CRYPTO LOANS AND SECURITY: LESSONS FROM THE CRYPTO WINTER



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The cryptocurrency industry – which had been flying high on a two-year long bull market, fuelled by the narrative of 'decentralised finance' (DeFi) – has now fallen to earth. The descent started with the disintegration of the Terra platform in May, which brought about the insolvency of Three Arrows Capital in June. Further dark clouds rolled in with the downfall of FTX in November. Now, the issues which Digital Currency Group/Genesis/Grayscale face threaten to prolong still further what has already been dubbed the 'Crypto Winter'. Participants, in what is (perhaps fortuitously) still a relatively small ecosystem, who eagerly accepted monies from retail depositors and equally eagerly extended loans to one another in search of high yields, find themselves exposed as rumours swirl and dominoes fall. Unicorns of the bull market contend with solvency issues as counterparties and retail depositors continue to pull liquidity, and a number of these former darlings of crypto are now subject to insolvency proceedings and allegations of failures of governance, at best, and misfeasance, at worst.

The once-mighty FTX group has now joined the ranks of 'crypto-banks' Celsius Network and Voyager Digital in filing for Chapter 11 bankruptcy protection in the United States; Three Arrows Capital voluntarily filed for liquidation in the British Virgin Islands; and Singapore's restructuring regime is currently host to a number of Singaporean and South-East Asian cryptocurrency businesses, including Vauld, Zipmex and Hodlnaut.

As these various insolvency processes unfold, a light is being shone on the business practices of this highly interdependent and largely unregulated market, and specifically on the manner in which the custody and collateral arrangements over crypto assets which are necessary to safeguard the interests of depositors, lenders and borrowers alike have – or, rather, have not – been put in place.

In this article, we consider some of the main issues associated with lending and borrowing crypto-assets: the custody of crypto-assets, the taking of security over crypto-assets and, if the worst comes to the worst, claiming in an insolvency.

Custody – why it's important

A common adage in the cryptocurrency space goes 'not your keys, not your coins' which warns users that their funds (or crypto assets) are never truly theirs unless they sit in a private wallet controlled by that individual. The turbulence in the crypto asset market and comments by a number of regulators raise the critical questions of what happens to crypto assets held by a crypto 'custodian' if the so-called custodian becomes insolvent and, then, who can lay claim to these assets? If assets are truly held in custody then they are property belonging to the custodian's customers, who have a proprietary claim. If not, then those assets form part of the general pool of assets in the insolvency estate of the custodian available to creditors generally.

The insolvencies of 'crypto-banks' such as Voyager and Celsius have brought this issue to the fore. It has been a common business model of crypto-banks to offer high yields to attract deposits of crypto assets from retail depositors, which are then on-lent, or otherwise deployed to third parties or DeFi protocols in order to generate additional yield for the crypto-bank. But customers could also elect to simply deposit their crypto assets to be held in custody with no expectation of any yield. Language and practices have differed from crypto-bank to crypto-bank, and the spate of insolvencies we are now seeing has left many depositors hoping, possibly in vain, that their assets will indeed be regarded as 'custodied'; in other words identifiably theirs and outside of the insolvency estate of the crypto-bank.

This has been a core issue in the insolvency of Voyager and, in its defence, its terms of use for its custody accounts expressly warned that in the event of Voyager's insolvency "it is unclear how [the customer's crypto assets] would be treated and what rights the [customer] would have to such [crypto assets]". Of the approximately USD 1.3bn in assets Voyager held at the time of its insolvency, the US Bankruptcy Court held on a fact-specific analysis that about USD 270m of cash and crypto assets were properly held in custody (with the Metropolitan Commercial Bank) and therefore could be returned to those depositors, as these assets did not form part of Voyager's bankruptcy estate.

So, despite its warning, Voyager – a public listed company – did have a properly structured custodian arrangement with Metropolitan Commercial Bank and many of its depositors have benefitted from this. But custody may not be as clearly established in other cases. The status of crypto assets deposited with Celsius – a company considered by many to have had opaque governance – is, for now, equally opaque. Though it commenced its Chapter 11 filing around the same time as Voyager, the custody question has yet to be answered. Apart from what have been reported as less than robust internal processes, another complicating factor is the fact that Celsius offered a 'Custody' product and a 'Withhold' product; although both may have been viewed by depositors as non-interest bearing 'custody' accounts, the latter was offered in jurisdictions where Celsius was not legally authorised to act as a custodian. It therefore remains to be seen how the US Bankruptcy Court will view these assets: the interim examiner's report and skirmishes in court so far have served only to confirm the confusion.

The more recent FTX exchange downfall will raise even more questions. FTX has English law-governed terms which provide that title to digital assets are retained by the retail depositors: FTX only executes trades on behalf of the depositors by matching buyers and sellers on its order books. Yet, by all accounts, retail depositors' assets were on-lent to Alameda Research, an FTX-affiliated proprietary trading fund, in an attempt to save the latter from bankruptcy. Tracing, custody and trust issues abound.

So, it is of fundamental importance that market participants are aware of the nature of their relationships with each other and their depositors. Although the term 'custody' is often used when interacting with crypto participants such as exchanges and crypto-banks, it should not be assumed that a custodial relationship is actually in place. Market participants and depositors alike should ensure that what is marketed as a custody relationship is in fact one – in an insolvency, that can make a world of difference.

Crypto assets as collateral

Primarily a point for institutional participants, the Crypto Winter has also raised interesting questions around the structuring of collateral arrangements over crypto assets, whether to support fiat or crypto-denominated loans.

It is settled law at this point, at least in the US, UK and Singapore, that crypto assets are considered property. As property, there are broadly two ways in which collateral (and also quasi-collateral) arrangements can be structured, either (a) with full title transfer or (b) without full title transfer.

Title transfer involves the collateral-provider transferring the crypto asset to the collateral-taker against the promise that the collateral-taker will return an equivalent crypto asset when the obligations secured by this arrangement have been settled. This seems the route favoured by many DeFi market participants as it provides the collateral-taker the ability to then deploy the collateral to earn additional returns.

The weakness of a simple title transfer structure, however, as demonstrated in a number of recent failed institution-to-institution lending arrangements, is that the collateral-provider is exposed to the insolvency risk of the collateral-taker. In the absence of a properly-constituted collateral arrangement, all the collateral-provider has is a contractual right to demand the return of an equivalent crypto asset upon fulfilment of the collateral-provider's obligations. Considering the volatility in the price of crypto assets, it is not uncommon for a collateral-provider to be required to provide collateral with values well in excess of its obligations, i.e. to over-collateralise those obligations. This has led to situations where even after netting the loans against the value of the crypto assets provided, the collateral-provider is left facing a material net loss, because collateral provided to the now insolvent collateral-taker significantly exceeded the amount required to settle the collateral-provider's obligations, and the contractual undertaking to return the surplus to the collateral provider may be worthless.

The second mode of providing collateral over crypto assets is by creation of a security interest (e.g. a charge or mortgage). While this can mitigate the issue of credit risk on the collateral-taker, it comes with its own difficulties. Without possessing title to the crypto assets, collateral-takers have to take it as a matter of faith that the borrower has not, for example, provided the same crypto assets as collateral to other lenders – faith which recent events have shown was not always rewarded. So even with a properly-perfected security interest, in the absence of control the collateral-taker is exposed to the same risk of redeployment of the crypto asset by the collateral-provider. Custody and control remain key for both counterparties.

The peculiar features of the crypto ecosystem raise more presently-unanswered questions regarding collateral. First, it was not uncommon for parties to come to an arrangement via a smart contract where collateral is deposited into the contract by the borrower against funds provided to the lender. Failure on the part of the borrower to return the funds would lead to an automatic transfer of the collateral to the lender or a disposal of the asset with proceeds to be transferred to the lender. In situations like these, it can be unclear whether an enforceable security interest has been created over the collateral, or if title to the crypto assets actually passed to the lender at the point the loan is extended. If the lender is simply an unsecured creditor, then an appropriation or sale by the lender of the crypto assets deposited into the contract would not be permissible as it would breach the *pari passu* distribution principle, which requires that, in an insolvency, all unsecured creditors must share equally in respect of the general pool of available assets. Secondly, to complicate matters further, many DeFi lending platforms operating these smart contract-based lending arrangements were 'decentralised autonomous organisations' (DAOs) – the legal status of which is still unclear in most jurisdictions, creating uncertainty as to who exactly is entitled to the security interest or legal title to the underlying assets.

Proving in insolvency

The final issue considered in this article is that of proving for a crypto-denominated loan in the event of an insolvency – this is already an issue of much dispute in situations where a company has gone into liquidation.

Typically, claims in foreign-denominated currencies are converted into the specified currency of the jurisdiction in which the insolvency proceedings are opened using an exchange rate on the date on which the company entered into insolvency proceedings. Yet crypto assets are not currency but property – and so there is a continuing debate as to how the claims of a creditor who has extended, for instance, a Bitcoin-denominated loan, should properly, and equitably, be treated.

The question is, as yet, an open one. The liquidators of Three Arrows Capital have, on the liquidation website and in their request for creditors to submit proofs of debt ahead of the first creditors' meeting, implicitly noted this is a contentious issue by stating that, while they will convert claims in crypto assets to their equivalent USD value on the date the company entered into liquidation, this is for the purposes of voting at the first creditors' meeting, and not necessarily for any other purpose. Significant amounts are at stake as, while crypto-prices fell to a significant low following the announcement that Three Arrows Capital had defaulted on its debts and gone into liquidation, prices have since recovered to a degree, and may further well recover as the liquidation process continues. This is an issue that the insolvency market in general is grappling with: to determine how, and at what point, to value cryptocurrency claims for the purposes of voting and distributions in a liquidation, and this is something which may be beyond the discretion even of a court, and so require legislative intervention in relevant jurisdictions, if crypto assets are to be given equivalent status to fiat currencies.

Conclusion

The exuberance of a bull market perhaps inevitably and once again reminds us that investors looking to participate in any new market would do well to learn from the costly mistakes of those who have come before. Trading in crypto assets is arguably no different, but it does present new and unique structural and transactional challenges which require regulatory oversight and legislative intervention. The Crypto Winter marks the first time that transactions, structures and business practices common to the crypto space have properly come under the legal and regulatory microscope, and we now have the opportunity to make sure that the risks native to this new asset class are properly examined, and that proper safeguards are put in place for the future.