


# Crypto Assets, Capital Flows, and International Cooperation



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Bitcoin prices have been on a roller coaster. After peaking at 19,500 USD last December, the price of bitcoin plummeted to the 6,800 USD range in early February and now is moving around 9,000 USD. While volatile, the market continues to develop in size. The total market capitalization of all crypto assets reached over 800 billion USD earlier this year, with bitcoin taking up one-third of the market. This market capitalization remains modest, however, compared to conventional assets. The market caps of Apple and Samsung Electronics stand at 900 billion and 350 billion USD, respectively, and the gold market remains about ten times bigger than the crypto asset market at its peak. As such, crypto assets may not pose a systematic risk at this point.

Bitcoin was architected to work as a trust-building mechanism on decentralized networks. But the more recognition it receives, the more problems are exposed. The anonymous nature of the bitcoin system gives rise to concerns about money laundering, tax evasion, and other illegal transactions. Moreover, it is questionable whether the system has achieved enough decentralization as originally designed. It has been pointed out that 97% of all bitcoins in circulation are held by only 4% of

bitcoin addresses, whereas 86% of addresses own only 0.6% of all bitcoins, and that a single actor likely drove the bitcoin price from 100 USD to 1,200 USD in two months during 2013.<sup>1,2</sup> We also notice that crypto exchanges are often hacked. All these problems contribute to the public distrust regarding the new system, and make us consider introducing relevant regulations, at least at the level of each country.

Such measures will likely need more work, however, particularly in terms of international cooperation. Even at this early stage of their development, crypto assets make cross-border payments possible without resorting to financial intermediaries. The globe is entering an uncharted territory where international capital flows can be significantly affected by new and unfamiliar channels. Capital flows are now associated with entirely new types of risks, and we should be prepared for the storm around the corner.

Cross-border illegal transactions in crypto assets are made possible due to their nature of anonymity. For example, there have been instances of drugs and other illegal products being traded via bitcoin, through deep-web markets such as the Silk Road. Cross-border exchanges for other assets achieve another layer of anonymity. Last January, a group of inbound travelers to Korea bought 68 kg of gold bars from the Korea Gold Exchange, using funds they had gained from selling their bitcoins in Korea, after which they flew away. Lacking a mechanism for international cooperation, it is not easy to determine whether these assets, bitcoins and gold bars, are related to illegal activities.

Crypto assets are globally traded. They are usually listed on multiple crypto exchanges around the world. When regulation gaps across countries exist, that is, regulations are not coordinated, markets can be segmented and arbitrage trading across borders arises. Following the announcement by Korean government authorities that tighter control measures would be introduced for crypto asset transactions, the bitcoin price gap across borders widened. The premium in the Korean market for crypto assets, often called the "kimchi premium," soared last December and January, reaching over 40% at its peak. This phenomenon is matched by significant changes in currency flows for arbitrage purposes. The total amount of cash holdings of outbound travelers from Korea doubled in 2017 compared to previous years, and the amount in January this year alone has already passed the total for 2016. As of yet,

<sup>1</sup> Credit Suisse (2018.1) "Blockchain 2.0" The Credit Suisse Connections Series.

<sup>2</sup> Gandal et.al. (2018) "Price Manipulation in the Bitcoin Ecosystem" Journal of Monetary Economics. <https://doi.org/10.1016/j.jmoneco.2017.12.004>

the majority of market participants for crypto assets are individuals, but the effect on capital flows will be leveraged as more institutional and professional investors become engaged.

An initial coin offering (ICO) is a new gateway of funding for startups. New crypto assets are published based on new projects, and these are sold in exchange for selected existing crypto assets, such as bitcoin or ethereum. That is, the funding can be global and anonymous, and is also related to capital flows across borders. The total funding on blockchain projects through ICOs amounted to 3.9 billion USD in 2017, which was about twice the amount of funding via venture capitals. This form of funding is already approaching 3 billion USD this year as of March 15. Concerns are being raised regarding the risks from overheated speculations and scam projects, and hence, some countries including China and Korea have banned ICOs. But, overseas cases of ICOs are increasing, circumventing regulations.

As we have seen, there are various capital flow channels associated with crypto assets. The rise of crypto assets will complicate the management of capital flows; therefore a higher level of international coordination will be required. Better regulated trading platforms across borders will deepen the crypto asset market, which enhances its resilience from unexpected turmoil. To build a cooperative and cross-border consistent framework, however, the international community should reach a wider consensus on crypto assets. Relevant research should be carried out before regulations are introduced too hastily. The industrial potential of blockchain technology has not been fully realized and is yet to be understood. We must be careful not to nip this rising technology in the bud. **KIEP**