CRYPTOCURRENCIES: THE NEW TSUNAMI?

Op Ed by Dr Rory Knight

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JOONGANG SUNDAY

JoongAng Sunday is the Sunday edition of the leading Korean language daily newspaper JoongAng Ilbo. It is one of the three largest newspapers in South Korea. The paper also publishes an English edition, Korea JoongAng Daily, in alliance with the International New York Times.

The recent banning of Initial Coin Offerings (ICOs) by the Korean Financial Services Commission (KFSC) has thrust cryptocurrencies firmly into the glare of the spotlight. Korea is not the only country to take such a step. China also recently banned the practice but went even further by closing down cryptocurrency exchanges as well. These actions no doubt represent a well-intentioned attempt to protect consumers. ICOs use crowd funding and cryptocurrencies to raise funds directly from the public, and since the "coins" are not securities they are not subject to the same regulations as traditional Initial Public Offerings (IPOs). ICOs are based merely on a prospectus or whitepaper where investor rights are at best ambiguous. There is therefore potential for abuse by the unscrupulous. Despite these risks, ICOs are the fastest growing source of new capital for start-ups around the world. Banning them outright runs the risk of imposing significant opportunity costs on many start-ups.

The rise of cryptocurrencies

Bitcoin is the original and best-known digital currency. Released as an open source application in 2009 by an anonymous group of developers, it now operates as a cryptocurrency and a means of digital payment. It operates as a peer-to-peer system based on a decentralised ledger known as a blockchain which does not require a central authority, repository or any other intermediation to verify transactions. The development of the cryptographic technology has caused an explosion in digital currencies. There are now nearly one thousand cryptocurrencies in circulation. Table 1 lists the top ten cryptocurrencies by market capitalisation. Although Bitcoin is still the largest by value its competitors are catching fast and as measured by volume have overtaken Bitcoin. In ranks 2 and 3 are Bitcoin competitors Ethereum and Ripple. Ethereum is emerging as a standard in the ICO arena. Ripple with its approximately $10bn capitalisation and alleged $15bn reserves aims to partner with other cryptocurrency systems. Ripple is by volume the most popular in the Korean Won trades. The price of the currency units is extremely volatile on a daily basis but the trend is ever upwards. The combined value of the top 10 is in excess of $136bn with Bitcoin on over $80bn which would place it in rank 115 of all companies. Its price is now approaching $5,000 representing an increase of 378% in 2017, year to date. The price rally has proceeded unabated despite the decisions of the Chinese and Korean regulators. However many leading commentators such as Kenneth Rogoff claim the Bitcoin price is a bubble about to burst. It is obvious that the frenetic creation of so many cryptocurrencies is a symptom of immaturity. The sector is basking in the heady glare of a gold rush. There will of course be losers. However, dismissing the total value of the sector as a price bubble could be mistaken. Collectively, the market may be underestimating the value of this disruptive sector. If - as seems likely - cryptocurrencies signal the end of banks as we know them, the sector could be worth considerably more. How this value should be allocated across contenders is of course currently uncertain. There are early signs of consolidation and over the next 18 months the number of cryptocurrencies will inevitably reduce. Table 1 reports the price and market capitalisations of the top 10, this list is likely to contain the two or three eventual winners as the battle for the top spots works itself out. Given this, regulatory intervention may be premature. Providing the public with accurate and adequate information on the risks may be sufficient for now.

The dangers of anonymity

The anonymity of the blockchain system represents both its strength and its weakness - a strength in that participants are protected which allows full transparency on the transactions but a weakness in that there are nagging fears that the system will be used by fraudsters. Fraudsters have access to real cash too, and that has not been banned yet – although Larry Summers is calling for that too. A more sensible approach may be to ensure that market participants are identifiable if not identified by some sort of KYC (Know Your Customer) arrangement. However such a scheme would be self-defeating if it burdened the new system with the same regulations that hold back innovation in mainstream banking. This is a new world and requires new rules. The current SWIFT system of international payments, for instance, takes two to three days to complete a transaction at exorbitant cost with some opacity on exchange rates. This compares to 15 to 20 minutes at almost no cost at an observable exchange rate using a cryptocurrency. Given this, how long can SWIFT hope to survive?

Crypto exchanges proliferate

The rise of cryptocurrencies in turn has generated a demand for exchanges on which to trade them. The market has not disappointed and has provided these by the dozen. There are now reported to be more than 113 active cryptocurrency exchanges trading in excess of 5,000 currency pairings with a daily volume approaching $3 trillion. Cryptocurrency exchanges allow participants to trade a cryptocurrency for another cryptocurrency or a real currency. These bilateral trades are known as pairings. The top 10 exchanges by recent trading volume are reported in Table 2. The two largest volume exchanges are Korean although traders are able to participate from anywhere in the world. The most popular pairwise trading on the Korean exchanges is the Ripple/Won (XRP/KRW). It is interesting that the Korean Won/Ripple pairing is the most traded pairing followed by the Bitcoin/US dollar (BTC/USD). Bithumb and Coinone, the top two, are Korean and both allow trading of many pairings. In third place is Bitfinex a Hong Kong exchange where the BTC/USD is the most traded pairing. The most popular trade on Hitbtc, the Hong Kong exchange ranked 5th, is an all cryptocurrency pairing of Ethereum and Bitcoin (ETH/BTC). The other Korean exchange in the top 10 is Korbit on which the Bitcoin/US Dollar is the most traded pairing. It is likely that only a few of these exchanges will survive in the face of such intense competition. This augurs well for users. The extraordinary demand as reflected in the high trading volumes indicates a healthy future for cryptocurrencies. Its success, however, will depend on the emergence of well-structured and cost efficient trading platforms.

ICOs dominate venture funding

The emergence of cryptocurrencies hand-in-hand with exchanges on which to trade them has enabled the proliferation of the ICO. An ICO allows any corporation - usually a start-up - to raise capital using crowdfunding by issuing its own coins (tokens) for pre-existing traded cryptocurrencies. In turn these proprietary tokens may themselves be traded on the cryptocurrency exchanges. In addition many of the cryptocurrency exchanges have been funded by ICOs and so the circle is complete. The current year has seen an explosion in ICOs with 175 year to date. These have raised $2.7bn worth of capital which is more than that raised by early stage venture capital funding. Table 3 lists the top 10 ICOs so far this year. The largest have raised over a quarter of a billion dollars each in a very short time interval or duration. The two largest FileCoin and Tezos raised the funds as Bitcoin and Erethreum. The fastest raise in the top 10 by size is Bancor in Switzerland which raised $153 million in 3 hours. Ethereum is emerging as the standard in the ICO market both in terms of the issuing currency and the underlying blockchain for trading the newly issued coins created by the ICO. Further evidence of the competition that Bitcoin faces. The major concern about ICOs expressed by many financial regulators is the protection of investors. Typically, investors in ICOs receive some right to services or other benefits which are very often poorly defined. Clearly, these are risky bets with almost no consumer protection. Korea, as stated, is on the leading edge of the emergence of cryptocurrencies, hosting three of the top ten most active cryptocurrency exchanges. It is understandable that the Korean Financial Services Commission was concerned enough to ban ICOs. Japan, by contrast, has recently adopted a more welcoming policy in recognising Bitcoin as legal tender and allowing the formal registration of eleven cryptocurrency exchanges. Perhaps a more comprehensive approach to regulating the whole cryptocurrency ecosystem could be created that would give Korea a competitive advantage and secure its position as a global financial centre with an innovative approach to regulating cryptocurrencies. Korea is well placed to lead the field in this arena if it acts thoughtfully to create an environment which protects investors without smothering innovation.

Bankers beware

JP Morgan CEO Jamie Dimon denounced Bitcoin, the leading cryptocurrency by value, as a fraud that will be closed down. His concern is understandable though his conclusion is likely to be wide of the mark. In fairness, his concerns about some aspects of Bitcoin are well founded as mentioned above. However this tsunami of innovation cannot be willed away by bankers or regulators. Many luddite bankers will no doubt call for the protection of the regulators to shut down the rise of this new technology. The more enlightened such as UBS will seek to embrace the new world. UBS has invited a consortium of banks to join their blockchain initiative Utility Settlement Coin (USC). The USC is not designed to be a new cryptocurrency as such but digital currency for settling and clearing transactions. It is expected to be launched in 2018.

Cryptocurrencies, the blockchain cryptography technology underlying them and the exchanges on which they are traded represent the most significant financial innovation since the invention of money itself. They are the most powerful force for financial disintermediation, and their emergence is unstoppable.

In the decade since the financial crisis banks around the world have been drowned in regulation. Banks have been neither innovative nor customer friendly. Now they face a new nemesis in the shape of a technological innovation emerging outside banking. They have been signally unresponsive. Banks should be worried. The signs are clear. Cryptocurrencies are here to stay. - perhaps they should be treated as a new asset class.

TABLE 1. Top 10 Cryptocurrencies

Prices at 10th October, 2017.

Rank	Cryptocurrency	Code	Price per coin $	Market Capitalisation $MM
1	Bitcoin	BTC	4,808.70	80.41
2	Ethereum	ETH	302.85	28.91
3	Ripple	XRP	0.25	9.69
4	Bitcoin Cash	BCH	319.88	5.35
5	Litecoin	LTC	50.89	2.71
6	Dash	DASH	285.99	2.18
7	Nem	XEM	0.21	1.94
8	Neo	NEO	29.80	1.48
9	Iota	MIOTA	0.48	1.34
10	Monero	XMR	86.67	1.32

TABLE 2. Top 10 Cryptocurrency Exchanges

Trading volume average rounded 1st to 10th October, 2017.

Rank	Cryptocurrency Exchange	Average daily volume $ MM	Country	Largest Volume pairing
1	Bithumb	500	Korea	XRP/KRW
2	Coinone	495	Korea	XRP/KRW
3	Bitfinex	490	Hong Kong	BTC/USD
4	Bittrex	200	US	BTC/USDT
5	HitBTC	180	Hong Kong	BCC/BTC
6	Poloinex	120	US	ETH/BTC
7	Kraken	115	US	BTC/EUR
8	CoinbaseGDAX	100	US	BTC/USD
9	Bitstamp	80	UK	BTC/USD
10	Korbit	75	Korea	BTC/KRW

TABLE 3. Top 10 Initial Coin Offerings (ICOs)

[1]SOURCE: coinschedule.com

Rank	ICO	Value raised[1] $ MM	Principal currency raised	Duration weeks	Country
1	FileCoin	257	BTC/ETH	4	US
2	Tezos	232	BTC/ETH	2	Switzerland
3	Eos	185	ETH	52	Cayman I.
4	Bancor	153	ETH	3 hours	Switzerland
5	Kin	97	ETH	2	Canada
6	Status	90	ETH	17 hours	Switzerland
7	TenX	64	ETH	7 minutes	Singapore
8	MobileGo	53	ETH	4	US
9	Kybernetwork	48	ETH	2 days	Singapore
10	Mcap	45	BTC	On going	Dubai