Review of Past Recessions, Fed Tightening

- Thus far this year, the Federal Reserve has raised its target for overnight Fed Funds rate by 75 bps from historic lows, starting a new tightening cycle to tame inflation and increasing the risk of an economic slowdown ahead.
- Over the past four decades, the FOMC has tightened monetary policy seven times; four resulted in subsequent Recessions (Figure 1 – 1980/81, 1990, 2001, 2007) that can be at least partially attributed to tighter monetary policy. They lasted 10 months, on average, however, were followed by much longer expansionary periods (Figure 2).
- From the beginning of the Fed tightening cycle, it took ~ 28 months for a Recession to be officially declared by the NBER.
- All Fed tightening cycles occurred in response to rising YoY Consumer Price Index (CPI).
- Except for the 1980 inflation experience, the average tightening cycle consisted of an increase in target Fed Funds by ~ 2.90% and the length of the tightening averaged approximately 19 months.
- Excluding the most recent Recession attributed to the announcement of the National Emergency due to the Pandemic in March 2020, the average increase in unemployment rate has been ~ 3%.

What is the impact of Fed Tightening on Housing?

- Periods of economic uncertainty, rising unemployment and income loss typically result in increased consumer debt delinquencies, **but do not translate into falling home prices or widespread mortgage delinquencies and foreclosures (Figures 3 and 4 on Page 2).**

Figure 1: Fed Funds Rate and Unemployment Rate.

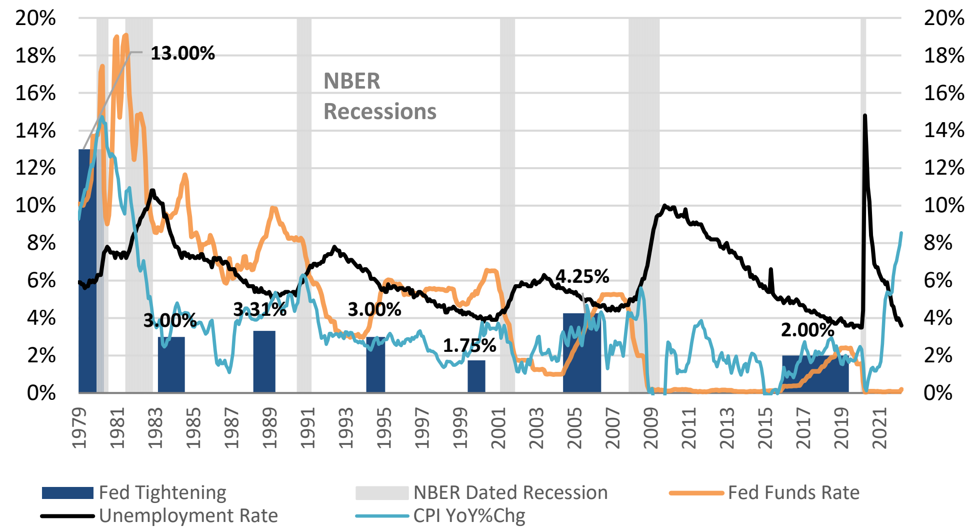
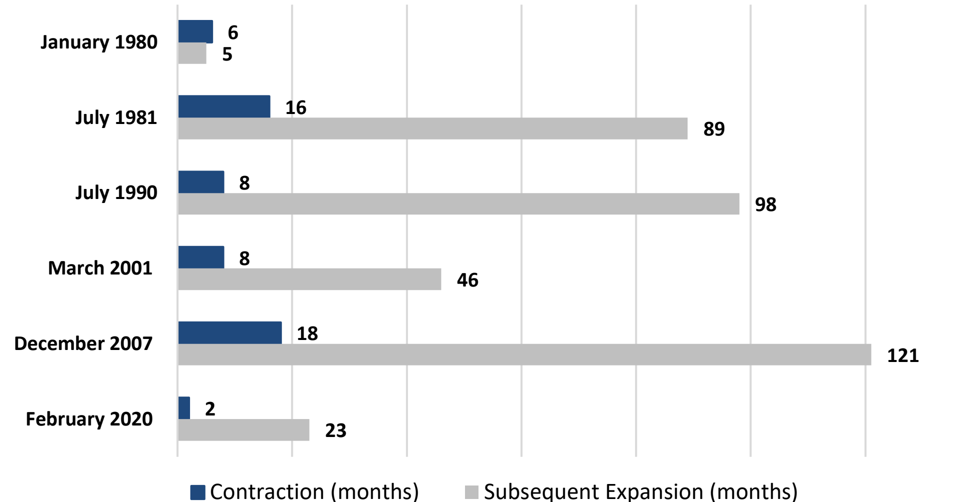


Figure 2: Business Cycle Timeframes.



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***Sources:** National Bureau of Economic Research (NBER), Federal Reserve Bank of New York, U.S. Bureau of Labor Statistics, Falcon Bridge Capital.*

Low Impact on Mortgage Credit Performance

- **Home price moderation observed during the 1981 and 1991 Recessions are indicative of decline in demand due to higher levels of unemployment. Great Financial Crisis ("GFC") was the only period when home prices fell rapidly. (Figure 3)**

- Standards for mortgage originations have significantly tightened since the housing crisis. As a result, **default risk of newly originated mortgages is lowest in history. (Figure 5)**

  - No documentation and low documentation loans that were prevalent during the housing bubble are no longer being originated. **All loans have full income documentation.**

  - Risk Layering that occurred prior to the crisis has been significantly curtailed in Agency eligible loans.

- **Bank charge-offs of residential real estate only increased during the GFC. (Figure 4)**

Figure 3: YoY Case Shiller Home Price Change.

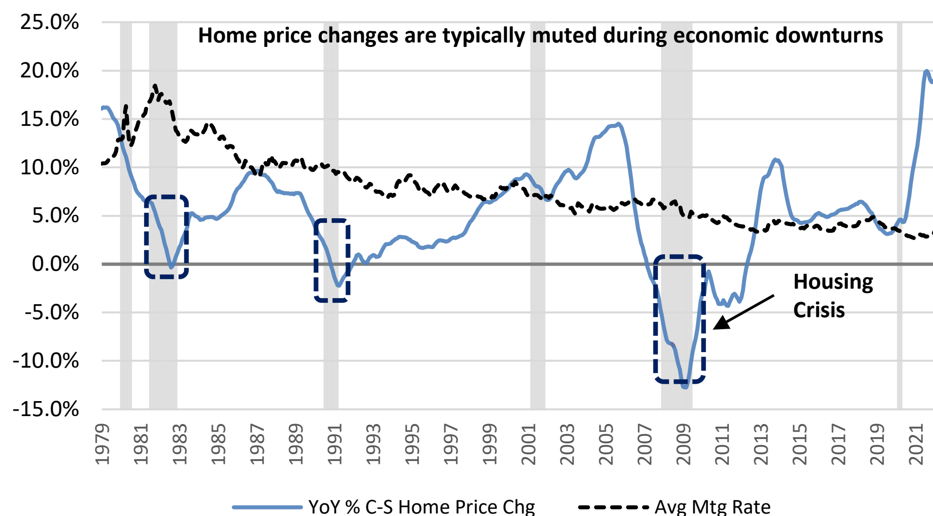


Figure 4: Charge-off & 30+ Delinquency; Mortgages all Commercial Banks.

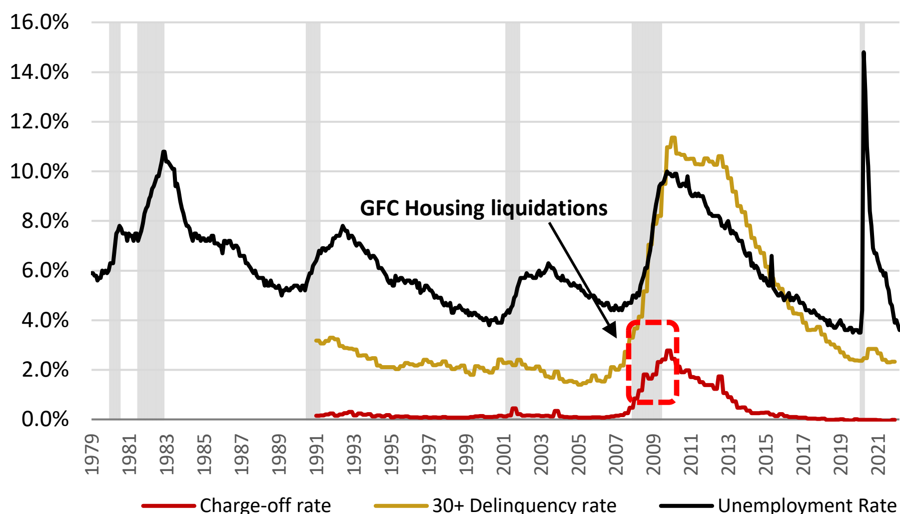
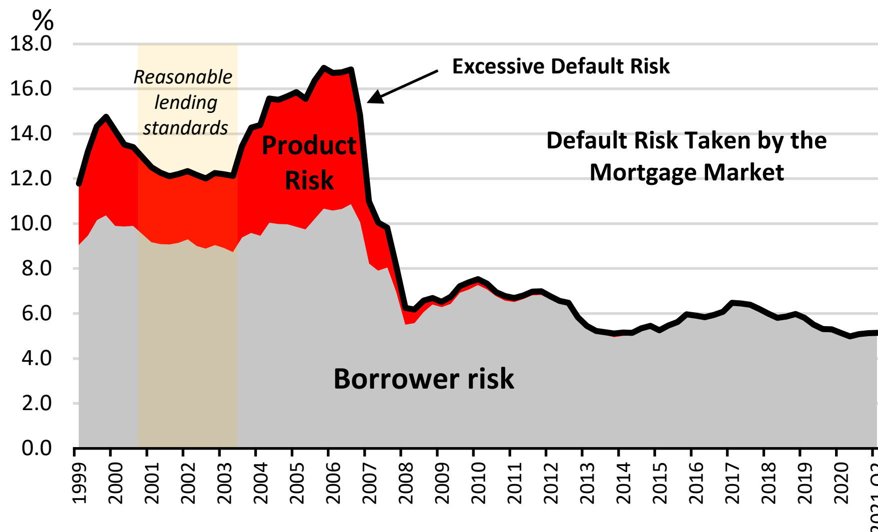


Figure 5: Superior loan quality results in better credit performance.



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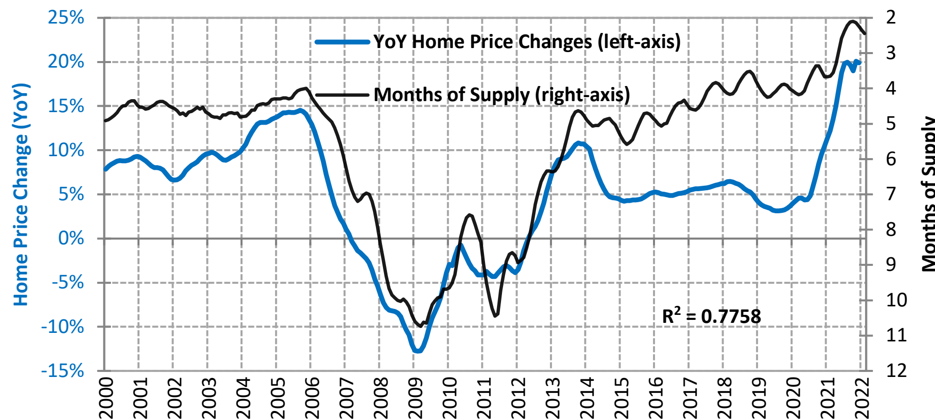
Sources: Board of Governors of the Federal Reserve System, Mortgage Bankers Association (MBA), S&P/CoreLogic, Falcon Bridge Capital.

Supply-Demand Imbalances Continue to Support Home Prices

- Significant home price appreciation observed since March 2020 has occurred as a a result of low interest rates, extremely low inventory levels, and strong household demand, as well as flexible work-from-home trends developed across many sectors of the economy. (Figure 6)
- Housing inventory is ~54% below long-term trend. The supply of homes available for sale (existing and new) has stabilized at ~ 1.3 million in February 2022. In comparison, inventory averaged 2.8 million during 1999-2019. (Figure 8)
- **Housing shortages continue, further exacerbating the supply-demand dynamics and home price increases. (Figure 7)**

Figure 6: Supply-Demand dynamics directly impact YoY Home Prices.



*Months of Supply is 6m average moved forward 6m (inverted RHS Axis)

Figure 7: A significant and long-term decline in the construction of homes following Great Financial Crisis has contributed to housing shortages.

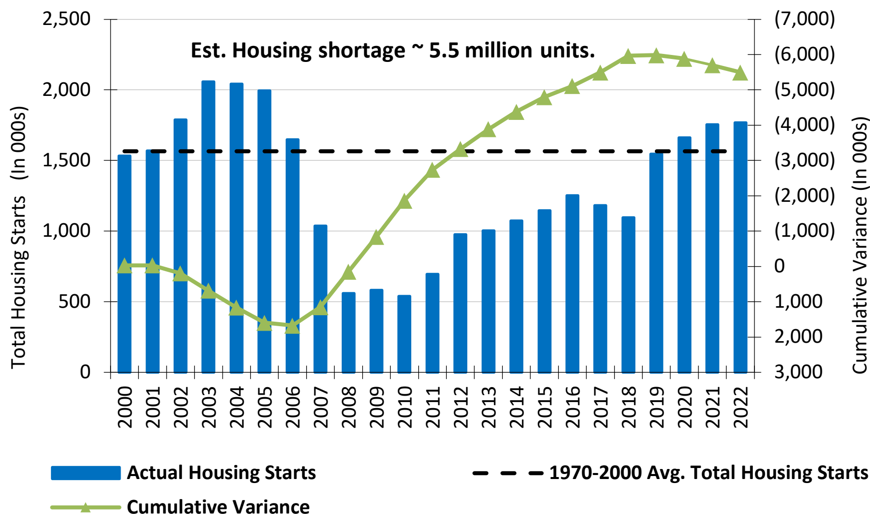
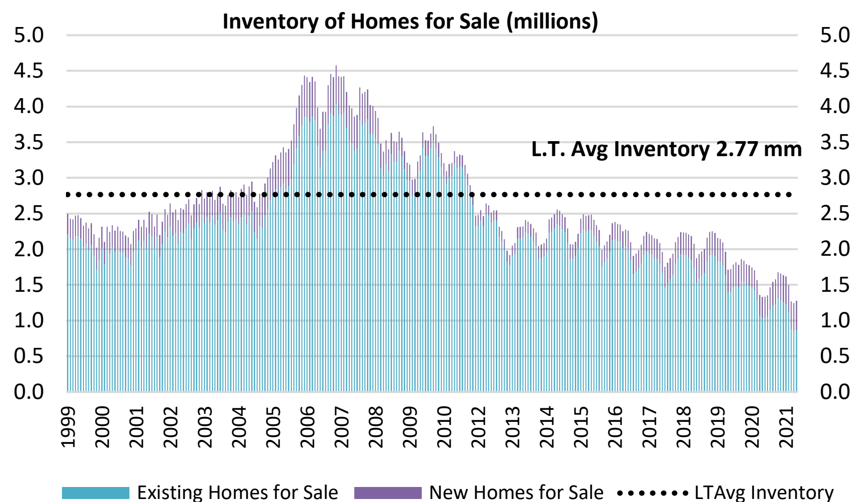


Figure 8: Inventory of new and existing homes for sale at historic lows.



Sources: Federal Reserve Economic Data, Falcon Bridge Capital.

Households Well-Positioned to Withstand Tightening of Monetary Policy

- **Tight labor markets and strong household balance sheets suggest most borrowers should be able to absorb potential economic downturn spurred by Fed rising rates. (Figure 9)**
- Affordability headwinds are expected to affect future home price appreciation and prepayment activity. (Figure 10)
  - Following robust gains in home prices and amidst rising mortgage rates, housing affordability continues to decline.
  - Most major markets are now exhibiting affordability levels below recent norms.

Figure 9: Tight Labor Markets are likely to soften the impact of Fed Tightening.

Figure 10: Declining affordability is expected to affect housing demand.

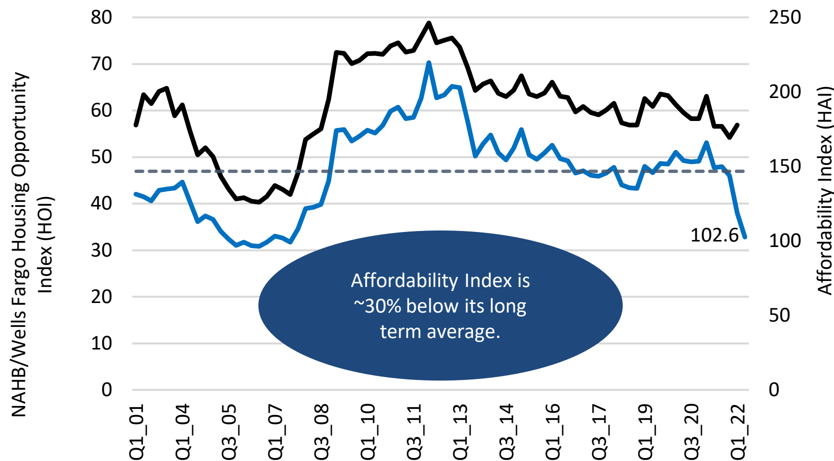
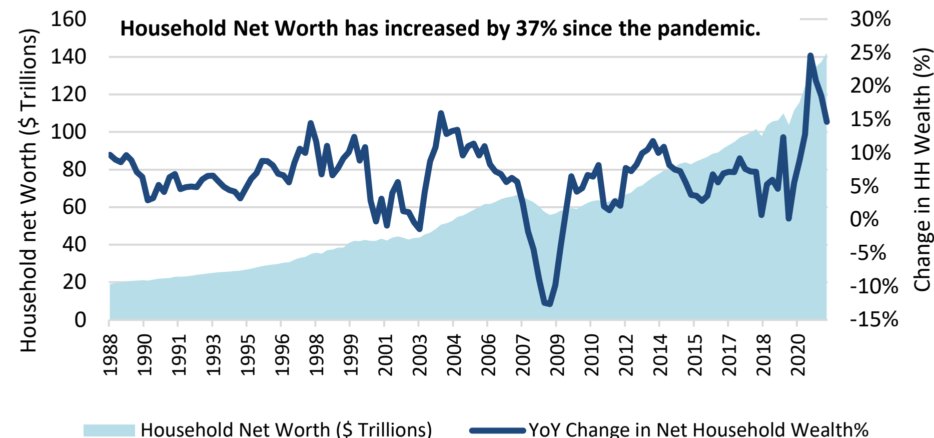


Figure 11: Healthy financial state and strong household balance sheets provide support for continued robust mortgage credit performance.



Sources: NAHB, NAR, Federal Reserve Economic Data, U.S. Bureau of Labor Statistics, Falcon Bridge Capital.

An affordability index (HAI) value of 100 means that a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home. An index above 100 signifies that family earning the median income has enough income to qualify for a mortgage loan on a median-priced home, assuming a 20% down payment. For example, a composite HAI of 120.0 means a family earning the median family income has 120% of the income necessary to qualify for a conventional loan covering 80% of a median-priced existing single-family home. Current Mortgage rates are 4.625% for Q1 2022.

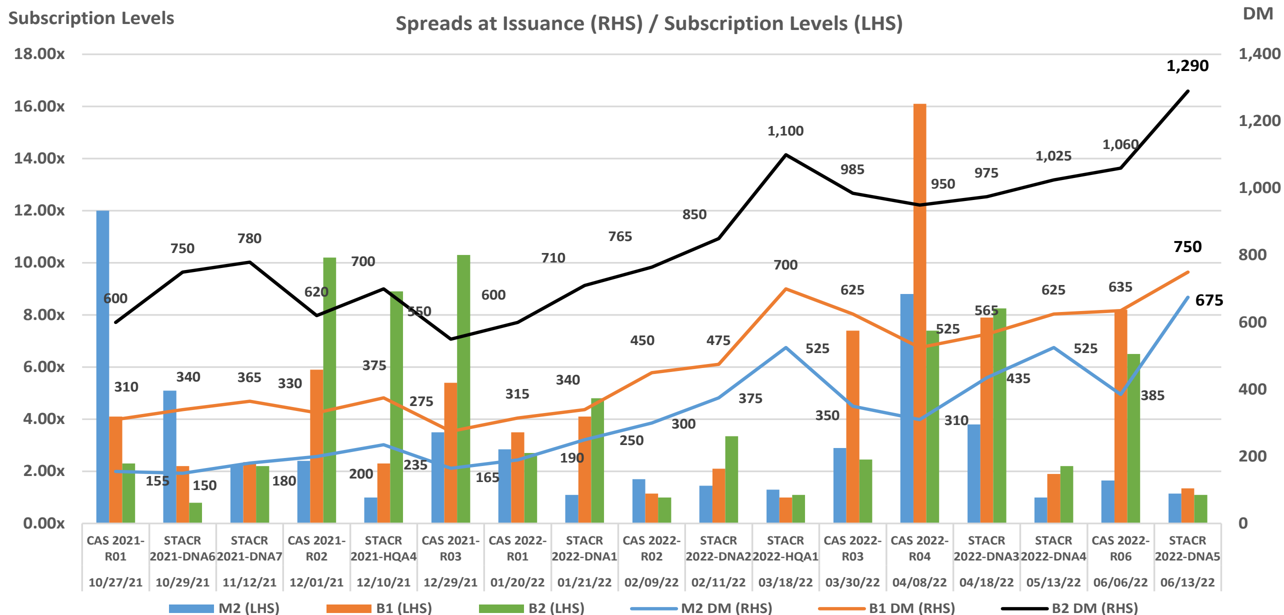
The **NAHB/Wells Fargo Housing Opportunity Index (HOI)** for a given area is defined as the share of homes sold in that area that would have been affordable to a family earning the local median income, based on standard mortgage underwriting criteria.

Investment Opportunity – Credit Risk Transfer (“CRT”) / U.S. Mortgage Credit Exposure

A **U.S. Housing Agencies were mandated by Congress in 2012 to transfer credit risk from their portfolios to private capital[1] investors; thereby creating a unique opportunity to Reinsure Fannie Mae and Freddie Mac (Government Sponsored Agencies, “GSEs”).**

B **Market “Technicals” are creating an attractive opportunity to deploy capital.**

- Increased market volatility, wider spreads and rising short-term rates, coupled with strong housing fundamentals are creating an attractive opportunity for investors looking to gain mortgage credit exposure through **Floating-Rate Credit Risk Transfer (“CRT”)** debt securities issued by the U.S. Housing Agencies, Fannie Mae and Freddie Mac.



Note: Bonds indexed to 30-day Average SOFR

C **Recent Spread Widening Explained**

- Uncertainties surrounding the ongoing war in Ukraine.
- Pent-up supply of deal issuances. Potential influx of deal issuance as Fannie Mae carries on with their credit transfer program following a ~24-month hiatus.
- Perception that persisting inflation may result in longer-term negative implications related to credit performance of marginal borrowers whose residual incomes are being squeezed.
- Liquidity Premium for nascent market sector.

D **Fundamentals Remain Strong**

- Strength of the housing and U.S. labor market.
- Continued supply-demand imbalances of available housing stock.
- Strict underwriting guidelines.
- Minimal risk layering. All loans must meet GSE underwriting and Servicing guidelines.
- Strong housing market over the past decade has built substantial homeowner equity reducing default probabilities.

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Source: Bloomberg, Falcon Bridge Capital. Note: CAS and STACR Structure differences contribute to the variance in DM levels.

Firm Overview

Falcon Bridge Capital was formed in January 2006 as part of joint venture with one of the largest Private Equity firms in the U.S. to provide portfolio management of legacy U.S. Residential Mortgage-Backed Securities ("RMBS").

Registered Investment Advisor since June 30, 2011.
SEC Registration Number: 801-72513
FINRA IARD Number: 156661

For complete analysis, research, loss modeling, sensitivity analysis and IRR Projections for Separate Managed Accounts ("SMA"), please contact:

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06.2022