

Appalachian Highlands Economic Update

MACROECONOMICS

FINANCIAL MARKETS

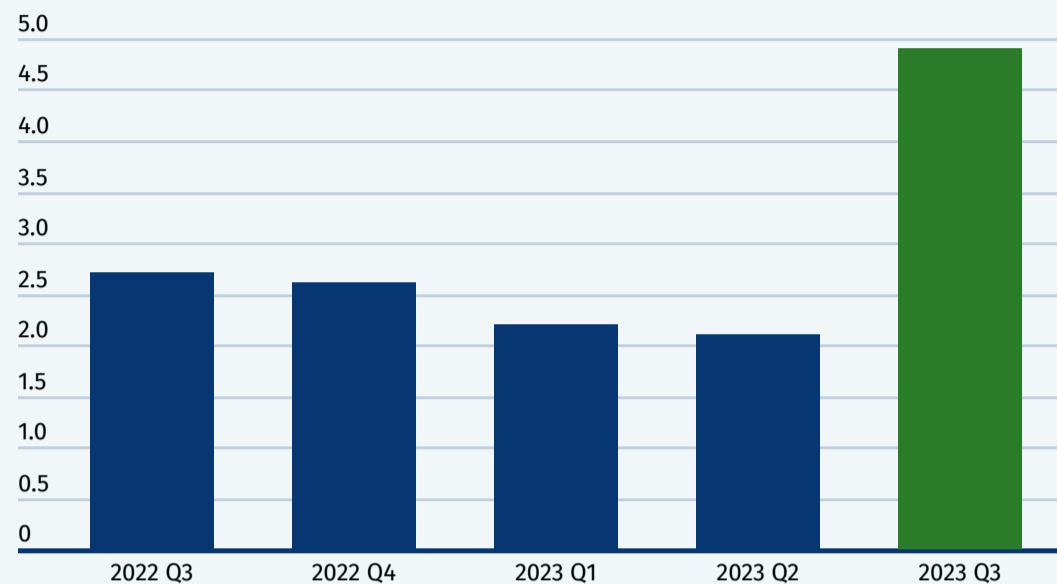
LABOR & EMPLOYMENT

HOUSING



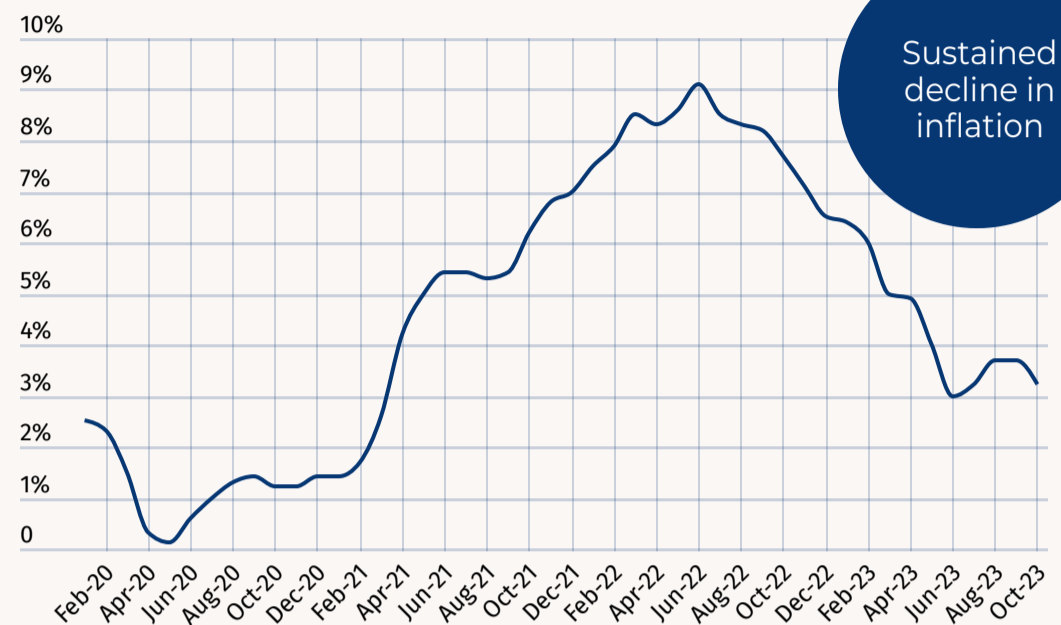
Macroeconomics

Dr. Aryaman Bhatnagar, Ph.D. Assistant Professor of Economics



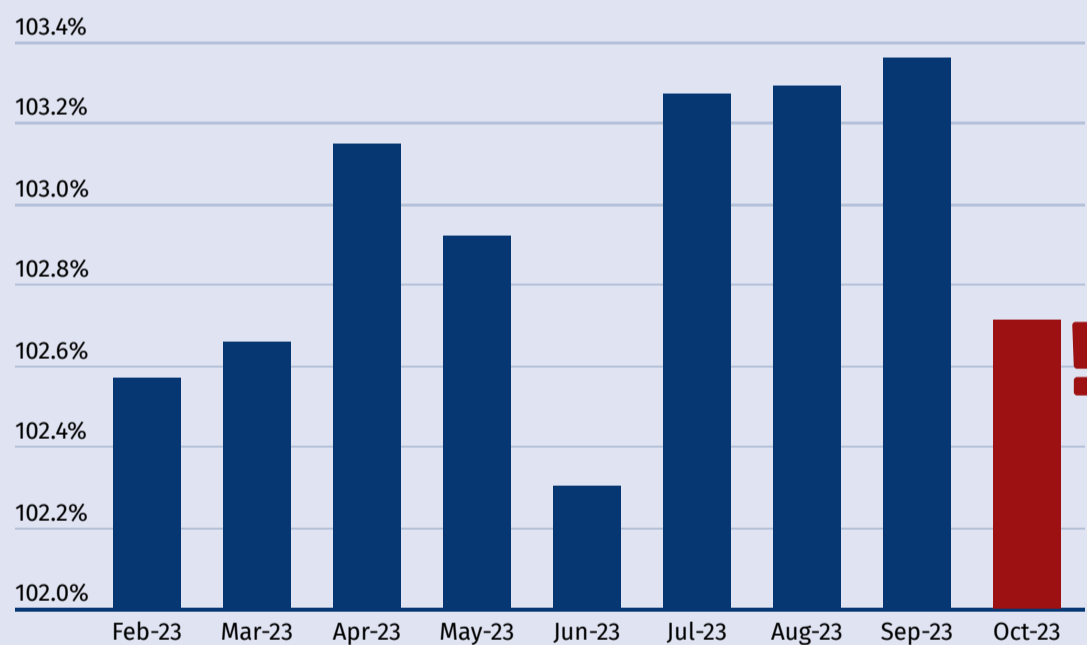
GDP Growth Rate

The U.S. economy grew at a robust 4.9% in the third quarter of 2023, registering the fastest growth since 2021 Q4. The growth was largely driven by consumer spending which grew at an annualized rate of 4%. This was due to a combination of lower inflation and higher wages, which boosted the households' purchasing power.



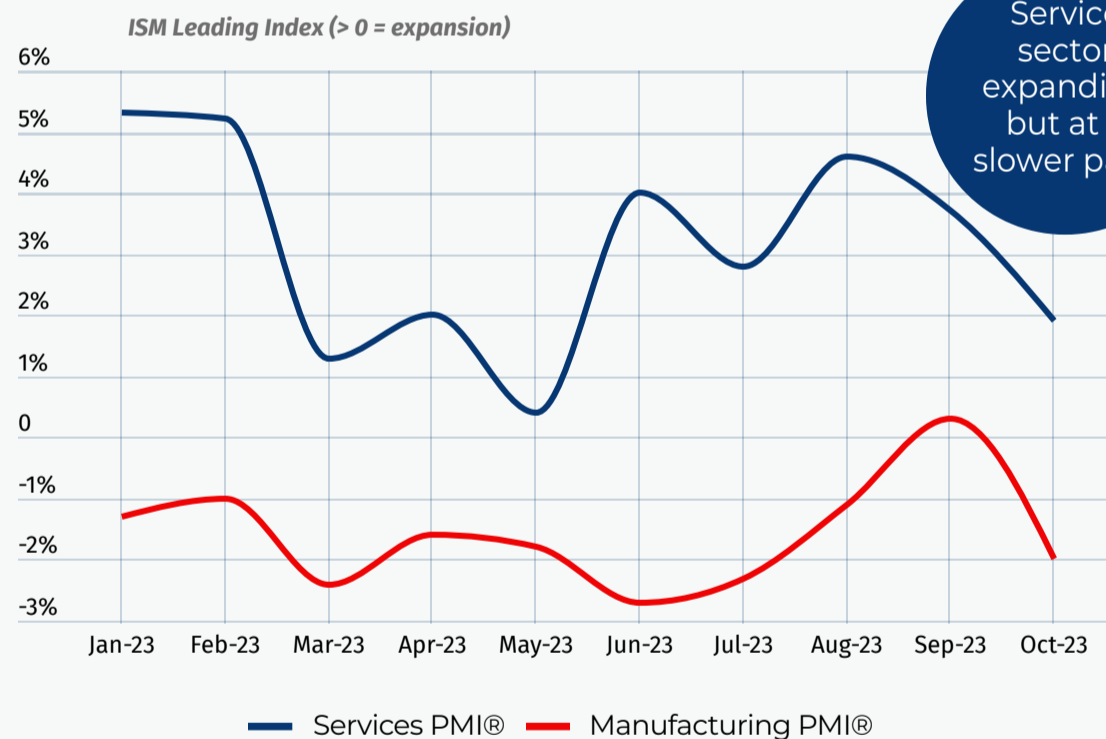
Inflation

Inflation continued to cool down to 3.2% in October 2023, since peaking in June 2022. This was primarily due to a 4.5% decline in energy prices. Core inflation, which excludes food and energy, also cooled down relative to the preceding months. Used car prices, which spiked after the Covid crisis, also fell sharply by 7.1%, easing out the price pressures on households.



Industrial Production

Despite the stellar economic growth in the third quarter, more recent macroeconomic data shows that growth could be slowing down. Industrial production fell by 0.6% in October after increasing over the last four months and manufacturing PMI also displayed contractionary trends. However, it is important to note that the fall in industrial production was largely due to the auto strikes which led to a steep 10% decline in motor vehicle output. Excluding motor vehicles and parts, manufacturing production grew by 0.1%. Given that the strike is over, it would appear that the slowdown in manufacturing could soon reverse.



Service Sector

We also see that services, as measured by the ISM services PMI, continued to grow in October albeit at a slower pace. Sectors such as retail trade, construction, finance and insurance saw positive growth while real estate, agriculture, mining, and wholesale trade reported a decrease in the month of October.

Summary



Going forward, economic growth in the fourth quarter is expected to be lower than Q3 but still well outside the recession zone. While low inflation and rapid consumer spending are encouraging, the economy faces some serious headwinds in the form of declining savings, the resumption of student loan repayments, soaring bond yields, wars in Ukraine and the Middle East, and a fragile banking sector. These factors will test the resilience of the US economy in the coming months.

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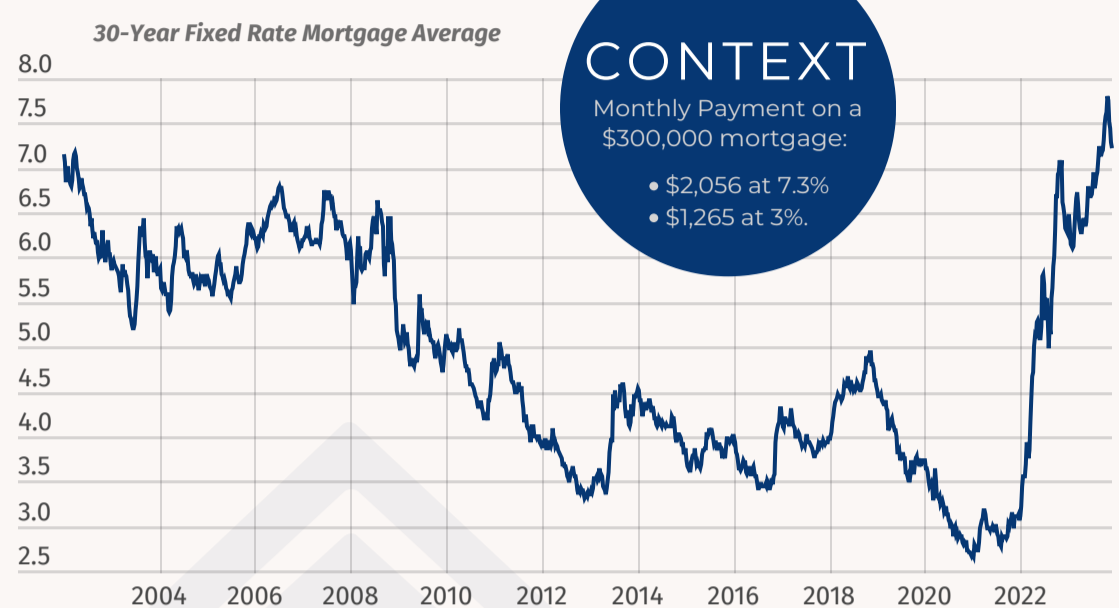
Financial Market Overview

William J. Trainor Jr. Ph.D. CFA Director, Center for the Study of Finance



Equity

Equity markets continue their run up in 2023 with the S&P 500 up 17% year to date, (Nov. 28, 2023) with most of the return generated by seven stocks, Amazon, Apple, Alphabet, Meta, Microsoft, Nvidia, and Tesla. These 7 companies now make up 29% of the market capitalization of the S&P 500 and have gained 70% while the other 493 stocks have only averaged 6% with all of that gained in the last month. For a sustained bull run, small and mid-cap stocks (those under \$10 billion market cap) will be needed to help fuel a continuing rally.

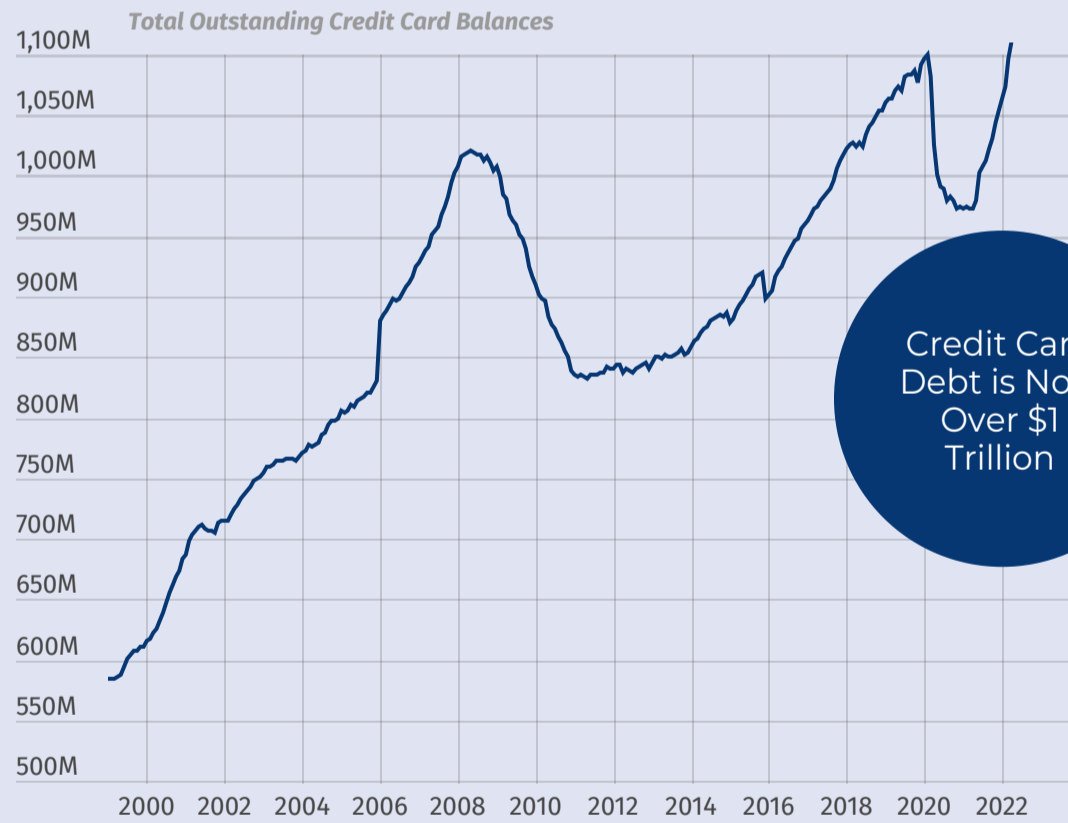


CONTEXT
 Monthly Payment on a \$300,000 mortgage:

- \$2,056 at 7.3%
- \$1,265 at 3%

Mortgage Rates

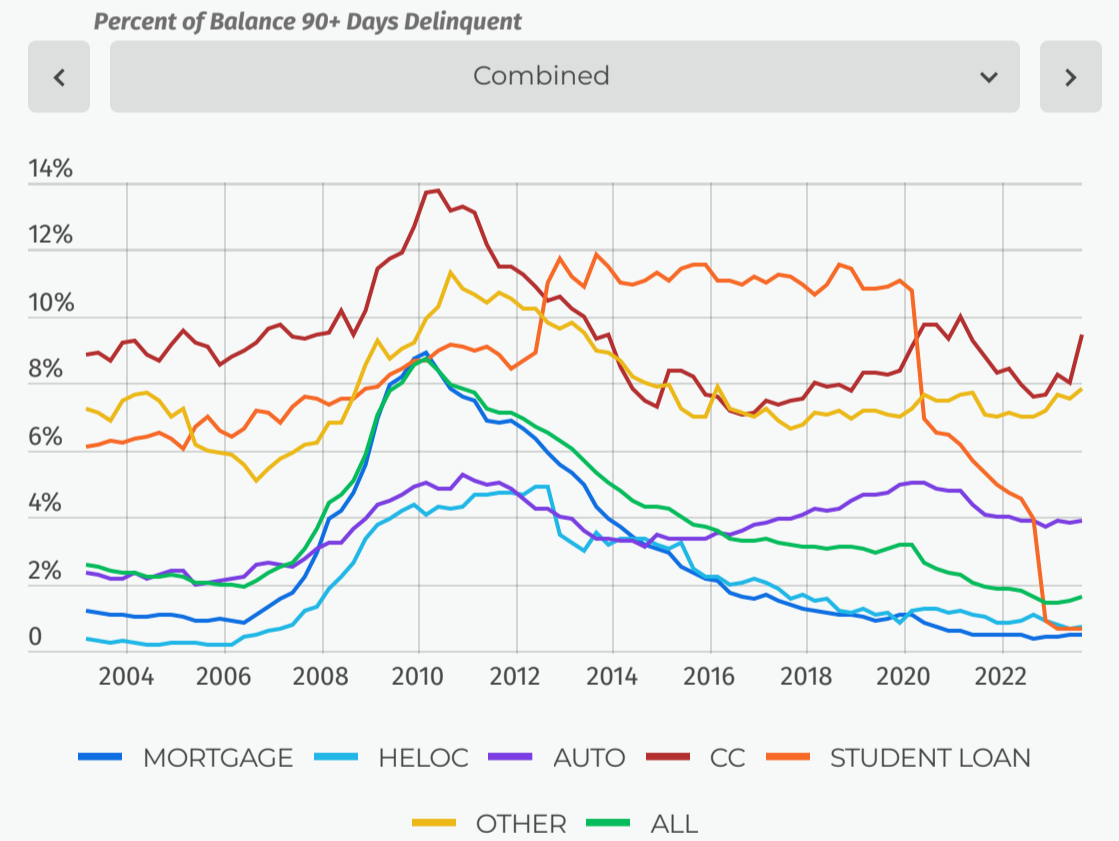
Mortgage rates hit a 21 year high in 2023 with 30-year fixed rates reaching 7.8% at the end of October although it has recently fallen to 7.3%. To place this in perspective, a \$300,000 mortgage now requires a monthly payment of \$2,056 when just two years ago at 3%, the mortgage payment was \$1,265. The higher costs should eventually lead to declining real estate prices, especially at the higher end although so far, supply constraints have held prices steady.



Credit Card Debt is Now Over \$1 Trillion

Credit Card Balances

Jerome Powell and the Fed have paused interest rate hikes and as long as inflation (not the price level) continues to abate, further increases are unlikely. Although unemployment remains low, consumer spending seems to be increasingly financed by credit card debt, now over \$1 trillion.



Delinquency by Loan Type

Delinquencies on credit card and automobile loans are increasing suggesting consumer spending may be waning. To what extent the economy manages a "soft landing" in Fed speak or a recession remains to be seen. However, corporate earnings are expected to increase by 13% or more in 2024 compared to the projected 4% for 2023.



Summary

In summary, if/when the Federal Reserve starts cutting short-term interest rates projected by some to start in March 2024, it is likely the market will go on a sustained bull run and surpass all time market highs. Markets are currently forecasting a 35% probability of a rate reduction in March 2024 but a great deal can happen in four months. As with all stock market forecasts, the only certainty is the market will fluctuate.

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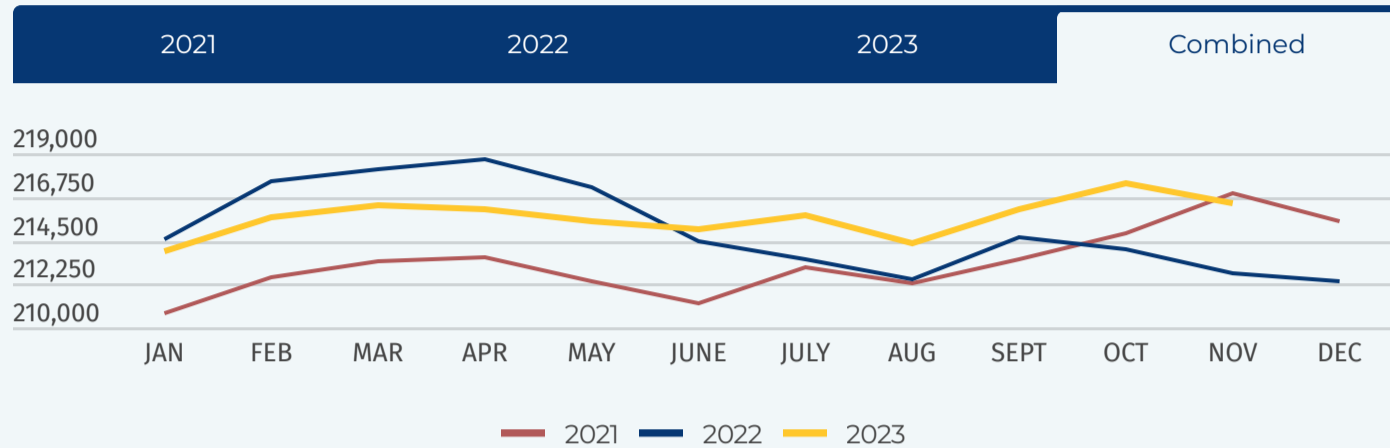
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Labor & Unemployment

Dr. Jon L. Smith Ph.D. Director, Bureau for Business & Economic Research

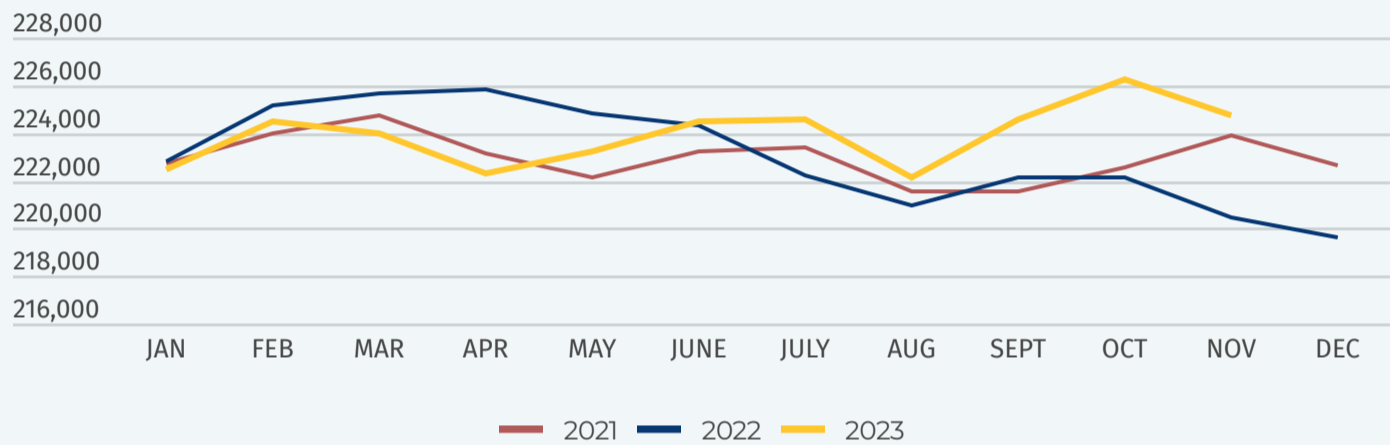
Eight County Northeast Tennessee Employed



Employment & Labor Force

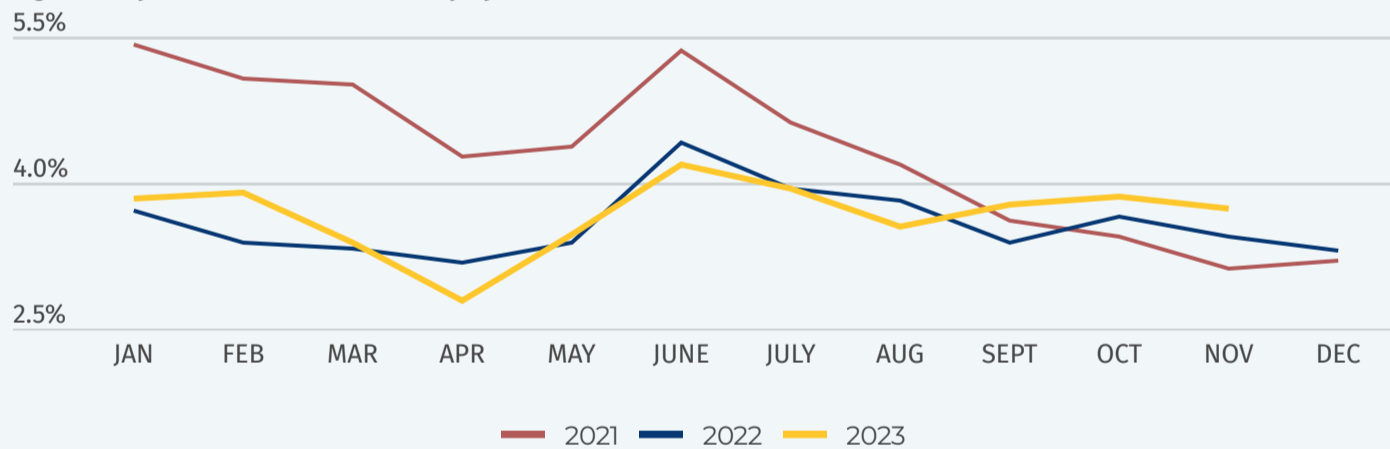
Employment levels within the eight-county region have shown modest increases over the past year. November's employment numbers showed a year-over-year increase in employment from 212,833 to 216,382, just over 1.67 percent.

Eight County Northeast Tennessee Labor Force

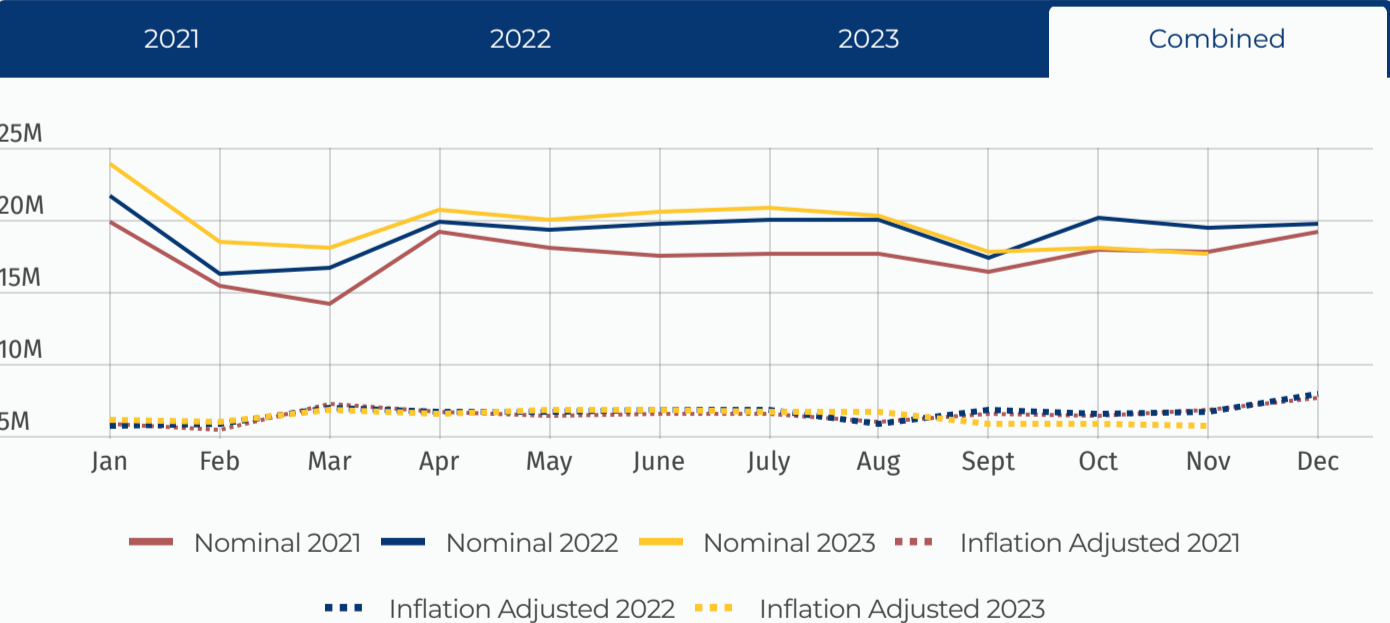


The regional labor force also had a similar increase, growing from 220,434 in November of 2022 to 224,765 in November of 2023, an increase of 1.96%.

Eight County Northeast Tennessee Unemployment Rate



Unemployment rates for the region have shown a slight increase from 3.45% in November of 2022 to 3.73% in November of 2023, probably the result of the increases in the labor force.



Sales Tax

Unlike the labor market, year-over-year nominal and inflation adjusted or "real dollar" local sales tax collections for the eight county region have shown disappointing year-over-year decreases. Nominal local sales tax collections fell 9.56% while inflation adjusted collections showed an even greater decrease, 13.31%. As inflation continues to resist efforts by the Federal Reserve to reign it in, falling nominal local sales tax collections combined with inflation driven reductions in the purchasing power of the dollar will place an increasing strain upon the ability of our regional communities to continue to provide the current levels of municipal services.



Summary

There are mixed signals regarding whether or not the national and regional economies will fall into a recession over the next year. A review of expert's forecasts of the probability of a recession over the next twelve months are fairly consistent ranging around the 50% mark. However, continued international conflicts, some of which are escalating, an unprecedented increase in immigration which is placing significant pressure on the social structure in some of the nation's largest cities and the prospects of a turbulent political season suggest that one should view the next year's economic prospects with an abundance of caution. We will continue to monitor national and local economic conditions and will update our data in the next quarterly report.

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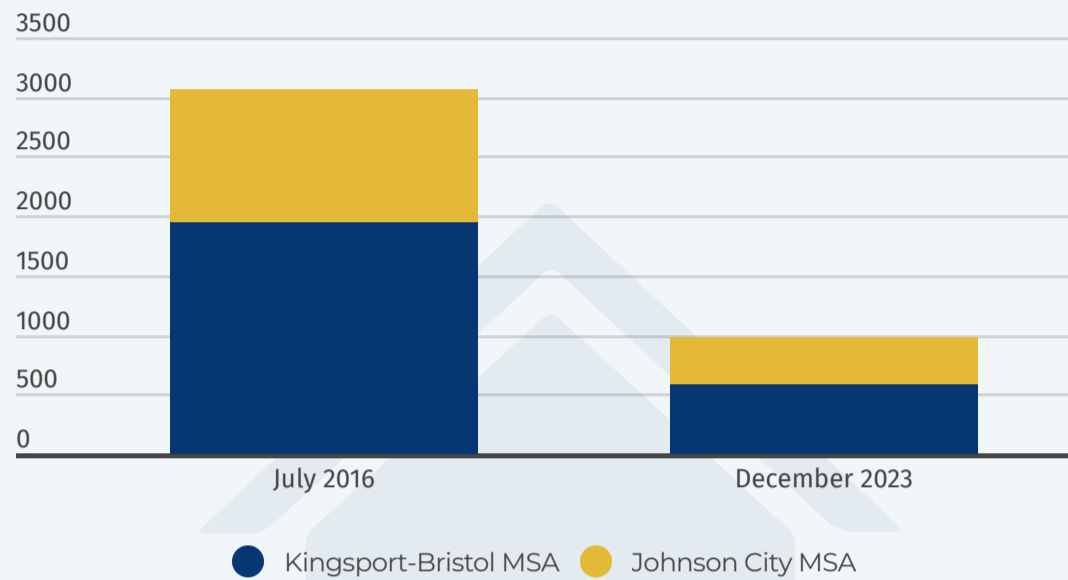
HOUSING



Housing Market

Joseph Newhard, Ph.D. Associate Professor of Economics

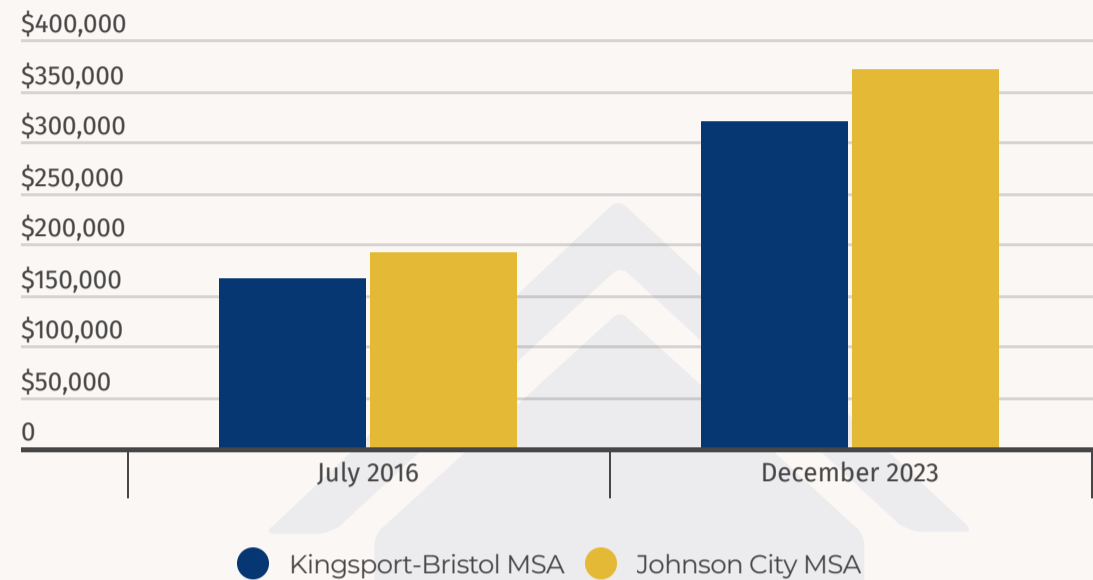
Housing Inventory



Housing Inventory

Housing inventory is improving with active listing counts rising nationally and statewide. In Tennessee, 21,157 listings in December represents their highest level since December 2019 after bottoming out at 6,454 in February 2022. However, no such recovery has taken place in the Johnson City and Kingsport-Bristol MSAs where listing counts have remained low and flat since early 2020. As of December 2023, they stood at 390 and 584, respectively. By comparison, in July 2016, their listing counts were at 1,109 and 1,948 and are down 65% and 70% since then. A sustained correction in prices will require that listing counts and months of inventory return to higher levels.

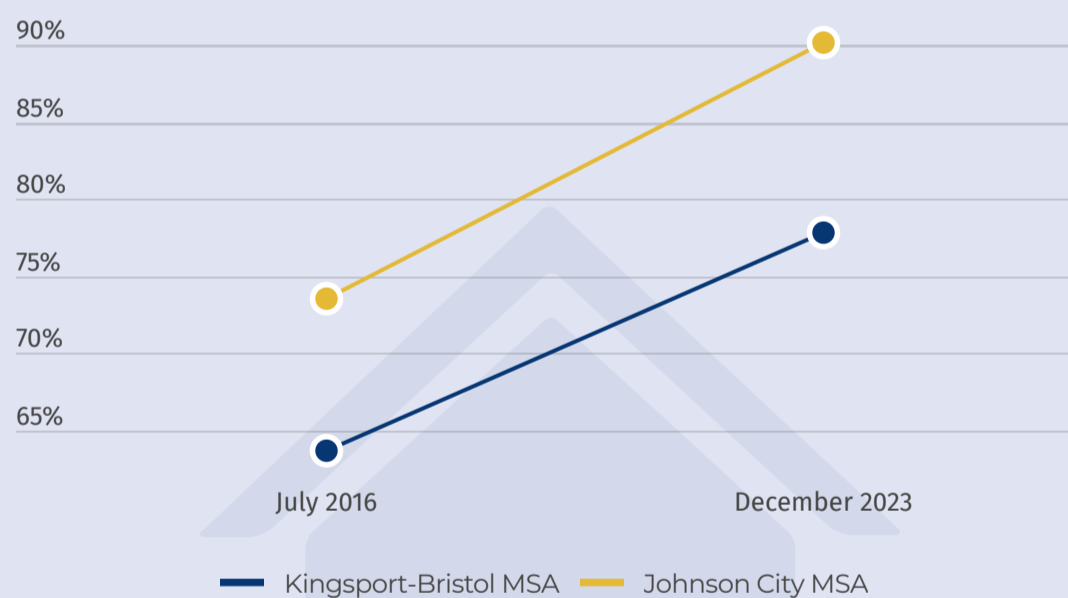
Median Listing Prices



Housing Prices

Housing prices remain unaffordable with respect to local household incomes. Although down 14% and 7.5% from their summer peaks, median listing prices in the Johnson City and Kingsport-Bristol MSAs in December stood at \$369,900 and \$319,000 and were up 94% and 93.5% over July 2016, respectively. In the same period, the median listing price nationwide rose only 58.3%.

Median Listing Price as Percentage of National Median

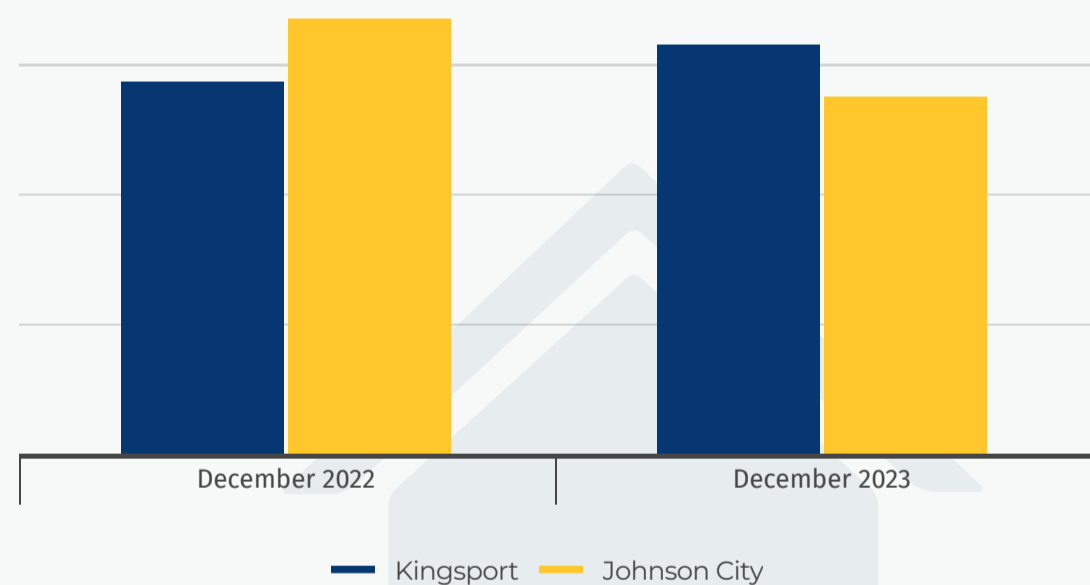


National Price Comparison

The Johnson City MSA median listing price had converged with that of the United States as well as Charlotte and Atlanta by September 2023 before diverging again in the following months. The national median stood at \$410,000 in December. In 2016, median listing prices in the Johnson City and Kingsport-Bristol MSAs stood at 73.5% and 63.7% of the national median, respectively; As of December 2023, they are at 90.2% and 77.8%. This decrease in the relative affordability of our region may persist even if prices fall but it may also deter further population growth and provoke some combination of new home construction, wage growth, and out-migration of the labor force.

City Limits Median Listing Price

Days on Market



Within the City Limits

Within city limits, the median listing price in Johnson City was down 17.9% year-over-year in December to \$274,950, but the median sold price was up 28% year-over-year to \$307,500 and median days on the market rose to 44 for the city and 54 for the MSA. The median listing price was up 10% year-over-year in the city of Kingsport to \$315,000 although the median sold price was only \$222,000, up 7.6% year-over-year. Median days on the market stood at 65 for the city and 59 for the MSA in December.

Summary



Housing prices remain elevated due to low levels of used home listings and high costs of land and new home building. The Producer Price Index for inputs to residential construction indicates that the cost of building a single-family or multifamily home rose 50% in the past decade. Indexed at 100 in December 2014, construction costs remained relatively modest through summer 2020 when the indices stood at 110. By March 2022, they rose above 150 and never recovered as of December 2023 despite easing supply chain constraints and a correction in lumber prices. High interest rates have negatively affected both the demand and supply of homes, with nationwide housing starts down 13.5% in November from their April 2022 peak.