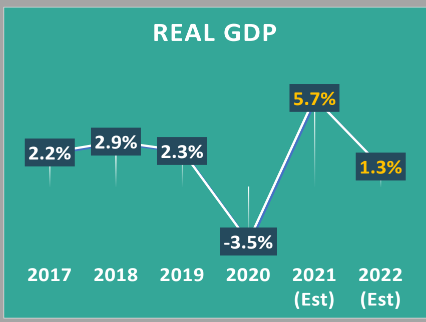
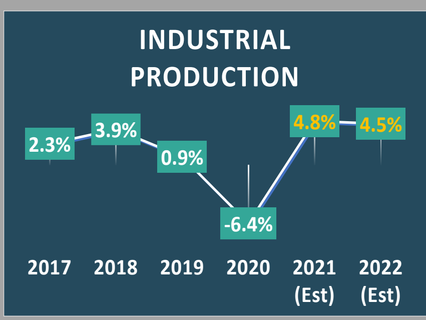
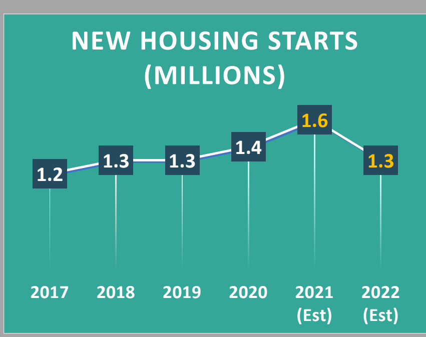
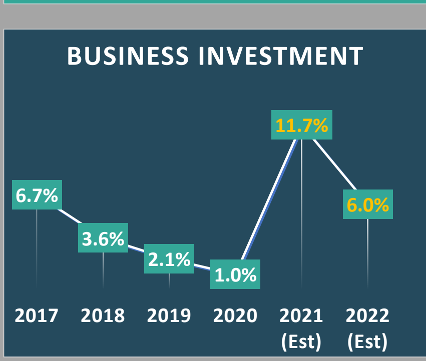
Selected Indices









Executive Summary – January '23

Big Items

GDP: The estimated growth numbers for the last quarter of 2022 were all over the place – a little something for everyone. There was the glass half empty crowd who predicted rates of 0.5% or below and the glass half full contingent that anticipated rates near 4.0%. In the end the growth leaned towards the positive side at 2.9%. There was a continued pattern of export growth as the dollar weakened against major currencies and the consumer was more active in the last month than was originally expected.

Industrial Production: Industrial production data continues to decline. It was down 0.7% in December and is down 1.7% for the year. The manufacturing segment alone was down by 1.3% but utilities surged with the arrival of colder weather – it was up 3.8%. Mining (which is predominantly oil and gas) also fell – by 0.9%. These are not yet numbers to cause panic, but the trend is not in the preferred direction. This signals that inventory accumulation has largely ended.

Housing Starts: Housing starts are still tanking - and fast. The latest data shows a decline of 1.4% from the revised November data and a whopping 21.8% below December of 2021. There is still a lot of growth in the multi-family market with permits being held at levels not seen since the 1980s. Even here there has been some slowdown, however. As is usually the case, there has been a lot of variation between locations and there are still a lot of very hot markets nationally.

Home Improvement Retail: Home renovation and remodeling continues to grow but at a slower pace. There are generally three motivators for remodeling. The number one driver has been preparing a house for sale, but this has largely declined. The second rationale has been to convert part of a house to some other purpose (home office, residence for elders, etc.) and that has slowed as well. Now the drivers of renovation come from families who no longer plan to relocate and want to improve the place they currently inhabit.

Manufacturing: The latest PMI from the Institute for Supply Management indicated a drop to 46.2. The US index is among 19 around the world which have tumbled under the 50-line that divides the growth nations from those in contraction. Canada popped to 51.0 in January, but Mexico slipped back into a mild slowing pattern at 48.9. There is no shock here given the industrial production numbers, but the continued slip will create deeper concerns for the coming year.

Big Risks

Inflation and Recession Potential: There have been some interesting developments as far as inflation and some deceleration taking place. Whether or not the country (or the world for that matter) slips into recession in 2023 will depend on what happens with inflation. If there really has been a peak in the pace of global inflation, there is a possibility that interest rates will start to come back down again by mid-summer.

What to Watch

Geopolitics: There are still lots of questions regarding the Ukraine war and how it might end, and China remains a nation with many questions regarding its economic rebound. But a new area of concern is Latin America as it is a major supplier to the US. Nearly every government is now in the hands of the political left and most of these are overtly hostile to the US – at least as far as the rhetoric is concerned. The economic ties have yet to be affected by this political posturing.

Macroeconomic Viewpoints

- Dr. Chris Kuehl

ASA MER Contents:

Has the Situation Really Changed? It is more than a little astonishing how quickly the data can shift. It was only a month or so ago that the consensus view among economists was that 2023 was going to feature a serious recession. Now there are many asserting that a short downturn and a soft landing may be in the offing. Not that this burst of optimism is universal as there are still plenty of pessimists out there, but there is some reasonable expectation of a better 2023 than previously assumed. Why? It all comes down to inflation expectations.

The primary driver for a recession is the desire to control inflation. The Fed (and the other central banks) have a mantra “raise rates until something breaks and then lower them again to fix what was broken”. At the end of 2022 the rate of global inflation began to fall, and it has continued to fall in some key areas. Commodities have seen declines (especially oil and gas), shipping rates have declined a bit, factory gate prices are also down a little. More importantly, there is evidence of some breakage in the economy. The jobless rate has remained very low and generally that is what the central banks look at to determine whether they have broken the inflation streak. Lately the unemployment numbers have been less than reliable measures due to factors such as the growth of the “gig economy” and the fact that many companies are reluctant to lay workers off as it has been so difficult to hire the talent they needed in the first place. The Fed has looked at other indicators such as housing starts, the Purchasing Managers’ Index, capacity numbers and so on. They have concluded that they can start relaxing a bit when it comes to interest rate hikes and that is reflected in their decision to limit the most recent hike to a quarter point (they had been talking about a half point hike only a few weeks ago).

Is it reasonable to assume that inflation is now under control? The fact is that the measure the Fed uses to gauge inflation is still far higher than they would prefer. The Personal Consumption Expenditure number is falling a bit – a gain of 4.4% compared to 4.7% the month prior. Although this is promising the Fed still wants to see that number between 2.0% and 2.5%. There is still a rationale for hiking rates and certainly for keeping them up. In past years there has been a pattern when it comes to interest rates. Once a peak in inflation has been reached it takes about seven to eight months for the rates to start coming down again. If the peak in inflation was reached in November or December of 2022 that would mean rates heading back down by June or July of this year.

There has been substantial progress as far as the cost of commodities, the performance of the supply chain and logistics but there is one inflation driver that is getting worse and creating the most angst. Labor costs have been spiking generally and in many sectors of manufacturing and construction the rise has been especially dramatic. The worker shortage has been as bad as it has ever been, and companies face higher and higher wage demands. The most common method used to hire is to poach employees from other companies. This means paying them more and it means paying the rest of the workforce enough to keep them from being poached. The accompanying issue is that many of the new hires are not as skilled and qualified as would be preferred and that has affected productivity. Many companies have turned aggressively to robotics and automation, but this is capital intensive and then there is the challenge of finding the people needed to operate higher tech machines.

Reader Question of the Month

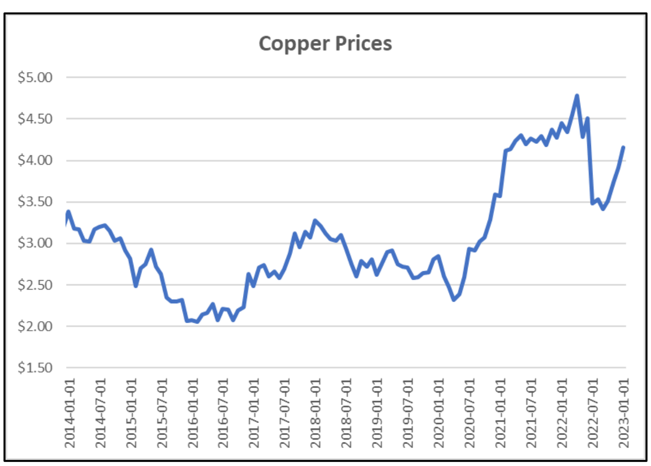
Q: How about a geopolitical question? What is the chance that China invades Taiwan and what would that mean for the global economy?

A: Ever since the Russian invasion of Ukraine there has been a concern that China would decide to engage in a similar set of actions directed at Taiwan. Part of the reason the US (as well as Japan) has taken a strong stand on Russia is to dissuade Beijing. To the leaders of the PRC the Taiwanese are a renegade province and there has been a nationalistic demand to recover that island since the creation of the Republic of China (ROC) in 1949. The US has pledged to protect the Taiwanese ever since, but the extent of that protection has never been defined.

China does a lot of business with Taiwan – Fujian province has been very engaged with the banks and businesses in the ROC. China knows that an invasion would provoke major reactions from the US, Japan, and other nations and thus far there has been more rhetoric than action. If there was an actual invasion and the US responded, the estimates are that GDP would plummet in both the US and China. Trade between the US and China would come to a halt, and this would damage both nations. The US buys a lot from China and China relies on the US for much of its food. China is less than 65% independent when it comes to soybeans and relies on the US for as much as 20% of its food. The Chinese military issued a report that pointed out every Chinese government that has ever fallen has been brought down by food shortages and riots. At this point analysts assert that China is not prepared to invade but some type of economic blockade would be a possibility. - CK

Key Commodity Outlook

The following section includes viewpoints on key commodities. Wherever possible, the Producer Price Index (PPI) is used as a gauge of prices for specific commodities. The PPI is derived from monthly Government surveys of those that purchase specific products and services. The PPI includes views on both spot and contract pricing for a given product or service and is more representative of general changes in street-level pricing trends.



Copper Prices (WPUSI019011)

- The price of copper has continued to rise since last month and is trading at $4.16/lb. ($3.91/lb. last month).
- The Producer Price Index (PPI) for December (latest PPI available) was 512.6, up month-over-month by 1.2% (7.1% last month). It was down 3.7% year-over-year (-8.4% last month). The ten-year index high was 572.0 in May 2022 and the low was 302.9 in 2016.
- **Looking Ahead**: Speculators have pushed the price of copper higher, at a time when global manufacturing demand is softening. The China reopening speculation is running strong; this is the notion that as China gets this first significant wave of Covid behind it, it will open the economy back up (permanently) and consumption will surge at some point.

General Commodities Discussion:

Nickel:

- Nickel Prices have been surprisingly flat over the past 30 days and were @$12.86 per lb. ($12.87 in the last update). LME warehouse levels fell again this month to 50,638 tons (53,862 tons in the last update) and remain at decade lows.
- **Outlook**: The impact of decelerating global manufacturing activity has outweighed the impact of China's reopening process and new demand that will be created for raw materials. And as mentioned last month, sections of the non-residential construction sector that use heavy stainless-steel inputs continue to perform well and the added pressure on nickel supplies from acceleration of EV battery production will eventually put more pressure on prices. Nickel supply is complex and "refined nickel" supplies are dwindling while Class I nickel ore is being produced rapidly by Indonesia, and inventories of unrefined nickel is growing.

Carbon Steel: (WPU101706)

- NYMEX Domestic Hot-rolled Coil steel prices (CRU-HRCc1) were higher over the past 30 days and were $780 per ton in mid-January ($670 per ton in the last update). This is down from a peak of $1,943 hit in August of 2021.
- However, Producer Prices for steel pipe and tube continued to drop in the latest data from the end of December (latest available). They were down 2.9% month-over-month (down 1.9% last month) and are now lower historically. Year-over-year, the PPI was 4.8% lower (0.1% higher Y/Y in the last update) against much more difficult comparisons.
- **Outlook**: The surge in certain steel prices since the beginning of the year is likely based on a lot of speculation about China's reopening process and some pockets of US manufacturing and construction that are still increasing demand for steel products despite recessionary headwinds. Infrastructure spending is beginning to pick up pace and construction spending is up double-digits across many categories of non-residential construction.

Stainless Steel: (WPU10170674)

- The Producer Price Index for stainless pipe and tube continued to slip and were down in December (latest available). Producer prices for stainless pipe fell by 1.3% month-over-month (down 0.7% last month); but they were still up 11.4% Y/Y (up 13.5% last month).
- **Outlook**: Stainless steel surcharges have been on an upward trajectory since November, and February's 304/L prices are at the highest level since July of last year. 316/L surcharges are at the highest level since June and several analysts expect molybdenum to continue rising.

Ferrous Metal Scrap: (PPI: PCU4299304299301)

- Producer prices for ferrous metal scrap rebounded slightly in December, coming in with an index of 467.5 (431.3 last month). This was higher by 8.6% M/M (-2.6% last month). Year-over-year it was down by 27.8% Y/Y (-34.6% in the last update). The highest producer price prior to this was in July of 2008 when the index hit 731.4 points.
- **Outlook**: Sources are pointing to the trend of conversions from blast furnaces to EAF (electric arc furnace) as one of the trends that will increase scrap demand. This is a longer-term trend, and many analysts are asking whether the scrap industry can keep pace with this shift in process, EAF of course creating more demand for metal scrap. Winter weather also hampered scrap supply in December and early January, which helped push prices up in the month.

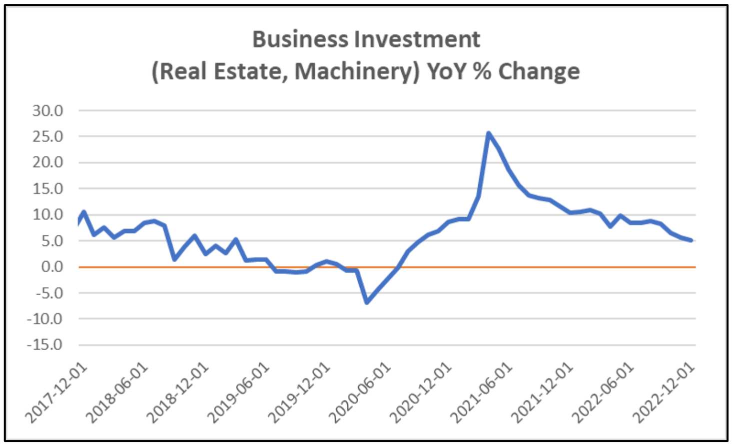
Additional commodities and finished product pricing are addressed in the Producer Price Index review on the next page.

Producer Price Index – Key Industry Products

The Producer Price Index (PPI) for key supply industry metrics is listed in the chart below including month-over-month and year-over-year comparisons. To the degree that the PPI is derived from monthly Government Surveys of actual purchasers and users of the following products, it provides a more accurate street-level pricing viewpoint. Some data is delayed and may not have been updated by the time of publication.

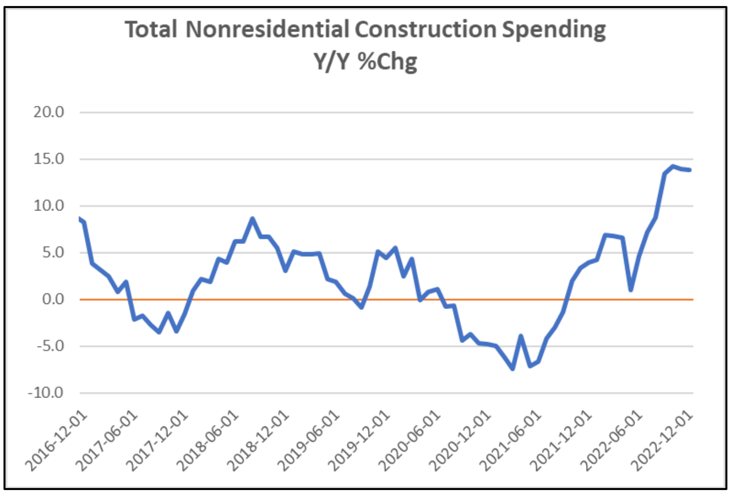
Producer Price Index - Key Industry Products						
Category	PPI Code	Dec-22	Nov-22	M/M% Chg	Dec-21	Y/Y % Chg
Pipe, Valves and Fittings						
Metal valves, except fluid power	WPU114902	423.8	423.8	0.0%	373.0	13.6%
Gates, globes, angles and check valves	WPU114902011	159.6	159.6	0.0%	146.2	9.1%
Ball valves	WPU11490202	558.2	558.6	-0.1%	477.5	16.9%
Butterfly valves (formerly W2421490203)	WPU11490203	297.6	297.6	0.0%	261.4	13.9%
Industrial plug valves	WPU11490204	297.7	297.7	0.0%	257.3	15.7%
Plumbing and heating valves (low pressure)	WPU11490205	376.4	376.4	0.0%	358.3	5.1%
Solenoid valves	WPU11490208	372.2	372.2	0.0%	372.2	0.0%
Other industrial valves, including nuclear	WPU11490209	392.6	392.6	0.0%	341.5	15.0%
Automatic valves	WPU11490211	248.9	248.9	0.0%	220.1	13.1%
Metal pipe fittings, flanges and unions	WPU11490301	476.5	476.4	0.0%	411.0	15.9%
Steel pipe and tube	WPU101706	469.1	482.9	-2.9%	492.9	-4.8%
Steel pipe and tube, alloy	WPU10170673	109.5	109.5	0.0%	109.5	0.0%
Steel pipe and tube, stainless	WPU10170674	151.5	153.5	-1.3%	135.9	11.4%
Copper & copper-base alloy pipe and tube	WPU10250239	331.8	331.8	0.0%	358.0	-7.3%
Plastic pipe	WPU07210603	211.8	214.7	-1.4%	198.8	6.5%
Plastic pipe fittings and unions	WPU07210604	318.4	319.0	-0.2%	275.6	15.5%
Plumbing Fixtures, Fittings and Trim	WPU105402	388.5	388.5	0.0%	355.0	9.4%
Bath and shower fittings	WPU10540211	286.7	286.7	0.0%	286.7	0.0%
Lavatory and sink fittings	WPU10540218	197.3	197.3	0.0%	177.8	11.0%
Enameled iron and metal sanitary ware	WPU1056	290.6	288.3	0.8%	258.6	12.4%
Steam and Hot Water Equipment	WPU1061	393.3	393.3	0.0%	349.0	12.7%
Cast iron heating boilers, radiators and convectors	WPU10610106	269.9	269.9	0.0%	212.3	27.1%
Domestic water heaters	WPU106601	569.4	569.2	0.0%	566.1	0.6%
Electric water heaters	WPU10660101	563.9	563.9	0.0%	561.4	0.5%
Non-electric water heaters	WPU10660114	346.7	346.7	0.0%	344.3	0.7%
Warehousing, Storage and Relates Services	WPU321	125.1	125.8	-0.6%	120.4	3.9%

PHCP & PVF



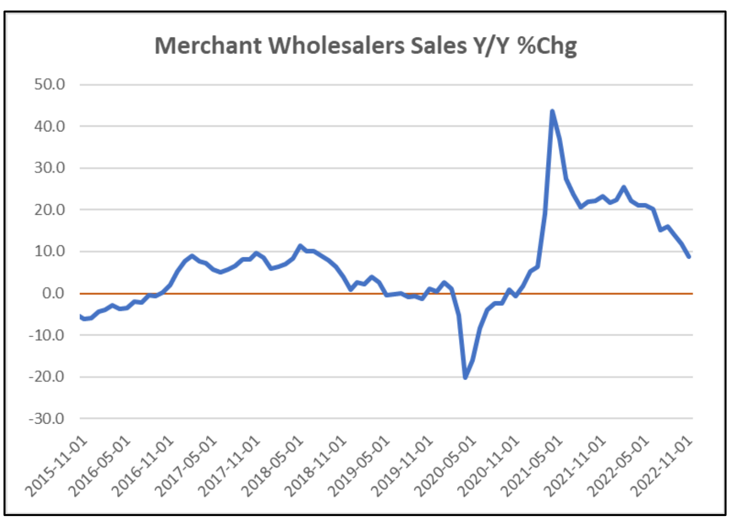
Capital Goods New Orders (NEWORDER)

- The value of manufacturers' new orders for capital goods remained stable again in December (latest available), spending was down slightly by 0.2% sequentially M/M (-0.2% last month). But they remained up by 5.2% Y/Y (up 5.7% last month) and continued to be stable overall.
- **Outlook**: Businesses were still spending at an annual rate of @$74.8 billion in capex. Some of this is due to inflation, but even when stripping out the impact of inflation, spending is still near all-time highs. Despite warnings that spending will retreat and a slight sign of decelerating activity, at least through December spending continued to show a firm pace.



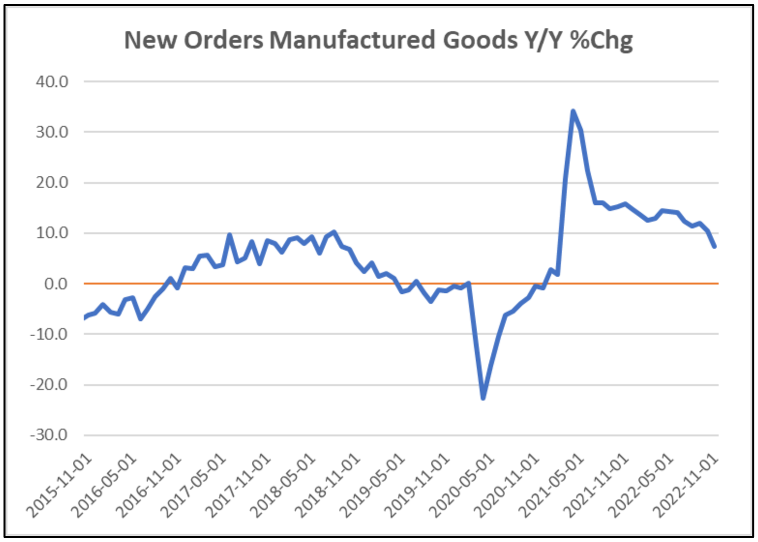
Total Non-Residential Construction (TLNRESCONS)

- Total Non-Residential Construction was 13.8% higher than it was a year ago (13.9% higher last month) but was 0.5% lower M/M (-0.3% in the last report). Overall spending was at an annual rate of $943B (the prior annualized run rate peak of $900B was hit in September of 2022).
- **Outlook**: Nonresidential construction continues to set new records (with some inflation impact involved). But there are undoubtedly some strong trends pushing areas like industrial manufacturing construction, commercial, lodging and entertainment, and multi-family construction trends. Other sectors of nonresidential construction are poised to gain momentum, health care, infrastructure, and perhaps education in some states.



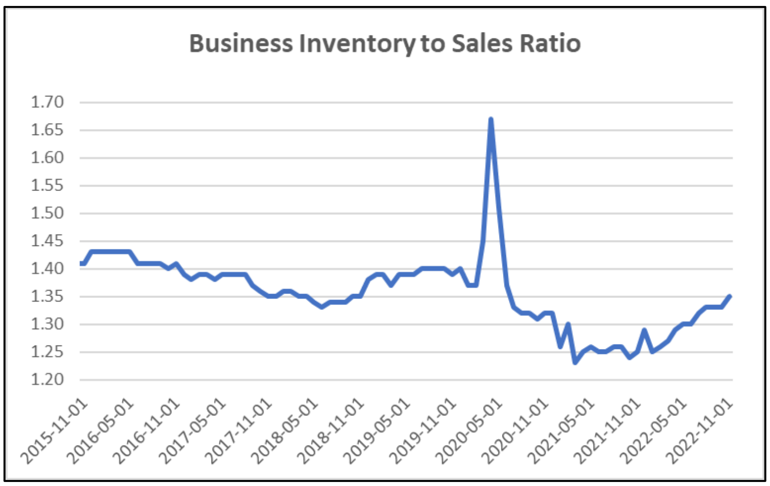
Wholesale Trade (WHLSLRSMSA, WHLSLRIMSA)

- Merchant wholesalers' sales were up 8.7% Y/Y through November (latest available; up 11.4% Y/Y in the last update). Month-over-month, sales were down 0.6% (up 0.4% last month).
- Wholesale inventories were up 20.9% year-over-year in October (up 21.9% last month).
- **Outlook**: The inventory to sales ratio for wholesalers is 11.6% higher year-over-year (9.1% higher last month) through November (latest available). Relative to sales, inventories are still overstocked, and some opening of the Chinese market could increase product availability in the coming months. This could allow wholesalers to start working toward a purposefully tighter supply chain and more methodical inventory management practices (if supply chain shortages, backlogs, and backorders do not resurface).



Manufacturing (AMTMNO)

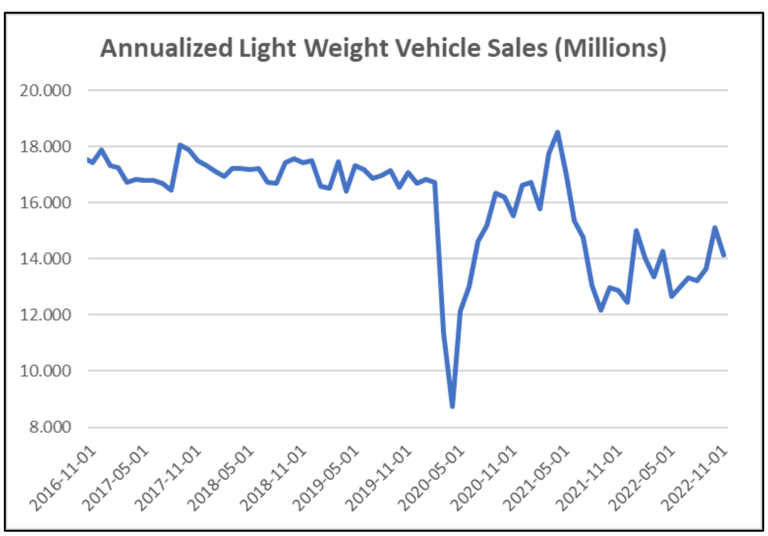
- Federal data on manufacturing was up 7.3% Y/Y (up 10.4% last month) through November (latest available). It was down sequentially by 1.8% month-over-month (1.0% last month).
- The S&P Global US manufacturing PMI came in at 46.9 in January, down from 46.2 in December.
- **Outlook**: A PMI reading over 50 is evidence of a sector that is expanding and growing. New orders were pulling heavily on the overall index, new orders fell across a broad swath of the market. Manufacturers were also continuing to trim hiring activity and were cost cutting through attrition according to some sources heading into what many believe could be a sluggish first half of 2023. Prices remained elevated, although some softening of input prices was noted. Many manufacturers are clearing backlogs but are concerned about how quickly new orders will pick up pace.



Business Inventory to Sales Ratio (ISRATIO)

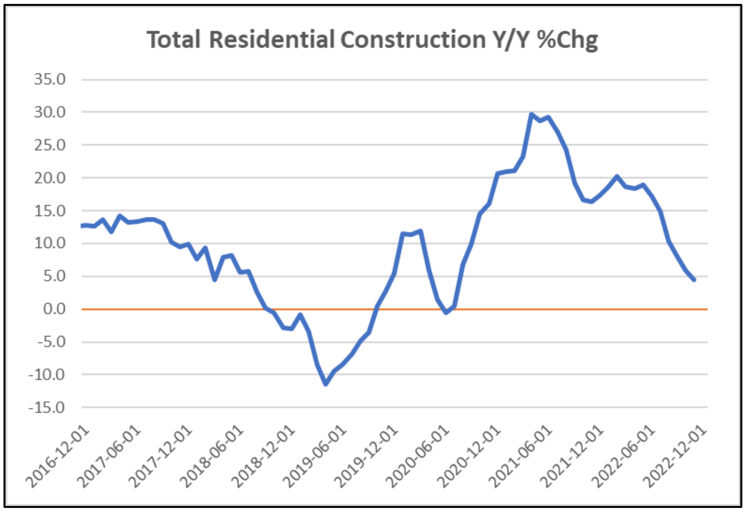
- The current inventory to sales ratio for all businesses remained at 1.35 months of inventory on hand in October (latest available) (1.33 last month). Relative to sales, inventories are finally hitting balanced levels, this month's ratio was 7.1% higher Y/Y (6.4% higher last month).
- **Outlook:** Businesses are reporting that they are seeing improvements in supply chain continuity, and products are more readily available and stockouts are dropping in number. However, there are some hints that supply chain managers are going to face some difficult times ahead trying to gauge how much inventory to carry. Supply chain disruptions are starting to resurface with intensity across China, and Europe is still going through difficult energy shortages which also hampers production. That could tighten inventories in ’23.

PHCP



Auto Sales (ALTSALES; AISRSA)

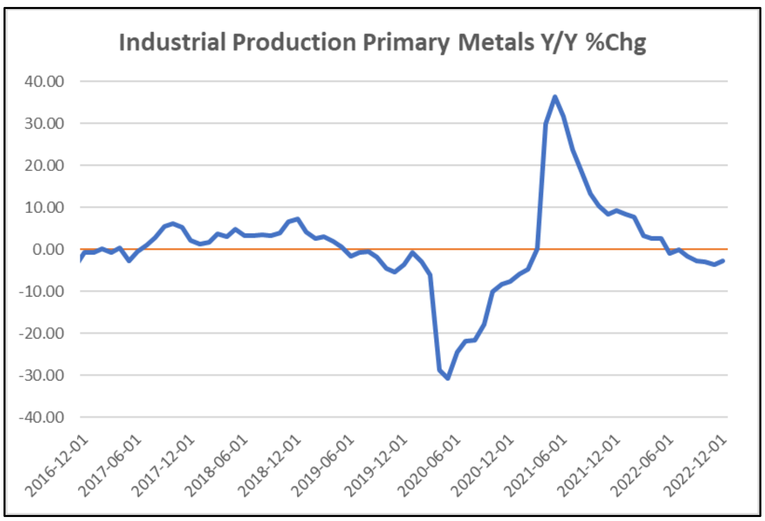
- US auto sales were trending at a 13.314-million-unit annual rate (14.134M last month) through December (latest available). This is up 4.7% year-over-year against moderate comps (+7.9% in the last update).
- The domestic auto inventory to sales ratio was up 34.3% Y/Y in November (latest available). On a monthly basis, it was 5.3% higher than it was last month.
- **Outlook**: Despite auto inventory data showing some improvements on a percent change basis, the inventory to sales ratio is still sitting at historically low levels. OEMs are still trying to rebuild new car inventories to get the “purchase and drive” sales spurred on dealership lots. Far too many new vehicle sales are still taking place as future orders, vehicles hitting dealer lots are still largely pre-sold. This keeps production demand strong, but also keeps prices for consumers higher, which will eventually weigh on sales.



Total Residential Construction **(PRRESCONS)**

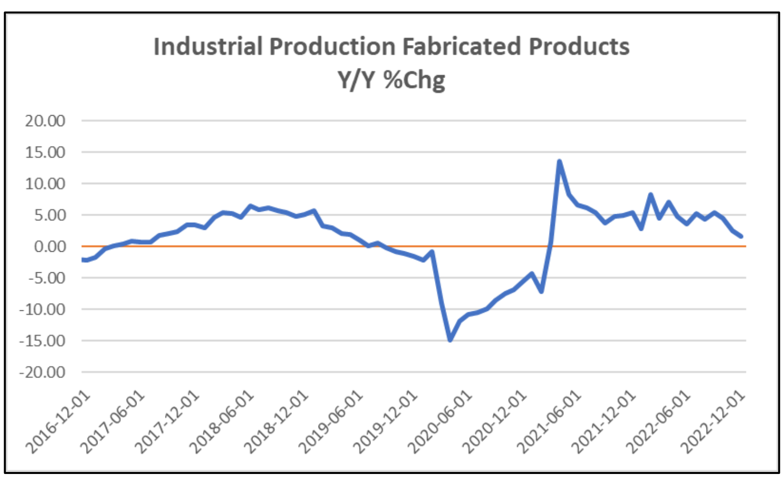
- Total residential construction in December (latest available), was up by 1.7% Y/Y (up 8.6% last month). It was down 0.3% M/M (also down 0.3% last month).
- **Outlook**: As expected, the housing sector was decelerating through the end of the year as interest rates hit 15-year highs. Multi-family construction in pockets of the country remains very strong, and there were some hints of improvements in single-family activity month-over-month as interest rates softened slightly at the end of the year. Pressure is expected to remain higher on housing throughout much of 2023. But as the Federal Reserve hints that interest rate hikes will perhaps peak this summer, there is renewed hope that the single family housing market may see some moderate improvements.

PVF



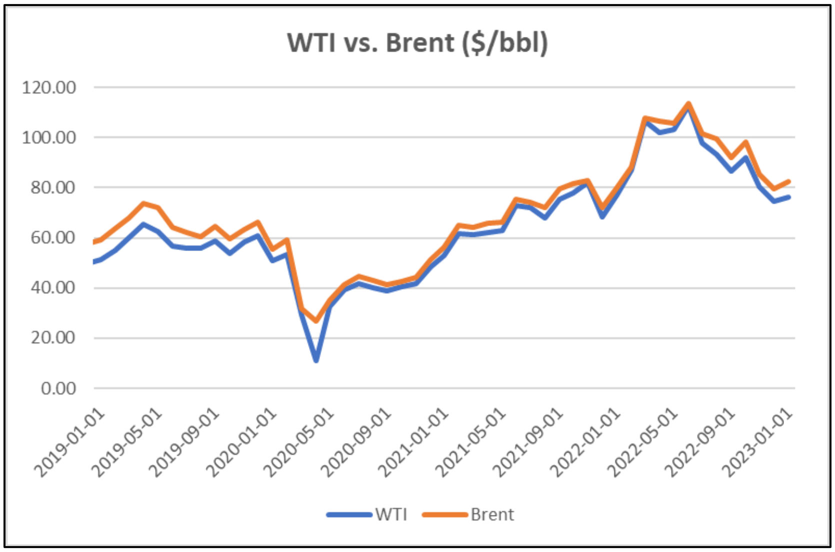
Industrial Production Primary Metals **(IPG331S)**

- Industrial production for primary metals was down 2.8% Y/Y through December (-3.7% in the last update). It was up 0.8% M/M (-1.4% M/M in the last update).
- **Outlook**: Primary metals demand continued to be sluggish again this month on the back of global manufacturing slowdowns. Some additional nonresidential construction activity in the US (starting projects that were put on hold) could create growth opportunities as commodity prices remain muted in the first half of 2023. Commodity inventories remain low however, and the reopening of China will have to be watched closely. Any surge in demand throughout Asia would have an impact on commodity prices, especially with inventories so low.



Industrial Production Fabricated Metals **(IPG332S)**

- Fabricated metal industrial production was up 1.7% Y/Y through December (up 2.5% last month). It was down 1.3% on a month-over-month basis, (-0.4% in the last update).
- **Outlook**: Fabricated metal production is a key feeder into other sectors of manufacturing and there is a significant amount of durable goods demand that helped keep production volumes strong again this month. Forecasts for the rest of the year show the outlook for machinery, computers, electronic equipment, and other durables weakening through Q3 with a slight improvement headed into the end of the year.



WTI and Brent

- WTI is currently at $76.24 a barrel ($80.10 in the last update) and Brent is at $82.51 ($84.44 in the last update).
- **Outlook:** China has lifted quotas off of their petroleum sector, allowing them to build inventories to whatever degree they can. Changes in Russian oil imports (bans go into effect in February) and OPECs decision to keep production capped could add some pressure to oil prices. However, US production remains stable and petroleum inventories have inched up over the past month. Inventories remain weaker than historically was the case, which is primarily why prices are not lower headed into what many anticipate being a recessionary period. As Europe emerges from winter, gasoline consumption demand should increase, and energy consumption should increase as well with the US being a continuous key supply line for countries throughout the region.

https://bakerhughesrigcount.gcs-web.com/rig-count-overview

	Last Count	Count	Change from Prior Count	Change from Last Year
U.S.	27-Jan-23	771	0	161
Canada	27-Jan-23	247	6	30
International	Dec-22	900	-10	66

Rotary Rig Counts (Baker Hughes)

- Baker Hughes US active rig counts were up 161 Y/Y (up 193 in the last update) at 771 (1,049 in 2019); Canadian counts were up by 30 Y/Y (down 37 in the last update). International counts are up by 66 Y/Y (up by 93 in the last update).
- **Outlook**: The US is falling short on oil production expectations and averaged 11.7 million barrels per day for 2022. The EIA believes that the US is still on track to hit nearly 12.5 million barrels per day in 2023 but could now fall short of expectations for hitting 13 million barrels per day in 2023. US gasoline inventories remain below the 5-year average and are lower than last year. The US is still exporting near record volumes of petroleum and petroleum products on a weekly basis despite global economic slowing.

Construction Outlook

<u>Residential construction</u>: 30-year national average mortgage rates have eased slightly again late January and are now 6.13% (6.27% in the last update). Home builder confidence moved up slightly M/M in December, it increased to 35 points (down from the December reading of 31). The all-time high was 90 points in November of 2020. Builders are still concerned about a Fed-induced recession on the back of higher interest rates. Slowing existing home sales, higher inventories, and weaker demand are weighing on sentiment.

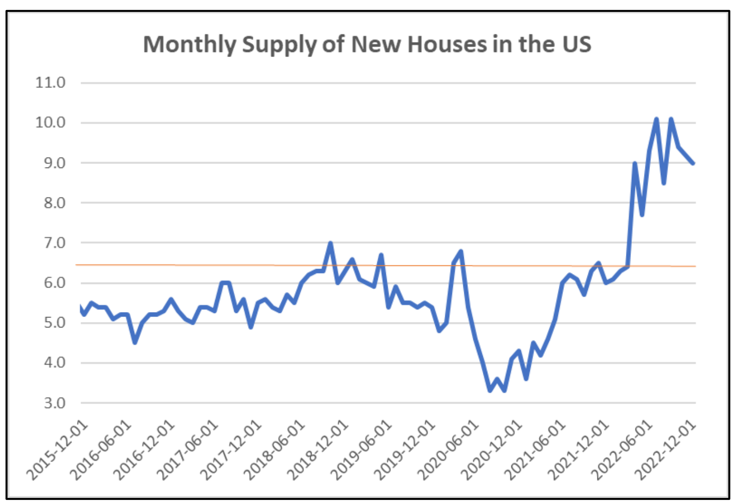
Table 1. NAHB/Wells Fargo National and Regional Housing Market Index (HMI)

NATIONAL HMI							
(Seasonally Adjusted)	2022				2023	M/M	Y/Y
	Jan.	Oct.	Nov. Revised	Dec. Prelim.	Jan. Prelim.		
Housing Market Index	**83**	**38**	**33**	**31**	**35**	12.9%	-57.8%
Housing Market Index Components							
Single Family Sales: Present	89	45	39	36	**40**	11.1%	-55.1%
Single Family Sales: Next 6 Months	82	35	31	35	**37**	5.7%	-54.9%
Traffic of Prospective Buyers	69	25	20	20	**23**	15.0%	-66.7%

REGIONAL HMI							
(Seasonally Adjusted)	2022				2023	M/M	Y/Y
	Jan.	Oct.	Nov.	Dec. Revised	Jan. Prelim.		
Northeast	71	47	32	32	**34**	6.3%	-52.1%
Midwest	72	37	35	30	**32**	6.7%	-55.6%
South	86	41	33	35	**39**	11.4%	-54.7%
West	89	25	28	25	**29**	16.0%	-67.4%

On a year-over-year basis, the NAHB/Wells Fargo Housing Market Index was down 57.8% against January of 2022 (down 63.1% last month).

Housing inventories were slightly higher, coming in at 9.0 months of inventory on hand. This is still well above the "ideal range" of 6 months of inventory on hand, and it will continue to impact new home starts as a result.



The housing market is highly regionalized, and each region has different levels of housing activity, but generally demand is being tempered by rising interest rates and housing prices that remain elevated (despite some recent deceleration being noted).

New housing starts are still moving at a 1.382-million-unit rate on an annualized basis (down from last month's 1.427 million annual rate); but the outlook for the rest of 2023 is obviously still weaker on interest rate pressures.

Single family starts were surprisingly up 11.3% M/M in December (latest available) against low start numbers in November, but were down 25.0% Y/Y. Multi-family starts were also down 18.9% M/M and were 16.3% lower Y/Y.

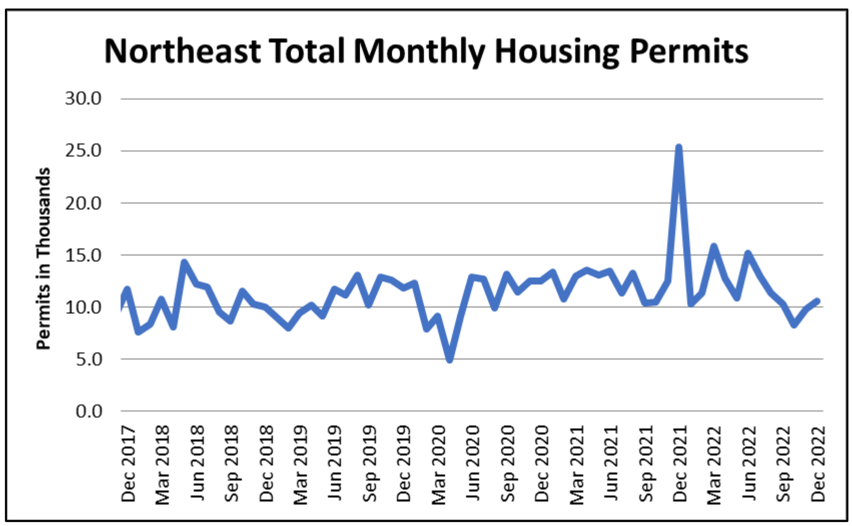
National Outlook: The theme continues, the Federal Reserve is moving higher on interest rate policy to tame inflation. Sixty-Six percent of the households in the US are living check-to-check and credit card balances are at 97% of their allowable limits. The Fed must get inflation under control, or many of these households could fail. After a quarter-point hike on 2/1/23, the Fed is likely to take one more quarter-point hike before summer then perhaps pause and read the data. Pockets of the economy (especially the jobs market) are still running very hot. The chart below (latest available) from the NAHB shows a forecast for housing and interest rates.

NAHB Housing and Interest Rate Forecast, 01/04/2023							
	2018	2019	2020	2021	2022	2023	2024
Housing Activity (000)							
Total Housing Starts	1,247	1,291	1,395	1,605	1,542	1,135	1,299
Single Family	871	889	1,002	1,131	997	744	925
Multifamily	376	402	393	474	545	391	374
New Single Family Sales	614	683	831	769	597	508	681
Existing Single-Family Home Sal	4,736	4,746	5,059	5,418	4,569	3,850	4,257
Interest Rates							
Federal Funds Rate	1.83%	2.16%	0.36%	0.08%	1.75%	4.77%	4.33%
Fixed Rate Mortgages	4.54%	3.94%	3.11%	2.96%	5.46%	7.16%	6.23%
Prime Rate	4.90%	5.28%	3.54%	3.25%	5.90%	11.93%	10.55%
For more forecast details, visit www.nahb.org.							

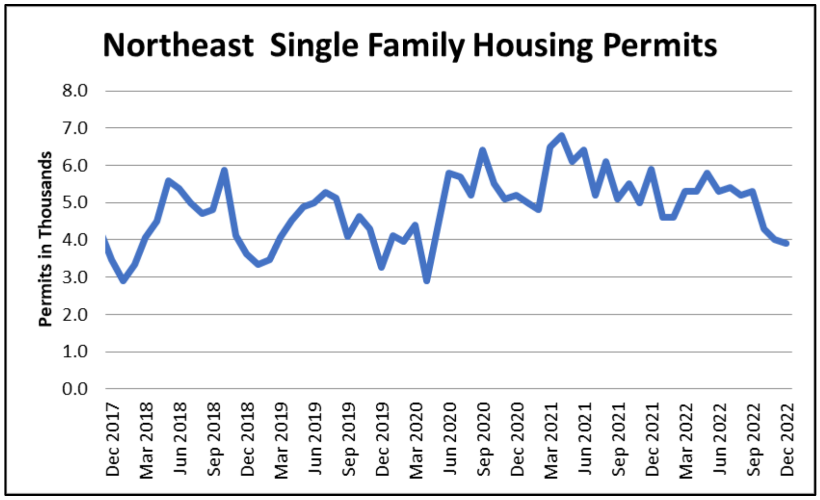
The following section provides monthly housing permit data for each major region in total, single family, and multi-family units.

Regional market outlook: Northeast

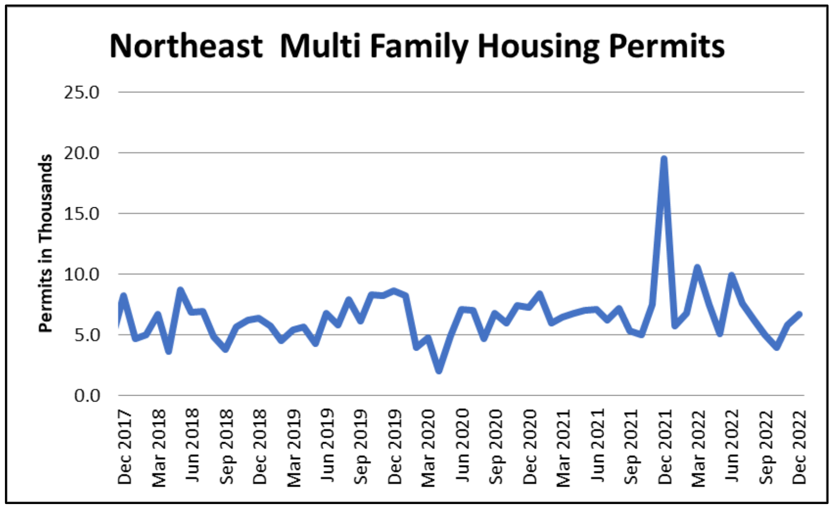
- Northeast total housing units authorized for construction rose in December by 8.2% (18.1% last month) M/M. December was the latest regional data available throughout this series.
- The 3-month moving monthly average was up 2.3% (-3.7% last month).
- On a year-over-year basis, permits were down 58.3% (-21.6% in the last update).



- Month-over-month single family permits were down 2.5% (-7.0% last month).
- On a 3-month moving average basis, permits were down 9.4% (-8.0% last month).
- Year-over-year permits were down 33.9% (-20.0% last month).

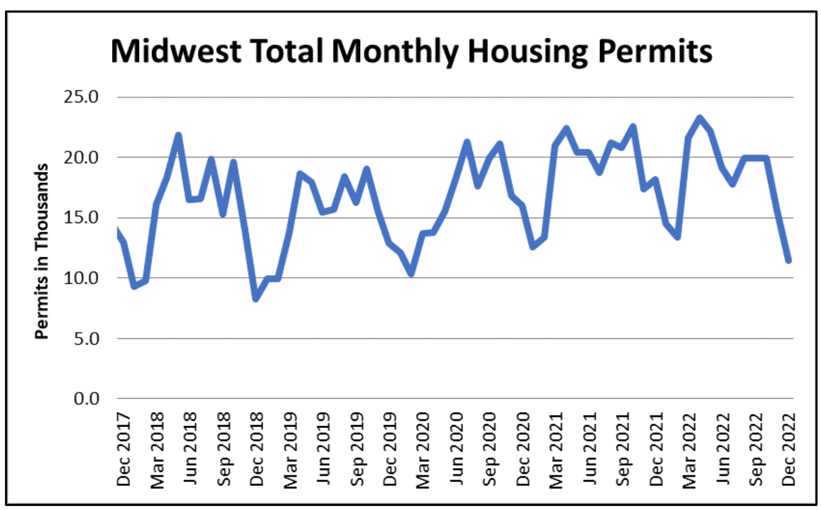


- Multi-family housing permits authorized for construction were up 15.5% M/M (45.0% in the last update).
- They were up 13.5% on a rolling 3-month average (1.9% last month).
- On a year-over-year basis, they were down 65.6% (-22.7% in the last update).
- These figures are based on a small number of units so the percentages can seem higher and more volatile.

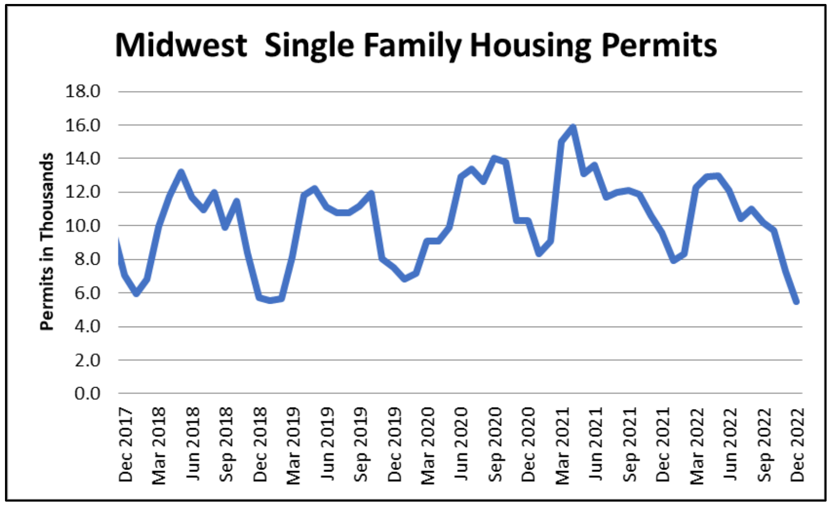


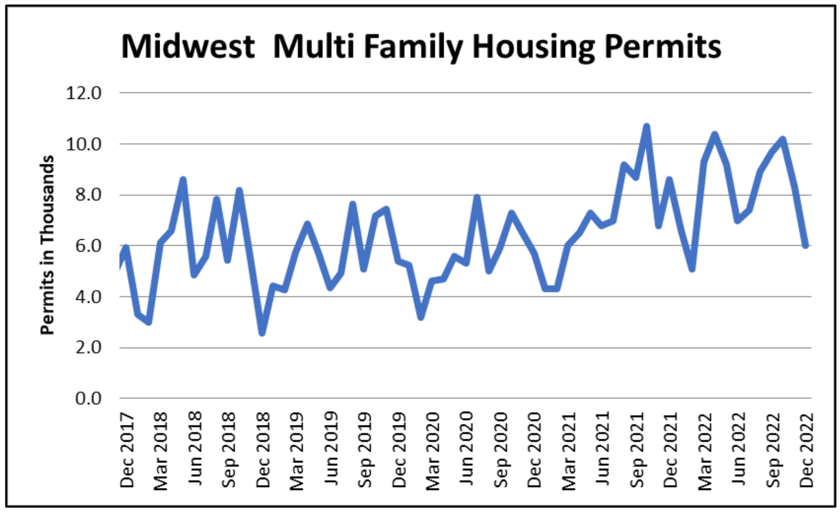
Regional market outlook: Midwest

- Midwest total housing permits were down 26.3% month-over-month (-21.6% in the last update).
- The 3-month average was down 16.0% (-7.2% in the last update).
- On a year-over-year basis, permits were down 36.8% (-10.3% in the last update).



- M/M permit volumes were down 24.7% (also -24.7% last month).
- The 3-month rolling average shows that permits were down 18.1% (-12.3% in the last update).
- Year-over-year, single family homes authorized by permits were down 42.7% (-31.1% in the last update).

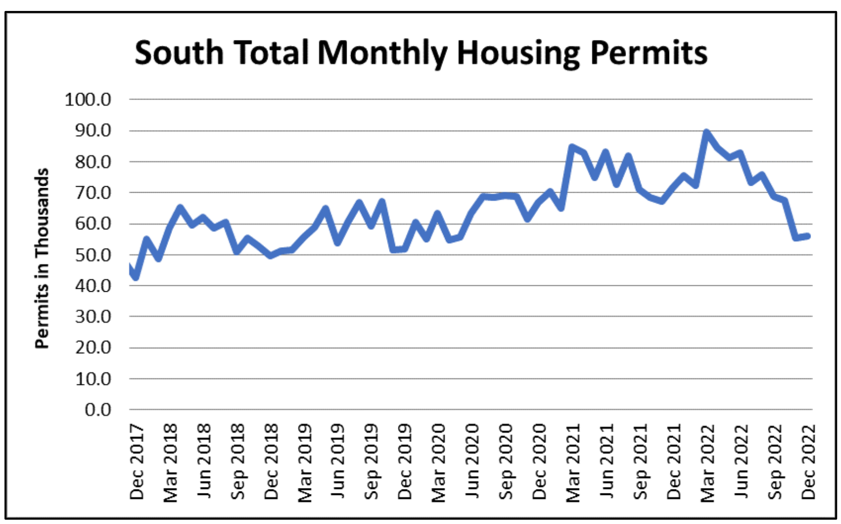




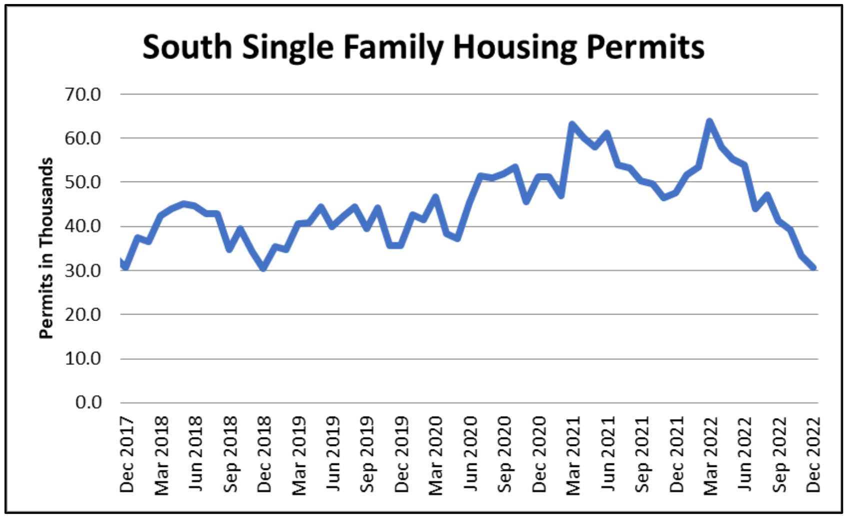
- Multi-family housing permits, again, are volatile month-over-month. This month, they were down 27.7% (-18.6% last month).
- On a 3-month rolling average basis, they were down 13.7% (-1.5% in the last update).
- On a year-over-year basis, permits were down 30.2% (22.1% in the last update).

Regional market outlook: South

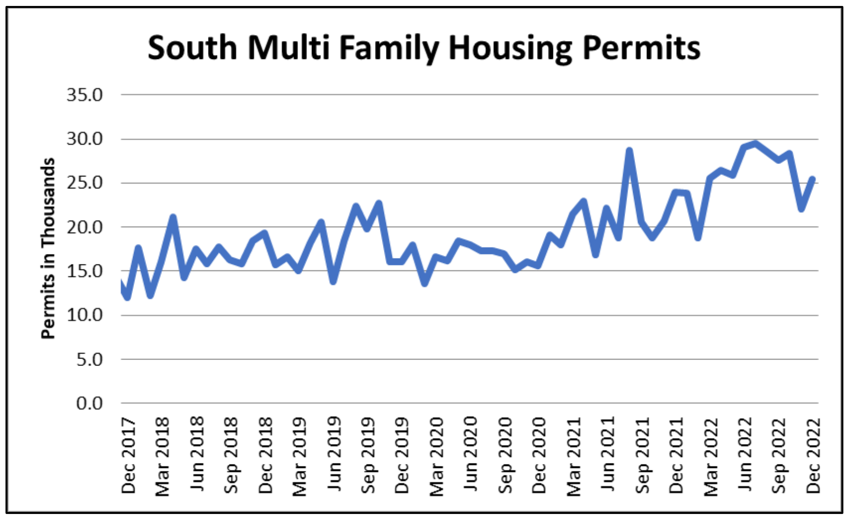
- Southern region housing permits were up 1.3% month-over-month (-18.0% in the last update).
- On a 3-month rolling average basis, permits were down 6.2% (-9.6% in the last update).
- On a year-over-year basis, total permits were down 21.8% (-17.7% in the last update).



- Southern region single family home permits were down 8.1% M/M (-14.8% last month).
- On a 3-month rolling average, they were down 9.2% (-10.7% in the last update).
- On a year-over-year basis, single family permits were down 35.6% (-28.3% in the last update).

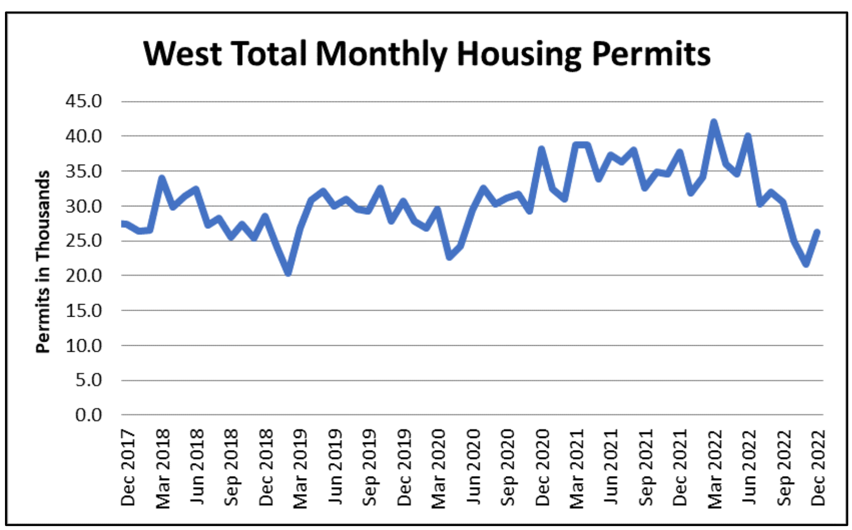


- Southern multi-family permits were up 15.5% M/M (-22.5% last month).
- On a 3-month rolling average basis, permits were down 1.4% (-7.7% last month).
- On a year-over-year basis, permits for multi-family housing were up 5.8% (+6.3% in the last update).

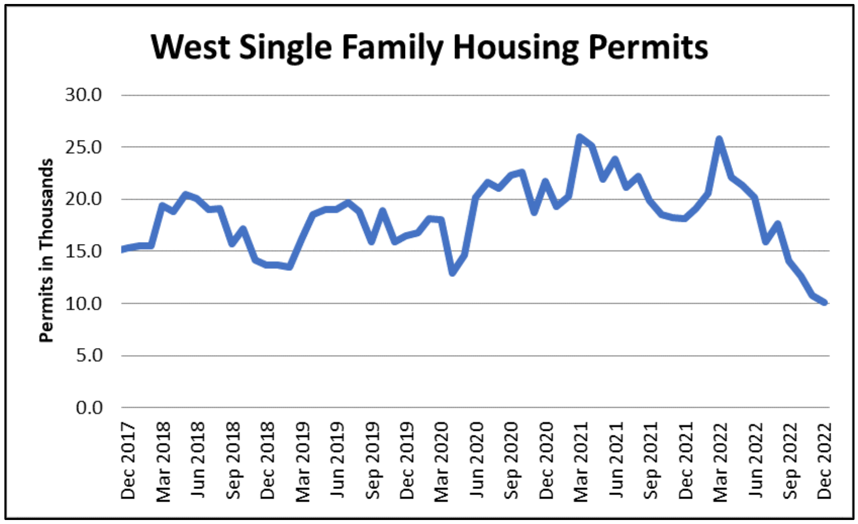


Regional market outlook: West

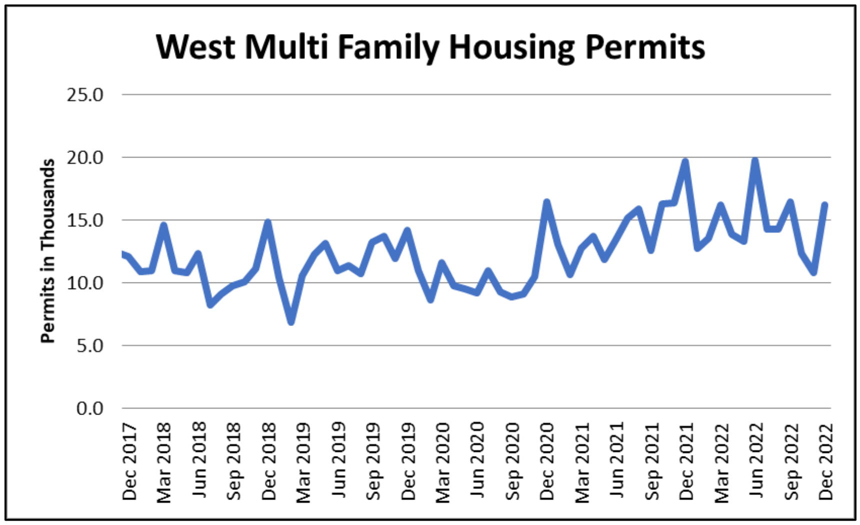
- Western region total monthly housing permits were up 21.8% M/M (-13.6% last month).
- On a 3-month rolling average basis, they were down 3.4% (-12.1% last month).
- On a year-over-year basis, permits were down 30.4% Y/Y (-37.6% in the last update).



- Single-family permits were down 6.5% M/M (-14.3% last month).
- On a 3-month moving average basis, permits were down 10.5% (-15.1% in the last update).
- Year-over-year, single family permits were down 44.2% (-40.7% in the last update).



- Multi-family permits were up 50.0% M/M (-12.9 in the last update).
- On a 3-month rolling average, it was up 4.1% (-7.5% in the last update).
- Year-over-year, multi-family unit permits were down 17.8% (-34.1% last month).



Industry Outlook

ASA Sales were stronger by 5.4% Y/Y (+9.7% last month) in December (latest available). Year-to-date through December, sales were up 19.5% (+19.3%in the last update). For the trailing twelve months prior, sales were up 19.5% (19.8% in the last update). ASA Pulse Report findings are reported monthly. The following chart shows the breakdown by primary business type and region.

	December Y/Y % Change in Total Dollar Sales	YTD % Change vs. YTD 2021	Trailing Twelve Months % Change
All Businesses	**5.4%**	**19.5%**	**19.5%**
By Primary Business			
PHCP	4.2%	15.5%	15.5%
PVF	6.8%	29.4%	29.4%
PHCP & PVF	6.4%	19.0%	19.0%
By Region			
1 (SWPD)	5.9%	19.4%	19.4%
2 (MWD)	0.2%	22.6%	22.6%
3 (SWCD)	0.9%	27.9%	27.9%
4 (NCWA)	6.5%	14.9%	14.9%
5 (ASA Northeast)	13.2%	16.7%	16.7%
6 (SWA)	-0.3%	20.0%	20.0%
*ISD - Insufficient Data			

The US Transportation Services Freight Index (TSIFRGHT), which typically leads ASA Sales by about five months, was mixed in November (latest available). The report showed that the TSI was at 140.7 for freight, down 1.8% M/M and was down by 0.1% Y/Y (+2.6% Y/Y last month).

More recent data (comparing similar industry data to the TSI) from other sources show much weaker data. DAT Trendlines was reporting at the end of December that spot truck freight demand was **57.3% lower than it was a year ago**. Spot trucking rates have fallen 19.4% Y/Y, but fuel surcharges are still high (29.5% higher Y/Y).

As mentioned last month, oil and petroleum production continue to be on a steady pace to return near all-time highs on fewer wells. Output in 2023 is expected to approach 12.5 million barrels per day (lower than the 13 million bpd estimates prior in the year). Total oil inventories were slowly improving but remain at the lower end of the historic range, and the Strategic Petroleum Reserves are still at the lowest levels since the mid 1980's and rebuilding activity must begin. This will continue to keep production steady through most of 2023 barring a significant global drop in demand (an event worse than a mild global recession).

Retail sales continued to slip in December across several categories, despite many sectors remaining stronger on a year-over-year basis.

When adjusted for inflation, sales were 1.1% weaker month-over-month in December, and were down 0.4% year-over-year.

As we mentioned last month, approximately 66% of US households are under pressure and have little credit or savings to fall back on (vs. 61% a year ago at this time). Consumer use of credit cards is still rising at one of the fastest rates on record, and among these households that are living check-to-check, credit card balances are still running at 97% of their credit limits. Credit card interest rates have also hit an all-time high above a national average of 19%.

Home improvement retail sales volumes were better in December, rising by 0.3% M/M and remained somewhat stable by rising 2.3% against last year. When adjusted for inflation, sales were flat at best year-over-year.

Kind of Business	Percent Change Dec. 2022 Advance from --	
	Nov. 2022	Dec. 2021
Retail & food services, total	**-1.1**	**6.0**
Retail	-1.2	5.2
Motor vehicle & parts dealers	**-1.2**	**1.8**
Furniture & home furn. stores	**-2.5**	**0.3**
Electronics & appliance stores	**-1.1**	**-5.6**
Building material & garden eq. & supplies dealers	**0.3**	**2.3**
Food & beverage stores	**0.0**	**6.9**
Grocery stores	0.1	7.3
Health & personal care stores	**-0.9**	**2.8**
Gasoline stations	**-4.6**	**5.2**
Clothing & clothing accessories stores	**-0.3**	**2.9**
Sporting goods, hobby, musical instrument, & book stores	**0.1**	**3.9**
General merchandise stores	**-0.8**	**3.8**
Department stores	-6.6	-0.6
Nonstore retailers	**-1.1**	**13.7**
Food services & drinking places	**-0.9**	**12.1**

Looking forward over the next 18 months, recession risk is still firmly in place (still most likely to occur in the first half of 2023), and economic growth is expected to be flat (at best) over the next four quarters according to the Conference Board and the Federal Reserve. That outlook has not changed over the past thirty days. Many crosscurrents in the global economy could change that outlook quickly, and some of the unexpected sudden lifting of zero-Covid restrictions in China could play a bigger role, and perhaps put some new pressure on commodity supplies (which could restart inflationary pressure on commodities).