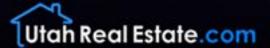
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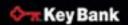
















The Salt Lake County Residential Real Estate Market

Examining Inflation, Mortgage Rates, and Housing Prices, 2022-2023

By James Wood

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When asked what he had learned from more than 40 years of housing research, Chip Case of the S&P Case-Shiller Price Indices replied, "housing markets can turn on a dime." And that's certainly the case for the Utah housing market in 2022. In May, the median sales price of a single-family home in Salt Lake County hit \$650,000, but by December, it had dropped to \$540,000. That same month prices registered their first year-over-monthly decline since 2012, a 2.1% drop. The abruptness of the 2022 correction raises a hard question, what can we expect for mortgage rates and housing prices in 2023?

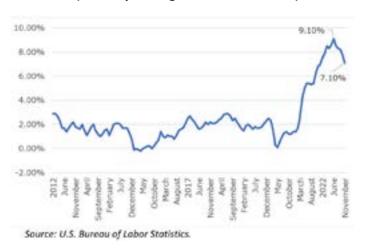
I. THE RISE IN INFLATION

Inflation underlies the housing market's correction. It forced the Federal Reserve to raise the federal funds rate, which contributed to higher mortgage rates, making housing more expensive. Higher home prices reduced homebuyer demand causing real estate sales to decline. Inflation set off this chain of events and the correction of 2022.

There are several measures of inflation. The most often used is the Consumer Price Index (CPI). The CPI had been stable for nearly 10 years. From 2012 to early 2021, price increases fluctuated in a narrow range of 1%-2%, Figure 1. What caused the CPI to break out of this stable pattern? There are three generally accepted causes: (1) the pandemic's fiscal stimulus, (2) supply chain disruptions, and (3) the Ukraine war.

"What caused the Consumer Price Index to break out of this stable pattern... there are three generally accepted causes: the pandemic's fiscal stimulus, supply chain disruptions, and the Ukraine war."

Figure 1
Year-Over Percent Increase in the Consumer Price Index
(U.S. City Average Urban Consumers)



Fiscal stimulus – In March 2020, when the threat of Covid-19 emerged, U.S. unemployment quickly rose by 15.9 million, and the unemployment rate increased by 10.3%, the largest one-month increase in the history of employment data (1948 to 2020). In five weeks, from mid-February into March, the Dow Jones Industrial Average lost 37% of its value, and second-quarter GDP declined at an annual rate of 31.7%. And importantly, the toxicity of Covid-19, an airborne virus that could be asymptomatic, was unknown. In this environment, both Republicans and Democrats overwhelmingly voted for immediate federal aid to state and local governments, businesses, and workers. The \$2.4 trillion CARES Act was passed in March/April 2020. In December, a supplemental appropriation to the CARES Act was again overwhelmingly approved for \$900 billion. The third fiscal stimulus bill, the American Rescue Plan Act, was passed along party lines in March 2021 for \$1.9 trillion. The total appropriation of the three bills was \$5.1 trillion. The pandemic's fiscal stimulus was nearly six times larger than the \$900 billion in fiscal stimulus for the Great Recession.

The pandemic brought legitimate worries that the global economy would collapse. The fiscal stimulus seemed necessary, as evidenced by the 96-0 vote in the Senate for the CARES Act and the 92-6 Senate vote for the CARES Act's supplemental funding. The stimulus inevitably gave a big boost to demand (governments, businesses, consumers), which by 2021 began to push prices higher and, by 2022, accelerated price increases.

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Supply chain constraints — For decades, globalization contributed to low prices and low rates of inflation, but when global supply chains are disrupted, as with a pandemic, shortages and higher prices become the norm. Thus, the pandemic not only boosted demand and prices via fiscal stimulus but also contributed to supply constraints that put upward pressure on prices.

Supply chain constraints center on China. The country plays a major role in supplying parts and finished products to foreign countries. But China's zero Covid policy (recently relaxed) shut down major cities as well as manufacturing facilities producing critical component parts and popular finished products. Most notable was the chip shortage. Semiconductors or chips were backlogged for as much as two years as soaring demand outpaced supply creating delays in the delivery of products. Among the most affected was the auto industry, where the chip shortage hurt sales and increased prices.

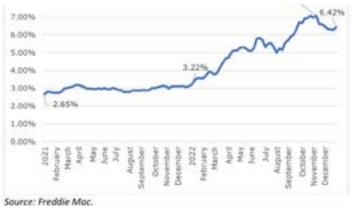
While globalization has been a serious international constraint, the labor shortage has been a serious domestic constraint and contributor to inflation. Utah's unemployment rate at 2% is hovering near an all-time low as employers scramble for workers who require higher wages. The shortage of workers adds to the upward pressure on prices as higher payroll costs are passed on to the consumer.

Ukraine war and inflation – The invasion of Ukraine by Russia in February 2022 setoff the largest land war in Europe since the Balkan Wars of the 1990s. The war added to global supply disruptions caused by scarcity and the rising cost of raw materials, particularly oil. The increase in oil prices in 2022 was due in part to the war.

II. THE SUDDEN INCREASE IN MORTGAGE RATES

In response to the highest rates of inflation in 40 years, the Federal Reserve raised the federal fund's target range seven times in 2022. This aggressive policy contributed to the sharpest nine-month increase in mortgage rates in over 50 years. To be clear, the Federal Reserve does not set mortgage rates, but raising the target range indirectly influences long-term mortgage rates. Mortgage rates are also affected by overall economic conditions, inflation, the Treasury bond and note market, and competition among lenders. In 2022, these factors combined to push mortgage rates from 3.2% in the first week of January to 7.0% by the end of October, more than doubling the rate in nine months, Figure 2. As the Federal Reserve's policies began to cool the economy, the average monthly mortgage rate dropped to 6.4% by the last week of December.

Figure 2
Average Weekly Mortgage Rates



Mortgage rates are a prime determinant of homebuyer demand. The increase in the rate in 2022 has resulted in a 29% increase in the mortgage payment for the median priced home. The mortgage payment in January, when the interest rate was 3.2%, was \$2,851; by December, with the interest rate at 6.4%, the payment increased to \$3,678, Table 1. The income required to finance the mortgage payment increased from \$122,185 in January to \$157,628 in December. The mortgage payment assumes a 5% down payment and a 1% charge for Private Mortgage Insurance. It's important to keep in mind that half of all homes sold were priced below the median. Nevertheless, the 29% increase in payment and income requirement would apply to homes at all price levels, above or below the median price.

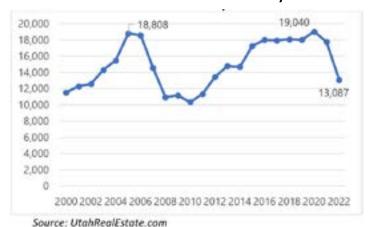
Table 1
Mortgage Payment for Median Priced Home in Salt Lake County
(Single-Family, Condominium, Townhome, Twin Home)

Category	2022	2022
Median sales price	\$501,000	\$485,000
Amount to finance*	\$475,950	\$460,750
Principal & interest**	\$2,063	\$2,891
Insurance	\$100	\$100
Private mortgage ins.	\$396	\$404
Property tax	\$292	\$283
Total mortgage pmt.	\$2,851	\$3,678
Income required	\$122,185	\$157,628

^{*}down payment of 95%. **interest rate, January 3.22%, December 6.42% Source: *UtahRealEstate.com, Freddie Mac.*

Such a dramatic increase in mortgage payments in such a short time was bound to have a serious impact on real estate sales. The pool of potential buyers shrinks as the mortgage payment increases. Consequently, sales dropped sharply in 2022. Home sales in Salt Lake County totaled 13,087, down 26% from 2021; the steepest single-year drop on record (1997 to the present), Figure 3. Prior to 2022, real estate sales had been remarkably consistent for seven years at about 18,000 sales, only diverging in 2020, the pandemic year, when sales jumped to 19,000 units.

Figure 3
Sales of Single-Family Homes, Condominiums, Twin Homes, and Townhomes Salt Lake County



III. HOUSING PRICES RETREAT

Housing prices in the Salt Lake Metropolitan Area have a long history of volatility as shown by the four price cycles depicted in Figure 4. Price increases peaked in 1979, 1994, 2006, and 2022. The first three peaks were consistent at

about 20%, whereas the most recent peak, in the first quarter of 2022, was substantially higher at 27%. Of considerable interest, given the current price climate, are the red bars in Figure 4 denoting year-over-price declines. On only two occasions have prices experienced extended quarters of decline: nine quarters from 1987 to 1989 and 16 quarters from 2008 to 2012. Both occasions were associated with very weak job markets. In 1986 and 1987, job gains of only one percent led to a decline in housing prices, and during Great Recession, the 6% drop in employment and the loss of 80,000 jobs resulted in a prolonged period of housing price declines.

Figure 4
Year-Over Percent Change of FHFA Quarterly Price Index
Salt Lake Metropolitan Area

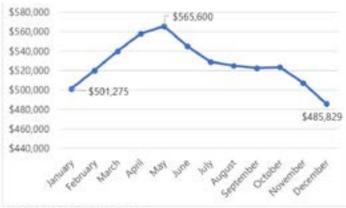


The median sales price of Salt Lake County homes (single-family, condominiums, twin homes, townhomes) peaked in May at \$565,600, Figure 5. As interest rate rose, the median sales price declined. Over the next seven months, the median price fell by 14% to \$485,829, and the month-over percent increases got smaller and smaller until finally turning negative 2.1% in December, Figure 6.

Prices eventually must peak, followed by decelerating price increases. After probably the longest trough-to-peak run in the county's real estate history —ten years and 41 quarters—price deceleration was becoming more and more likely. But the possibility of an orderly price retreat was ruined by the impact of Covid-19.

The initial response to the virus by policymakers was to lower interest rates and provide unprecedented fiscal stimulus. "Irrational exuberance" overtook the housing market. A global depression was averted, but the inflationary tinder was laid. It ignited in late 2021 and intensified in 2022, forcing the Federal Reserve to respond aggressively, thus, in the end, putting heavy downward pressure on housing prices and real estate sales.

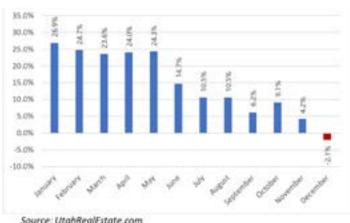
Figure 5
Median Sales Price of Homes in Salt Lake County, 2022
(Single-Family, Condominiums, Townhomes, Twin Homes)



Source: UtahRealEstate.com

"Expect slower job growth, but a recession in Utah is unlikely."

Figure 6
Year-over Percent Change in
Monthly Median Sales Price, Salt Lake County
(single-family, condominium, townhomes, twin homes.)



IV. WHAT TO EXPECT IN 2023

Economic conditions - Expect slower job growth, but a recession in Utah is unlikely. There's no formal or accepted definition of a state recession, but if job growth falls below one percent, that indicates weak economic conditions associated with a national recession. The employment growth forecast from the Utah Department of Workforce Services for 2023 is 2%, an increase of 35,000 jobs. Utah's long-term annual employment growth rate is 3.0%

Housing bubble – It's very unlikely that the recent price runup represents a housing bubble. We don't know if a bubble exists until after it bursts. Alan Greenspan defined a housing bubble as a prolonged period of housing price declines. Such a decline is extremely unlikely in Utah in 2023-2024.

Inflation — Relying on the Federal Reserve's December forecast (core Personal Consumption Expenditure Price Index), the rate of inflation will moderate in 2023. Following the trend of the projected PCE, the CPI should decline to around 5% this year.

Mortgage rate - The Federal Reserve appears determined to hold the federal fund's target at 4.25% to 4.5% despite improving news on inflation. The Fed could even have another rate increase in early 2023, which would present resistance to declines in the mortgage rate. Forecasts of mortgage rates vary widely from 5% to 9% but most settle on the 6.5% to 7.5% range. The Mortgage Bankers Association has the most optimistic forecast, with a 5.2% rate in the fourth quarter.

Housing prices - 2023 is not 2008. Fortunately, in 2023, very few desperate, unemployed homeowners face foreclosure. A large majority of homeowners don't need to sell. They can step back and wait for the dust to settle. Consequently, the price declines since May 2022 will stabilize by the third quarter of 2023. The first and second quarters will likely see year-over price declines, but the annual median sales price for 2023 will likely be within a few percentage points one way or another of 2022. Worst case scenario, prices down about 5%; best case scenario, prices equal to 2022.

Residential sales - Reluctant sellers and priced-out buyers make for a year of reduced sales. After seven years of sales averaging 18,000 homes, the high prices in 2023 will not top 13,000 and will likely range between 11,000 to 12,000 homes.