Prepared by Chief Risk Officer: Meriton Sllamniku

Inflation Report

September 2024

Summary

- **CPI data improved in July and August, with core CPI stabilising. Core PCE readings were more favourable, supporting the Fed's decision to cut rates**
- **PPI components linked to core PCE inflation came in lower than expected, but rising trade services inflation could keep inflation expectations high**
- **Wage growth is slowing as job openings and payroll growth decline. Wage inflation risks remain subdued, with fewer incentives to switch jobs and the quits rate falling below 2%**
- **M1 and M2 rose in July and August, with M2 increasing 0.6%—the largest monthly gain this year—driven by strong money market fund inflows**
- **Liquidity conditions were stable in July and August. While reserves remain ample at over $3.3 trillion, their uneven distribution raises concerns for smaller banks**
- **Recent Fed guidance suggests two 25bps cuts in November and December, raising the risk of market disappointment if the labour market improves or inflation data falters**

About this document

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

Contents

Inflation Report

September 2024

The Importance of Inflation

Inflation is the most critical 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 regulated in the UK and Monaco. It manages over $600 Mio across Credit, Special Situations, Digital Assets, Carbon, Multi-Manager, and Social Impact. It is focused on generating alpha from innovative and niche strategies uncorrelated to other asset classes. These niche strategies are often less crowded and overlooked by large managers since capacity is generally constrained. Altana is a meaningful co-investor in its funds, aligning interests with investors.

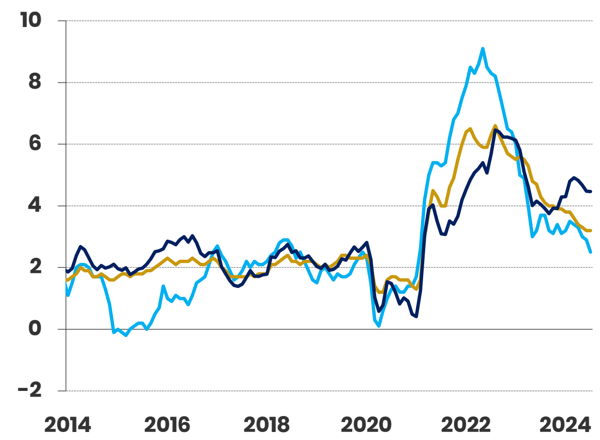
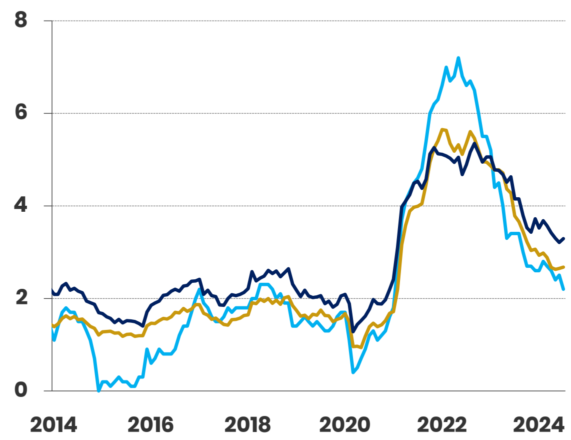
Lee Robinson established Altana in 2010 as his co-investment vehicle. Today, the Altana team comprises thirty investment professionals in London and Monaco. It has built a best-in-class infrastructure for operations, investor relations, and fund accounting alongside regulated service providers.

Please get in touch with Stephen Martus, CFA, Head of Business Development, to learn more. Stephen.Martus@altanawealth.com

Prepared by Chief Risk Officer: Meriton Sllamniku

Inflation Report

September 2024

Consumer prices as measured by CPI (% y/y)	**Consumer prices as measured by PCE (% y/y)**
	
— Total CPI — Core CPI — Core CPI Services (ex-housing), supercore	— Total PCE — Core PCE — Core PCE Services (ex-housing), supercore

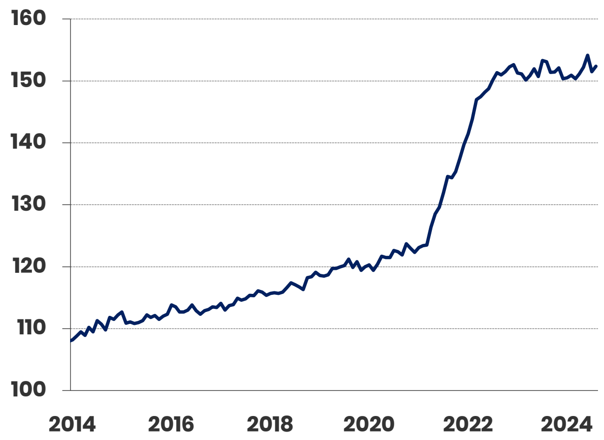
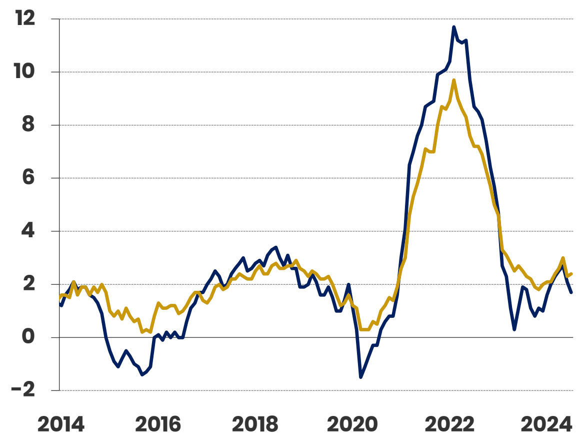
Current status:

Consumer price inflation continued to head in the right direction in July and August. In Q1, core CPI averaged 0.37% m/m, dropping to 0.13% m/m in Q2. July and August came in at 0.17% and 0.28% m/m, respectively. Core goods deflation remains persistent, with July y/y printing -1.9%, the lowest rate in decades. The global manufacturing recession and the slowdown in China remain a drag on goods prices imported into the US, which is positive for US consumers. Services inflation remains the key sticking point, with shelter continuing to exert upward pressure on core services inflation. August's 0.51% m/m increase in shelter inflation was the strongest monthly reading since January. Although the annual growth rate has been slowing, Fed officials have stressed disappointment at this pace of disinflation. Despite shelter's stickiness, broad-based disinflation continues across the services sector. Notably, the Fed's preferred inflation measure, core PCE, only attributes an 18% weighting to rent prices compared to core CPI's 40% weighting. Core PCE numbers have been particularly constructive recently. In Q1, core PCE averaged 0.36% m/m, but in July and August, they came in at 0.16% and 0.13% m/m, lower than the implied readings from the June SEP projections. These numbers followed up a good Q2, which gave the Fed good reason to go ahead with a bigger rate cut.

Prepared by Chief Risk Officer: Meriton Sllamniku

Inflation Report

September 2024

Producer Prices (index)	**Producer Prices (% y/y)**
	
— PPI Trade Services (the margins of retailers & wholesalers)	— PPI final demand — Core PPI final demand (ex-food and energy)

Current status:

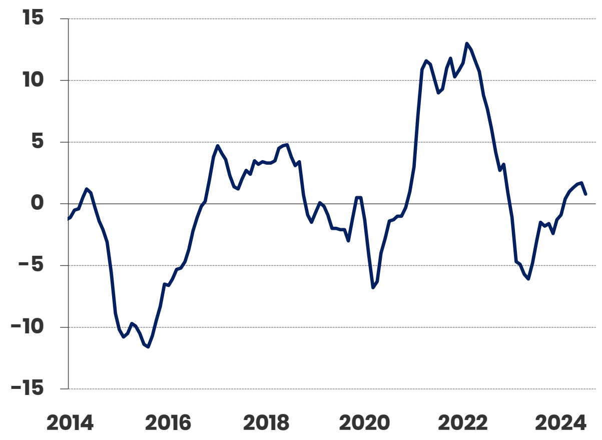
On a positive note, the components of PPI contributing to core PCE, such as airfares and portfolio management services, were lower than expected, which helped reduce PCE inflation. However, the resilience of trade services inflation—specifically the gross margins of wholesalers and retailers—is an issue. In August, trade services prices increased by 0.6%, resulting in a 3.9% annualised rate over the three months leading to August. This creates uncertainty for the inflation outlook, as retailers and wholesalers may continue to pass higher prices onto consumers, keeping inflation expectations elevated. Retailers' and wholesalers' behaviour could also be viewed more positively. They are optimistic about consumer spending patterns if they believe they can pass on these higher prices.

Prepared by Chief Risk Officer: Meriton Sllamniku

Inflation Report

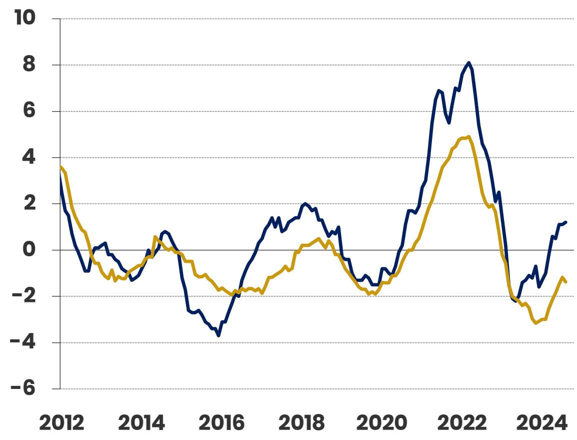
September 2024

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:

Although the annual growth rates of core import prices are trending higher, this is mainly due to base effects from weak readings last year. Despite dollar weakness in July and August, monthly changes in core import prices were benign, primarily imported goods from China. Core import prices rose by 0.1% m/m in July and fell by 0.1% in August. These readings took the 3-month annualised growth rate of core import prices at the end of August to 0.8%, down from the 3% levels seen in Q1.

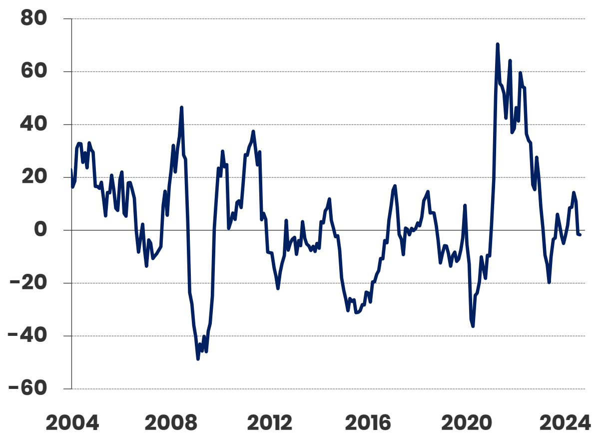
Prepared by Chief Risk Officer: Meriton Sllamniku

Inflation Report

September 2024

CRB-TR/J Commodity Price Index

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



What is this data?

The CRB Index is a basket of commodity prices—a timelier indication of Crude PPI.

Current status:

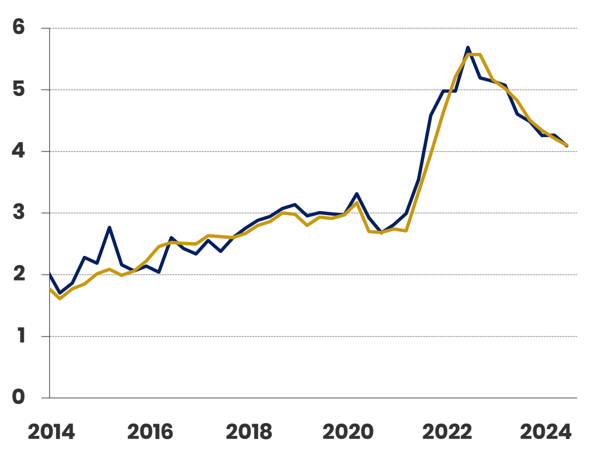
Commodity prices across the board were down except for precious metals. Gold charged to new highs in August as US recession risks grew following the weak jobs report in early August, igniting a major positioning unwind in big US tech and the yen. The softer demand outlook in the US and bearish seasonals also didn't help oil prices, sending Brent below $80/bbl. The industrial metal complex remained weak as Chinese economic data continued to disappoint. In August, copper and iron ore were down 4.4% and 6.5%, respectively.

Prepared by Chief Risk Officer: Meriton Sllamniku

Inflation Report

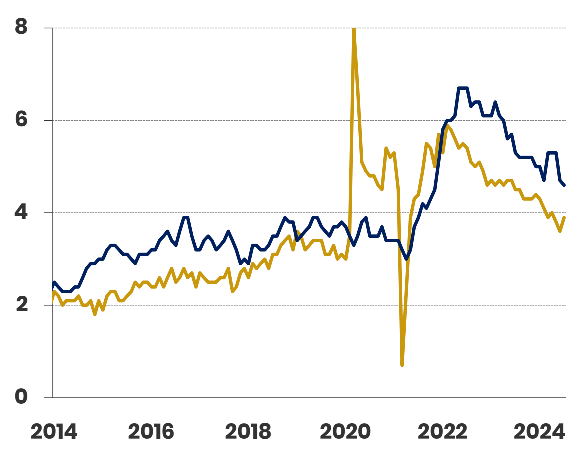
September 2024

Employment Cost Indices (% y/y)



— Wage & Salaries (private sector)
— Wage & Salaries-ex incentives (private sector)

Hourly Earnings



— Average Hourly Earnings % y/y (private sector)
— Atlanta Fed Wage Growth (3-month MA)

What is this data?

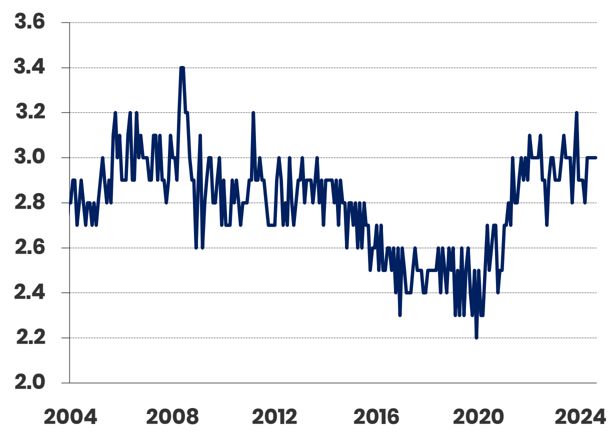
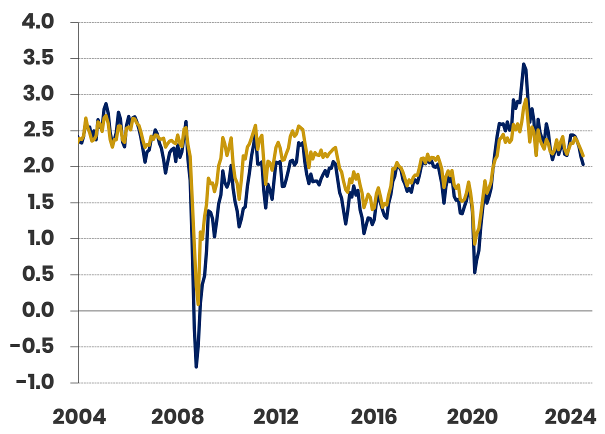
The Employment Cost Index (ECI) measures the total cost of employing workers (wages, salaries, benefits) and is quarterly—just the wages and salaries components are shown above; 'hourly earnings' is monthly. The Atlanta Fed Wage Growth Tracker, developed by the Federal Reserve Bank of Atlanta, shows the 3-month moving average of annual wage growth.

Current status:

As measured by average hourly earnings and the Atlanta Fed tracker, wage growth shows good progress in lowering wage inflation. We've seen the labour market continue to loosen in the form of fewer job openings and slower payroll growth. With fewer job openings helping bring labour demand closer to being in line with labour supply, we see further downside risks to wage inflation in the coming months. Notably, for the first time since 2018, the 3-month moving average wage growth for job switchers has fallen below that of job stayers. The quits rate also fell below 2% in August for the first time since COVID. With fewer incentives to switch jobs due to less attractive pay and fewer opportunities, wage inflation is expected to remain subdued. All of this said, m/m readings for average hourly earnings have risen slightly higher recently. Whether this sustains is something to watch, the upcoming ECI report for Q3 will shed more light on what's seemingly a favourable backdrop for wage pressures.

Inflation Report

September 2024

Consumer inflation Expectations (% y/y)	Market inflation Expectations (% y/y)
	
— Univ. of Michigan Survey of Consumer expectations for CPI over the next 5-10y	**— US 10yr Breakeven Inflation Rate (10yr Treasury yield minus 10yr TIPS yield)** **— US 5yr Breakeven Inflation Rate (5yr Treasury yield minus 5yr TIPS yield)**

What is this data?

Inflation expectations held by the public (Michigan survey) and financial markets (10y/5y breakeven inflation rates). Inflation expectations are important as higher consumer expectations of inflation may lead to higher wage demands.

Current status:

Market concerns over inflation continued to abate, reflected in inflation breakevens closing August at their lowest since late 2020. This primarily comes down to the Fed having gained enough confidence in its inflation mandate to justify a shift toward looser monetary policy. The message from Jerome Powell at the Jackson Hole speech in late August was clear, stressing that the balance of risks has now shifted from inflation to concerns over the labour market. Consumer inflation expectations struggle to move below 3%, which is puzzling given the drop in gasoline and food prices seen in recent months.

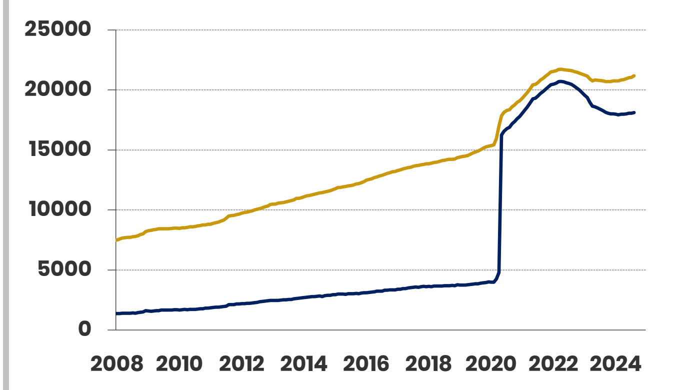
Inflation Report

September 2024

Monetary base

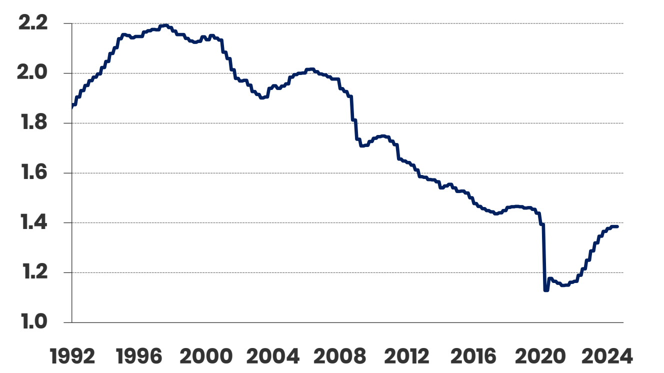
— Monetary Base (level outstanding $bns)

M1 & M2

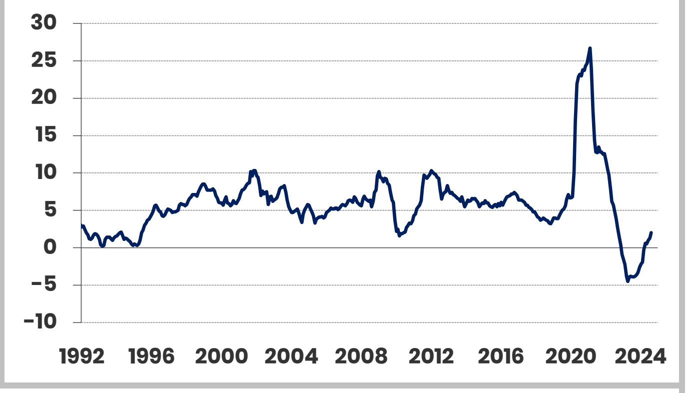


— M1 (level outstanding $bns)
— M2 (level outstanding $bns)

M2 velocity



M2 (% y/y)



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

M1 = M0 + demand deposits + other checkable deposits (inc savings deposits previously in M2 – recently revised)

M2 = M1 + time deposits<$100k + retail money funds.

M2 Velocity = Nominal GDP/M2 shows how often the money stock is used for spending on goods and services. It is inversely related to the 'demand for money', i.e., holding that money rather than exchanging it for goods and services.

Current status:

M1 and M2 rose by 0.3% and 0.8%, respectively, through July and August. The August monthly increase of 0.6% in M2 was the largest this year, reflecting rising deposit bases and strong money market fund inflows. Despite falling bill yields in anticipation of lower interest rates, retail investors and institutions continue to pile into money market funds. By the end of August, the industry's total assets reached a record $6.3 trillion, up 31% since the regional banking crisis in March. If the yield curve remains inverted, which means three-month T-bill yields exceed those of two-year Treasury notes, the incentive to invest in money market funds will persist. A small TGA build in July initially limited M1 growth, but this reversed in August as Treasury balances declined, boosting private sector deposits and M1. The 0.4% August increase in M1 cannot be fully explained by the TGA drawdown, especially with bank lending growth soft. One explanation could be that consumers are becoming more cautious and increasing their savings, supported by recent upward revisions to the savings rate.

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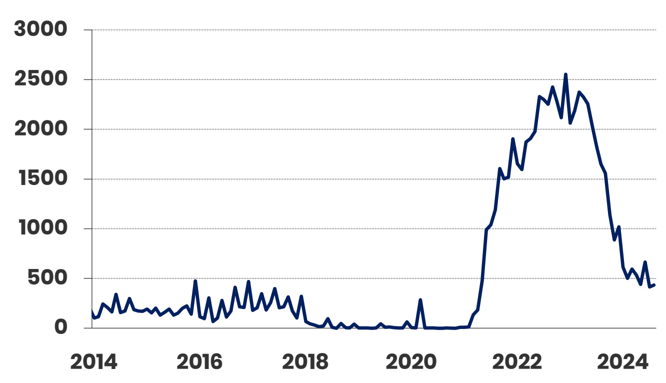
Inflation Report

September 2024

US reserves at Federal Reserve banks

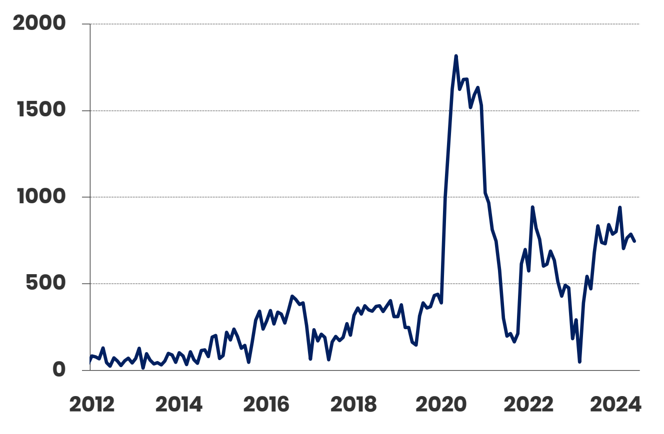
— Reverse balances at Fed banks ($trn)

Reverse Repo Facility (RRP)



— RRP balance ($bn)

Treasury General Account (TGA)



— Treasury General Account (balance in $bn)

Net Fed Liquidity

— Net Fed Liquidity ($trn)

What is this data?

This data helps track broader liquidity conditions by examining reserves across the Federal Reserve banking system, the amount of money parked in the Fed's overnight repurchase facility (RRP), total Treasury cash balances, and outstanding marketable Treasury debt.

Current status:

Liquidity conditions were stable throughout July and August, with a brief uptick following the usual quarter-end window dressing of the RRP facility. Institutions tend to park more money at the RRP at quarter-end so that their balance sheets appear healthier. Barring short-term gyrations, the Treasury's cash account and RRP remained unchanged. Reserve balances, commercial bank deposits at the Fed, settled just above $3.3 trillion in August. The Fed still deems this level "ample" to maintain healthy funding markets. Although the level of reserves may be in a good place, the distribution is just as important. Reserves tend to be unevenly distributed, with a more significant skew towards the bigger banks. This means smaller banks may be holding onto fewer reserves in case of an emergency. This uneven distribution makes it more challenging to determine the optimal level of reserves. Still, the Fed feels comfortable today continuing their quantitative tightening programme.

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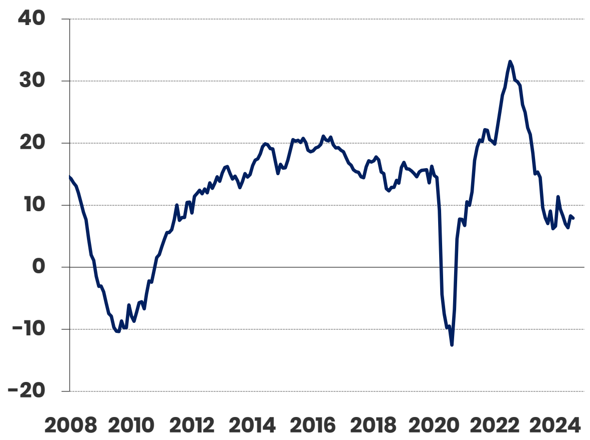
Inflation Report

September 2024

Consumer credit	Consumer credit (% y/y)
	
— Consumer Credit (6mth MA of m/m $bn change)	— Consumer Credit

What is this data?

It 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:

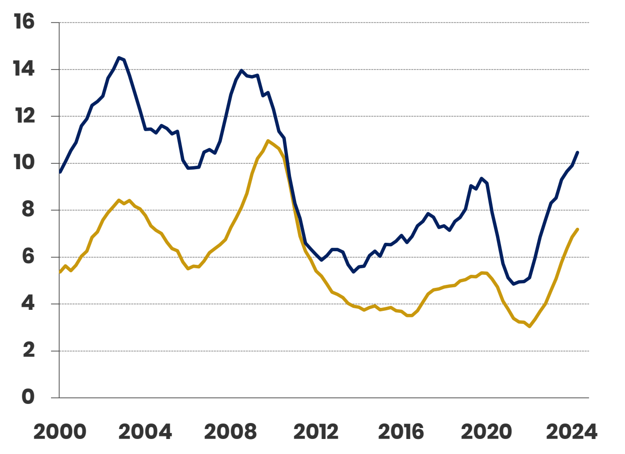
In the latest August report, US consumer credit rose $8.9 billion, below an expected $12 billion increase but still above the 6-month average. July saw consumer credit rise by $26 billion, the most significant monthly jump since November 2022. We are witnessing looser bank lending standards translate into a pickup in consumer credit activity. Although we've flagged signs of consumer fatigue in previous reports, recent monthly increases do not suggest that the average US consumer faces any trouble. The latest GDP revisions confirmed this as personal incomes were revised higher than spending, meaning consumers have a larger savings buffer than initially thought. This and lower interest rates should support consumption and consumer credit growth in Q4.

Prepared by Chief Risk Officer: Meriton Sllamniku

Inflation Report

September 2024

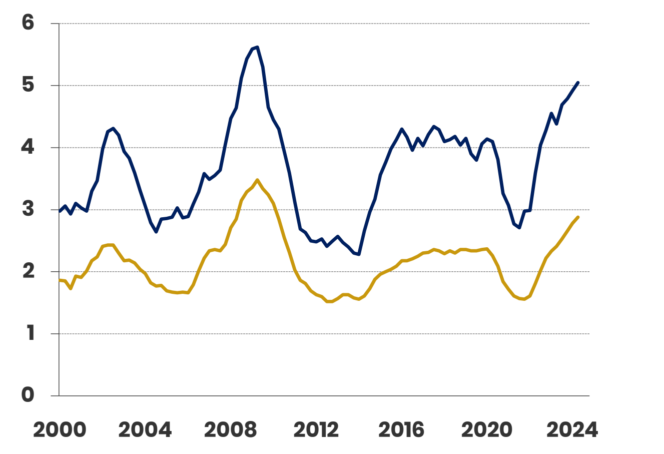
Credit card debt- delinquency rates



—Transition into serious delinquency for ages 18-29

— Transition into serious delinquency for all ages

Auto loan debt-delinquency rates



— Transition into serious delinquency for ages 18-29

— Transition into serious delinquency for all ages

What is this data?

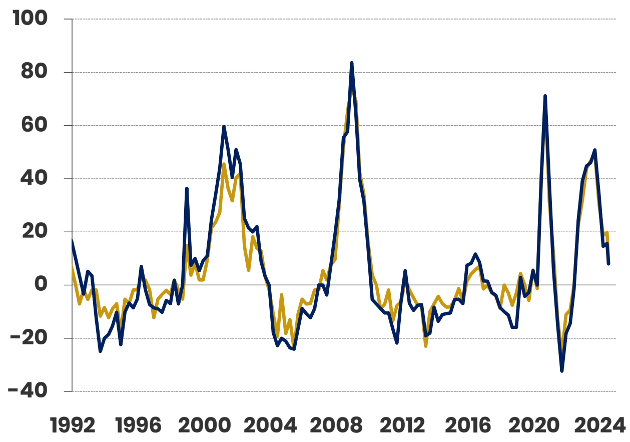
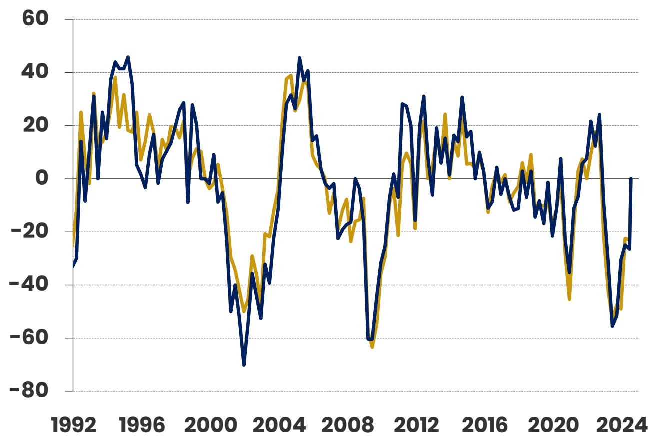
Quarterly data provided by the NY Fed provides insight into consumers' credit health, showing the percentage of debt transitioning into serious delinquency, i.e., over 90 days due.

Current status:

Q3 data has yet to be released; therefore, the commentary remains unchanged. Transitions into serious delinquency rose again in Q2 across all loan types and age groups. For all ages, delinquency transition rates for credit cards and auto loans increased slightly from Q1. Although the rate of increase slowed from the previous quarter, the level of credit card debt transitioning into serious delinquency remains worryingly high. Among those aged 18-29, who tend to use credit cards more, transitions into serious delinquency accelerated faster than in Q1. This weakness among younger consumers corresponds with employment data showing that this age group struggles to find jobs.

Inflation Report

September 2024

SLOOS- tighter lending standards	**SLOOS- stronger demand conditions**
	
— % tightening standards for C&I loans for medium/large firms **— % tightening standards for C&I loans for small firms**	**— % reporting stronger demand for C&I loans for medium/large firms** **— % reporting stronger demand for C&I loans for small firms**

What is this data?

Quarterly Fed's Senior Loan Officer Survey provides insights into changes in bank lending standards for commercial and industrial loans. The survey gathers information from senior loan officers at major banks and financial institutions and asks questions about changes in lending standards, loan demand, and other factors influencing credit availability.

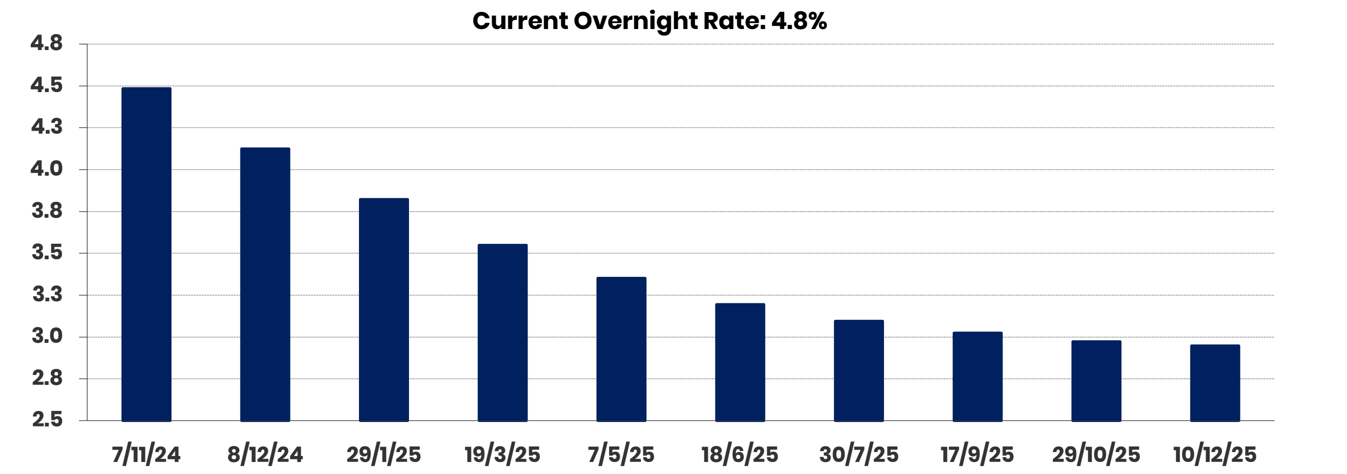
Current status:

Q3 data has yet to be released; therefore, the commentary remains unchanged. The Q2 senior loan officer survey shows a different picture from the one presented by rising delinquencies. The most recent report showed banks barely tightening lending standards for business loans. For C&I loans, the July 2024 survey showed a significant easing of standards compared to a year ago when the number of banks reporting tighter standards was much higher. The percentage of banks tightening standards for C&I loans for large/medium and small businesses stood at 7.9% and 8.2%, respectively- down by over 40 percentage points from last year. Regarding demand for C&I loans, banks reported unchanged demand from firms of all sizes. With fewer banks tightening lending and demand for loans stabilising as rate cuts approach, credit growth is poised to accelerate in the medium term. Despite fears of an impending recession, such easing of lending standards and steady demand for credit typically don't coincide with economic downturns.

Inflation Report

September 2024

Fed Funds Futures pricing



Implied Overnight Rate at each Federal Reserve meeting

What is this data?

Fed funds futures pricing reveals market expectations for the outcomes of upcoming FOMC meetings regarding the Fed funds rate target. This shows us the implied overnight rate at each Federal Reserve meeting.

Current status:

Although this report covers data for July and August, we must point out the Federal Reserve's decision to cut the Fed Funds rate by 50bps in September. This brought the overnight rate down from 5.33% to 4.83%. By the end of September, the market was pricing in over 70bps of cuts for the two remaining meetings in 2024, implying some chance of another 50bps cut. Despite the Fed going bigger in September and effectively front-loading cuts, economic projections and guidance by the Fed indicate two 25bps cuts in November and December. Of course, things can change depending on the data, but markets may end up disappointed if labour market or inflation data strengthen.

Inflation Report

September 2024

Appendix A – Monetary Indicators

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

A Monetary Framework

The amount of money circulating in the economy will affect inflation in the medium-long term. This is best expressed via the **Quantity Theory of 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 is used), P is prices, and Y is real output (GDP). Together, P.Y is money or nominal GDP.

This is not controversial as an essential identity. If M ($500) is used five 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.

The identity becomes more interesting in the assumptions made about its components. Traditional Monetarists contend that V is relatively stable and predictable, and the economy's capacity constraints Y. Monetarists argue that if M rises faster than Y and V is stable, P will increase. In other words, money growth creates inflation.

Others contend that V is unstable, and 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 the central bank creates money (the monetary base) and generates additional increases in the total money stock, primarily via the lending of commercial banks – more on money creation below.

In sum, this fundamental Quantity Theory Identity is a valuable framework for analysing the potential interaction between the monetary and real sectors of the economy. 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 fundamental 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.

Inflation Report

September 2024

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 the Fed methodological revision—they were previously in M2). Note that bank reserves are not included in M1, which is essential when considering 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 significant 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 helpful way to think about money – again relevant when considering Fed QE – is to consider who created it. The short answer is that central and commercial banking systems create money.

The Monetary Base is created and influenced by the Central Bank. It 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, 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 primary driver of 'money creation'. This is because a loan, when advanced to the borrower, will be deposited in the borrower's account, i.e. an immediate rise in deposits (higher M1). Or, if the 'loan' is via a credit card, the borrower's account will not be affected. Still, the credit card spending recipient will deposit the revenue in their 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 banks' ability to create other money, such as M1. However, the rate at which this happens (the money multiplier) will depend on the banks' commercial judgement of whether they would like to advance extra loans.

Inflation Report

September 2024

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