Blockchain in Supply Chain Financing

**Motivation / Background**

- Supply Chain Finance (SCF) is a financial solution offered by banks to optimize suppliers' and buyers' working capital, lower financing costs, and improve business efficiency.
- However, the current SCF process still much relies on paper documentation, inefficient processes, and costly operations.
- Blockchain is a shared, decentralized, and secured data structure that may transform supply chain finance landscape.

**Supply Chain Finance** + **Blockchain**

- Security
- Immutability
- Traceability
- Efficiency

**Research question**

What are net value of implementing blockchain-based SCF solution?

**Methodology**

- Literature review & Interview with practitioners
- Map out the SCF processes in 3 scenarios
- Develop ‘Cost-benefit Model’

**Expected Contribution**

- The first academic work to quantify cost and benefits of blockchain-based SCF solution
- Provide quantitative insights for involved parties, such as suppliers, buyers, and banks, for making decision about adoption of blockchain-based SCF solution

**Initial Results**

Potential monetary benefits & cost savings of blockchain in Supply chain financing

- Unlock faster working capital for supplier
- Reduce administration costs
- Cut/reduce service fee by eliminating intermediaries
- Enable cheaper and efficient supplier onboarding process
- Reduce fraud/error/reconciliation costs
- Reduce human costs
- Reduce operating times/eliminate the bottleneck
- Etc.

Let’s adopt blockchain to our supply chain financing system!

Hmm... is it really cost-effective?

Simpson A (The Buyer) Simpson B (The Supplier)