L&W SUPPLY MERCHANDISING UPDATE - FIRST HALF 2024

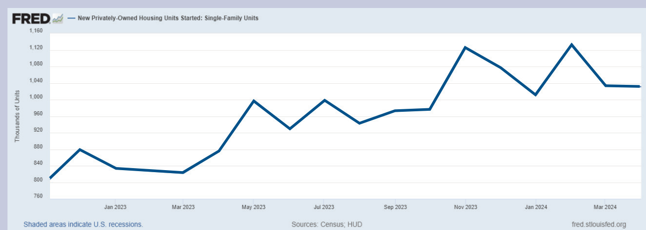
Housing starts finished 2023 down 9% compared to 2022 but, following the lowest readings of the year in August, upward momentum accelerated and has continued in the 1st half of 2024. Affordability remains the biggest barrier as mortgage rates have retreated off their 23 year highs but still hover above 7%. With inflation remaining above Federal Reserve targets, rates aren't likely to fall enough in 2024 to fully remove mortgage rate "lock-in" for existing homeowners, limiting supply of existing homes for sale and diverting demand to new construction.

Nonresidential building starts fell 9% in March to a seasonally adjusted annual rate of $363 billion. On a year-to-date basis through March, total nonresidential starts were up 2%. Nonresidential Building Starts fell each month for the first quarter led by declines in the Manufacturing and Commercial segments due to a pullback in Office and Hotel starts.

Director of Research, Kevin Hocevar, provides some thoughts on recent events later in this report then we finish with an update on synthetic gypsum and the impacts to the wallboard industry.

DEMAND

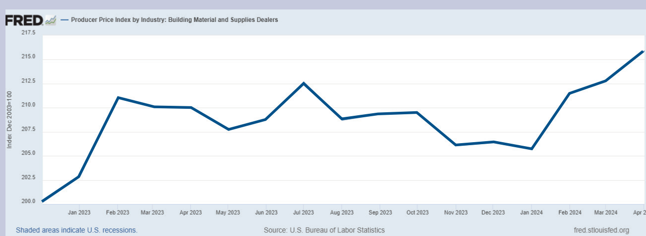
- US Housing Starts (non-seasonally adjusted) were up 1.3% YOY in 1Q2024 supported by Single Family Starts (up 27.1%) while Multi-Family starts are off significantly (down 38%). For 1Q2024, QOQ results have been mixed as rising mortgage rates have negatively impacted starts.



- After peaking in December, Non-Res, Put in Place Construction was down 0.7% in the first 3 months of 2024 with wide variation across sectors and geography.
- The Architectural Billings Index, a leading indicator for commercial construction, has been below 50 (a number less than 50 indicates contraction for the index) for 8 consecutive months.

INFLATION

- Key product cost drivers like freight and paper, after a stable 2H2023, eased up in 1Q2024 while energy costs have trended down in 1Q2024 .
- Labor/wage inflation continued to rise in Q1 with wages outpacing the CPI.
- Price increases on key product categories have been mixed with increases largely driven by raw material input costs (wallboard, ceilings, fiberglass).



KEY PRODUCT UPDATES

WALLBOARD

- The availability of synthetic gypsum continues to wane as the number of active coal-fired power plants continues to decrease due to shuttering or conversion to other methods of power generation such as natural gas which does not produce SynGyp. The declining supply of SynGyp is pushing prices up on this raw material while simultaneously forcing wallboard manufacturers to offset declining SynGyp availability with more expensive imported natural rock.

STEEL

- Manufacturer shipments of metal framing and accessories, as reported by SFIA, were up 12.0% for YE2023 but were down 4% in 1Q2024 confirming initial forecasts of a LSD % declining opportunity in 2024.
- Hot Rolled Coil (HRC) pricing, a key input cost for Cold Formed Steel Framing and ceiling grid, is down 21.6% through the first 4 months of 2024 after a 61.2% runup during 4Q2023.

CEILINGS

- After a challenging 2023, lead times on USG ceilings are back to normal levels and plant on-hand inventory has normalized.
- The office segment, representing 30% of the overall domestic ceilings opportunity, continues to be hampered by post-covid return-to-work policies and will serve as a governor to growth for ceilings, especially traditional mineral fiber products.
- Ceilings are an integral part of the evolving solutions for healthy indoor spaces in the Education and Health Care segments, and an increasingly highly specified, high-value product in the Government and Transportation segments improving long term demand for the category.

OTHER PRODUCTS

- All Four (4) Fiberglass Manufacturers continue to operate with constrained supply as demand outpaces supply for residential batts, loosefill and metal building (MBI) products.
- Mineral wool insulation will continue to experience severely constrained supply and extended lead times with an ongoing imbalance of supply and demand as the 3 domestic manufacturers struggle to keep pace with demand.
- In addition to an industry wide increase in January 2024, fiberglass and mineral wool manufacturers have announced additional increases for mid-year 2024 due to strong demand as well as raw material inflationary pressures.

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MARKET HIGHLIGHTS FROM

KEVIN HOCEVAR Director of Research - ABC Supply

Directionally speaking, 2024 is playing out as expected. From a broad macro perspective, GDP growth remains resilient thanks in large part to continued strength in consumer spending. From an end market perspective, single-family new construction has been strong, multi-family new construction has slowed meaningfully (though record backlogs of work in process is providing a buffer to building material demand in the near term) and commercial end markets have seen growth rates shrink with leading indicators pointing towards continued moderation.

The most notable data point moving against the grain is mortgage rates which, per Freddie Mac, have risen from about 6.6% in early January to 7.2% as of the time of this writing (early May). Heading into 2024, the expectation was that mortgage rates would move lower as economists/investors expected the Fed Funds rate to be cut 5-6 times (with each cut being 0.25%). However, expectations are getting reset higher. Why is that? Though mortgage rates aren't directly tied to the Fed Funds rate, they are heavily influenced by it and thus changes in the expectations of what the Fed is going to do with the Fed Funds rate can influence the 10-year treasury yield which in turn influences the 30-year mortgage rate. The Fed sets the Fed Funds rate to levels that it believes will achieve its dual mandate of 1) price stability and 2) maximum employment. Looking at each of these items, to achieve price stability the Fed would like to see inflation at around 2%. The core PCE price index, which is the Fed's preferred inflation gauge, peaked in early 2022 at 5.6% and has been coming down ever since. Inflation was expected to continue to mitigate in 2024, and although inflation is less than it was in 2023, it has not come down as much as expected thanks to sticky housing and services inflation. Plus, there are signs that inflation mitigation is stalling out as the 3-month annualized rate of inflation has ticked up. As a result, core PCE has only dropped from 2.9% inflation in December 2023 to 2.8% inflation as of the most recent reading in March 2024. In terms of maximum employment, labor markets have been very strong in 2024 (at least until the April nonfarm payrolls report came out) and the unemployment rate remains below 4% which is far below the long-term average of 5.7%. Thus, with inflation stalling out in the upper-2's% and the economy/labor markets humming, the Fed has little incentive to lower the Fed Funds rate in the near term. As a result, Fed Funds futures now suggest investors only expect 1-2 rate cuts this year vs 5-6 cuts expected a few months ago. This has been the driving force behind mortgage rates moving higher.

So what does that mean to markets and where do we go from here? The good news is that some relief has come recently as Fed Chairman Jerome Powell's comments after the most recent Fed meeting were perceived as dovish and the April nonfarm payroll data (along with hourly wage inflation) came in much lighter than expected. This put downward pressure on rates in early May. Second, rate relief is merely delayed as opposed to eliminated as, at the end of the day, the current Fed Funds rate at 5.25-5.50% is very likely restrictive on the economy and will come down at some point. The Fed Funds futures curve still suggests 1-2 cuts this year and another 3 cuts next year. Though this represents less cuts than were expected a few months ago, it still suggests cuts are coming. And lastly, demand for new single-family construction has remained resilient despite the rise in rates with several publicly traded homebuilders recently raising delivery guidance for the year. Thus, despite some near-term noise surrounding rates, end markets remain solid and a shortage of housing still exists which should support new single-family construction for some time.

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THE STATE OF SYNTHETIC GYPSUM

Synthetic Gypsum, also known as Flue-Gas-Desulfurization gypsum or FGD for short, is a byproduct of coal-fired power plants. It's produced as the flue gasses in smoke stacks pass through chemical scrubbers using a slurry of limestone or calcium carbonate to remove sulfur from the exhaust. The resulting byproduct, when oxidized with water, produces gypsum. This high-quality form of gypsum has been leveraged by wallboard manufacturers for more than 30 years to the point that, at the peak, close to 50% of all wallboard produced in the US was made using FGD. The benefits to gypsum wallboard manufacturers were many, especially:

- **Cost:** FGD gypsum has historically been considerably cheaper than using natural rock especially considering costs related to mining and transportation. Natural rock is typically mined offsite whereas FGD is often sourced nearby to the wallboard manufacturing plant increasing efficiencies and minimizing transportation costs. This also allowed wallboard plants to be closer to end market demand as opposed to near quarries, mines, or a port.

- **Quality:** FGD gypsum is a purer form of gypsum with few impurities and a consistent structure which allows gypsum wallboard manufacturers to optimize production rates and efficiencies.

These benefits led to the majority of wallboard plants built in the past 30 years to be close to the source of the FGD gypsum and, in some instances, literally next door. This minimized transportation costs for receiving the FGD byproduct but is now proving problematic as FGD use in manufacturing is dramatically declining and a conversion back to natural rock is on the rise. The reason? Coal-fired power plants are being retired or converted to other energy sources such as natural gas as the use of coal for energy production has fallen out of favor. US coal plants are currently generating ~17mm tons of FGD/year, with ~11mm tons being used for wallboard production. However, approximately 32 coal-fired power plants have publicly announced plans to close/idle by the end of 2030 representing ~7mm tons. An incremental ~2mm tons/year are expected to be retired by 2040.

This decline in the supply of FGD gypsum is forcing manufacturers to return to natural rock to offset the shortfall and the conversion is expensive, especially for plants that were built to maximize efficiencies and minimize cost using FGD and are geographically challenged to offset the FGD with natural rock. Large capital expenditures are required to mine natural rock and transport it; whether by ship, barge, truck, rail, or a combination of any of these. Once onsite, natural rock is typically more expensive to process and prepare for manufacturing wallboard. Often these sources of gypsum supply come from imports from Canada, Spain, and Mexico since the domestic supply of mined natural rock has nearly been steady in the recent past. With FGD gypsum decreasing in supply and becoming a commodity in high demand, the cost of it has increased significantly over the past few years with some sources putting the yearly inflation of FGD at more than 25% YOY.

The impacts of declining FGD gypsum to the domestic wallboard market are substantial. As the supply of FGD dwindles the cost of this resource will continue to climb. As the cost and availability of FGD limit its use, manufacturers will be forced to convert to more expensive natural rock or curtail production, or both.

Sources: EIA, Gypsum Association, Public Disclosures & Filings

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