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The Future Of Banking: Cryptocurrencies Will Need Some Rules To Change The Game

Primary Credit Analyst:
Mohamed Damak, Dubai (971) 4-372-7153; mohamed.damak@spglobal.com

Secondary Contacts:
Cihan Duran, Frankfurt (49) 69-33-999-242; cihan.duran@spglobal.com
Alexandre Birry, London (44) 20-7176-7108; alexandre.birry@spglobal.com
Thierry Grunspan, New York (1) 212-438-1441; thierry.grunspan@spglobal.com
Markus W Schmaus, Frankfurt (49) 69-33-999-155; markus.schmaus@spglobal.com
Mira A Dalal, New York 212-438-8223; mira.dalal@spglobal.com
Jean-Michel Six, Paris (33) 1-4420-6705; jean-michel.six@spglobal.com

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The Future Of Banking: Cryptocurrencies Will Need Some Rules To Change The Game

Financial markets are abuzz with questions regarding the nature and viability of digital currencies. As far as rated financial institutions' risk exposure is concerned, however, S&P Global Ratings believes that it is much ado about nothing. In our opinion, in its current version, a cryptocurrency is a speculative instrument, and a collapse in its market value would be just a ripple across the financial services industry, still too small to disturb stability or affect the creditworthiness of banks we rate.

Cryptocurrencies are digital currencies that use encryption techniques to regulate the generation of units of currency and verify the transfer of funds. They have attracted a significant amount of attention from the market over the past 12 months. Cryptocurrencies are independent from central banks, and the risk of them infiltrating the traditional financial systems, exposing them to a possible bubble burst, is raising eyebrows at regulators.

Overview

- We view cryptocurrencies as a speculative instrument that would have an insignificant effect on global financial stability if its value were to collapse.
- If the value of cryptocurrencies dropped substantially, we expect retail investors would endure most of the impact, while rated banks wouldn't feel the hit since they are largely insulated thanks to their limited direct and indirect exposures and cautious approach so far.
- The future of cryptocurrencies will depend on the coordinated approach of global regulators and policymakers, but we note that their underpinning technology could strengthen operations, notably with regards to money transfers and financial market infrastructure companies.

We believe that cryptocurrencies, in their current version, have many characteristics of a speculative instrument. We think that retail investors would be the first to bear the brunt in the event of a collapse in their market value. We expect banks rated by S&P Global Ratings to be largely insulated, given that their direct or indirect exposure to cryptocurrencies appears to remain limited.

If cryptocurrencies become an asset class, the impact on financial services firms will be more gradual. That is because we believe that their future success will largely depend on the coordinated approach of global regulators and policymakers to regulate and enhance market participants' confidence in these instruments. More importantly, we believe that blockchain technology--which is what underpins cryptocurrencies, enabling the creation of a shared digital transaction ledger--could be a positive disrupter for various financial value-chains. If widely adopted, blockchain could have a meaningful and lasting impact on the celerity, traceability and cost of financial transactions. The financial market infrastructure segment might also see medium-term benefit from cryptocurrencies and blockchain through the launch of new income-generating products, such as futures or exchanges based on cryptocurrencies, or the replacement of current practices by new ones based on blockchain.

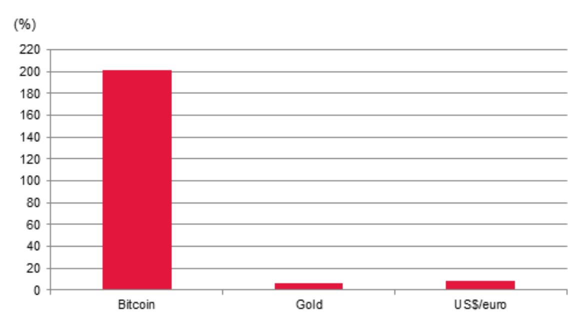
A Speculative Bet On Future Value

In our view, cryptocurrencies do not meet the basic two requisites of a currency: An effective mean of exchange and an effective store of value. First, cryptocurrencies are still not widely accepted as payment instruments, although the list of companies accepting them have increased over the past few years. Second, the volatility that we have observed over the past 12 months in the valuation of some cryptocurrencies and their market cap is the most meaningful evidence that they fail the test of value storage (see Chart 1). For example, in the first 10 days of February 2018, the market cap of cryptocurrencies dropped by around $185 billion from Jan. 28, 2018.

We also don't view cryptocurrencies as an asset class. For starters, the total outstanding aren't big enough yet. At Feb. 10, 2018, there were 1,523 outstanding cryptocurrencies with a market cap of around $394 billion (see Chart 2). By way of comparison, at the same date, this is well below the market capitalization of Apple Inc., around $794 billion. The oldest and most renowned cryptocurrency is Bitcoin, which emerged in the aftermath of the global financial crisis as a decentralized peer-to-peer payment instrument. It intended to restore the credibility of the payment system by removing intermediaries such as banks and central banks from the equation and relying on end users' powered network. Bitcoin was originally used as a means of payment for transactions but its credibility dipped when it was allegedly associated with illegal transactions. Bitcoin and other cryptocurrencies reemerged in 2017 when their market cap increased exponentially. However, we believe that their usage changed from a payment instrument to a speculative instrument when buyers began to largely bet on their future value instead of using them for transactions.

Chart 1

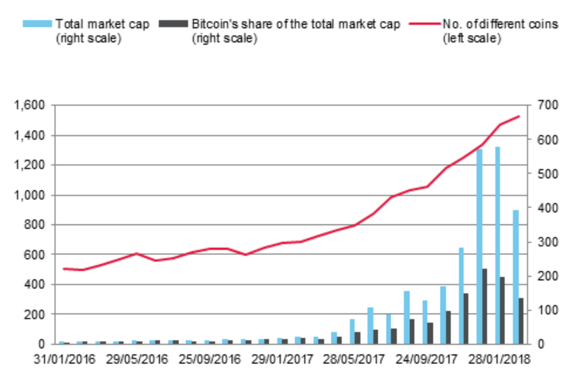
Volatility Is The Name Of The Game



Note: Volatility is approximated by the standard deviation divided by the average of the price over April 2013-February 2018. Source: http://coinmarketcap.com, S&P Global Ratings, and the World Gold Council.

Chart 2

Cryptocurrencies In Numbers



Source: http://www.coinmarketcap.com.

Bubble Or No Bubble

Cryptocurrencies are most like a speculative instrument, versus an asset class or a currency. We are of the view that the current version has many characteristics of a traditional bubble, mainly based on the following three reasons:

- The offer of the oldest cryptocurrency (Bitcoin) is limited by definition to 21 million coins of which around 16.9 million are already in circulation. One could argue that an infinite number of cryptocurrencies could be created, but we believe that this process takes time, as these currencies need to earn their credibility. As such, the top 10 cryptocurrencies represent roughly 80% of their total market cap (see Chart 3).
- The volatility of the value of cryptocurrencies is extremely high. Over the past 12 months, cryptocurrencies' market cap has increased 33x from $17 billion to $579 billion at Jan. 28, 2018 compared with an increase of 1.4X over 2014-2016. In the first 10 days of February 2018, the market cap dropped by around $185 billion reaching $394 billion. That was reportedly underpinned by the crackdown of some countries, particularly China and South Korea. Moreover, the single-name concentration in the holdings of these instruments is high. For example, at Feb. 10, 2018, 1,650 users (addresses) with more than 1,000 Bitcoins in their portfolio controlled as much Bitcoins as the 26.3 million users with less than 100 Bitcoins in their portfolios (Chart 4). We believe that this concentration, along with the unregulated nature of this instrument makes it prone to market manipulation for example.
- Finally, cryptocurrencies do not benefit from the backing of cash flows or a credible central issuer, which would give it an intrinsic value. Market perception/sentiment rather drives their valuation.

Chart 3

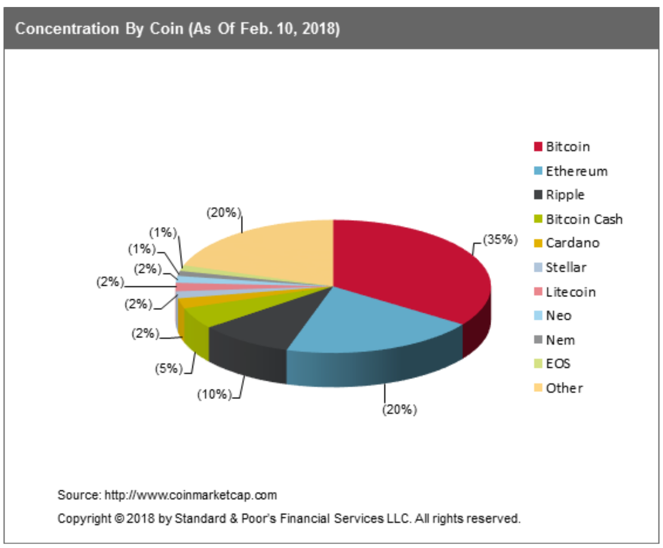
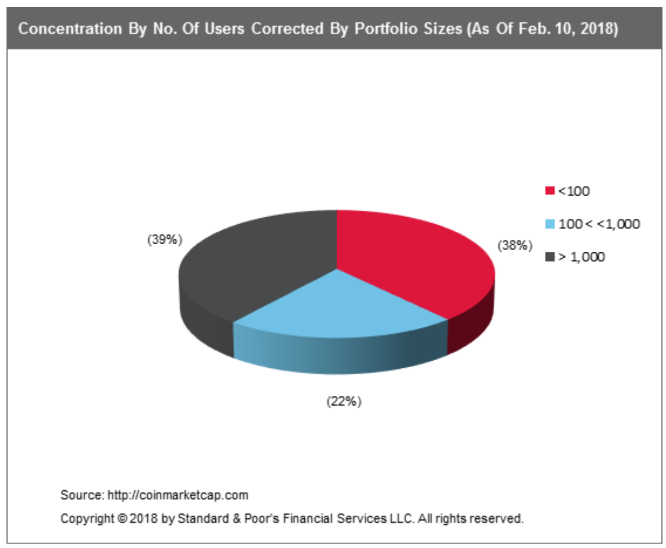


Chart 4



If cryptocurrencies were to take off and become an effective currency issued in a decentralized manner, the impact on monetary policy implementation would be deep, since central banks might lose their ability to control money supply. Conversely, if central banks were to back cryptocurrencies, the central banks would be better positioned to predict money demand and therefore adjust supply accordingly. It is still too early to tell in which direction this instruments will move.

Rated Banks Largely Unscathed By A Collapse In Value

In the event of a correction of the cryptocurrencies' valuation, we think that retail investors would feel most of the heat, because we understand that these investors contribute to most of the activity on this market. While there are no official statistics on the holdings of cryptocurrencies by countries, investors in the U.S., China, Japan, and South Korea are reportedly the most exposed. Positively, the relative contribution of cryptocurrencies in the global wealth formation is still limited. For example, the global stock market capitalization reached approximately $80 trillion at year-end 2017, meaning that cryptocurrencies are still a marginal instrument. Therefore, we do not foresee any systemic wealth effect risk. From a risk perspective, because of the lack of regulation and possible use of cryptocurrencies in illegal activities, banks might expose themselves to operational and legal risks, if regulators accuse them of helping money laundering, for instance. Recent cases show how expensive this could be for banks.

Because of the high volatility of their valuations, cryptocurrencies could also pose risks for financial advisers in dealing with their clients. Merrill Lynch, for example, banned its clients' advisors from trading Bitcoin-related investments. Finally, other channels of transmission to banks include credit cards and brokerage operations on behalf of clients. Whenever retail investors fund their cryptocurrencies purchases with credit cards, the deterioration of clients' creditworthiness following a slump in cryptocurrencies prices could drive an increase in delinquency rates. Faced with this risk, many U.S. issuers--such as Citigroup, Bank of America, Discover, and Capital One--recently decided to prohibit their customers from purchasing Bitcoin with their credit cards. European banks, such as Lloyds, are also following this trend. U.S. brokers--including TD Ameritrade, which was the first to allow its clients to trade Bitcoin futures in the U.S.--are also exposed to credit risk whenever clients trading Bitcoin futures are unable to meet their margin calls and their positions are liquidated at a loss. This risk is limited so far, however, owing to the low open interest in Bitcoin futures.

Beyond these immediate impacts, we think that the creation of a cryptocurrency backed by a central bank that gives citizens direct access to this central bank's ledger is potentially a game-changer to banks as we know them. This does not mean that banks will disappear but it would mean significant changes in the way they do business.

Non-Bank Financial Institutions Could Benefit

Because non-bank financial institutions have, generally, greater flexibility than banks, they are both more adept and more vulnerable to the rise of cryptocurrencies and bitcoin as a new instrument. From a business perspective, investment banks and stock exchanges around the world are somewhat affected by the development of Initial Coin Offerings (ICOs). ICOs allow companies to raise capital to fund, generally start-ups, at the very early stage of its creation. Currently unregulated, some market participants view ICOs as an alternative way to bypass the regulated capital raising processes (see Table 1). Non-bank financial institutions, particularly financial market infrastructure (FMI) companies, enjoy a certain level of revenue protection from the customary, standardized capital-raising process, which generally requires coordination between underwriters, investment banks, and regulators. ICOs circumvent the traditional roles of underwriting, regulatory oversight, and voting privileges. The unregulated landscape of cryptocurrencies and ICOs could threaten this.

Table 1

The Differences Between IPOS And ICOs

	IPO	ICO
Document	Prospectus	Whitepaper
Purchase	Equity	Tokens
Payment	Fiat money	Cryptocurrencies
Compensation	Ownership and potential dividend	Product offering via Tokens

Table 1

The Differences Between IPOS And ICOs (cont.)

	IPO	ICO
Legal environment	Heavily regulated	Unregulated
Liquidity	Generally high	Uncertain
Investor base	Mainly institutional investors	Open to all participants
Advisors	Investment banks, lawyers, etc.	Anyone

ICOs only attracted approximately $4 billion of capital worldwide in 2017, which is less than 15% of total capital raised in IPOs at the New York Stock Exchange and around 2% of the total capital raised in IPOs globally. However, the pace of ICOs accelerated in the last quarter of 2017. Some countries such as China or South Korea have prohibited ICOs, while others have embraced it. The SEC announced its first-ever enforcement action against an ICO on Dec. 4, 2017 and in January, froze the assets of an ICO worth an estimated $600 million, with increasing regulation in the U.S. likely. We expect that if regulation diminished the anonymity associated with cryptocurrencies, the assets' proliferation would decline. Investor engagement seems supported by cryptocurrencies' position outside the formal banking system.

Despite lingering reputational risk with cryptocurrencies, well-established FMIs have expanded their product portfolio to this new asset class. High-frequency traders have recently moved into the space by exploiting arbitrage opportunities across crypto-currencies exchanges. U.S. exchanges including Cboe Global Markets and CME Group Inc. launched Bitcoin futures contracts in December 2017, with Nasdaq Inc. planning to debut a cryptocurrency contract in 2018. While these adoptions are not likely to move credit ratings at this stage, they certainly can inform S&P Global Ratings' assessment of business diversity and risk appetite.

Policymakers Hold The Key

We have observed a differentiated reaction from some regulators/policymakers toward cryptocurrencies. Some of them have recognized these instruments as a means of exchange while others have banned them. Some countries have also introduced tax friendly regulations for cryptocurrencies such as Japan, which reportedly eliminated consumption tax on Bitcoin trading in 2017. Others have reportedly banned them such as Bolivia. To date, European authorities have mainly called for investors' caution when dealing with cryptocurrencies. We believe that, if the market is to take up, it will imply great regulatory scrutiny and may be on the agenda of G20 or other supranational bodies. Some of the key risks that regulations may try to address include consumer protection, impeding illegal activity, and central bank backing

The short history of cryptocurrencies has been marked by few episodes of instability. One of the most important was in 2014 with the collapse of the largest cryptocurrency exchange (Mt. Gox in Japan) that triggered a loss of around $450 million for its users. More recently, hackers have reportedly stolen around $530 million of cryptocurrencies from another exchange. Finally, in the first 10 days of this month, the market cap of cryptocurrencies dropped by around $185 billion from the level at Jan. 28, 2018. The response to such risks could take the form of regulation to ensure the financial solidity of cryptocurrencies exchange and their technical readiness to encounter cyber risks. Moreover, the fact that few investors, reportedly, hold a large number of these instruments could result in new regulation to mitigate the risks related to manipulating their value.

The anonymity behind cryptocurrencies make them an easy tool for illegal activities. The use of Bitcoin in Silk Road, an online black market for selling illegal drugs is an example. While the traceability of transactions is possible through the cryptocurrencies ledger, the anonymity of end users makes it an attractive domain for potential illegal activity, money launderers or terrorists. We acknowledge that supporters of cryptocurrencies have used the same argument for cash or even the global financial system. However, the existence of anti-money-laundering legislations and the scrutiny of regulators are supposed to help minimize the risk. Enforcing similar regulation for cryptocurrencies could help reinforcing their credibility.

Many central banks are carefully looking at cryptocurrencies and exploring the potential for creation of a central bank backed cryptocurrency. Japan's Mitsubishi UFJ Financial Group, Inc. (MUFG) announced plans to launch a cryptocurrency exchange pegged to the Japanese yen, and Venezuela intends to begin selling a petroleum-linked cryptocurrency on February 20, with each coin valued at one barrel of Venezuelan crude oil. In some markets, we think that a framework backed by authorities could boost the general public adoption and the new currency might be used as a means of exchange or a currency instead of an investment asset class or a speculative instrument. We also believe that a coordinated approach among global regulators could help ward off any potential arbitrage.

Blockchain Could Drive A Positive Disruption

Blockchain technology enables the creation of a shared digital transaction ledger. We believe that, at the very least, blockchain presents an opportunity for financial institutions to cut costs by streamlining back-office operations; shortening clearing and settlement times; facilitating payments; and even generating new revenue streams. Blockchain can be used for many banking services, including bank payments, trade finance, money transfer and post-trade services. Having a real-time standardized view of transaction data without needing to conduct multiple reconciliations would remove many of the inefficiencies that hinder the financial system, and could reduce costs considerably.

Whether cryptocurrencies take off or not, we believe that banks' role in the payment business might change materially in the next decade. Some market participants are challenging the benefit of blockchain, arguing that the technology was created a decade ago and has not yet disrupted the financial system in a meaningful manner. That said, we project that, because of this technology and the growth in other peer-to-peer services, smaller and more innovative market participants could have more opportunities to challenge established banking groups' existing product offering.

Related Research

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- The Future of Banking: Could Fintech Disrupt Gulf Cooperation Council Banks' Business Models?, Oct. 16, 2017
- The Future of Banking: Is PSD2 Yet Another Threat To Revenues In Europe?, May 16, 2017
- The Future of Banking: Blockchain Can Reshape The Financial System, Oct. 26, 2016
- The Future of Banking: Nordic Banks Looking Svelte In The Fintech Race, June 14, 2016
- The Future of Banking: How Fintech Could Disrupt Bank Ratings, Dec. 15, 2015

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Additional Contact:
Financial Institutions Ratings Europe; FIG_Europe@spglobal.com