



Lethame Capital Management

Technology : Research : Investing

QE, money creation and the banking system

“We believe the Federal Reserve’s large-scale asset purchase plan (so-called “quantitative easing”) should be reconsidered and discontinued... The planned asset purchases risk currency debasement and inflation, and we do not think they will achieve the Fed’s objective of promoting employment.”

[Letter from a group of 24 economists to Fed Chair Ben Bernanke, November 15, 2010 ¹](#)

Ten years later the dominant narrative still seems to be that “quantitative easing” is the large-scale printing of money which will ultimately lead to inflation. Despite the prevalence of this view there isn’t a clear definition amongst economists as to what money is. Undergraduate textbook ‘Modern Money and Banking’² states “money is difficult to define and measure...divergences in views about what constitutes money are likely to widen with time”. Inspired by the extraordinary book “Princes of the Yen”³ this paper examines its argument that rather than government it is private banks that create money, examines the role of reserves and their importance in Quantitative Easing and contemplates that we may now have gone beyond QE in the third stage of the search for a solution to structural economic problems that are very similar to those seen in previous economic cycles. Finally, consideration is given to what all this may mean for investment strategy.

How private banks create money – a practical example

Historically mainstream economic theory suggested either:

- (a) banks operate as intermediaries which gather deposits which they then lend or;
- (b) banks operate in a fractional reserve (money multiplier) system where money for loans comes from excess reserves

More recently a different perspective on banks role in the economy is gaining traction. This theory states that banks create money when they lend. This money creation occurs because in the process of lending they create deposits. As the Bank of England⁴ stated “of the two types of broad money, bank deposits make up the vast majority — 97% of the amount currently in circulation. And in the modern economy, those bank deposits are mostly created by commercial banks themselves.” Despite this it seems that the idea that governments create money remains the most commonly held view regarding the workings of the financial system.

Werner (2014)⁵ provided empirical evidence of banks special role as money creators. This money creation process can be illustrated with an extension of a simplistic example of the accounting treatment of the creation of a loan in a banking system compared to one created in a non-banking system i.e. by a non-bank company.

Non-bank System				Bank System			
Step 1 - initial balance sheet position				Step 1 - initial balance sheet position			
Company		Company		Bank A		Bank B	
Asset	Liability	Asset	Liability	Asset	Liability	Asset	Liability
Cash	\$100	Equity	\$100	reserves	\$100	Initial deposit	\$100
loan	\$0	A/C Payable	\$0	loan	\$0	A/C Payable	\$0
	\$100		\$100		\$100		\$0

To begin the example both systems hold \$100 of assets. In the case of Bank A, the balance sheet is made up of reserves held at the central bank on the asset side funded by a \$100 deposit on the liability side. The non-bank company on the other hand has assets held in cash of \$100 funded by a liability of \$100 of equity.

Disclaimer: Lethame Capital Management (“LCM”), is a private company which manages only the personal assets of its principal, Piers D. Watson. This document, prepared by LCM, is confidential and may not be copied, reproduced or otherwise redistributed. It has been issued for informational purposes only and nothing in this document should be interpreted as constituting legal, regulatory, tax, financial or investment advice. The information contained herein is addressed to and directed only at professional investors and should not be relied on by any other person. It does not constitute a report, an offer or a solicitation by anyone in the United States or in any other jurisdiction in which such a report, offer or solicitation is not authorized or to, or for the account or benefit of, any US person as defined in relevant US securities laws, or to any person to whom such report, offer or solicitation is unlawful. The information herein may be approximate. It may contain errors and/or omissions and due to rounding, numbers presented throughout may not precisely reflect performance results. It may be based on third party sources of information which are assumed to be correct and reliable but not independently verified. This document may also contain forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties. LCM does not guarantee and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any information provided herein which may be amended at any time. LCM is under no obligation to provide updated version of such information.

For the purpose of this exercise the loan creation process is split into two parts. The first part is the signing of a loan contract and the second part is the process of drawing down the loan. As previously discussed in step 1 the balance sheet position of both Bank A and the Company is the same.

In step 2 the first part of the loan creation process, the loan is booked. This step is identical for both the Company and Bank A. The loan appears as a line item under assets while the fact that a payment is due to the borrower means an a/c payable is booked under liabilities. At this temporary stage of the process both balance sheets have increased to \$200.

Non-bank System				Bank System					
Step 2 - loan contract is signed				Step 2 - loan contract is signed					
Company		Company		Bank A		Bank B			
Asset	Liability	Asset	Liability	Asset	Liability	Asset	Liability		
Cash	\$100	Equity	\$100	reserves	\$100	Initial deposit	\$100		
loan	\$100	A/C Payable	\$100	loan	\$100	A/C Payable	\$100		
	\$200		\$200		\$200		\$200		

Step 3, the drawing down of the loan, is where Bank A and the Company differ. In the case of the Company the loan is booked to the borrower which means that the account payable liability disappears as the borrower 'draws' the money and this money comes from cash which is debited from the Company's assets. Despite increasing at the temporary stage in step 2, once the loan process is complete by step 3 the Company's balance sheet remains the same \$100 size after it has lent money as it was before it originated the loan.

In the case of Bank A, the account payable also disappears in step 3 but the bank magically 'creates' a liability called a 'deposit', here referred to as 'client 1 deposit', and its balance sheet is lengthened by the amount of the loan. After lending \$100 Bank A's balance sheet increases by the amount of the \$100 loan to \$200.

Non-bank System				Bank System					
Step 3 - loan drawn down				Step 3 - loan drawn down					
Company		Company		Bank A		Bank B			
Asset	Liability	Asset	Liability	Asset	Liability	Asset	Liability		
Cash	\$0	Equity	\$100	reserves	\$100	Initial deposit	\$100		
loan	\$100	A/C Payable	\$0	loan	\$100	A/C Payable	\$0		
	\$100		\$100		\$200	client 1 deposit	\$100		
					\$200		\$200		

Why the difference in treatment? While economists consider banks as deposit taking institutions that lend out money, the law does not. Werner⁵ argues that under English law, which is the basis of most financial transactions, banks are not deemed to be 'deposit taking institutions' and don't lend out money. The law doesn't even recognise bank deposits. The money the customer holds on 'deposit' at a bank is not the customer's money and is not held in custody on their behalf as in the case of a non-bank, instead it is owned exclusively by the bank and the 'depositor' is simply a general creditor. This concept is reiterated by Fowler⁶ who concludes:

"When a depositor makes a deposit, the funds become the property of the bank, and, in exchange, the depositor receives a claim against the bank for the amount of the deposit. The bank "buys" the cash in exchange for a short-term IOU (representing the bank's deposit liability)"

The reason that a bank can create a liability called a deposit when a non-bank cannot is because the 'client money rules', which apply to a non-bank and dictate that it must segregate 'client' assets from its own, do not apply to a bank. In essence banks don't offer deposits to customers but instead customers lend money to banks. Under the law, when signing a loan contract, the customer issues a security to the bank. When the bank 'lends the customer money' the bank actually purchases an I.O.U. from the customer which is booked not as an a/c payable but as a liability, the bank calls this liability a deposit.

The final step in this illustrative example relates just to Bank A. The customer has borrowed the money for a reason, perhaps to buy a house, and so rather than sit as a deposit at Bank A it will most likely be transferred as a payment to another customer's bank account perhaps at Bank B. As the liability side of the balance sheet has reduced a reduction is also needed on the asset side of the balance sheet. To achieve this Bank A lends the \$100 of reserves that it no longer needs into the overnight interbank lending market and Bank B borrows the \$100 in reserves that it needs from the overnight interbank market.

Non-bank System				Bank System					
Step 4 - bank customers deposit transferred to another bank				Step 4 - bank customers deposit transferred to another bank					
Company		Company		Bank A		Bank B			
Asset	Liability	Asset	Liability	Asset	Liability	Asset	Liability		
Cash	\$0	Equity	\$100	reserves	\$0	Initial deposit	\$100		
loan	\$100	A/C Payable	\$0	loan	\$100	A/C Payable	\$0		
	\$100		\$100		\$100	client 1 deposit	\$0		
					\$100		\$100		

Disclaimer: Lethame Capital Management ("LCM"), is a private company which manages only the personal assets of its principal, Piers D. Watson. This document, prepared by LCM, is confidential and may not be copied, reproduced or otherwise redistributed. It has been issued for informational purposes only and nothing in this document should be interpreted as constituting legal, regulatory, tax, financial or investment advice. The information contained herein is addressed to and directed only at professional investors and should not be relied on by any other person. It does not constitute a report, an offer or a solicitation by anyone in the United States or in any other jurisdiction in which such a report, offer or solicitation is not authorized or to, or for the account or benefit of, any US person as defined in relevant US securities laws, or to any person to whom such report, offer or solicitation is unlawful. The information herein may be approximate. It may contain errors and/or omissions and due to rounding, numbers presented throughout may not precisely reflect performance results. It may be based on third party sources of information which are assumed to be correct and reliable but not independently verified. This document may also contain forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties. LCM does not guarantee and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any information provided herein which may be amended at any time. LCM is under no obligation to provide updated version of such information.

Reserves only facilitate the money creation process

This final step 4 in this simplistic example illustrates the important role of reserves in allowing banks to operate as providers of credit to the financial system. The central bank through its Open Market Operations will create reserves to allow banks to settle the transactions between each other. It also uses reserves in the setting of monetary policy. In order to target its policy interest rate, it will create reserves by buying short term government debt held on the banks balance sheet or destroy reserves by selling short term government debt to the bank, in doing so it influences the policy rate. As such creating reserves merely swaps one bank asset for another. Reserves are a necessary but not sufficient condition for the creation of money in a banking system. As Carpenter and Demiralp⁷ concluded:

“Changes in reserves are unrelated to changes in lending, and open market operations do not have a direct impact on lending.”

If banks don't use those reserves to lend then money is not created.

The conclusion is therefore that the non-bank the balance sheet doesn't change in the lending process, the balance sheet is \$100 before the loan and \$100 afterwards. In the case of the bank however, lending \$100 causing the banking systems balance sheet to increase to by \$100 as \$100 of 'money' is created out of nothing. It is banks not governments that create money.

What about Quantitative Easing?

It is common to hear 'experts' discuss and often object to central banks Quantitative Easing as it is resulting in unprecedented money printing. This often comes with the conclusion that this will inevitably lead to inflation. It is clear that central banks are creating a significant quantity of reserves and the theory seems to be that this is money which must make its way into the economy.

However, in simple terms Quantitative Easing is an extension of Open Market Operations. When the central bank creates reserves its essentially swaps them for assets the bank already holds on its balance sheet. As we have seen private banks create money by lending so for the central bank to actually create money banks have to create loans in a similar process occurs as in the illustrative example. Instead of this in Quantitative Easing central banks buy longer dated assets from the banking system i.e. Treasuries, Mortgage Backed Securities etc and replace those assets with reserves. The central bank is buying pre-existing assets and so banks can replace those assets with other pre-existing assets bought in the open market, the price of those assets increases as the demand relative to assets of different duration has increased but there is no additional money in the economy rather just a rearrangement of holdings in the financial sector and as there is no new lending and no money is created.

The effect of Basel III

Rather than the consensus opinion that the central bank reserve creation is an extraordinary measure it is possible to present the case that this is the new normal. Poszar⁸ shows that in the post-Basel III world order central bank created liquidity (reserves) has to be used to replace the previously used market-based liquidity. In particular Basel III's Liquidity Coverage Ratio requires banks to hold High Quality Liquid Assets which would in large part constitute central bank reserves against all short-term liabilities maturing in less than 30 days⁹. Prior to Basel III banks were only required to hold reserves against demand deposits i.e. onshore overnight liabilities. Now reserves need to be held against *“any short-term liability issued by any legal entity of a bank holding company globally”*⁸. This brings into scope the vast and underappreciated offshore Eurodollar market whose very success it can be argued was in part because it historically didn't require reserves. As Friedman¹⁰ stated in 1971 *“Euro-dollar banks are not subject to legal reserve requirements”*. It is probable therefore that central bank balance sheets had to expand as a function of Basel III and this is not a temporary phenomenon but a new normal.

The extension of his argument is contrary to the conventional opinion, that reserve creation is ultimately inflationary, in actual fact not expanding central bank balance sheet sufficiently is deflationary and could be what Bordo and McCauley¹¹ described as the *“legacy of Triffin”*. It is discussed that globally there is a shortage of dollars¹², the Fed is having to take many unconventional steps to alleviate this and its balance sheet is expanding as a consequence.

Fed policy action is helping asset prices and in the absence of banks' lending function creating money it is only if money is given directly to participants in the economy that new money is created and this takes us into the realms of fiscal policy.

Why is money creation important?

Previously it was suggested that mainstream economic theory finds it difficult to define money. The assumption that banks are intermediaries between lenders and borrowers has allowed economists to even ignore the existence of money, as Carpenter and Demiralp⁷ state:

“Most models currently used for macroeconomic policy analysis, however, either exclude money or model money demand as entirely endogenous, thus precluding any causal role for reserves and money.”

However, if the money that changes hands to pay for transactions in a given time period must equal the nominal value of those transactions then it should be the case that an increase in the value of transactions (and hence economic growth) can only take place if there has been an increase in the amount of money to carry out those transactions. As we have seen, the net amount of paper money issued by the banking system can only increase when banks make new loans.

Because of lack of reliable data regarding economic transactions the economics profession has formulated the “monetarist theory” which states that changes in money supply are the most significant determinants of the rate of economic growth and the behaviour of the business cycle.

The theory is governed by the formula:

$$mv = py$$

In which the $mv = py$ formula says m = money supply, v = velocity of money, p = price of goods and y = quantity of goods.

However, the underlying assumption that nominal GDP is a close approximation of the value of all transactions may not hold, since transactions such as certain loans involving for example real estate or financial assets, are not contributors of GDP. This is not problematic when their growth is in line with the growth of GDP. However, when it rises faster, this will cause GDP to be an unreliable proxy. Then we must expect the traditional quantity theory of money of money $mv = py$ to give the appearance of a fall in velocity, as money is used for transactions other than nominal GDP (PY).



Beyond QE?

According to the St. Louis Fed the velocity of money in the US has been declining since the mid-90's. As the creation of money is a key driver of economic growth, where that money is allocated within the economy has significant repercussions. For many decades private banks have been handed this key responsibility and in large part they have used their money creation ability to fund non-GDP creating assets predominantly housing. As McKinsey Global Institute¹³ found *“Real estate played an important role in the growth of leverage across countries”*. For example, their report highlighted the fact that residential mortgages accounted for 75% of the growth in U.S. bank lending between 2000-2007. Given the additional demand for these assets from newly created bank money their price has increased. People who are able to afford housing have benefitted those who could not have been left behind resulting in great inequality.

Additionally, it is not well understood but historically the unregulated offshore Eurodollar market has allowed for unchecked money creation at the whim of, often non-US, banks as Fowler⁶ states:

“such instruments engender growth of dollar-denominated credit without a commensurate increase in the conventionally defined money supply. In a very real sense then, foreign banks create unsanctioned American money when they create Eurodollars”

Disclaimer: Lethame Capital Management (“LCM”), is a private company which manages only the personal assets of its principal, Piers D. Watson. This document, prepared by LCM, is confidential and may not be recycled, reproduced or otherwise redistributed. It has been issued for informational purposes only and nothing in this document should be interpreted as constituting legal, regulatory, tax, financial or investment advice. The information contained herein is addressed to and directed only at professional investors and should not be relied on by any other person. It does not constitute a report, an offer or a solicitation by anyone in the United States or in any other jurisdiction in which such a report, offer or solicitation is not authorized or to, or for the account or benefit of, any US person as defined in relevant US securities laws, or to any person to whom such report, offer or solicitation is unlawful. The information herein may be approximate. It may contain errors and/or omissions and due to rounding, numbers presented throughout may not precisely reflect performance results. It may be based on third party sources of information which are assumed to be correct and reliable but not independently verified. This document may also contain forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties. LCM does not guarantee and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any information provided herein which may be amended at any time. LCM is under no obligation to provide updated version of such information.

For more Lethame Capital insights please visit www.lethamecapital.com

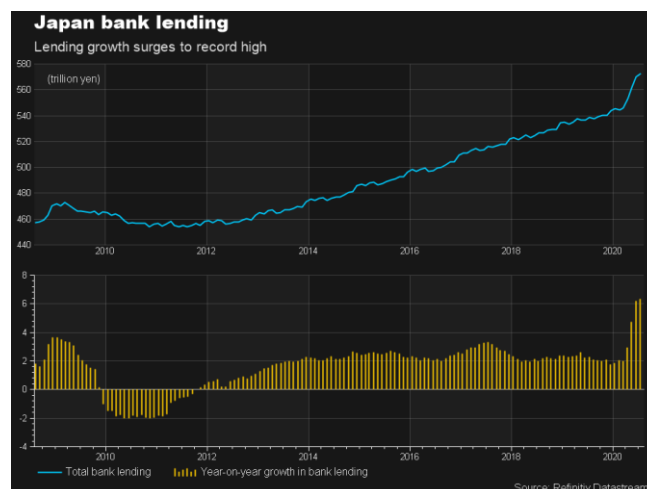
In the years following the financial crisis Quantitative Easing has been necessary because banks seem to have been reluctant to lend, globally they have shrunk their balance sheets, meaning less money is being created and so growth is subdued. QE can be thought partly as an attempt to fill the gap created by the decline of the private bank money creation process. The widely discussed shortage of US dollars¹² is in part a reflection of stresses that occur when debtors attempt roll over their debts in an environment where banks are relatively less willing to lend. Given the scale of debts there are debtors whose cash flows are not sufficient to service debt in the absence of the ability to roll it over. This results in significant stress which is reflected across asset markets.



Significantly, in the last few weeks there have been new policies aimed at more directly encouraging banks to lend. In the U.S. there has been a surge in broad money (M2) in the response to the economic shock caused by the COVID-19 pandemic. In addition to directing money straight to the businesses and consumers under the \$2tn CARES Act the U.S. government has guaranteed bank loans made through for example the \$40bn Coronavirus Small and Medium Enterprises (SME) Guarantee Scheme. Unlike the printing of reserves which stay in the financial system this money appears likely to make it into the economy which should facilitate growth that wouldn't have otherwise have happened. It is likely that this is the start of measures that will form a process which Bridgewater's Ray Dalio¹⁴ refers to as Monetary Policy 3.

The government intervention in response to the crisis has similarities to Werner's³ observation of the Japanese governments 'window guidance' in the 1980's, which were essentially lending quotas. This recent change in the growth of M2 exceeds anything seen in 75 years¹⁵. It is growth of broad money which in part is created by governments intervening in the commercial banking system. Like window guidance the governments is telling commercial banks to grant loans to companies, and then guaranteeing those loans.

There are similar programs in other countries, for example the U.K. offers SME's 100% guaranteed 'bounce back' loans which have very low interest rates. In Japan, the Bank of Japan's "coronavirus relief" scheme involves lending cash to banks against the collateral of their loans to the private sector. Importantly, in April the BOJ instituted a 'bonus' of 10 basis points to encourage banks to use scheme which when compared to a 3 basis point yield on the 10-year government bond is very attractive. Until that point the concern has been that Japan's negative interest rate policy was reducing the flow of credit to the economy.



Disclaimer: Lethame Capital Management ("LCM"), is a private company which manages only the personal assets of its principal, Piers D. Watson. This document, prepared by LCM, is confidential and may not be copied, reproduced or otherwise redistributed. It has been issued for informational purposes only and nothing in this document should be interpreted as constituting legal, regulatory, tax, financial or investment advice. The information contained herein is addressed to and directed only at professional investors and should not be relied on by any other person. It does not constitute a report, an offer or a solicitation by anyone in the United States or in any other jurisdiction in which such a report, offer or solicitation is not authorized or to, or for the account or benefit of, any US person as defined in relevant US securities laws, or to any person to whom such report, offer or solicitation is unlawful. The information herein may be approximate. It may contain errors and/or omissions and due to rounding, numbers presented throughout may not precisely reflect performance results. It may be based on third party sources of information which are assumed to be correct and reliable but not independently verified. This document may also contain forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties. LCM does not guarantee and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any information provided herein which may be amended at any time. LCM is under no obligation to provide updated version of such information.

Instead the result of this new policy is that Japanese bank lending is now rising at its fastest pace in over 10 years. According to the New York Times¹⁶ the “BOJ has effectively back-financed nearly all of the bank lending growth” since the scheme was instituted.

Implications for Investment Strategy

It is probable that central banks continue to hope that the signalling of lower interest rates that Quantitative Easing implies will increase the demand for money encouraging banks to lend. However, indebtedness is at levels where relying on adding more debt as a solution is challenging. The easiest cure for too much debt is inflation¹⁴ which is certainly not something that investors have been anticipating. Monetary policy has been targeted at conditions in the real economy and because the creation and allocation of credit has been trusted to private banks much of the money that has been created has been allocated to areas that don't contribute to GDP. The predicament is that central banks are likely to continue with their unconventional policies, this is supportive of asset prices but increases inequality. Their aim is for banks to start lending again in order to achieve the level of growth that will help alleviate inequality. However, when private banks lend, they predominantly lend against housing which boosts house prices increasing inequality.

There is much wringing of hands by 'experts' who fear that unconventional monetary policy has contaminated markets which because of the government interference can no longer correctly price risk. It is unlikely that these same 'experts' complained about decades of unchecked credit growth, much of which occurred without their realisation, in the shadows of the offshore banking system. Having allowed this distortion to be created by the private sector the result has been unprecedented levels of debt which ever since 2008 the system has been working through. It could be argued that given we are here, which we rather wouldn't be, central banks are actually doing the best job they can of avoiding the catastrophic consequences that would be the alternative, an economic depression.

While economies continue to struggle their way through the pandemic there is concern about what happens when the government stimulus ends. However, by getting involved in the banking system and directing lending to specific areas of the economy it is possible that governments find the intervention habit difficult to kick. There are signs of increasing social unrest driven by the inequalities that the economic system has delivered over the last 40 years. It seems that either under continued QE or a return of private bank lending these inequalities are destined to get worse. Dalio¹⁴ argues that when interest rates approach zero it has historically signalled the final stages of a long term-debt cycle. Therefore, it is possible that a financial system reset is needed which is what has happened at the end of debt cycles in the past, government directed lending may be the start of this.

What approach should investors take in these circumstances? As ever there is much uncertainty regarding the future, it is likely that what worked in the past doesn't necessarily work going forward. The outstanding diversifying asset of the last 30 years, the treasury bond, is unlikely to do the same job of balancing investor portfolios now interest rates are zero. Therefore, the key for investors will be to structure diversified portfolios with the optionality to take advantage of the potential for change and indeed 'chaos' that may be necessary to produce that change.

References

- ¹ <https://economics21.org/html/open-letter-ben-bernanke-287.html>
- ² Miller, Roger L. and David D. VanHoose (1993), “*Modern Money and Banking*”, international edition, third edition, McGraw-Hill, New York.
- ³ Werner, R. A. (1993) “*Princes of the Yen*” Quantum Publishers.
- ⁴ McLeay, M., Radia, A. and Thomas, R. (2014), “*Money Creation in the Modern Economy*”, *Bank of England Quarterly Bulletin*, pages 14-27.
- ⁵ Werner, R. A. (2014b), “*Can banks individually create money out of nothing? — The theories and the empirical evidence*”. *International Review of Financial Analysis*, 36,1 –19.
- ⁶ Fowler, S., (2014) “*The Monetary Fifth Column: The Eurodollar Threat to Financial Stability and Economic Sovereignty*”, *Vanderbilt Journal of Transnational Law*
- ⁷ Carpenter S., and Demiralp, S. (2012), “*Money, Reserves and the Transmission of Monetary Policy: Does the Money Multiplier Exist*” *Journal of Macroeconomics*. 34(1), 59-75
- ⁸ Pozsar, Z. (2016) “*Global Money Notes #5*” – Credit Suisse Economic Research.
- ⁹ Bank for International Settlements (2013) “*Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*”
- ¹⁰ Friedman, M. (1971) “*The Eurodollar market: Some first principles*” *The St. Louis Fed*
- ¹¹ Bordo, M.D., and McCauley, R.N. (2017), “*Triffin: dilemma or myth?*” *BIS Working Papers* No 684.
- ¹² McGuire, P., and von Gotz, P., (2009) “*The US Dollar shortage in global banking and the international policy response*”, *BIS Working Papers* No 291.
- ¹³ Roxburgh C. et al (2010) “*Debt and deleveraging: The global credit bubble and its economic consequences*”, *McKinsey Global Institute*
- ¹⁴ Dalio, R. (2018), “*Principals for Navigating Big Debt Crises*”. *Bridgewater Associates, L.P.*
- ¹⁵ Siegel, J., Interviewed on CNBC 12 August 2020
- ¹⁶ <https://www.nytimes.com/reuters/2020/08/13/world/asia/13reuters-japan-money-boj.html>

Disclaimer: Lethame Capital Management (“LCM”), is a private company which manages only the personal assets of its principal, Piers D. Watson. This document, prepared by LCM, is confidential and may not be copied, reproduced or otherwise redistributed. It has been issued for informational purposes only and nothing in this document should be interpreted as constituting legal, regulatory, tax, financial or investment advice. The information contained herein is addressed to and directed only at professional investors and should not be relied on by any other person. It does not constitute a report, an offer or a solicitation by anyone in the United States or in any other jurisdiction in which such a report, offer or solicitation is not authorized or to, or for the account or benefit of, any US person as defined in relevant US securities laws, or to any person to whom such report, offer or solicitation is unlawful. The information herein may be approximate. It may contain errors and/or omissions and due to rounding, numbers presented throughout may not precisely reflect performance results. It may be based on third party sources of information which are assumed to be correct and reliable but not independently verified. This document may also contain forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties. LCM does not guarantee and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any information provided herein which may be amended at any time. LCM is under no obligation to provide updated version of such information.

For more Lethame Capital insights please visit www.letamecapital.com