X Arch | MI

HaMMR Digest

Stay current with economic and mortgage market trends.

December 18, 2023

Parker Ross — Global Chief Economist pross@archgroup.com | 914 216 7270

Leonidas Mourelatos — Director of Real Estate Economics Imourelatos@archgroup.com | 631 521 9048

ARCH MORTGAGE INSURANCE COMPANY® | 230 NORTH ELM STREET GREENSBORO NC 27401 | ARCHMI.COM

© 2023 Arch Mortgage Insurance Company. All Rights Reserved. Arch MI is a marketing term for Arch Mortgage Insurance Company and United Guaranty Residential Insurance Company. Arch Mortgage Insurance Company is a registered mark of Arch Capital Group (U.S.) Inc. or its affiliates. HaMMR is a service mark of Arch Capital Group (U.S.) Inc. or its affiliates. MCUS-B1633B-0123



The Gift That Keeps on Giving

- Key Takeaway: The Fed opening the door to talking about rate cuts ensures financial conditions remain supportive of growth.
- Macro Implications: Policymakers putting more weight on inflation progress reduces the near-term risk of an adverse labor market outcome.
- Housing Implications: Lower mortgage rates set the stage for a boost to housing activity in early 2024.

Macro: 2024 Looks More Positive than One Month Ago

- "Higher for longer" replaced by "how far and how fast" for rate cuts.
- Disinflation is in tow while economic activity is looking solid.
- Should current trends continue, sentiment will rebound.

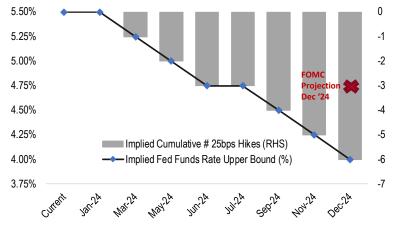
Rates: 10-Year U.S. Treasury Yields Sink to Five-Month Low

- Fed's hint at rate cuts pulled 10-year yields 16bps lower to 3.9%.
- Market odds for first rate cut is well above 50% for March.
- Shorter-term UST yields have more downside risk than long-term.

Housing: Mortgage Rates Lowest Since August

- Mortgage rates have fallen for seven straight weeks to below 7%.
- Mortgage applications continued to rebound.
- Stabilization in housing market expected after a weak Q4.





Sources: Federal Reserve Board, U.S. Bureau of Labor Statistic, Bloomberg, Arch Global Economics

Retail Sales: Households Feeling Holiday Spirit

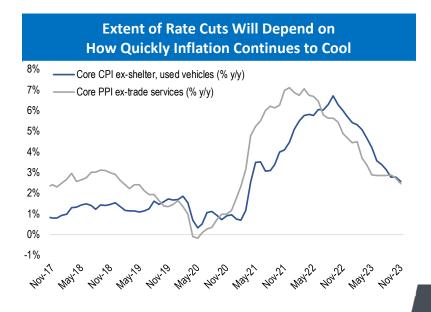
- Retail sales rebounded 0.3% in Nov. and are up 4.1% y/y.
- Real control group sales up eight months in a row and 3.8% y/y.
- The trend in consumer spending remained robust.

Inflation: Keep Calm and Carry On

- Consumer prices were up 0.1% in Nov. with core inflation up 0.3%.
- Wholesale inflation was even softer with headline and core flat.
- Price pressures remain in a downtrend with minimal upside risk.

Industrial Production: End of UAW Strike Provided a Lift

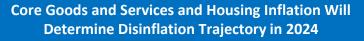
- Total production rose 0.2% in Nov. but was down -0.4% y/y.
- Auto rebound in Nov. only partly made up for its Oct. decline.
- Manufacturing output is up modestly from the 2022 low.



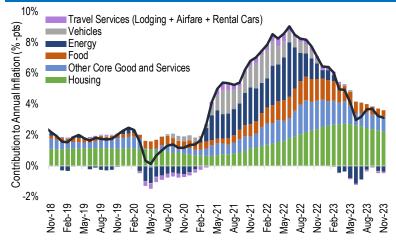




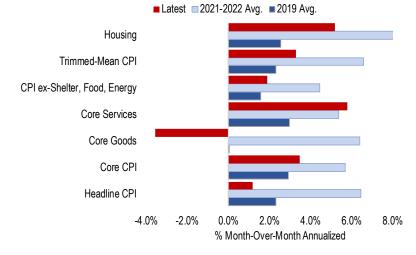
Consumer and Producer Inflation



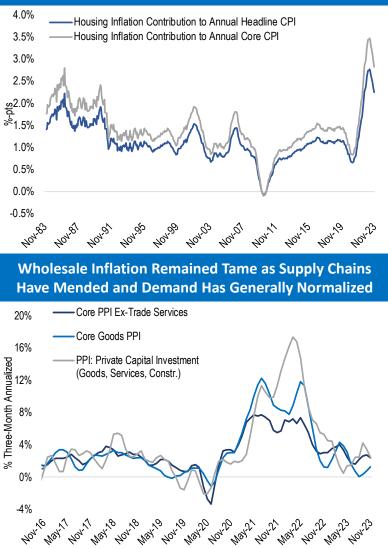
XArch | MI



Monthly Inflation Inching Closer to 2019 Averages Across Key Groupings

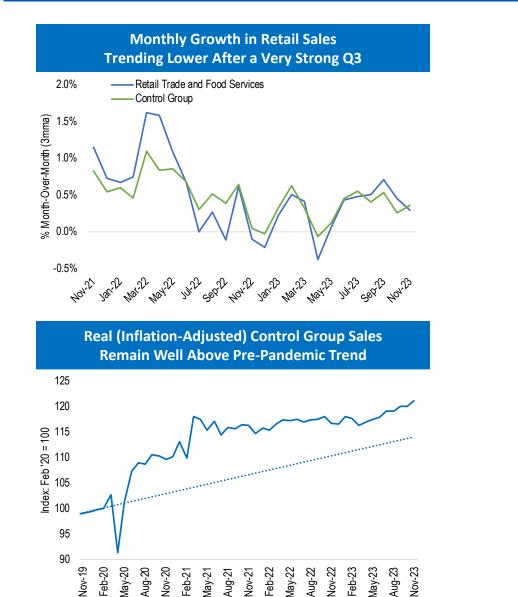


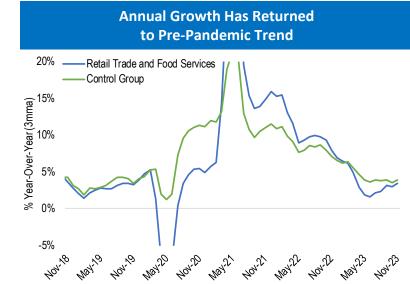
Housing Inflation Still Elevated but Trending the Right Direction



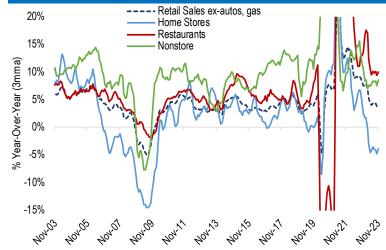


Retail Sales





Consumers Have Shifted Focus to Spending on Services While Buying Fewer Goods for the Home

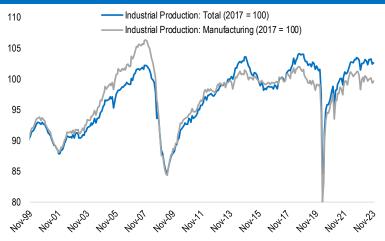


Note: "Home Stores" = building materials, garden equipment, home furnishings & appliances. "Control Group" = Retail sales excludes autos, gas, building materials, and restaurants Sources: U.S. Census Bureau, BLS, Arch Global Economics

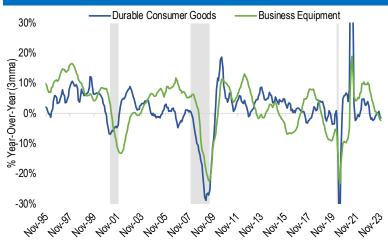


Industrial Production

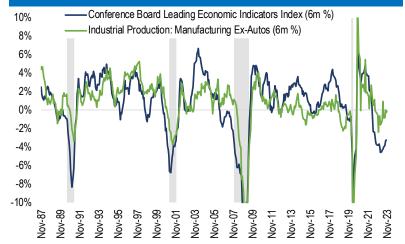
Total Industrial Production Has Remained Elevated Despite Numerous Headwinds



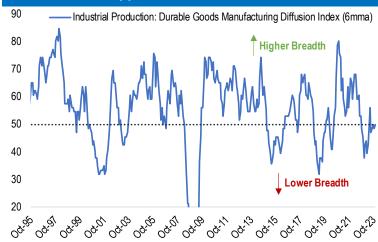
Consumer Shift to Services Weighing on Durables While Business Investment Has Cooled from '22 Boom



Excluding Autos, Manufacturing Output Has Also Been Better than Leading Indicators Would Suggest



Share of Durable Goods Sectors Contracting Appears to Have Bottomed



Pending Sales Still Slowing but Pace of New Listings Has Also Taken a Step Back Recently



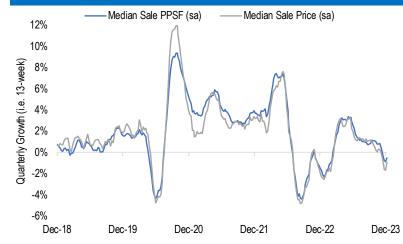
Days on Market Continued to Trend Higher but Remained Below Pre-Pandemic Norm



Causing a Tentative Pause in the Rapid Softening of the National Housing Market



Softening Market Conditions Have Pulled Down Seasonally Adjusted Home Prices Over the Past Quarter



XArch | MI

| Metro | Median Sale Price Per Square Foot (y/y) | | Active Listings with Price Drops | | Share of Homes Sold Above List | | Average Sale-to-List Ratio | | Total Active Listings | Median Days on Market vs Pre-COVID | | Months' Supply vs Pre-COVID | |
|-------------------|--|--------------|-------------------------------------|--------------|-----------------------------------|--------------|-------------------------------|--------------|--------------------------|---------------------------------------|----------|--------------------------------|-------------|
| | Current | Year Ago | Current | (∆ y/y, ppt) | Current | (∆ y/y, ppt) | Current | (∆ y/y, ppt) | (y/y) | Current | Year Ago | Current | Year Ago |
| All Redfin Metros | 4.6% | 4.1% | 5.3% | 0.5% | 26% | 1.8% | 99% | 0.4% | -5% | -15.1 | -12.8 | -8% | -13% |
| Atlanta | 5.4% | 6.7% | 5.0% | 0.2% | 23% | 1.1% | 98% | 0.5% | -27% | -1.8 | -2.8 | -13% | 2% |
| Austin | -5.9% | -6.1% | 6.1% | -0.9% | 11% | -1.3% | 97% | 0.7% | -5% | 28.8 | 20.8 | 78% | 75% |
| Baltimore | 5.9% | 4.9% | 5.8% | 0.2% | 39% | 6.5% | 101% | 0.4% | -10% | -16.5 | -12.7 | -32% | -31% |
| Boston | 8.6% | 1.2% | 4.3% | 0.0% | 51% | 9.4% | 101% | 1.4% | -15% | -0.7 | 1.5 | -11% | -11% |
| Chicago | 10.7% | 1.9% | 3.0% | 0.4% | 33% | 6.7% | 99% | 1.0% | -21% | 5.9 | 13.8 | -18% | -5% |
| Dallas | 1.7% | 6.9% | 6.4% | -1.1% | 16% | -4.0% | 98% | -0.2% | -3% | -6.3 | -7.8 | 6% | 2% |
| Denver | 0.9% | 0.5% | 6.9% | -1.0% | 21% | 3.9% | 99% | 0.3% | -3% | 6.4 | 5.8 | 36% | 26% |
| Houston | 0.4% | 8.3% | 6.2% | 0.1% | 13% | -1.4% | 97% | 0.1% | 2% | -12.5 | -13.6 | 4% | -2% |
| Los Angeles | 7.3% | 0.8% | 3.4% | 0.0% | 45% | 10.2% | 101% | 1.7% | -19% | -5.8 | 2.2 | -3% | 19% |
| Miami | 10.1% | 11.2% | 4.0% | 0.8% | 14% | -0.1% | 96% | 0.0% | -3% | -11.5 | -8.0 | -4% | -20% |
| Minneapolis | 3.2% | 3.5% | 5.5% | 0.8% | 31% | 1.4% | 99% | 0.3% | -2% | -4.2 | -3.8 | 16% | 9% |
| Nashville | 1.7% | 8.3% | 4.5% | -0.1% | 15% | -0.1% | 98% | 0.3% | -3% | 0.8 | -0.8 | 17% | 4% |
| New York | 4.1% | 4.0% | 3.4% | -0.7% | 32% | 8.0% | 100% | 0.8% | -16% | -26.3 | -28.6 | -15% | -19% |
| Phoenix | 3.5% | -0.3% | 6.5% | -1.0% | 16% | 3.0% | 98% | 0.9% | -23% | 1.8 | 13.6 | 30% | 63% |
| Portland | 1.8% | 2.4% | 5.0% | -0.8% | 26% | 1.5% | 99% | 0.2% | -3% | 1.0 | -4.3 | 48% | 18% |
| Riverside | 4.9% | 2.0% | 4.7% | 0.1% | 37% | 8.3% | 99% | 1.0% | -22% | -16.5 | -6.0 | -13% | 13% |
| San Diego | 11.8% | 3.0% | 4.5% | -0.6% | 38% | 12.3% | 99% | 1.2% | -21% | -10.0 | -0.8 | -12% | -4% |
| Seattle | 8.5% | -4.9% | 4.6% | -1.5% | 27% | 9.3% | 99% | 1.5% | -26% | -4.7 | 2.6 | 11% | 31% |
| Tampa | 3.0% | 9.7% | 8.3% | -0.7% | 13% | -1.8% | 97% | 0.1% | 6% | -5.5 | -6.0 | 25% | 10% |
| Washington DC | 4.7% | 2.5% | 4.3% | 0.0% | 32% | 6.2% | 100% | 0.5% | -17% | -2.9 | 3.2 | -4% | 3% |

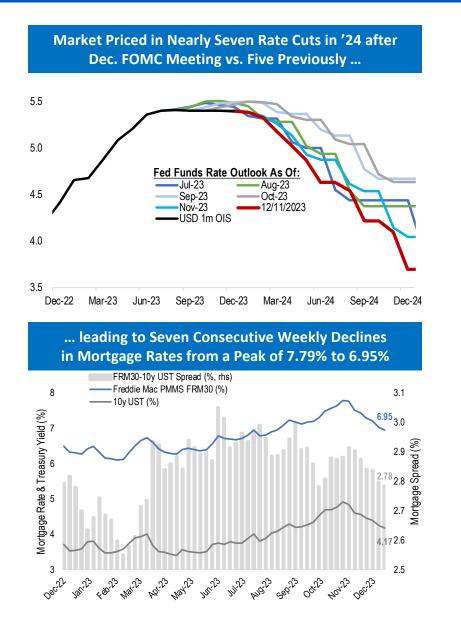
National Market Remained Relatively Tight but Trends Growing Mixed Across Metro Areas

Data as of December 10, 2023, and reflects 4-week averages.

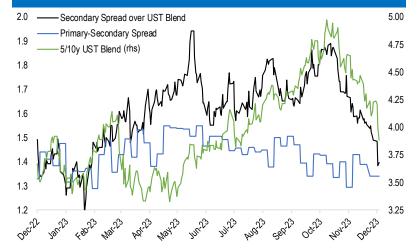
XArch | MI

HaMMR Digest — December 18, 2023

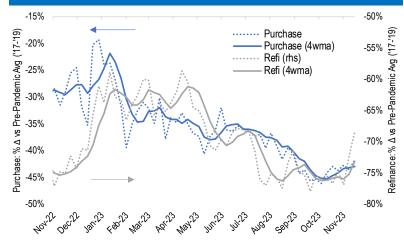
Interest Rates & Mortgage Market



Mortgage Spreads Have Narrowed Sharply as Additional Rate Cuts Were Priced in ...



... and Spurred a Modest Increase in Mortgage Purchase and Refinancing Applications

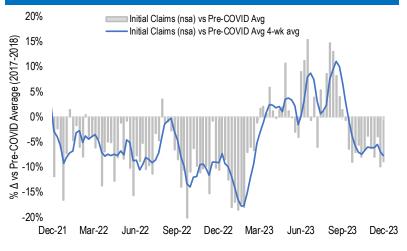


Secondary Spread: Current Coupon Option Adjusted Spread Over 5/10y UST Blend Primary-Secondary Spread: Primary Mortgage Rate – Secondary Mortgage Rate



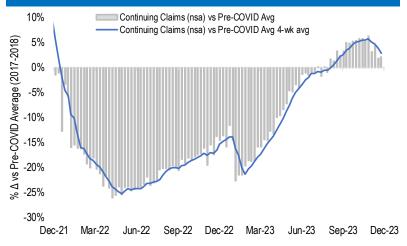
Jobless Claims

Initial Claims Have Remained Below Pre-Pandemic Norm Since Sept. and Moved Lower in Recent Weeks

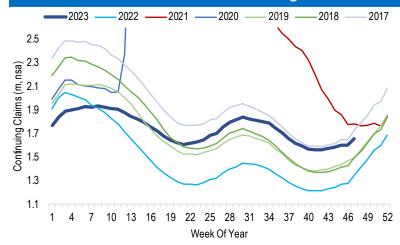


Little Concern as Initial Claims Following Typical **Pre-Pandemic Path Into Year-End** 2023 2022 2021 2020 2019 -2018 2017 400 375 350 Initial Claims (000, nsa) 325 300 275 250 225 200 175 150 1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 46 49 52 Week Of Year

Continuing Claims Have Entered a Downtrend vs. Pre-Pandemic Norm Since Peaking in Late Oct.



Continuing Claims No Longer Trending Higher vs. Pre-Pandemic Norm or Year-Ago Level



Recent Data Releases

Key economic and housing data releases over the prior week:

| Date | Indicator | Period | Actual | Consensus | Revised | Prior | Note |
|----------|-----------------------------------|----------|--------|-----------|---------|-------|-----------|
| 12/12/23 | NFIB Small Business Optimism | Nov | 90.6 | 90.7 | | 90.7 | index, sa |
| 12/12/23 | CPI m/m | Nov | 0.1% | 0.0% | | 0.0% | sa |
| 12/12/23 | CPI Core (ex Food and Energy) m/m | Nov | 0.3% | 0.3% | | 0.2% | sa |
| 12/12/23 | СРІ у/у | Nov | 3.1% | 3.1% | | 3.2% | nsa |
| 12/12/23 | CPI Core (ex Food and Energy) y/y | Nov | 4.0% | 4.0% | | 4.0% | nsa |
| 12/13/23 | MBA Mortgage Applications | 12/8/23 | 7.4% | | | 2.8% | w/w, sa |
| 12/13/23 | PPI Final Demand m/m | Nov | 0.0% | 0.0% | -0.4% | -0.5% | sa |
| 12/13/23 | PPI Core (ex Food and Energy) m/m | Nov | 0.0% | 0.2% | | 0.0% | sa |
| 12/13/23 | PPI Final Demand y/y | Nov | 0.9% | 1.0% | 1.2% | 1.3% | nsa |
| 12/13/23 | PPI Core (ex Food and Energy) y/y | Nov | 2.0% | 2.2% | 2.3% | 2.4% | nsa |
| 12/13/23 | FOMC Rate Decision (Upper Bound) | 12/13/23 | 5.5% | 5.5% | | 5.5% | |
| 12/14/23 | Advance Retail Sales m/m | Nov | 0.3% | -0.1% | -0.2% | -0.1% | sa |
| 12/14/23 | Retail Sales Control Group m/m | Nov | 0.4% | 0.2% | 0.0% | 0.2% | sa |
| 12/14/23 | Initial Jobless Claims | 12/9/23 | 202 | 220 | 221 | 220 | k, sa |
| 12/14/23 | Continuing Claims | 12/2/23 | 1,876 | 1,879 | 1,856 | 1,861 | k, sa |
| 12/14/23 | Import Price Index m/m | Nov | -0.4% | -0.8% | -0.6% | -0.8% | nsa |
| 12/14/23 | Import Price Index y/y | Nov | -1.4% | -2.1% | -1.8% | -2.0% | nsa |
| 12/14/23 | Business Inventories m/m | Oct | -0.1% | -0.1% | 0.2% | 0.4% | sa |
| 12/15/23 | Empire Manufacturing | Dec | -14.5 | 2.0 | | 9.1 | index, sa |
| 12/15/23 | Industrial Production | Nov | 0.2% | 0.3% | -0.9% | -0.6% | m/m, sa |
| 12/15/23 | Capacity Utilization | Nov | 78.8% | 79.1% | 78.7% | 78.9% | sa |
| 12/15/23 | S&P Global US Manufacturing PMI | Dec P | 48.2 | 49.5 | | 49.4 | index, sa |
| 12/15/23 | S&P Global US Services PMI | Dec P | 51.3 | 50.7 | | 50.8 | index, sa |
| 12/15/23 | S&P Global US Composite PMI | Dec P | 51.0 | 50.5 | | 50.7 | index, sa |

Sources: Bloomberg Consensus Survey of Economists, Arch Global Economics

Green = beat expectations; Red = worse than expectations; (compared vs. prior if no consensus estimates available)

UPCOMING DATA RELEASES

* Arch | MI

Key economic and housing data releases for the coming week:

| Date | Indicator | Period | Consensus | Prior | Note |
|----------|---|----------|-----------|-------|------------|
| 12/18/23 | NAHB Housing Market Index | Dec | 37.0 | 34.0 | index, sa |
| 12/19/23 | Housing Starts | Nov | 1,360 | 1,372 | k, saar |
| 12/19/23 | Housing Starts m/m | Nov | -0.9% | 1.9% | sa |
| 12/19/23 | Building Permits | Nov | 1,460 | 1,487 | k, saar |
| 12/19/23 | Building Permits m/m | Nov | -2.5% | 1.1% | sa |
| 12/20/23 | MBA Mortgage Applications | 12/15/23 | | 7.4% | w/w, sa |
| 12/20/23 | Existing Home Sales | Nov | 3,770 | 3,790 | k, saar |
| 12/20/23 | Existing Home Sales m/m | Nov | -0.5% | -4.1% | sa |
| 12/20/23 | Conf. Board Consumer Confidence | Dec | 104.0 | 102.0 | index, sa |
| 12/21/23 | GDP Annualized q/q | 3Q T | 5.2% | 5.2% | saar |
| 12/21/23 | Personal Consumption q/q | 3Q T | 3.6% | 3.6% | saar |
| 12/21/23 | Core PCE Deflator q/q | 3Q T | 2.3% | 2.3% | saar |
| 12/21/23 | Initial Jobless Claims | 12/16/23 | 215 | 202 | k, sa |
| 12/21/23 | Continuing Claims | 12/9/23 | 1,880 | 1,876 | k, sa |
| 12/21/23 | Philadelphia Fed Business Outlook | Dec | -3.0 | -5.9 | index, sa |
| 12/21/23 | Conference Board Leading Index | Nov | -0.5% | -0.8% | m/m, sa |
| 12/22/23 | Personal Income | Nov | 0.4% | 0.2% | m/m, sa |
| 12/22/23 | Personal Spending | Nov | 0.3% | 0.2% | m/m, sa |
| 12/22/23 | Real Personal Spending | Nov | 0.3% | 0.2% | m/m, sa |
| 12/22/23 | PCE Inflation m/m | Nov | 0.0% | 0.0% | sa |
| 12/22/23 | PCE Inflation y/y | Nov | 2.8% | 3.0% | nsa |
| 12/22/23 | PCE Core Inflation (ex Food and Energy) m/m | Nov | 0.2% | 0.2% | sa |
| 12/22/23 | PCE Core Inflation (ex Food and Energy) y/y | Nov | 3.3% | 3.5% | nsa |
| 12/22/23 | Durable Goods Orders | Nov P | 2.2% | -5.4% | m/m, sa |
| 12/22/23 | Cap Goods Orders Nondef Ex Air | Nov P | 0.1% | -0.3% | m/m, sa |
| 12/22/23 | New Home Sales | Nov | 688 | 679 | k, saar |
| 12/22/23 | New Home Sales m/m | Nov | 1.3% | -5.6% | sa |
| 12/22/23 | U. of Mich. Sentiment | Dec F | 69.4 | 69.4 | index, nsa |
| 12/22/23 | U. of Mich. 1 Yr Inflation | Dec F | | 3.1% | nsa |
| 12/22/23 | U. of Mich. 5-10 Yr Inflation | Dec F | | 2.8% | nsa |

Sources: Bloomberg Consensus Survey of Economists, Arch Global Economics