



Summary

- **CPI strength in August was a shock to the market - more than offsetting the softer July number.**
- **Several categories responsible for the strength over the past year should now start to normalize, possibly substantially, with offsets coming from a broadening of strength into other areas**
- **PPI and import prices are also showing signs of slowing, albeit from very high growth rates, as commodities weaken, supply chain pressures ease and inventories move higher.**
- **While the price data looks like remaining noisy going forward – but with better news overall – the Fed views the labour market and wages as the key to the longer-term control of trend inflation.**
- **Wages remain strong and employment growth hasn't yet slowed enough.**
- **Credit growth remains solid, but money data suggests that cash is being moved into interest bearing rather than transactions balances.**

About this document

US Inflation Watch presents 18 charts comprising key inflation indicators grouped into five categories including consumer/producer price inflation, commodity prices, wage inflation, inflation expectations and monetary indicators.

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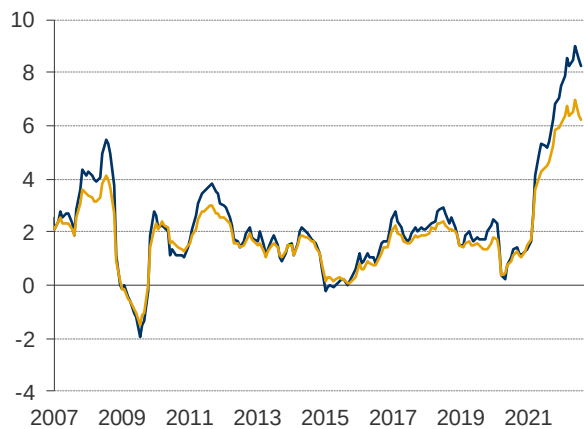
The Importance of Inflation

Inflation is the single most important indicator when measuring real wealth as it determines what wealth can buy i.e. purchasing power. If 'nominal' wealth doubles over 25 years but the level of prices also doubles, there is no net gain in 'real' wealth. It only takes annual inflation of 2.8% to cause a doubling in prices over 25 years.

About Altana Wealth

Altana Wealth is a specialist fund manager focused on delivering alpha where we have a competitive edge from niche strategies. As co-investors in all our funds, our interests are aligned with those of our investors. Altana was set-up by Lee Robinson, co-founder of highly successful Trafalgar Asset Managers in 2010. Our funds have won seven performance awards over the past three years.

Total Consumer Prices (% y/y)



— Total CPI
— Total PCE price index

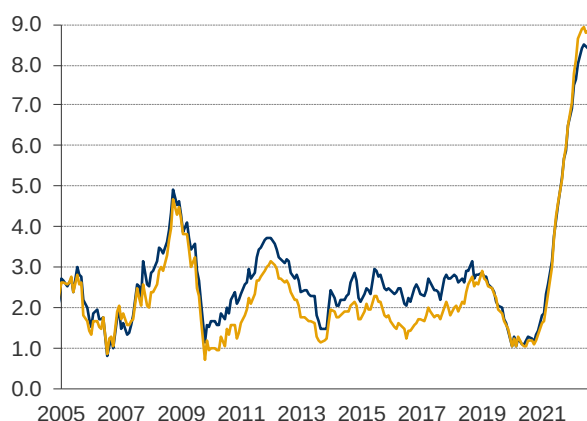
Core Consumer Prices (% y/y)



— Core CPI (ex-food and energy)
— Core PCE price index (ex-food and energy)

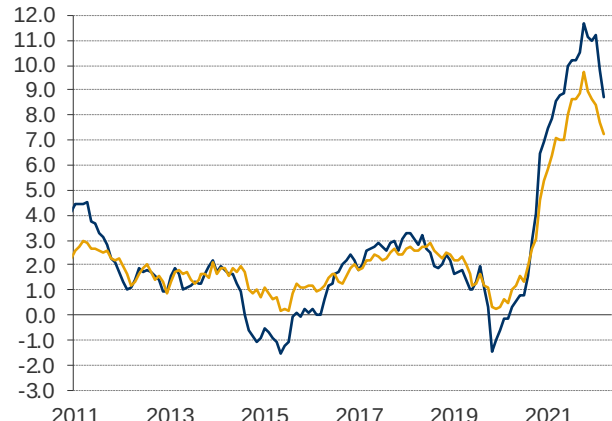
Current status: Core CPI remains stubbornly firm - the upside shock in the Aug data more than offsetting the downside surprise for Jul. There are three points worth making. 1) Indicators suggest that areas like autos, airfares and margins in general will fall going forward, possibly quite substantially, but the timing is unclear. 2) It is evident that inflation pockets are now popping up in other areas, suggesting that inflation psychology is broadening somewhat, perhaps supported by the lagged effect of higher wage costs – troublesome for the Fed. 3) Rents remain the central component of higher than trend core CPI – half of the Aug +0.57% m/m rise in core CPI was due to this category. In terms of 1), car auction prices have been falling and should equate to lower used car prices over coming months and beyond. This should also affect new car prices as and when inventory starts to improve in line with the recovery in auto production – timing unclear. Margins, as shown in the PPI data, remain elevated but are topping out and any move back towards normal levels could have a dramatic effect on core CPI. The improvements in inventory are encouraging in this respect – timing unclear. Airfares should fall sharply short-term given the substantial fall in air fuel prices. On 3) the peak m/m rate for rents may have been seen but it will likely take time for a major deceleration. The Fed has stated it will continue raising rates until it sees a meaningful (3 consecutive months?) slowdown in m/m core CPI.

Producer prices (% y/y)



— Core PPI (finished consumer goods)
— Core PPI (all finished goods)

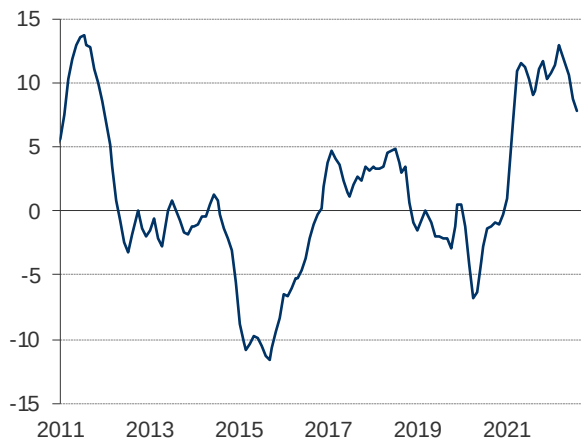
Producer prices (% y/y)



— PPI final demand
— Core PPI final demand (ex-food and energy)

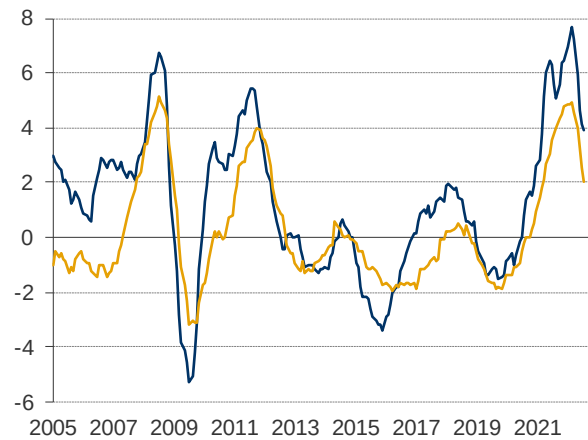
Current status: Core PPI is starting to slow, especially in m/m annualised terms. Margins in Aug were higher but due to a temporary quirk at gas stations (lag between lower wholesale and retail prices). Ex-margins core PPI was only +0.2% m/m. Lower commodity/import prices and broader margin falls bode well for slower prices in future.

Import Prices (% y/y)



— Import prices

Import Prices – core and China (% y/y)



— Core import prices (ex-fuels)

— Import prices of Chinese goods

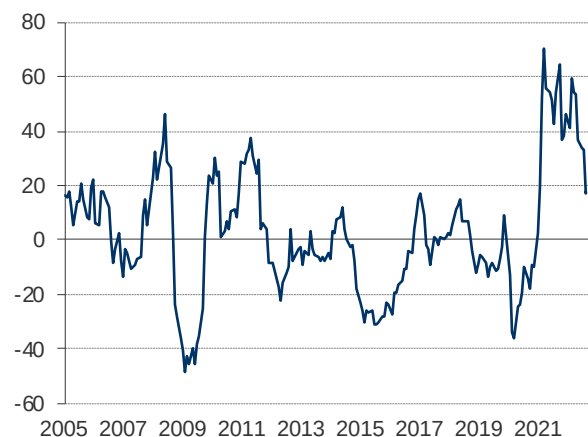
What is this data? Producer price indices refer to prices set by domestic producers only, so Import Prices are also monitored to gauge price pressures entering the system from abroad. Import price data excludes tariffs.

Current status: Y/y growth in Import prices ex-fuel continues to decelerate in terms of y/y growth. Ongoing strength in the USD and recent weakness in commodities are probably underpinning these developments. Core industrial supplies & materials were down to +8.6% y/y from 20% plus levels in Jan-Apr, while capital goods and consumer goods ex-autos were +3.3% and +1.8% y/y respectively, both down from the 4% area earlier in the year. The external upward pressure on prices seems to be softening somewhat.

CRB-TR/J Commodity Price Index



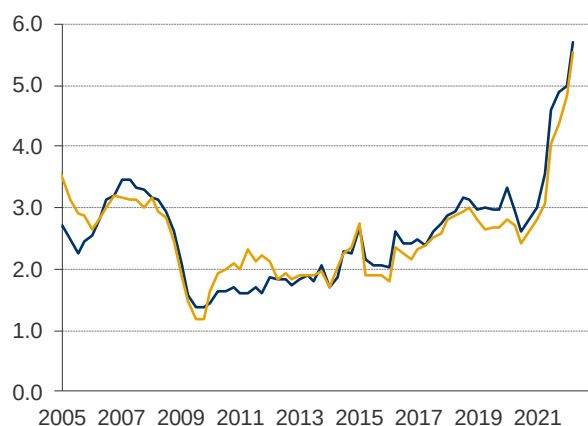
CRB-TR/J Commodity Prices (% y/y)



What is this data? CRB Index is a basket of commodity prices - a timelier indication of Crude PPI.

Current status: Commodity prices have been falling sharply since early Jun with initial weakness in raw industrials spreading elsewhere to included energy and food. This is a helpful development in terms of negatively affecting inflation expectations, especially for consumers, but on the flip side in terms of Fed demand management it is supportive of consumer spending on other items. Overall, it is a constructive development as it reduces the risk of inflation and inflation expectations getting out of control.

Employment Cost Indices (% y/y)



— **Total Employment Cost** (private sector)
— **Wage & Salaries component** (private sector)

Hourly Earnings (% y/y)

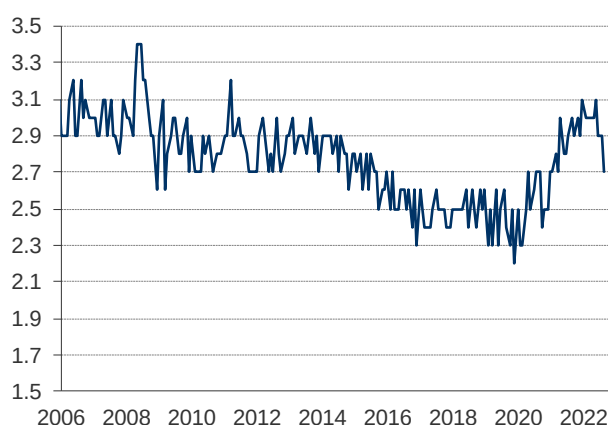


— **Hourly Earnings** (private sector)

What is this data? The Employment Cost Index (ECI) is the total cost of employing workers (wages, salaries, benefits) and is quarterly; 'hourly earnings' is monthly.

Current status: Wage growth was higher (after revisions) than initial indications in the monthly data, while Q2 ECI data was also strong. This is uncomfortable for the Fed as it sees wage strength as a major obstacle to achieving the 2% inflation goal and adds to the urgency to engineer demand conditions that will cause a weakening in the labour market. Employment growth has been slowing but not by enough. Of note in the latest set of FOMC forecasts was the unemployment rate at 4.4% for Q4 2023 from 3.8% in Q4 2022. A clear signal perhaps of the direction of travel the Fed sees as required to resolve the situation. Any rise in the labour participation rate to correct the supply/demand imbalance would also be welcome. The vacancies/unemployment ratio – a favourite of Fed Chair Powell – remains very high but fell back sharply in Aug. A welcome sign if sustained and the start of a trend.

Consumer Inflation Expectations (% y/y)



— **Univ. of Michigan survey of Consumer expectations for CPI over next 5-10y**

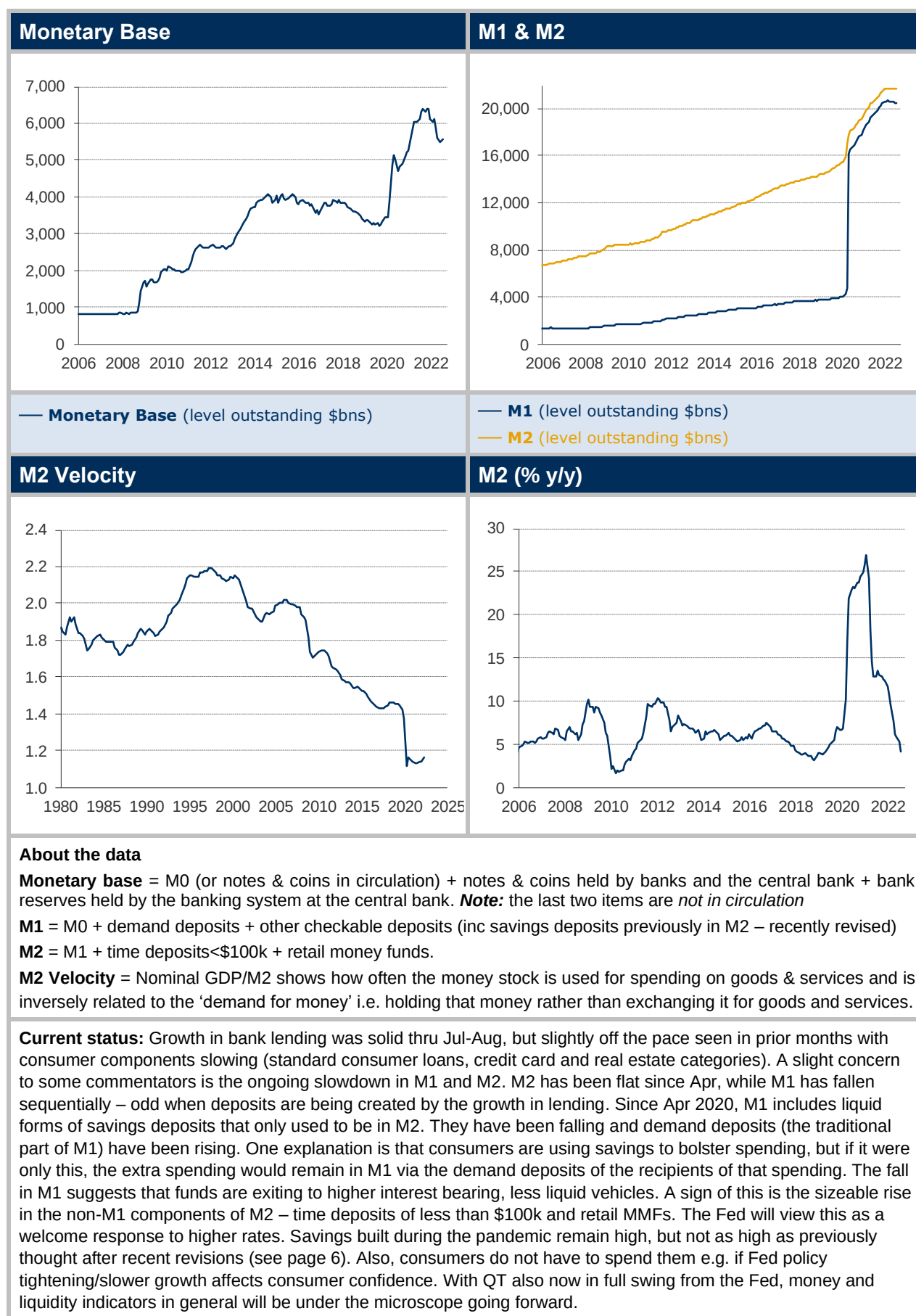
Market Inflation Expectations (% y/y)



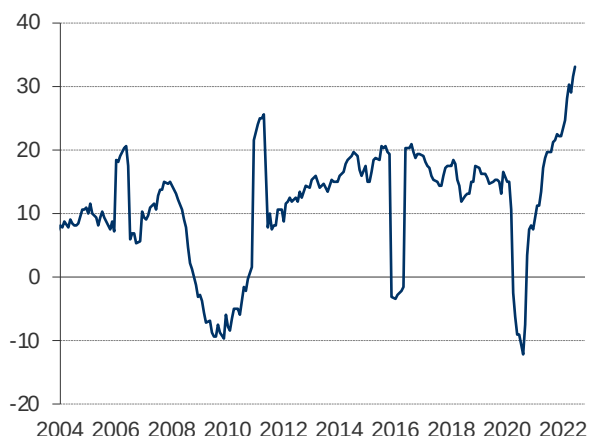
— **US 10yr Breakeven Inflation Rate** (10yr Treasury yield minus 10yr TIPS yield)

What is this data? Inflation expectations held by the public (Michigan survey) & financial market (10y breakeven inflation rate). Inflation expectations are significant e.g. higher consumer expectations of inflation may lead to higher wage demands. If market expectations of inflation are rising/falling, this may require some reaction from policymakers.

Current status: Market expectations remain well off the highs due to lower growth expectations and weak commodities. 5-10 yr consumer expectations have also fallen alongside lower fuel prices, so for now at least earlier Fed concerns regarding the strength of this number (in Jun) have subsided.



Consumer Credit



— Consumer Credit (6mth MA of m/m \$bn change)

Consumer Credit (% y/y)



— Consumer Credit

What is this data? Covers most short and intermediate-term credit extended to individuals, excluding loans secured by real estate. Consumer credit growth will directly influence money growth and monetary velocity.

Current status: Consumer credit growth remained strong in Jun but eased off in Jul. The slowdown was mainly in the non-revolving category as opposed to revolving (credit cards). Overall, the rise in credit is still fairly strong by historical standards so there is no sign of any squeeze just yet. From an overall perspective, consumers on aggregate remain in a healthy state, both in terms of liabilities and debt ratios and outright savings. However, revisions revealed in the recent set of Q2 GDP and Aug personal income and expenditure data show that consumers built less savings than previously thought during the pandemic. In addition, they have also spent more of these savings in monetary terms since then – so a double whammy. The net result is that the cushion of 'surplus' savings that now remains is much lower than previously thought - around 5.5% of GDP as opposed to 8%.

Appendix A – Monetary Indicators

The monetary backdrop is somewhat profound in terms of its potential influence on inflation and is the subject of considerable debate. Below is a simple monetary framework that helps to explain the role of Money in the economy and how it can affect inflation.

A Monetary Framework

The amount of money circulating in the economy will have implications for inflation in the medium-long term. This is best expressed via the **Quantity Theory Identity**

$$M.V \equiv P.Y$$

Where M is the amount of money in the economy, V is the velocity of money (how many times the amount of money is used), P is prices and Y is real output (GDP). Together, P.Y is money or nominal GDP.

As a basic identity this is not controversial. If M (\$500) is used 5 times (V) then \$2,500 will have been spent and will be equal to the value (P.Y) of all goods sold in the economy - e.g. 2,500 items of real output (Y) at \$1 each (P) or 1,000 of (Y) at \$2.50 each (P) etc.

Where the identity becomes more interesting is in the assumptions made about its components. Traditional Monetarists contend that V is fairly stable and predictable, and Y is constrained by the capacity of the economy. So, Monetarists argue that if M is rising faster than Y and V is stable, it follows that P will also rise. In other words, money growth creates inflation.

Others contend that V is not stable and that Y can occasionally deviate substantially away from full capacity, so the relationship between M and P is less obvious. For example, since the Global Financial Crisis the Federal Reserve has made great efforts to increase the supply of money (M), but this has not led to proportionate increases in P.Y. This is due to two things. First, a reduction in velocity - any extra money balances are merely accumulating in the system (higher demand for money) rather than being spent and second, a lower money-multiplier. The money-multiplier represents the rate at which central bank created money (the monetary base) generates additional increases in the total money stock, primarily via the lending of commercial banks – more on money creation below.

In sum, this basic Quantity Theory Identity is a useful framework for analysing the potential interaction between the monetary and real sectors of the economy and the data followed in this document will seek to shed light on what is happening to the various components of this identity.

What is Money?

Another issue is how 'money' or M is defined. Definitions of money include M0, MB (the Monetary Base), M1, M2, M3 and MZM (maturity zero money) and the basic difference between them is primarily related to liquidity. The further we move along the spectrum towards M3 the less liquid 'money' becomes. For example, a large time deposit cannot be spent immediately whereas a checking deposit can. Note that M3 and MZM are no longer used in the US by the Fed.

Definitions

M0 = notes and coins *in circulation* with the non-bank public.

Monetary base = M0 + notes and coins held by banks and the central bank + bank reserves held by the banking system at the central bank (bank reserves) **Note:** the last two items are *not in circulation*.

M1 = M0 + demand deposits and other checkable deposits (including savings deposits after Fed methodological revision – they were previously in M2). **Note:** bank reserves are not included in M1 – important when looking at how Fed QE affects M1 and M2 etc.

M2 = M1 + time deposits less than \$100k + retail money funds. **Note:** institutional money market funds are not included in M2.

M3 = M2 + large time deposits + institutional money market funds + short-term repos and other large liquid assets.

MZM (Money Zero Maturity) = M2 + all money market funds less time deposits **Note:** MZM aimed to identify all forms of 'liquid' money and was a hybrid of M2 and M3.

Who creates Money?

A useful way to think about money – again relevant when considering Fed QE – is who creates it? The short answer is that both the central bank and the commercial banking system create money.

The Monetary Base is created and influenced by the Central Bank and is so-called because it is the base from which all other forms of money (non-M0, M1, M2 etc.) are created by the commercial banking system via bank lending.

For example, using QE as an example, the Fed buys T-Bonds from a bank and credits that bank's account at the Fed with the proceeds. These funds are now reserves. At this point, no money has entered circulation, so no other measure of money apart from the Monetary Base has been affected.

As the Monetary Base has increased, commercial banks are more *able* to create other money by issuing new loans and if they were to do this it would lead to a corresponding rise in deposits. Bank lending is the main driver of 'money creation'. This is because a loan, when advanced to the borrower, will be deposited in the borrowers account i.e. an immediate rise in deposits (higher M1). Or, if the 'loan' is via a credit card, the borrowers account will not be affected, but the recipient of the credit card spending will deposit the revenue in their own bank account, so deposits somewhere in the system will have increased because of the 'loan' (higher M1).

In sum, boosting the Monetary Base (via e.g. Fed QE) increases the ability of banks to create other money such as M1. But the rate at which this happens (the money-multiplier) will come down to a commercial judgement by the banks as to whether or not they would like to advance extra loans.

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