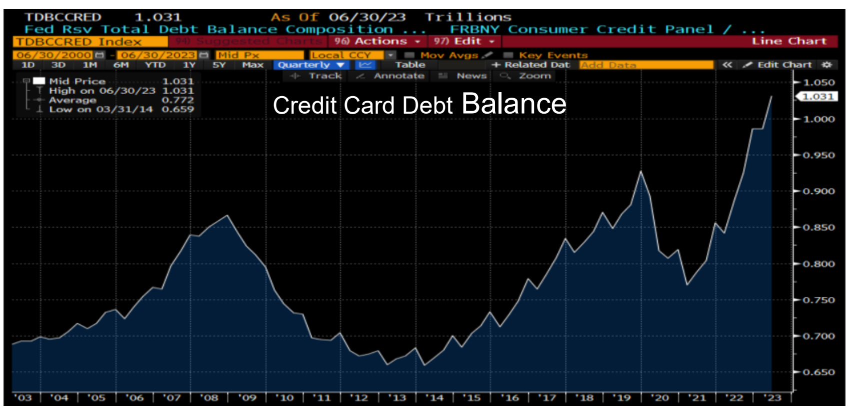
VANDERBILT Ave. ASSET MANAGEMENT

4th Quarter 2023

The consensus outlook in early 2023 was for a recession. Vanderbilt (VAAM) had a different outlook, expecting strong growth during the year. The economy was supported by a robust consumer with a 3%-4% savings rate and growth in real disposable income. In addition, the consumer sector was helped through labor market gains and falling unemployment. The importance of the consumer to the U.S. economy cannot be overstated. The consumer sector is approximately 66% of GDP and is as large as China's economy (the second largest in the world). Our outlook for growth resulted in a conservative posture for fixed income portfolio durations.

VAAM's 2024 outlook is for a **significant slowdown in growth** bordering on a recession during the second half of the year. There are various headwinds to growth. The lagged effects from the Fed's tighter monetary policy and higher interest rates will continue to offer surprises and impact growth. The consumer has exhausted his savings from the stimulus payments to aid the economy during Covid. Mortgage, auto and credit card debt outstanding has reached new highs.



Credit Card balances have eclipsed the one trillion-dollar mark for the first time during 2023. Sixty percent of card holders have been in debt for a year or more. Consumers are paying 18% to 20% interest on delayed credit card balances.

Job growth has been at a slower pace than in 2022 which will have an impact on disposable income. In the face of slowing growth, companies have controlled labor costs by reducing average hours worked rather than layoffs. Average hours worked have declined by 3% since January 2021 and are now at a more normalized historic level. Companies will eventually resort to layoffs rather than reducing hours worked to control labor costs in the wake of slowing growth. Despite a recent disinflation environment (where inflation grows at a slowing rate), consumers are still highly sensitive to certain components of the CPI.

The business sector is also seeing headwinds to spending and capital investment. A slowdown in GDP growth, let alone a recession, will raise uncertainty regarding earnings and cash flows. Net debt leverage for the corporate sector has risen because of depletion of cash relative to debt. Small business is acutely feeling the combination of higher interest rates and potential slowing growth. This is an important sector since small business accounts for two of every three jobs added in the past 25 years. Commercial real estate is another sector that has felt the adverse effects from the combination of higher interest rates and financial leverage. Companies have significantly lowered their demand for office space due primarily to employees working remotely. In general, commercial property values have experienced large declines. This is an industry with a large amount of floating rate debt. Short term rates have not declined, and a large portion of this debt needs to be refinanced in the next couple of years. According to Bloomberg, $1.3 trillion in floating rate notes will mature through 2025.

The current path of U.S. fiscal policy has significant negative long-term ramifications. Even though the economy has been relatively strong, sustained and increasingly large Federal fiscal deficits have occurred. Both political parties are at fault and, with an upcoming election next year, there is little chance of addressing this issue anytime soon. Debt service costs are soaring because of larger debt levels and higher interest rates from the Fed's monetary tightening. It is a toxic combination of higher debt levels having to be financed at higher interest rates. Deficits over the past half-century averaged 3.3% of Gross Domestic Product. Today, the deficit has expanded to approximately 6% of GDP.

Interest payments on the debt now take up about 14% of federal tax revenue. Net interest payments on the Federal debt surged above $600 billion a year from around $380 billion when the pandemic hit. Debt payments are getting close to spending on national defense. A third of the current deficit is going to pay interest. Maturities on U.S. Treasury securities have gotten shorter-almost one-third of the national debt needs to be rolled over within the next 12 months likely at higher interest rates. It will take a long-term bi-partisan plan to address this issue. However, the current polarized state of politics in Washington offers little hope of any serious approach to this problem in the foreseeable future. This situation will constrain the ability to provide increased fiscal stimulus to the economy to offset future recessions. This results in another layer of uncertainty and potential volatility to the economic outlook.

The path of **inflation** will continue to dictate monetary policy in the near term. The Fed was late raising rates to lower inflation. VAAM has had a forecast of a gradual decline in inflation rates. The CPI measure has gone from 9% to 2.9%. The core PCE measure (the Fed's preferred gauge of inflation that excludes food and fuel) has declined from 5.5% (year-over-year) in early 2022 to 3.2% currently-the lowest reading since March 2021. We are forecasting a 2.5% to 2.8% inflation rate for core PCE in 2024. Goods inflation has come down and services inflation is beginning to follow this trend. However, we believe the path of inflation will be **volatile**, not a straight line down, and will take some time to achieve the Fed's 2% objective. It should be noted that the most recent reading of the core PCE came in at 1.9% for the last six months at an annualized rate. While this most recent reading is below the Fed's 2% objective, the Fed will want to see a sustained level over a period of time before declaring victory over inflation. The recent auto workers contract has the potential to serve as a precedent to other industries and could result in a wage-price spiral. In addition, geopolitical concerns could provide inflation surprises for commodity prices.

There are various factors at work that will determine Federal Reserve **monetary policy**. VAAM forecasts the Fed won't cut rates until June 2024. While the consensus outlook is for the Fed to start cutting rates in March 2024, we believe there will be two rate cuts in the second half of the year. The Fed's dual mandates are (1) full employment with (2) low and stable inflation. The last several years the priority has been on the inflation mandate. However, with significantly slower GDP growth bordering on recession as 2024 progresses the Fed's priority could shift to full employment. The Fed will be very cautious about when and how much to reduce rates so it does not appear they are abandoning their inflation objective prematurely. If disinflation continues and the labor market cools, a slowdown in activity may be the reason for 2024 rate cuts more so than inflation. The Fed is facing a potential dilemma. If disinflation continues and the Fed pivots monetary policy with rate cuts, the Fed will enhance a soft landing and protect against a recession. However, if inflation is volatile and sticky with surprises and does not reach the 2% goal, the Fed may be unable to pivot to lower rates in the wake of a recession in order to protect attaining their inflation objective.

Market Sectors

The shape of the U.S. treasury yield curve took center stage once again in the fourth quarter. The yield curve slope, as measured by the difference between the 10-year treasury yield (4.57% on 9/30/23) and the 2-year treasury yield (5.04% on 9/30/23), began the quarter at -0.47%. An inverted yield curve—where long term rates are below short-term rates—signals that an economic slowdown will follow once the curve reverts to an upward slope. The rationale for this concept lies in the expectation that the Federal Reserve will cut short term rates in response to declining growth. In July 2023, the 10-year to 2-year treasury spread bottomed at -1.08%, at which time an economic slowdown seemed imminent as the labor market showed signs of softening, inflation was slowing down, and there was an expectation that growth appeared to be the next obstacle for the Federal Reserve to tackle. Following that, the 10-year to 2-year spread began its steady rise to, what was expected to be, a positive slope; but it only peaked at -0.16% in October 2023. By November and December of 2023, the curve started to again revert to a more inverted shape, ending the year at -0.37%, even as economic data continued to point to receding inflation and a weaker labor market. With its current inverted shape, the treasury yield curve still suggests that an economic slowdown is approaching, but its timing will be deferred until the curve resumes an upward slope.

Corporate bond spreads have also been performing in line with a delayed expectation of an economic slowdown, as spreads on corporate bonds have tightened. The tightening in spreads comes on the heels of lower interest rates, particularly in the 10-year part of the curve, lowering the cost of capital for corporate borrowers to issue new debt. Even net leverage, which, along with interest rates, had risen gradually in the last two years, has also decreased marginally in the past quarter.

While leverage levels appear resilient, our concern surrounds the continuing decrease in interest coverage ratios (EBITDA divided by interest expense). As corporate interest expenses have increased in the last two years due to rising interest rates and increased borrowing, this has led to lower interest coverage, a ratio indicating that companies are less prepared to pay off their debts. Interest coverage ratios could benefit from potential Federal Reserve rate cuts in 2024 if they lower companies' interest expense. However, since the rate cuts would likely occur in response to an economic slowdown, which would be negatively impacting earnings, interest coverage ratios may remain suppressed as well.

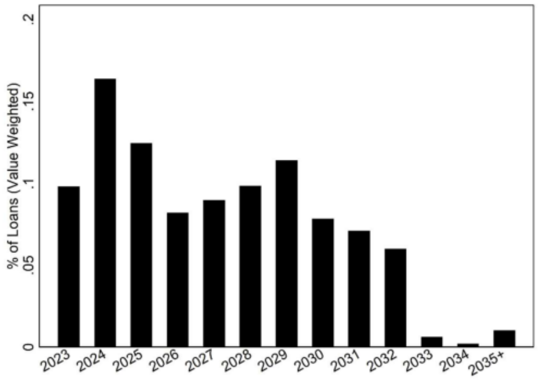
Housing has been 2023's inflationary unicorn. With consumer prices declining across all other sectors of the economy, prices of homes have, save for a brief 7-month period between July 2022 and January 2023, charged full steam ahead. Their unlikely ascent has been driven by a rapid rise in interest rates, and therefore mortgage rates, that occurred after 15 years of a consistently low interest rate environment. With most homeowners unwilling to sell their homes and forego their existing low fixed mortgage rate, the supply of existing homes for sale reached low levels that have not been seen since the Great Recession, a time when home prices were plummeting, not rising as they are today.

New home construction, while providing additional inventory to the housing sector, has been insufficient in meeting demand, as it was constrained due to labor and lumber shortages that started during the pandemic. Concurrently, generational demographics have spurred on demand for homes. Household formation by members of the Millennial generation continued to increase, and the demand for homes, even with 7%-8% mortgage rate levels continued to outpace supply. At the same time, the Baby Boomer generation, after accumulating decades of wealth from a rising stock market, were able to buy homes—sometimes second homes, further draining supply.

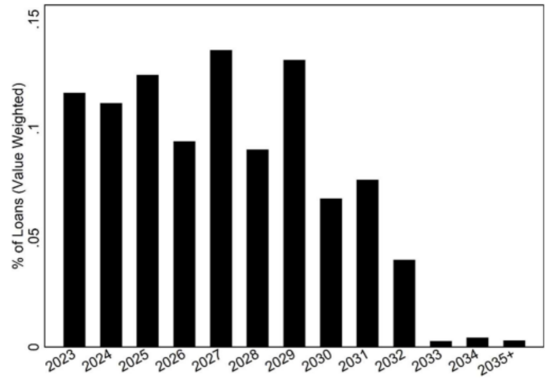
With the Federal Reserve indicating that 2024 may see some cuts in interest rates, supply of existing homes for sale may finally increase, as homeowners who have been holding on to their mortgage rates will be willing to sell and move to another home if they could access an attractive mortgage rate once again. But this decrease in rates would not necessarily decrease home prices, as demand for homes, at lower mortgage rates would attract additional buyers who have been waiting on the sidelines for rates to come down. Unless demand is constrained or additional housing inventory becomes more rapidly available, housing may continue to play a game of chicken.

Unlike residential real estate loans which are primarily fixed rate, commercial real estate loans are adjustable with balloon maturity dates, at which time they get refinanced. With over 15% of maturity dates approaching in 2024, the high interest rate environment is hurting commercial real estate valuations, and the bank balance sheets that hold the loans. According to a December 2023 report by NBER (National Bureau of Economic Research), 14% of commercial real estate loans (and 44% of office building loans specifically) are in negative equity, which means the value of the debt surpasses the value of the properties. Since banks hold $2.7 trillion in commercial real estate loans, they are vulnerable to defaults.

Since the Federal Reserve began increasing rates in the first quarter of 2022, commercial property values are down 22%, and office properties are down 35%. The NBER ran an analysis assuming a 10% default rate (a reasonable assumption since during the Great Financial Crisis commercial real estate defaults were 9%), banks can expect to lose $80 billion. While up from 0.45% a year ago, commercial loan delinquencies in the third quarter were relatively benign at 0.85%, but they can ramp up quickly with over 15% of commercial loans expected to mature in 2024 and forced to either refinance into a significantly higher rate environment or default. In the case of office buildings whose tenants have departed in droves thanks to the work from home model, the likelihood of defaults cannot be dismissed.



(a) All Loans



(b) Office Loans