On Global Interest Rates and MakerDAO

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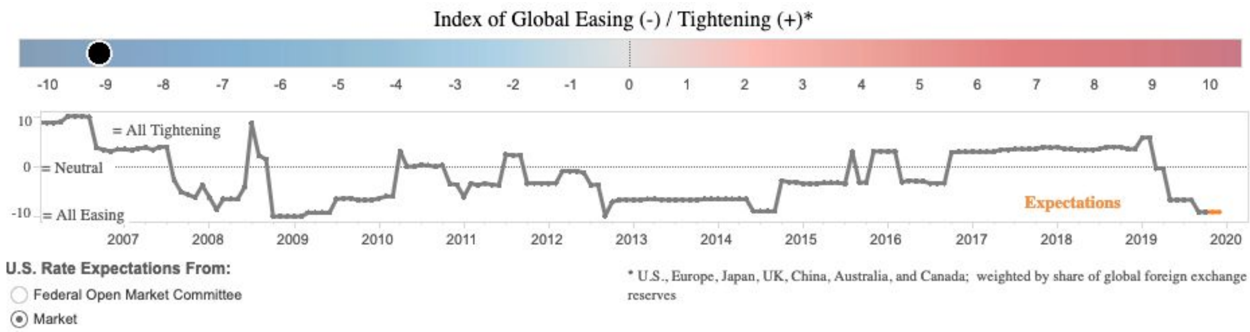
After several years of extraordinary global monetary policies, key interest rates have gone negative in Europe and Japan with US rates simultaneously near historical lows. Investors are aggressively searching for yield in a world were a low-risk return is becoming harder to find. The decentralized finance sector of the crypto space, specifically MakerDAO, provides a unique alternative. MakerDAO is a globally distributed smart contract platform built on the Ethereum blockchain that has two native tokens: Dai, the fully-collateralized stablecoin pegged to the US dollar, and MKR, MakerDAO's governance token. Recently, MakerDAO released the Dai Savings Rate, a trustless smart contract that initially allows Dai holders to earn a 2% annualized return by depositing Dai into the DSR contract. Amidst global uncertainty surrounding central bank policies, demand for a stable asset that offers a positive yield will likely increase. As market participants recognize the massive value offered by Dai and the DSR, more capital will flow into the MakerDAO ecosystem, and governance of the platform will become substantially more important and valuable.

Dai Savings Rate: Implications in a Yield-less World

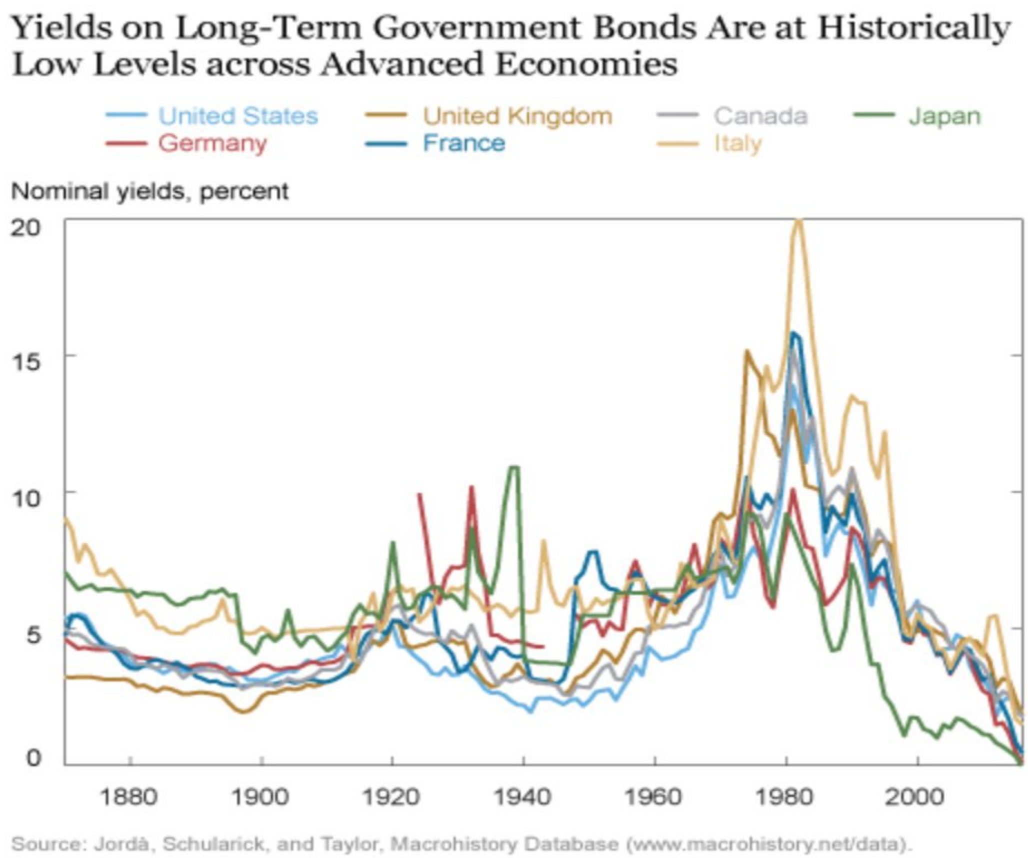
There is currently over $17 trillion worth of debt in the world that trades at a nominal yield below zero. When you account for inflation, this number more than doubles to $35.7 trillion.[1] The concept of a negative yielding bond is that an investor pays to lose money if the bond is held to maturity. At no other time in history have we seen negative nominal rates, which imply that you have to pay someone to store your money with them, rather than the conventional system where you can earn some amount of interest by lending your money to a counterparty.

Since the Financial Crisis, central banks have been keeping interest rates very low in an effort to stimulate the global economy. In places like Japan, Sweden, and Switzerland, central banks have set overnight lending rates below zero. The Euro Area deposit rate, which is the rate that banks receive on their overnight deposits held at the central bank, is currently at -0.5%. Simultaneously, central banks have been printing money and using it to directly buy bonds on the open market in order to inject money into the financial system. This has also kept interest rates artificially low.



CFR Global Monetary Policy Tracker[2]

The Global Monetary Policy Tracker is currently one degree from its maximum easing value, meaning that the monetary stimulus we are currently seeing around the world is truly extraordinary; however, these massive policy experiments do not seem to be succeeding in generating economic growth and recovery. Ray Dalio recently published an article titled "The World Has Gone Mad and the System Is Broken." In it, he describes how the only real results of this central bank activity are that the prices of financial assets have gone up significantly, and the future expected returns have gone down, while economic growth and inflation remain sluggish. In the last decade, Europe and Japan saw limited improvement in GDP, employment, and inflation metrics, and now these numbers are already starting to move in the opposite direction. The easiest path for the central banks is to try pushing rates even lower and printing even more money. Two months ago, European Central Bank President Mario Draghi announced plans to do exactly that. The major risk of this path is that it threatens the viability of the three major world reserve currencies, the US dollar, the euro, and the yen, as viable storeholds of wealth.[3] By constantly printing more money, the central banks will continue to dilute the supply of their own currencies and weaken them in the process.



Yields on Government Bonds[4]

In this low interest rate environment, the ‘hunt for yield’ has encouraged people to pour more money into equities and other riskier alternatives to bonds. It is the only place they have been able to find a decent return on cash.

MakerDAO with the new DSR provides an alternative option to the traditional financial system for earning a relatively risk-free return on a stable asset. Many crypto/blockchain advocates will say that Bitcoin is the best store of value to protect your assets in today’s world of negative interest rates. While Bitcoin possesses many qualities that make it an attractive option, it is still quite volatile, and its risk/reward profile may be too aggressive for some investors. In contrast, Dai is a decentralized stablecoin designed to hold its value as close as possible to a peg of 1 USD. Dai is the stablecoin of the MakerDAO protocol, which can be thought of as a globally distributed central bank run on top of the Ethereum blockchain. Launched in December 2017, the platform enables users to lock collateral into a smart contract, creating a “Vault” (formerly known as a “CDP”) and draw Dai, essentially allowing a person to borrow against him or herself. The value of Dai is held close to the $1 peg through various system parameters, all of which are voted on by MKR holders, the owners and governors of the system.

A stable value is intriguing on its own, but as the dollar is gradually debased through inflation then this may still cause some concern since Dai is pegged to the dollar. That is where the Dai Savings Rate comes into play. On November 18th, the Maker Foundation introduced the Dai Savings Rate (DSR) as part of the transition from Single-Collateral Dai (SCD) to Multi-Collateral Dai (MCD). Up until this point, ETH was the only asset you could use as collateral to mint Dai, but now the system has opened itself up to other types of collateral and simultaneously added the DSR feature. By locking your Dai in the DSR smart contract, you can immediately begin earning interest on the Maker platform. Currently, the DSR is set at 2%, and it will vary over time through frequent votes by MKR holders. There are other platforms or companies that currently exist where you can loan out your Dai and receive some interest in return, but they require transferring your Dai to those platforms and giving up some control of the assets. The introduction of the DSR allows you to keep all your Dai within its native ecosystem while earning interest. This is a simpler and more secure solution that does not require the risk of a transfer to another platform or company. The DSR contract allows you to unlock it and withdraw your principal with the accrued interest at any time. This enables a level of liquidity that is essentially unmatched in the current financial world, and it should be very attractive to institutions and individuals looking to earn some return on their excess cash reserves as Dai liquidity increases.

In a world where low-risk yield is hard to find, the Dai Savings Rate could provide a new opportunity for individuals and institutions looking to grow their wealth and manage short-term cash effectively. Dai and its DSR have unique value in the current global environment, and they could prove even more valuable if global rates continue to decrease and even become more negative. The impressive bull run for equities has lasted more than a decade, and as investors grow more uncertain, high valuations across asset classes could come under pressure. A global, decentralized, fully-collateralized stablecoin pegged to the dollar that offers a 2% yield looks very interesting amidst this global economic background. The potential impact of the DSR in today's macroeconomic environment could be a true gamechanger, and the implications for Dai holders, and anyone who wants to earn a low-risk 2%, are significant.

Impacts of the DSR and Multi-Collateral Dai on MKR Holders

The DSR and the launch of Multi-Collateral Dai are going to have a large impact on the MakerDAO ecosystem and the holders of MKR. These owners will benefit from an increased accrual of stability fees generated from more Vaults and an increase in the value of system governance. When a Vault is closed, an auction occurs where the fee paid goes to buying the equivalent amount of MKR and burning, or destroying, that

MKR. In regard to governance, each MKR token is equal to one vote within the MakerDAO.

Up until now, the only way to affect the price of Dai was through indirect methods that targeted the supply side through the cost of Vault creation. Holders of MKR, the native governance token of the MakerDAO system, have the power to vote to change the Stability Fee, which is effectively the interest rate that Vault holders are charged on their borrowed amount. By adjusting the Stability Fee, Vault creation can be incentivized or discouraged, which leads to more or less sell pressure on Dai. When the Stability Fee was very low at the beginning of 2019, we saw consistent, heavy sell pressure on Dai as people opened a large number of Vaults and immediately sold out of their newly minted Dai in order to buy other cryptoassets and obtain a leveraged position. Dai was consistently below its 1 USD peg as a result of this, and in response, MKR holders voted to raise the Stability Fee several times, setting it as high as 20.5%.

With the DSR, Maker stakeholders can now directly influence the demand side of the equation. By raising the DSR, more people will be encouraged to open Vaults, mint Dai, and lock that Dai into the saving contract. Raising the DSR will increase demand for Dai as investors seek a low-risk return higher than most cash rates. Lowering of the DSR should reduce demand for Dai, all else equal. The DSR will target Dai holders directly rather than affecting them through a two step process with the Stability Fee. This will have multiple beneficial effects for the MakerDAO system.

First of all, it should result in lower average borrowing costs for Vault holders. As described above, the Stability Fee occasionally had to rise to high levels in order to achieve the desired effect for the value of 1 Dai. By targeting the demand side of the Dai market more directly with the DSR, we should avoid this situation, and the Stability Fee should generally be lower in Multi-Collateral Dai than it has been in Single-Collateral Dai. Lower borrowing costs should increase the demand for Vaults and bring more capital into the system.

The DSR should also enable Dai to stay closer to its intended peg. With a more trustworthy peg, we should see significantly higher usage of Dai. For many stablecoin users, particularly other DeFi applications, stability is paramount. They do not want to have to deal with even a 1% fluctuation in the value of their position. While Dai remained relatively stable during ETH's ~90% selloff, it has deviated as much as 4% from its target peg.[5] With the DSR, especially if it is eventually dynamically adjusted, we should see less deviation. As more people trust the peg and adopt Dai, it will become even more stable since the risk is spread across more counterparties and collateral types. A positive feedback loop will be created that reinforces the price stability.

If there is more capital coming into the system and more Vaults are created due to the above reasons, this means more MKR being burned and more value being accrued by existing MKR holders. Even though they might be getting a smaller piece of the Stability Fee pie because some will go towards paying the DSR, the notional amount of MKR burned is very likely to increase from current levels. It will be a slightly smaller piece of a much larger pie. As the amount of capital in the ecosystem grows, the value of governance will increase, and therefore, demand for MKR should increase.

Total USD Value Locked in DeFi applications and the percentage of the total that is within the MakerDAO ecosystem as of December 1, 2019[6]

Conclusion

It is an exciting time for MakerDAO and the decentralized finance space. DeFi is one area of the crypto world that could see rapid adoption as it provides solutions to real, pressing issues in today's financial world. Once investors come to truly understand the dynamics of today's macroeconomic environment and learn about new ways to earn yield, such as the Dai Savings Rate contract, we could see a significant flow of capital into the MakerDAO ecosystem and its associated assets. As that occurs, system governance becomes exponentially more valuable and important. Given that each MKR token represents one vote within the MakerDAO governance system, we have a programmable asset that not only represents an ownership stake in the system, but also contains voting rights. As voting transitions from simply deciding on the Stability Fee to setting an ever-increasing number of system parameters, and the amount of capital in the system rises, the value of governance will increase significantly.

We believe it is incredibly important for all Maker holders to be active in the governance of the system, especially as the traditional financial world comes to realize the importance of a fully-collateralized stable asset that offers a yield higher than most cash rates we currently see within our global banking system. Owning and governing the different pieces of the new economic fabric of our society, which is forming through the development and interoperability of public blockchain systems, such as MakerDAO, will be more vital than the governance of any one particular company, or companies, within the global economy. Future companies and their successors will end up running on top of this economic base layer.

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