payments and transfer of ownership.

Do we need smart sukuk?

- Standardisation helps advance Islamic finance where the underlying contracts are simple and high volume
- Sukuk are bespoke financing arrangements – contracts by necessity are underpinned by assets and corporate activities. Standardising this arrangement leads to bond-like issuances that ignore the real economy
- Look beyond the hype: **what engineering solution is there to the problem of lack of available finance? Why do we need decentralisation? Do we want standardisation?**
- If efficiency is the aim, blockchain reduces efficiency
- If standardisation is the aim, standardisation resists diversity, limits freedom, impinges on consensual freedom, and imposes a set of risk allocations that may or may not be appropriate.
- Calls for standardisation are, in my view, in most cases currently premature.