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Ripple – the big story of Q4 2017

Ripple is one of the most talked-about phenomena in the cryptocurrency world, and its profile reached new heights in Q4 2017, both because of its own conference (in the same place and the same time as that of SWIFT, the organisation Ripple aims to take down), its own PR machine, and the price of its XRP currency – rising from USD0.25 on 10th October to USD2.25 at the end of the year.

But because XRP is a "commodity" and not a form of money, the monetary authorities take no position on it. Because XRP is not listed on a regulated stock exchange, Ripple is able to talk about it and deal in it in a way that is beyond the scope of investment regulators. People part with real money (in a fiat currency) to acquire XRP, but XRP cannot be spent in shops: it is not legal tender.

As such XRP – and Ripple – float in the ether (though not in the ether-eum).

Ripple's supposed core business is to displace SWIFT as the main carrier of cross-border payments, but its capabilities and market penetration in this activity are obscure. This article of January 29th this year gives the impression of a strong uptick in market penetration:
https://www.coindesk.com/words-real-companies-talk-ripple-xrp-pilots/?utm_content=buffer74b7e&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

There is nothing here, however, that says either how it works or what it does better than what existed before. Nor is there an indication of the business volumes and revenues that may accrue as a result of these new link-ups.

The Santander UK trial of Ripple was banal and involved Santander extracting SWIFT MT103 messages from their core system, and re-routing them into Ripple and not into Santander's gateway to SWIFT; at the other end Santander's correspondent extracted the message from Ripple, put it into its MT103 processing flow, debited Santander's USD account in its books and sent the payment out through the Fedwire system, through which all banks in the USA must be directly or indirectly reachable.

This arrangement permitted the claim that Ripple could reach any bank in the USA instantly, even though this instancy was dependent upon many other parties having suitably configured their wire transfer processing and clearing system membership well before Ripple existed.

SWIFT would have delivered the MT103 instantly to Santander's correspondent, and all that has been saved is the SWIFT cross-border Traffic Fee of USD0.15 but not any of the associated costs.

A benefit to Santander could be demonstrated from the pilot, as long as the costs of running the pilot were excluded. A benefit-in-production for Santander could be demonstrated as long as the incremental cost was suppressed of the inefficiency of building a new way of doing something that could be done already, and which would not be de-commissioned even if the bank had the Ripple channel working: Santander UK could never close down its SWIFT infrastructure for as long as SWIFT existed.

The main costs of cross-border payments fall outside the scope of the pilot, which was solely about the transmission of the payment from one institution to another, and the main costs are not mitigated by selecting a new bank-to-bank channel, that is unless there was some way of eliminating the need to settle payments through a correspondent and a clearing system. For that, all institutions would need to be directly connected to Ripple and there would need to be a built-in settlement mechanism.

This latter point appears to be the role of XRP, although it was not involved in the Santander pilot. XRP is Ripple's in-house cryptocurrency and is presented as a settlement medium, one that would stand in for the usage of multiple fiat currencies. XRP can thus be construed as an "Esperanto" settlement currency along the lines of Special Drawing Rights, the European Unit of Account or the European Currency Unit (as was). The bank can then either pay and receive this settlement medium, or get it paid out or pay it in through a fiat currency at the then-current rate of exchange.

SDR, EUA and ECU are/were basket currencies, composed of weightings of fiat currencies, and so the exchange rate of the basket currency against any fiat currency would move in line with:

- The volatility of the respective fiat currency against the other currencies in the basket, if the fiat currency was part of the basket (e.g. USD against SDR); or
- The volatility of the respective fiat currency against all the currencies in the basket, if the fiat currency was not part of the basket (e.g. USD against ECU);

XRP's problems in this regard are firstly that it is not a fiat currency, secondly and as a result it is not part of any basket currencies, and thirdly and because of Ripple's own policies its price – and therefore its value expressed in any fiat currency - is very volatile.

A bank making and receiving small value payments in multiple fiat currencies might be willing to settle them in a "basket currency" (like SDR) or in a cryptocurrency. The bank will be applying a significant bid-offer spread around the interbank exchange rate to the customer trade in the fiat currency. A modest rate fluctuation in the value of the settlement currency against the fiat currency will be immaterial, especially if the bank has a flow of offsetting payments and receipts in the same fiat currency.

Having the ongoing balance of several currencies against one another being held in XRP saves effort in managing multiple balances that are each well below the radar of the interbank spot traders. This brackets XRP's value to the area of small foreign payments where foreign exchange is needed (i.e. where the currency of the payment is not the currency of the debit/credit account). The value pertains to running balances below the trigger level at which the bank's dealers would be alerted that the balance needed to be brought down.

However, even this potential benefit evaporates when XRP rises and falls dramatically in value, beyond the bid-offer spread the bank applies to the customer trades.

We can assume that there are a number of use cases where financial institutions are both using Ripple's core service of payment message transmission (without the SWIFT Traffic Fee) and are using XRP as the settlement medium for those payments. In consequence we can infer that a certain number of units of XRP are owned by these same financial institutions. Exact figures for the number of XRP units owned under this category have not been made available, however.

In addition to positioning XRP as the settlement medium through which Ripple's customers should transact under Ripple's core "payment message transmission" service, Ripple has started to offer XRP as an "investment" in its own right:
https://www.quora.com/Is-Ripple-XRP-a-good-investment-How-do-I-buy-Ripple

In other words private individuals and institutions can buy XRP units without using Ripple's core service. As the number of units held by core service users is unclear, so the number owned by third-party investors is also unclear, as both sets of users draw their XRP units from the same category of the released units that are not part of Ripple's "war chest".

The interest of third-party investors in XRP is purely speculative: they want volatility, the opposite of what banks will want if they settle low-value payments in XRP.

Ripple has therefore positioned XRP in a mutually exclusive way towards its two principle user groups: third-party investors want price volatility, and core service users want price stability.

Ripple has gone further and has even "mined" XRP for itself and put it in its own "vault", as per this article on 10th October 2017:
https://www.ft.com/content/8dcd3fa4-adbb-11e7-beba-5521c713abf4

"While the market value of XRP has risen close to $10bn, there is a further $15bn of the cryptocurrency that Ripple holds in reserve. "Ripple owns about $15bn of XRP and we will use that to ensure that we continue to advance," Mr Garlinghouse [Brad Garlinghouse, Ripple CEO] said".

These words would imply that Ripple owns 150% of the number of units owned by core service users and third-party investors combined. What is confusing is that on the same day this article quoted the price of one XRP unit at USD0.25:
https://bravenewcoin.com/news/ripple-price-analysis-trend-reversal-likely/

A USD25 billion market value on a price-per-unit of USD0.25 would infer units-in-issue of 100 billion, of which Ripple was claiming to own 60%, or 60 billion, with 40 billion owned by others. This does not tally with the explanation given in The Guardian at the end of 2017 (see below).

However, the same Bravenewcoin article on 10th October went on to state: "Expect a second conclusive announcement from XRP CEO Brad Garlinghouse regarding the 55 billion XRP Ripple the company is sitting on. In May, Garlinghouse announced that the company would be placing the entire amount in escrow by the end of the 2017, releasing 1 billion XRP a month".

The announcement quoted from May stated that Ripple expected to place 55 billion units in escrow:
https://ripple.com/insights/ripple-to-place-55-billion-xrp-in-escrow-to-ensure-certainty-into-total-xrp-supply/

Confusion may easily have arisen between Ripple placing 55 billion units "in escrow" which had not been released, and Ripple awarding itself a "war chest" worth USD15 billion (in October 2017) out of the XRP units that had been both created and released, with the remaining "released" units belonging to core service users and third-party investors.

There has also been a difference in the meaning of the term "market value" as used in the FT article in October 2017 and as used in the article in The Guardian at the end of 2017. The former gave the "market value" as USD25 billion (100 billion units at USD0.25) whereas The Guardian quoted a "market value" of USD85 billion at a time when the unit price was USD2.25:
https://www.theguardian.com/technology/2017/dec/31/ripple-cryptocurrency-bitcoin-value

This figure of USD85 billion was based on the number of XRP units released multiplied by the price of buying one unit, not the number of units in existence. The Guardian article states that "The company initially created 99bn XRP, and has released around 38bn. In May, Garlinghouse announced the company would place 55bn of its XRP into escrow and will unleash up to 1bn into the market each month".

The price of one unit on the date of the article was USD2.25, so the USD85 billion "market value" referred to here - divided by USD2.25 - delivers the number of units released of around 38 billion, not the 99 billion units that the company has created.

If we assume that 38 billion units have been released and that 55 billion are in escrow, this still does not add up to the total of 99 billion that supposedly exist: it leaves 6 billion units unaccounted for.

This confusion between different articles and announcements would not be acceptable for a company with listed shares: the issuer has to make crystal-clear to the stock exchange how many shares (i.e. claims on the company's net assets and dividends) exist, how many are tradeable, how many are not tradeable, and how many are owned by the company itself (Treasury Stock).

The issuer would not be able to simply issue new shares, diluting the claims on the net assets and dividends of existing investors, without due process. This is exactly what Ripple intends to do, although in a sense it does not matter – an XRP unit represents no claim on any asset or dividend anyway. As such Ripple's actions create no dilution as traditionally understood, but only a risk for the investor that an arbitrary increase in the supply of units could lead to a decline in price.

The correct "fair value" accounting treatment for a holding of XRP would be nil, just as the Bank of England values its EUR56 million shareholding in the European Central Bank at nil, because the contribution is non-refundable and does not entitle the Bank of England to any dividends (Source: letter from Mark Carney to B Lyddon of 15th January 2018 sent through Dominic Raab MP).

There cannot be any "fair value" accounting treatment for a holding of XRP that is anything other than nil for another reason: the lack of transparency about the categories of unit and who holds them:

Category	Owner	Number	Nomenclature
In escrow	No-one	55 billion	Created but not released
Own reserves	Ripple's "war chest"	x% of 38 billion	Released
Investors	Third-party investors	y% of 38 billion	Released
Customers	Users of the core service	z% of 38 billion	Released
Missing	?	6 billion	Released

With this degree of transparency, one can only guess at the size and value of Ripple's "war chest" and the relationship in which it stands to the other "released" units, which all together add up to 38 billion (according to The Guardian), and with 6 billion unaccounted for.

A point of great significance is that all of the "war chest" units, the units "in escrow" and the units belonging to the core service users (and presumably the "missing" units as well) are locked away – like Treasury Stock in a publicly-listed company – and do not form part of the open-market trading volumes.

Only the units owned by investors are being traded.

The percentage of the total released units that are tradeable may be as low as 20%, and in turn – because "released" units are only 38% of total existing units - the tradeable percentage is only 8% of the total existing units.

This goes into the same area as the LSE allowing – or not – Aramco to list in London with only 5% of its shares being tradeable: all the third-party buyer interest concentrates itself on the small minority of shares that are available, which pushes the price up. A false market is created. The inferred valuation for the whole company mushrooms and allows the company's management to carry out financial transactions of various sorts anchored to that unrealistically high valuation.

When we examine what Ripple has actively done, and what it has permitted to circulate as media stories without taking active steps to correct them, we have an uncomfortable picture:

- lock most of the XRP units away so they do not trade;
- make a small amount of XRP units available to third-party investors;
- put out a steady stream of positive publicity about the underlying service, but with little valuable detail;
- create its own XRP for itself, which it can presumably do very easily and with little of the effort required to mine Bitcoin;
- fail to state the exact number of the released units owned by the different classes of participant: Ripple itself, core service users, third-party investors;
- fail to state the exact number of units in its "war chest";
- issue press releases that value its own "war chest" of XRP and therefore itself as a company based on multiplying the market price for the smaller amount of XRP that is publicly available times the larger amount of self-awarded XRP;
- allow a blurring of the distinction to go out into the marketplace between the units in its "war chest" and the units it is "sitting on" (sic Bravenewcoin), the latter being the 55 billion unreleased units that are supposedly in escrow;

- thereby permit a blurring of whether Ripple just owns the units in the “war chest” or those in escrow as well, and thus a blurring of whether Ripple owns (let’s say) 13/38 billion of the released units, or both 13/38 of released and 55/55 billion of unreleased units;
- permit journalists to extrapolate widely different “market values” for XRP and for Ripple as a whole;
- allow the distinction to blur between Ripple and XRP, as if they were one and the same, with Brad Garlinghouse being described as the XRP CEO (sic Bravenewcoin);
- position the company to start carrying out financial transactions anchored to an unrealistically high valuation.

This would be illegal for a company to do if its shares or its product (XRP in Ripple’s case) were listed on a supervised stock exchange, and this is the reason why the Aramco IPO is so controversial.

As it stands, Ripple was the big story of Q4 2017: in 2018 we may find out whether any of it is more than a story.

In our estimation the company is caught on the horns of a dilemma: XRP could have value as a payment settlement medium if it demonstrates price stability against fiat currencies. By offering it up as a rival cryptocurrency to Bitcoin, Ripple has hooked XRP to the volatility of Bitcoin. The two pathways are mutually exclusive. One pathway or the other needs to be dropped.

Bob Lyddon
1st February 2018