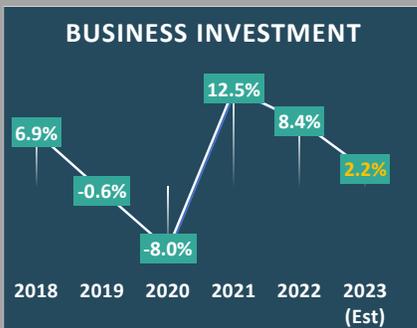
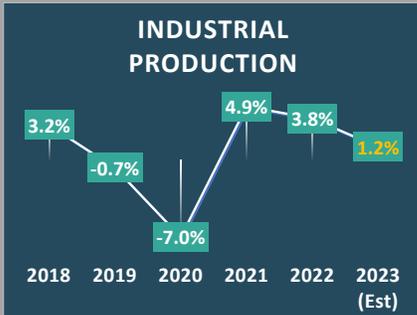
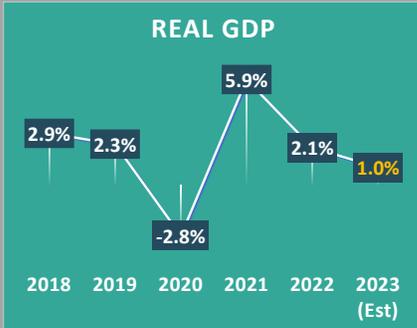


Selected Indices



Executive Summary – November '23

Big Items

GDP: The GDP numbers for Q3 continue to stun economists and central bankers. When the initial Q3 numbers came in at 3.9% there was shock at how resilient the economy appeared to be. The assumption was that revisions would drag these numbers back a bit but when the latest revisions were released the Q3 numbers jumped even higher – to 5.2%. This is quite spectacular growth for a nation where 2.5% growth has been the two-decade norm. Q4 is now expected to be in the 2.0% to 2.5% percent range rather than the 1.0% that had been the consensus. The drivers of that growth seemed to be business inventory build and robust consumer spending.

Industrial Production: Industrial production fell by 0.6 percent in October. The manufacturing sector fell by 0.7% and that seems to signal that the inventory building which had been driving the Q3 numbers may be fading. On the other hand, there is abundant evidence suggesting that almost all of that manufacturing slump was attributable to the 10% collapse in the automotive sector due to the strikes. A rebound here would trigger a rebound for the entire manufacturing community. The utility industrial production data declined by 1.6% but mining was up by 0.4% as demand for oil and fuel expanded to some degree.

Housing Starts: The starts data has actually been improving a little but still lags the numbers from last year. They are up by 1.9% over the revised September numbers but still down by 4.2% from October of 2022. The unexpected recovery is attributed primarily to a period of lower mortgage rates. Not that these have fallen all that much but they were expected to keep climbing and this lull has allowed some buyers to get off the fence to some degree. The multi-family sector is still growing far faster than the single family home market.

Home Improvement Retail: The data on home improvement has been sagging a bit but it remains stronger than in the immediate post-pandemic period. The emphasis has changed from home offices and getting a house ready to sell to improving a home for the current residents. This includes creating more usable space, improved storage, and better bathrooms.

Manufacturing: The US has climbed back into positive territory by the narrowest of margins – sitting at an even 50. The last few months have featured a slow climb out of the doldrums, which is more than can be said for Europe or most of Asia. It is also interesting to note that Mexico is now sitting at 52.7 and Canada has seen some gains although it is still in the contraction zone. Currently there are still 22 nations under 50. India remains the fastest growing state.

Big Risks

Inflation and Recession Potential: According to the consensus view of the Conference Board there is a good chance for a shallow recession in the first two quarters of 2024 (-1.0% in Q1 and -0.7% in Q2). This gloomy expectation has not been without critics who point out that the same group predicted less than 2.0% growth in Q3 of last year and only 1.0% growth in Q4.

What to Watch

Mexico's Emergence – Mexico now exports more to the US than does China. Not just food and oil but consumer goods and industrial equipment. Next year the elections will be historic as Mexico will have its first female leader. It will either be Claudia Scheinbaum from the Morena Party (the current ruling party) or Xochitl Galvez from the PAN party. Both are seen as technocrats and seem more open to engagement with the US.

Macroeconomic Viewpoints

- Dr. Chris Kuehl

A Brief Dip Into Economic Theory – I know you readers can barely control your excitement at this point. In truth there are some key issues that are a bit easier to understand if one is aware of what economists think this all means. These include the question of which is worse – inflation or recession? Then there is the debate over what the “neutral” rate of the Fed Funds Rate is. Another important conversation is over what to make of the “gloom merchants” that predict the end of the world by 2030. And there are lively debates over whether a low rate of joblessness is a good thing or not.

To start with, it is important to understand that economists are fundamentally philosophers as opposed to scientists. This is why we have the joke of putting five economists in a room and getting five opinions. We all look at the same data but reach different conclusions based on our philosophical position. In the interests of full-disclosure I can reveal that I am a devotee of Milton Friedman and the Chicago school. In other words, conservative, free-market, capitalist. Take the issue of unemployment. It would seem a good thing to have that rate low, as that means that there are more consumers with money to drive an economy that relies on consumption for roughly 70% of its GDP. But low levels of unemployment have a cost as well – higher wages. The driver of inflation right now is wages as there is a worker shortage. We have seen very active unions and will continue to see this. It is hard to hire people, hard to motivate those hired, and these employees are more expensive and less productive than has been the case in years. How to reverse some of these trends? A lot of layoffs make people a lot more grateful for having a job.

Which is worse – recession or inflation? Most economists and most central bankers will assert that it is inflation. The reality is that recession doesn’t hurt everybody and often benefits some companies and people. Over sixty percent of the Fortune 100 expanded or started in a recession. Individuals with cash find lower prices everywhere. Inflation clobbers everyone as money loses its buying power. Everybody loses in an inflation surge and that means that central banks will ALWAYS pursue lower inflation with rate hikes even if it means inviting a recession. It has been assumed for decades that the neutral rate was 1.0% - over that and the economy slowed and under 1.0% and the economy speeds up. Now the thinking is that neutral may be 2.0% or even 2.5%. That changes the target for inflation.

Finally – what to do with the doom merchants chanting dirges for the end of the decade? Let’s be clear. Economists can’t predict to next Tuesday – much less six or seven years from now. Why do it then? These are less forecasts than they are warnings – the economist is trying to get our attention. The real message is that there are major problems and if they are not addressed, the likelihood is a major economic collapse. If these are not dealt with, the economy very likely hits that wall.

ASA MER Contents:

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Reader Question of the Month

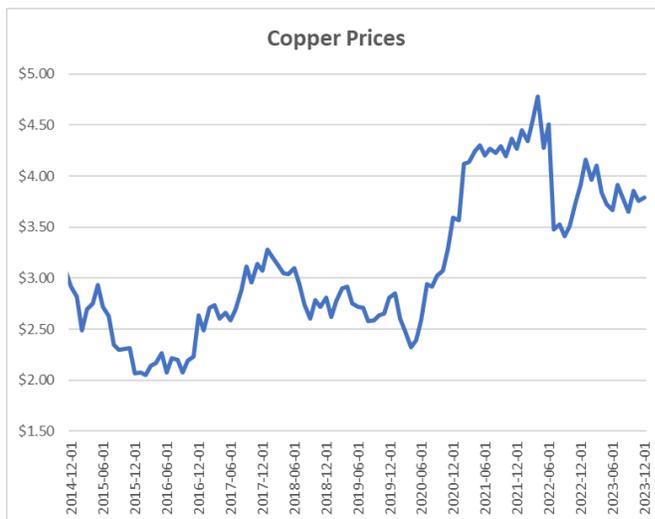
Q: Why is the Federal Reserve Not Talking Rate Reduction?

A: The investment community has been extolling the virtue of lower interest rates from the Fed but thus far they are not seeing much support from the Fed members themselves. The latest dot plot is about as divided as it has been in years. There is a range of opinion that stretches from 4.2% to 6.4% for 2024. There are a couple of realities to be aware of. The most obvious is that investors are trying to apply pressure on the Fed as lower interest rates are most definitely in their best interest. The other reality is that central banks will ALWAYS battle inflation more aggressively than recession. They still see some distinct threats and have maintained their commitment to “higher for longer”. They know that much of the reduction in inflation has been tied to energy prices and food prices. Both have been down more than expected but both are also notoriously volatile. An oil price surge could take place at any time and right now the US has the lowest stockpile of oil seen in decades. Even a minor disruption will reverberate quickly. Both the Bank of England and Bank of Canada have warned about this explicitly. Food prices could soar with badly timed weather events. The core of inflation has been wages and these are not dropping anytime soon.

The upshot is the Fed still has a goal of 2.0% inflation and it currently stands at 3.9% (annual PCE numbers). Then the Fed looks at Q3 GDP numbers of 5.2% and unemployment at less than 4.0% and that tells them that recession is anything but imminent. It is very unlikely rates will go up any further, but it is nearly as unlikely that rates go down any time before Q3 or perhaps Q4 of 2024. - 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 been fluctuating since last month and is trading at \$3.79/lb. (\$3.86/lb. last month).
- The Producer Price Index (PPI) for October (latest PPI available) was 492.168, up month-over-month by 1.5% (-0.4% last month). It was up 4.1% year-over-year (+2.6% last month). The ten-year index high was 572.0 in May 2022 and the low was 302.9 in 2016.
- **Looking Ahead:** A continued drop in global demand is the primary factor slowing down copper prices. Inventories have now also improved, at a time when 18 countries still have manufacturing sectors in contraction. That drop in global demand is keeping prices muted. For now, copper prices are essentially flat, they were just 0.2% lower YTD and are now 0.3% lower than this time last year.

General Commodities Discussion:

Nickel:

- LME Nickel Prices have slipped again over the past 30 days and were @\$7.18 per lb. (\$8.28 in the last update). And warehouse levels increased again this month to 46,314 tons (42,204 tons in the last update) but are still historically low (and well off the peak inventory level hit in 2021 of 260,000 tons).
- **Outlook:** “Nickel prices recently fell to 16-month lows on the Shanghai Futures Exchange. But, SHFE prices have rebounded sharply this week amid reports Indonesian officials will soon establish a new nickel prices index that is not tied to LME (Class one) nickel.”

Carbon Steel: (WPU101706)

- NYMEX Domestic Hot-rolled Coil steel prices ([CRU-HRCc1](#)) surged over the past 30 days and were \$1,028 per ton in early December (\$695 per ton in the last update). This is still down from a peak of \$1,943 hit in August of 2021.
- Producer Prices for steel pipe and tube were slightly lower in the latest data from the end of October (latest available). They were down 0.1% month-over-month (down 1.6% last month). Year-over-year, the PPI was 19.0% lower (-22.5% Y/Y in the last update) against much more difficult comparisons.
- **Outlook:** “Carbon steel prices have increased significantly since September of this year. The end of the UAW strike saw steel service centers place large immediate orders of HRC, driving prices up and most likely inflating steelmakers’ profits. This contrasts with the end of Q3/beginning of Q4, which saw HRC pricing hover around \$700. Some producers are now planning for a \$1,000 or even \$1,100 price per ton. The price of carbon steel pipe has not been resistant to these HRC increases and has increased significantly with no relief expected.”

Stainless Steel: (WPU10170674)

- The Producer Price Index for stainless pipe and tube were down in August (latest available). Producer prices for stainless pipe fell by 0.6% month-over-month (down 2.9% last month); and they were down 7.9% Y/Y (down 9.5% last month).
- **Outlook:** “The stainless-steel fitting market has largely stabilized over the past few months. Lead times for finished goods were somewhat extended but as they’ve returned to normal, modest pricing pressure has been observed. Raw material prices have remained exceptionally volatile.”

Ferrous Metal Scrap: (PPI: PCU4299304299301)

- Producer prices for ferrous metal scrap increased in October vs. the prior month, coming in with an index of 462.7 (487.2 last month). This was lower by 3.4% M/M (+4.6% last month). Year-over-year it was up by 4.0% Y/Y (+2.5% in the last update). The highest producer price prior to this was in July of 2008 when the index hit 731.4 points.
Outlook: Scrap prices are bouncing. There was some renewed evidence in the global Baltic Dry Index showing a sharp rebound in the movement of early-stage raw material inputs in the world’s busiest trade lanes (up 106.37% in thirty days and 137.6% Y/Y). Global manufacturing was seeing some slight improvements in demand, and with inventories balanced, that is spurring the building of new raw materials as inputs. That is helping account for some of the increase in activity, but it hasn’t rippled through the metal scrap sector.

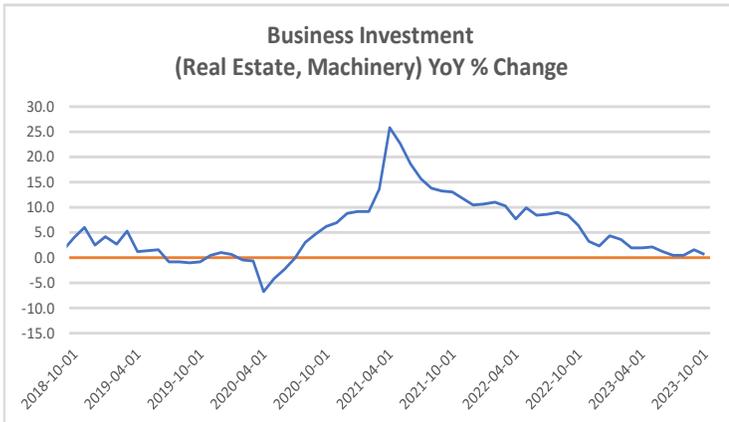
Additional commodities and finished product pricing are addressed in the Producer Price Index review on the next page.

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.

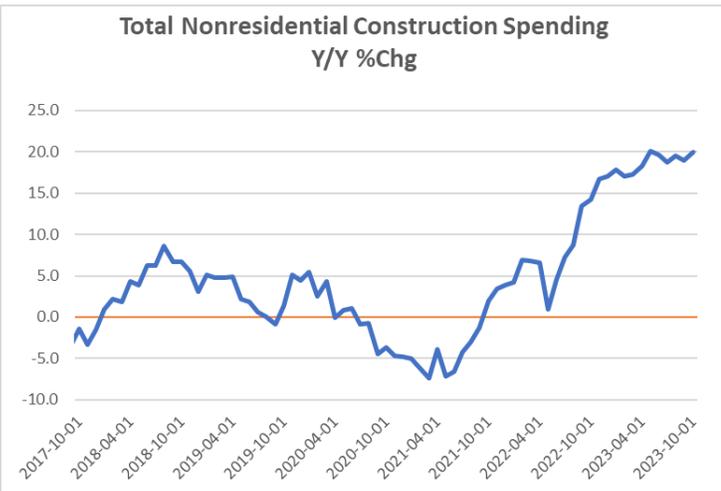
Producer Price Index - Key Industry Products						
Category	PPI Code	Oct-23	Sep-23	M/M% Chg	Oct-22	Y/Y % Chg
Pipe, Valves and Fittings						
Metal valves, except fluid power	WPU114902	443.1	437.1	1.4%	418.8	5.8%
Gates, globes, angles and check valves	WPU114902011	165.8	165.8	0.0%	159.6	3.9%
Ball valves	WPU11490202	590.0	590.0	0.0%	545.6	8.1%
Butterfly valves (formerly W2421490203)	WPU11490203	306.1	306.1	0.0%	285.3	7.3%
Industrial plug valves	WPU11490204	308.7	308.7	0.0%	283.0	9.1%
Plumbing and heating valves (low pressure)	WPU11490205	389.8	393.4	-0.9%	376.4	3.6%
Solenoid valves	WPU11490208	372.2	372.2	0.0%	372.2	0.0%
Other industrial valves, including nuclear	WPU11490209	416.5	406.7	2.4%	391.5	6.4%
Automatic valves	WPU11490211	261.5	249.1	5.0%	248.0	5.4%
Metal pipe fittings, flanges and unions	WPU11490301	477.9	477.9	0.0%	475.7	0.5%
Steel pipe and tube	WPU101706	383.1	383.5	-0.1%	473.1	-19.0%
Steel pipe and tube, alloy	WPU10170673	109.5	109.5	0.0%	109.5	0.0%
Steel pipe and tube, stainless	WPU10170674	143.9	143.7	0.1%	155.1	-7.2%
Copper & copper-base alloy pipe and tube	WPU10250239	330.9	338.9	-2.4%	331.5	-0.2%
Plastic pipe	WPU07210603	192.9	196.6	-1.9%	217.3	-11.2%
Plastic pipe fittings and unions	WPU07210604	315.6	316.9	-0.4%	328.1	-3.8%
Plumbing Fixtures, Fittings and Trim	WPU105402	395.0	395.0	0.0%	388.5	1.7%
Bath and shower fittings	WPU10540211	286.7	286.7	0.0%	286.7	0.0%
Lavatory and sink fittings	WPU10540218	204.6	204.6	0.0%	197.3	3.7%
Enameled iron and metal sanitary ware	WPU1056	290.6	283.5	2.5%	288.0	0.9%
Steam and Hot Water Equipment	WPU1061	428.5	428.5	0.0%	326.2	31.3%
Cast iron heating boilers, radiators and convectors	WPU10610106	289.7	289.7	0.0%	279.2	3.8%
Domestic water heaters	WPU106601	570.6	570.6	0.0%	569.2	0.2%
Electric water heaters	WPU10660101	564.3	564.3	0.0%	563.9	0.1%
Non-electric water heaters	WPU10660114	347.7	347.7	0.0%	346.5	0.3%
Warehousing, Storage and Related Services	WPU321	137.8	138.4	-0.4%	132.2	4.2%

PHCP & PVF



Capital Goods New Orders (NEWORDER)

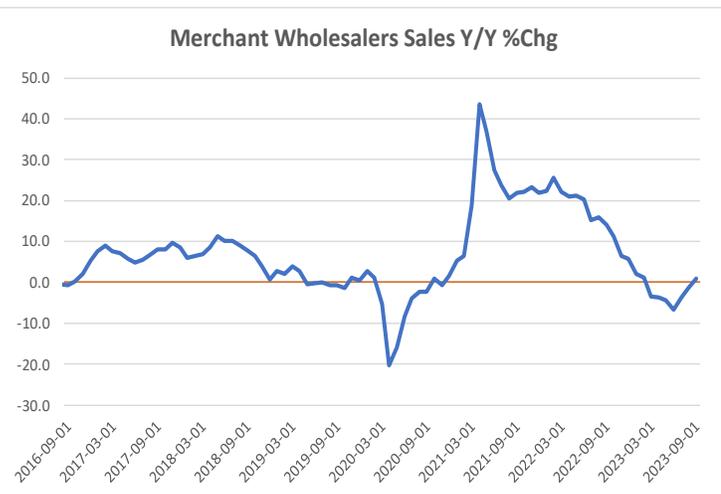
- The value of manufacturers' new orders for capital goods went down 0.9% in October M/M (up 1.1% last month). They remained up by 0.6% Y/Y (up 1.5% last month) and continued to be stable overall.
- Outlook:** Concerns are growing that capital spending could continue to flatten as higher interest rates and bank tightening take their toll. And yet, some spending remains strong. Investments in segments of high tech, (especially AI), defense, automotive, aerospace, pockets of energy production, and nonresidential construction are still generating interest, and investment is following. A new focus on investing in products that improve productivity and increase profitability will be key.



Total Non-Residential Construction

(TLNRECONS)

- Total Non-Residential Construction activity in October (latest available) was 20.0% higher than it was a year ago (19.0% higher last month) and was 0.1% lower M/M (down 0.5% in the last report). Overall spending was at a new all-time high of \$1.131T (the prior annualized run rate peak of \$900B was in September of 2022).
- Outlook:** Nonresidential construction is one of three legs of a stool that contributes to GDP. Funding mechanisms in place should continue to keep it stable in 2024. Leading the non-residential construction sector in growth is still the manufacturing construction sector, which is still 61.9% higher Y/Y on nearly \$211 billion in spending.



Wholesale Trade (WHLSLRMSA, WHLSLRIMSA)

- Merchant wholesalers' sales were up 0.9% Y/Y through September (latest available; down 1.5% Y/Y in the last update). Month-over-month, sales were increasing by 2.4% (+2.3% last month).
- Wholesale inventories were down 1.2% year-over-year in September (latest available; down 1.0% last month).
- Outlook:** There have been some improvements in estimated inventory levels in the past 30 days, and this could signal that a reset in the global supply chain is underway. Some products in the wholesale market are still in a stockout situation (primarily electrical panels and transformers), and that is holding up the movement of other wholesale products because it delays construction projects. Some suppliers are still reporting 6-12 months of delays in filling orders.



Manufacturing (AMTMNO)

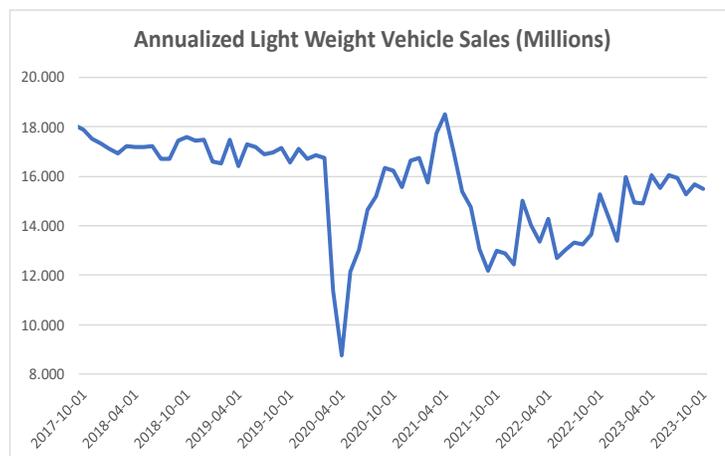
- Federal data on manufacturing was down 2.1% Y/Y (2.5% last month) through October (latest available). It was also down sequentially by 3.6% month-over-month (+2.6% last month).
- The S&P Global US manufacturing PMI came in at 49.4 in November, down from 50.0 in October.
- **Outlook:** Global data from the Purchasing Manager's Indexes showed 18 countries had manufacturing sectors remaining in contraction through November. Many countries were able to witness small improvements month-over-month in new order activity, and inventories were dropping in the past month, which is positive for the outlook for manufacturing. But it could take until Q1/Q2 of next year to build momentum.



Business Inventory to Sales Ratio (ISRATIO)

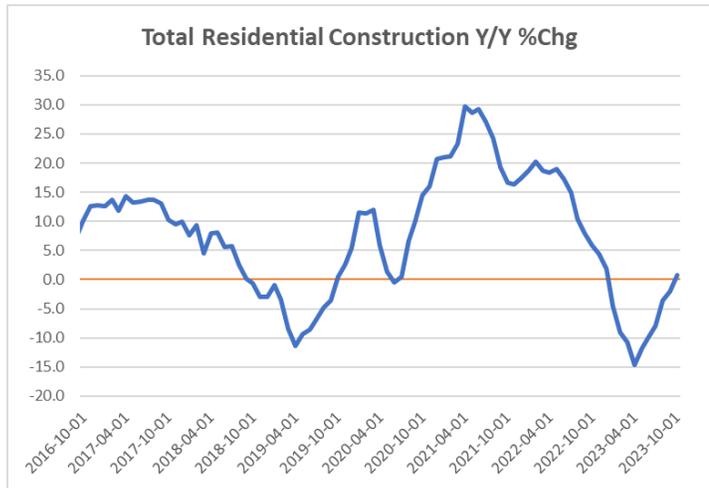
- The current inventory to sales ratio for all businesses is at 1.36 months of inventory on hand in September (latest available; 1.37 last month). Relative to sales, inventories are low, this month's ratio was 0.7% lower Y/Y (0.7% higher last month).
- **Outlook:** As mentioned last month, it is difficult to get a full picture of the entire industry with this macro view. When looking at sub-sectors across the industry, approximately 64% of the goods producing and moving industry are still facing inventory levels that are between 3% and 25% higher than they were in the entire decade prior to the pandemic (when supply chains were in-cycle). But this month, some anecdotes are suggesting that inventories across the board are getting more balanced, and that could help reset the global supply chain.

PHCP



Auto Sales (ALSALES; AISRSA)

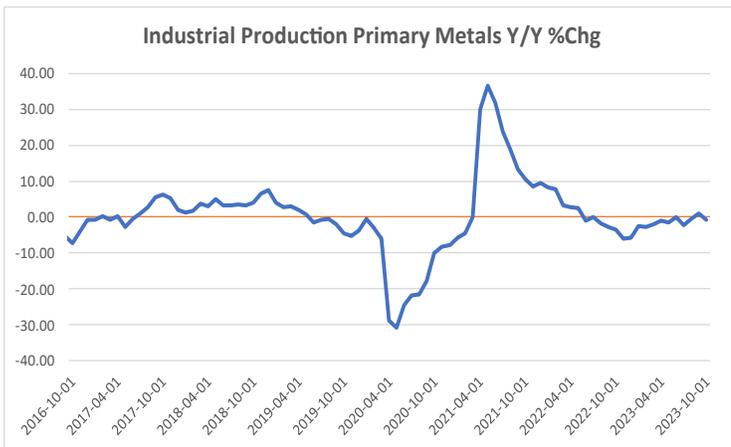
- US auto sales were trending at a 15.497-million-unit annual rate (15.682M last month) through October (latest available). This is up 5.6% year-over-year (+14.5% in the last update).
- The domestic auto inventory to sales ratio was up 60.5% Y/Y in September (latest available). On a monthly basis, it was up 2.1% (up 9.1% last month).
- **Outlook:** There is still a lot of noise in the automotive data in the wake of the UAW strike, but production is resuming, and the automotive supply chain is recovering. The question is: how long will it take for dealer inventories to be sufficient, and risk overstocking? Consumer spending is slowing (as we can see in some of the sales data) and banks are using high interest rates to limit lending risk, which brings down entry-level prices that many consumers can afford.



Total Residential Construction (PRRESCONS)

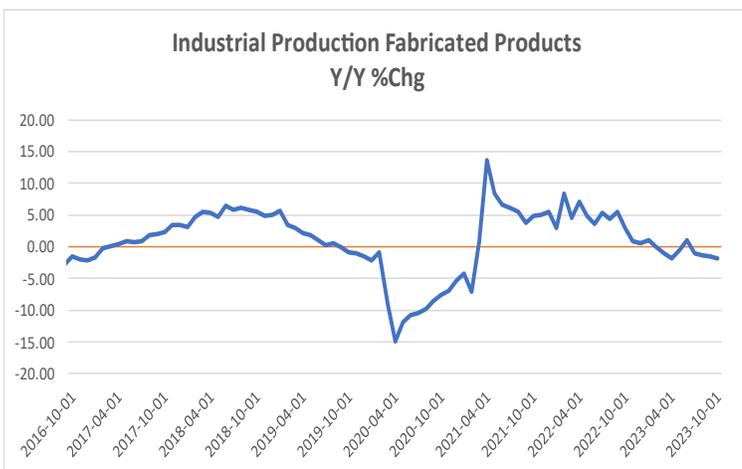
- Total residential construction in October (latest available), was up by 0.7% Y/Y (down 2.0% last month). It was up 1.2% M/M (down 0.2% last month).
- **Outlook:** Housing starts and permits continued to show the strains of higher interest rates and tightening credit standards. As mentioned, many times, homeowners that are already in low interest rates are not in the market for homes at this time. The gap between their current rates (sub 3%) and current rates above 7% is too severe a gap. Those buyers that are forced to move (work relocations, family issues) have no choice but to purchase currently, and first-time home buyers have not completely fallen out of the market. Builders are trying to respond to higher interest rates by reducing the square footage of new homes, reducing costs of construction, and using incentives to spur sales.

PVF



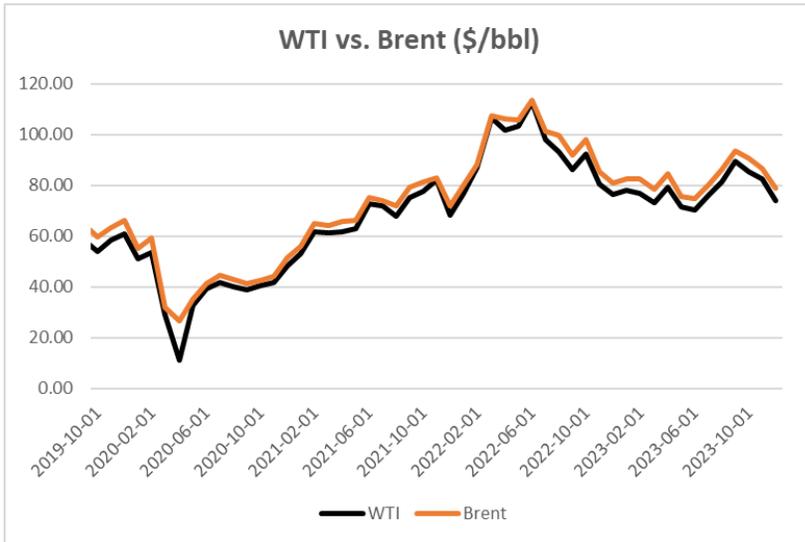
Industrial Production Primary Metals (IPG331S)

- Industrial production for primary metals was down 0.8% Y/Y through October (up 1.1% in the last update). It was down 1.9% M/M (up 1.6% M/M in the last update).
- **Outlook:** As mentioned, there are five primary sectors that are driving demand, which is creating enough activity to keep the sector essentially stable year-over-year. The infrastructure bill is finally contributing \$50 billion a year in incremental spending across many different segments of infrastructure. Most of those sectors are up double-digits year-over-year in construction spending. With auto production resuming, this will also boost primary metal manufacturing demand.



Industrial Production Fabricated Metals (IPG332S)

- Fabricated metal industrial production was down 1.9% Y/Y through October (down 1.5% last month). It was down 0.4% on a month-over-month basis, (down 0.2% in the last update).
- **Outlook:** Fabricated metal production is a key feeder into other sectors of manufacturing and activity through October was still trailing slightly behind last year's volumes. There was still a lot of influence on the sector from the UAW strike in October, and resumption of production in November will help lift the sector. Models that forecast fabricated product manufacturing show it improving through the first half of 2024.



WTI and Brent

- WTI is currently at \$73.92 a barrel (\$82.46 last month) and Brent is at \$78.76 (\$86.85 last month).
- **Outlook:** What a difference a month makes. Despite the war in the Middle East, OPEC+ cuts in production, historically low US inventory levels of crude oil, and stable travel activity in the US, three components are keeping oil prices much lower than expected. First, the US dollar remains strong and that keeps a lid on prices. Second, supply challenges did not change amid the war in the Middle East. This continuous flow of oil has led to speculators pulling the geopolitical premium off oil prices. Lastly, some large investors liquidated their long positions on oil which also pulled the price downward – largely because global demand has fallen sharply. This demand destruction fear has overridden concerns over low inventory levels.

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

	Last Count	Count	Change from Prior Count	Change from Last Year
U.S.	1-Dec-23	625	3	-159
Canada	1-Dec-23	192	-5	-3
International	Nov-23	978	16	68

Rotary Rig Counts (Baker Hughes)

- Baker Hughes US active rig counts were down 159 Y/Y (-142 in the last update) at 625 (1,049 in 2019); Canadian counts were down by 3 Y/Y (down 22 in the last update). International counts are up by 68 Y/Y (+92 in the last update).
- **Outlook:** The oil market is still being battered by a fluctuating dollar, low supply inventories and an uncertain demand environment as mentioned. But the US is estimated to be approaching new record levels of monthly output of oil, on more efficient (but fewer) active wells. Many wells are also still in pre-production phases, the infrastructure is in place and production is not yet put into motion awaiting stronger market fundamentals to start production. The EIA shows the balance between global oil supply and demand to remain balanced through 2024, assuming the production of oil continues to grow at current rates. None of these forecasts at this time incorporate any disruptions in supply (whether physical or geopolitical through sanctions).

Construction Outlook

Residential construction: 30-year national average mortgage rates continued to rise in early October, at 7.22% (7.31% in the last update). Home builder confidence fell M/M in November by 15.0% according to the [NAHB/Wells Fargo index](#), it fell to 34 points (down from the October reading of 40) and the weakest since April. The all-time high was 90 points in November of 2020. Builders' confidence has started to wane with the Federal Reserve keeping rates likely "higher for longer", and some cracks showing up in consumer spending activity. Additional banking pressure is tightening lending standards, creating an additional headwind for the industry.

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

NATIONAL

(Seasonally Adjusted)	2022		2023										M/M	Y/Y	
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun	Jul	Aug	Sep.	Oct.			Nov.
Housing Market Index	33	31	35	42	44	45	50	55	56	50	44	40	34	-15.0%	3.0%
Housing Market Index Components															
Single Family Sales: Present	39	36	40	47	49	51	56	61	62	57	50	46	40	-13.0%	2.6%
Single Family Sales: Next 6 Months	31	35	37	48	47	50	56	62	59	55	49	44	39	-11.4%	25.8%
Traffic of Prospective Buyers	20	20	23	28	31	31	33	37	40	35	30	26	21	-19.2%	5.0%

REGIONAL HMI

(Seasonally Adjusted)	2022		2023										M/M	Y/Y	
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun	Jul	Aug	Sep.	Oct.			Nov.
Northeast	32	32	34	46	46	44	45	52	60	55	48	46	53	15.2%	65.6%
Midwest	35	30	32	36	36	40	42	48	46	42	38	37	32	-13.5%	-8.6%
South	33	35	39	46	50	50	56	60	58	55	48	43	35	-18.6%	6.1%
West	28	25	29	37	36	40	48	50	54	46	42	36	28	-22.2%	0.0%

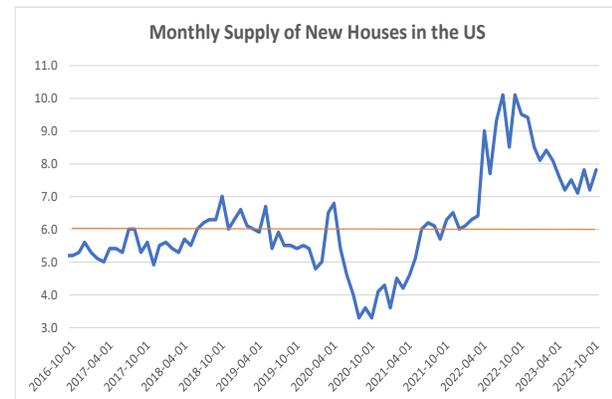
On a year-over-year basis, the NAHB/Wells Fargo Housing Market Index was up 3.0% against November of 2022 (down 2.0% last month).

Adjusted housing inventories increased in October (latest available), coming in at 7.8 months of inventory on hand. This is higher than the "ideal range" of 6 months of inventory on hand and is still lower than the 9.5 month peak we saw last October. The increase in inventory could be a worrisome sign.

The housing market is highly regionalized, and each region has different levels of housing activity, but macro demand is still being tempered by lack of affordable single-family housing inventories and steep housing prices which are only easing in some markets. But new permit and starts data is weak.

New housing starts are volatile right now and came in at a 1.372-million-unit rate on an annualized basis (flat from last month's adjusted 1.346 million annual rate); and the outlook for the rest of 2023 is weaker based on current industry trends.

Single family starts were higher in October by 0.2% M/M (latest available) but were up 13.1% Y/Y. Multi-family starts are volatile and were up 4.9% M/M and down 31.8% Y/Y.



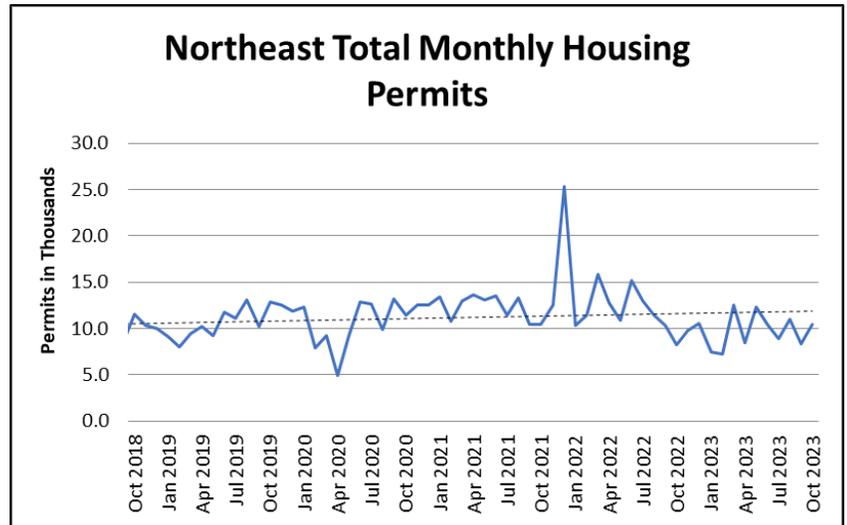
National Outlook: The Federal Reserve continues to pause rate hikes as expected. Inflation is cooling, but at a slower than expected pace. At the same time, economic growth remains stable, despite some slowing in consumer spending. Tighter financial factors are weighing more heavily on construction forecasts. Surveys continue to show that lack of access to financial funding is the primary hindrance to many non-residential projects' starts (roughly 62% of project start delays are now due to funding difficulties). That has superseded the lack of availability of labor and products used in construction activity. Banking records also show the lowest volume of bank credit being extended since the Great Recession, a sign of tighter credit conditions.

Housing and Interest Rate Forecast, 11/07/2023							
	2019	2020	2021	2022	2023	2024	2025
Housing Activity (000)							
Total Housing Starts	1,292	1,397	1,606	1,551	1,380	1,333	1,429
Single Family	889	1,003	1,132	1,004	912	946	1,027
Multifamily	403	394	474	547	467	386	403
New Single Family Sales	685	833	769	637	678	714	792
Existing Single-Family Home Sales	4,746	5,057	5,420	4,530	3,700	3,957	4,452
Interest Rates							
Federal Funds Rate	2.16%	0.36%	0.08%	1.68%	5.06%	5.38%	4.05%
Treasury Yield:							
Ten Year Maturity	2.14%	0.89%	1.44%	2.95%	4.02%	4.32%	3.63%
Freddie Mac Commitment Rate:							
Fixed Rate Mortgages	3.94%	3.11%	2.96%	5.34%	6.88%	7.04%	5.81%
Prime Rate	5.28%	3.54%	3.25%	4.85%	9.33%	12.42%	9.86%
For more forecast details, visit www.nahb.org.							

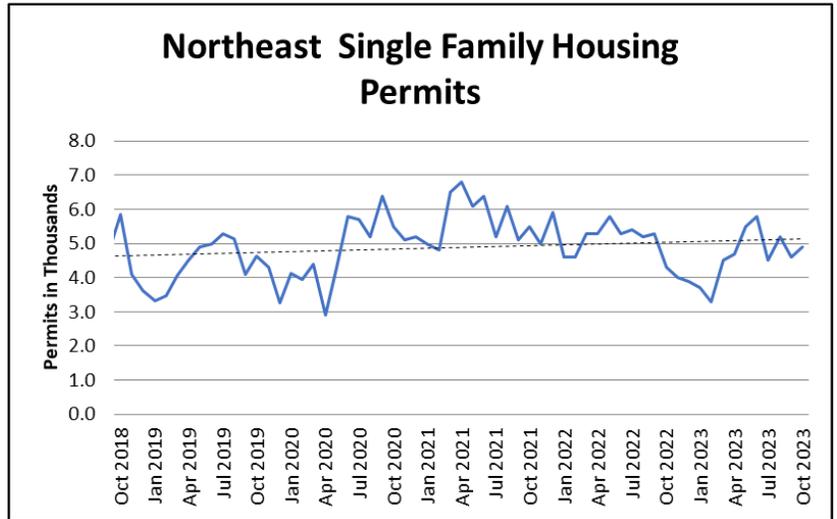
The following section provides monthly housing permit data for each major region in total, single family, and multi-family units.

Regional market outlook: Northeast

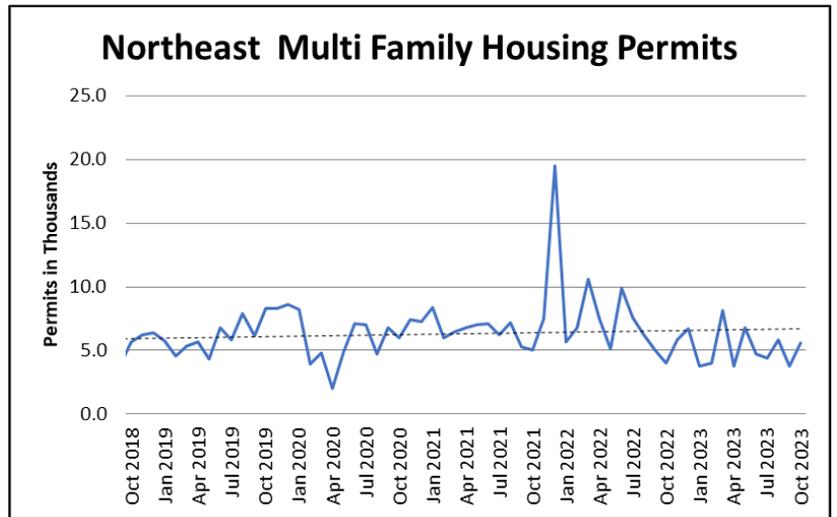
- Northeast total housing units authorized for construction were up in October by 25.0% M/M (-23.6% last month). October was the latest regional data available throughout this series.
- The 3-month moving monthly average was up 8.3% (-5.1% last month).
- On a year-over-year basis, permits were up 26.5% (-18.4% in the last update).



- Month-over-month single family permits were up 6.5% (-11.5% last month).
- On a 3-month moving average basis, permits were up 3.5% (down 6.1% last month).
- Year-over-year permits were up 14.0% (-13.2% last month).

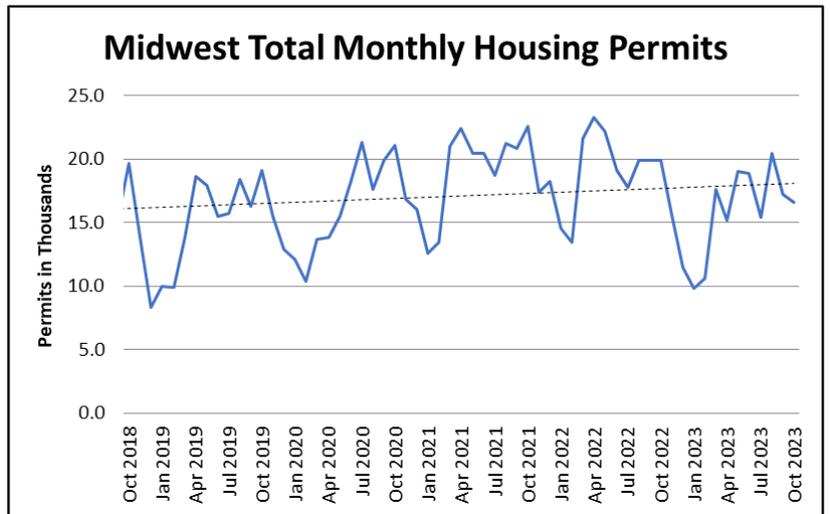


- Multi-family housing permits authorized for construction were up 47.4% M/M (-34.5% in the last update).
- They were up 14.9% on a rolling 3-month average (-3.0% last month).
- On a year-over-year basis, they were up 40.0% (-24.0% in the last update).
- These figures are based on a small number of units so the percentages can seem higher and more volatile.

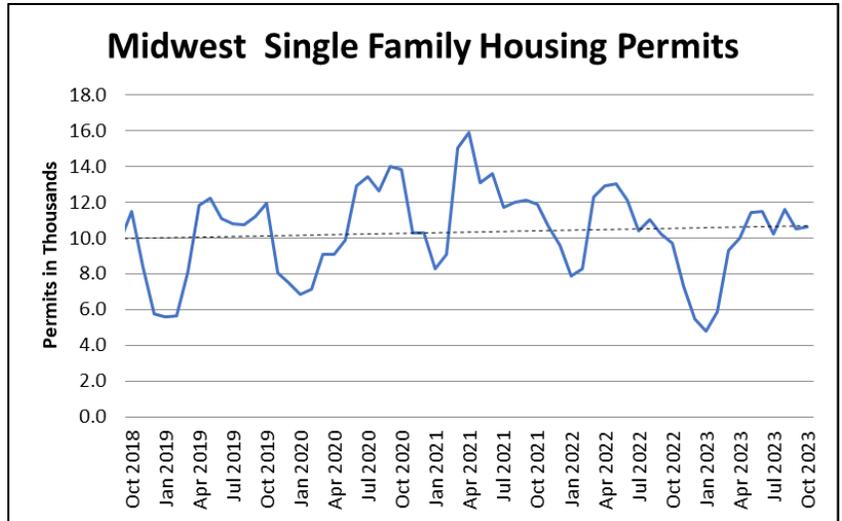


Regional market outlook: Midwest

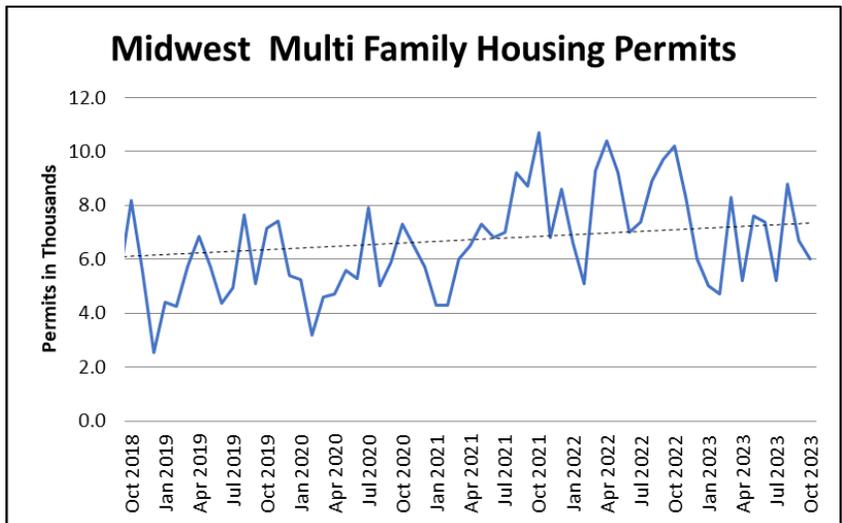
- Midwest total housing permits were down 3.5% month-over-month (-15.7% in the last update).
- The 3-month average was up 4.4% (-0.6% in the last update).
- On a year-over-year basis, permits were down 16.6% (-13.6% in the last update).



- M/M permit volumes were up 1.0% (-9.5% last month).
- The 3-month rolling average shows that permits were up 1.7% (-2.4% in the last update).
- Year-over-year, single family homes authorized by permits were up 9.3% (2.9% in the last update).

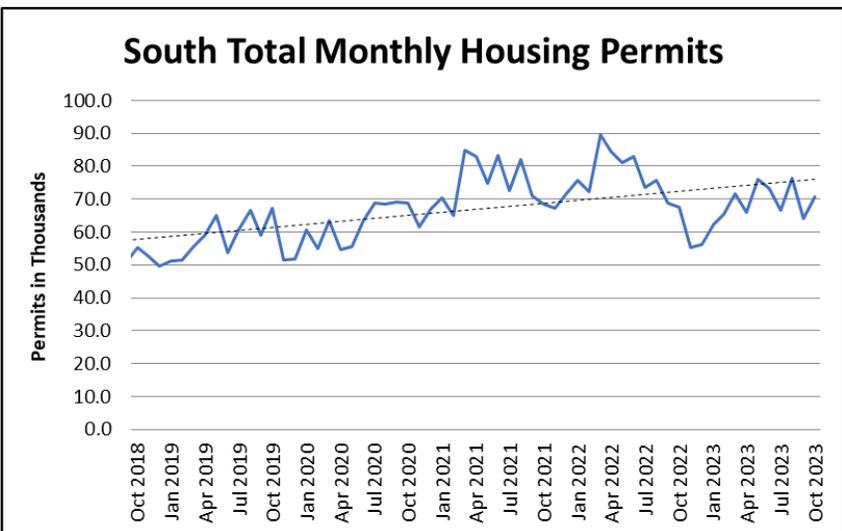


- Multi-family housing permits, again, are volatile month-over-month. This month, they were down 10.4% (-23.9% last month).
- On a 3-month rolling average basis, they were up 11.6% (5.2% in the last update).
- On a year-over-year basis, permits were down 41.2% (-30.9% in the last update).

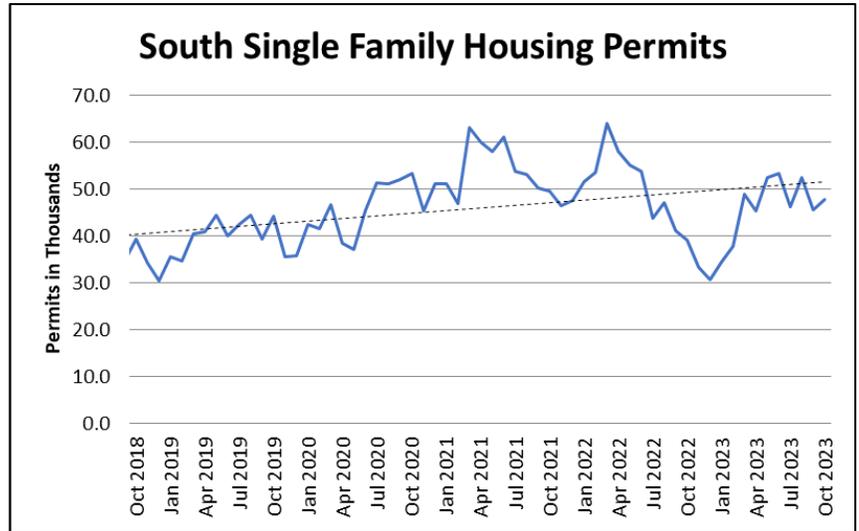


Regional market outlook: South

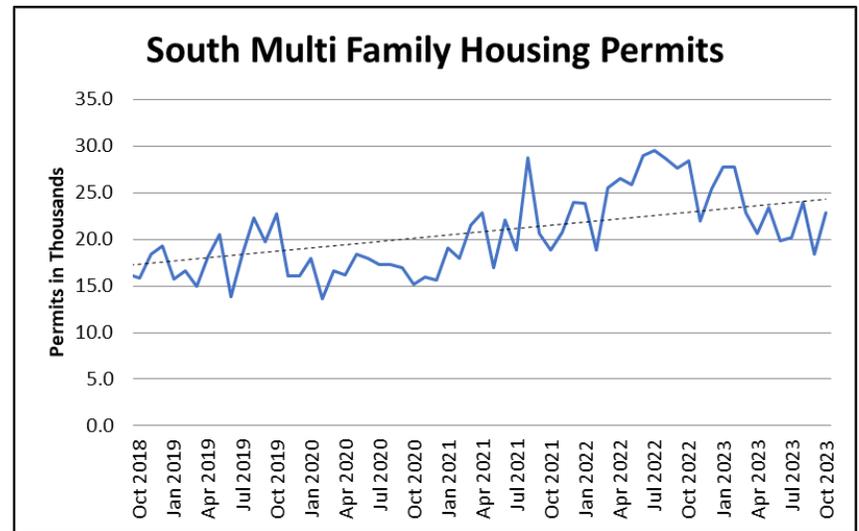
- Southern region housing permits were up 10.1% month-over-month (-16.2% in the last update).
- On a 3-month rolling average basis, permits were up 3.0% (-3.5% in the last update).
- On a year-over-year basis, total permits were up 4.4% (-6.8% in the last update).



- Southern region single family home permits were up 4.6% M/M (-13.0% last month).
- On a 3-month rolling average, they were up 1.7% (-4.3% in the last update).
- On a year-over-year basis, single family permits were up 21.9% (10.9% in the last update).

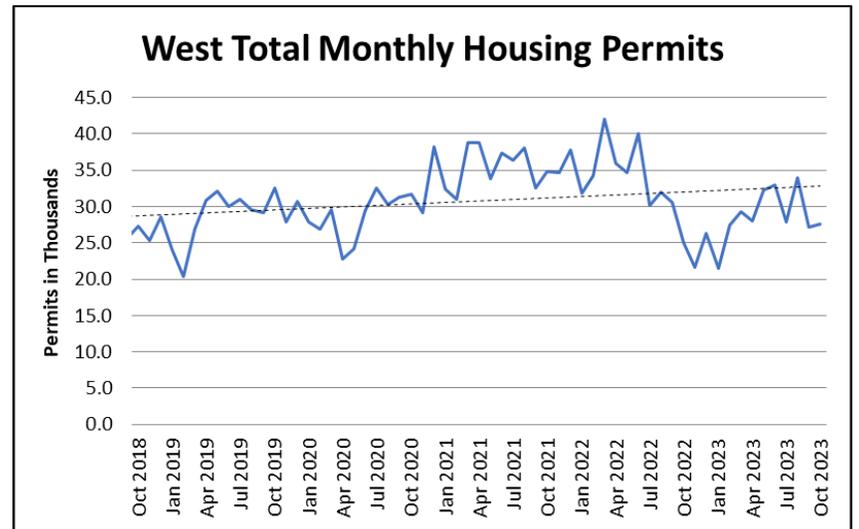


- Southern multi-family permits were up 23.9% M/M (-23.3% last month).
- On a 3-month rolling average basis, permits were up 6.5% (-0.8% last month).
- On a year-over-year basis, permits for multi-family housing were down 19.7% (-33.3% in the last update).

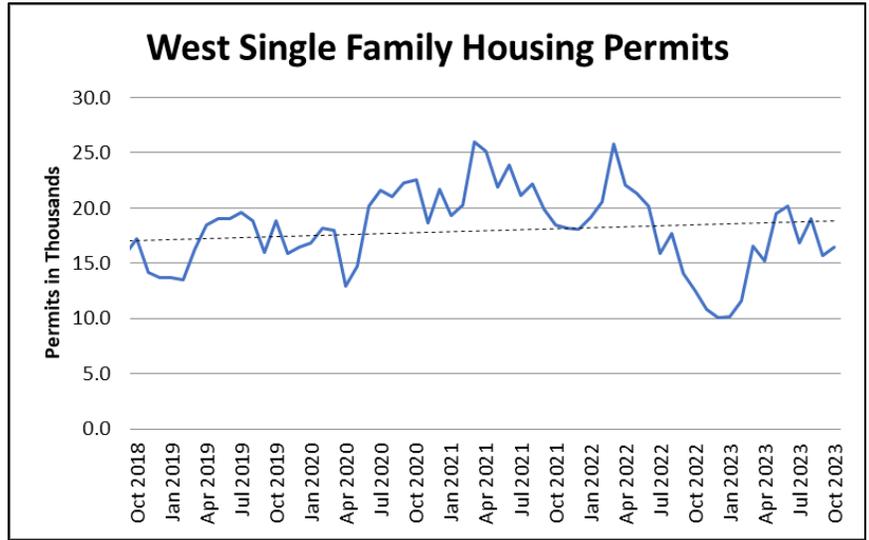


Regional market outlook: West

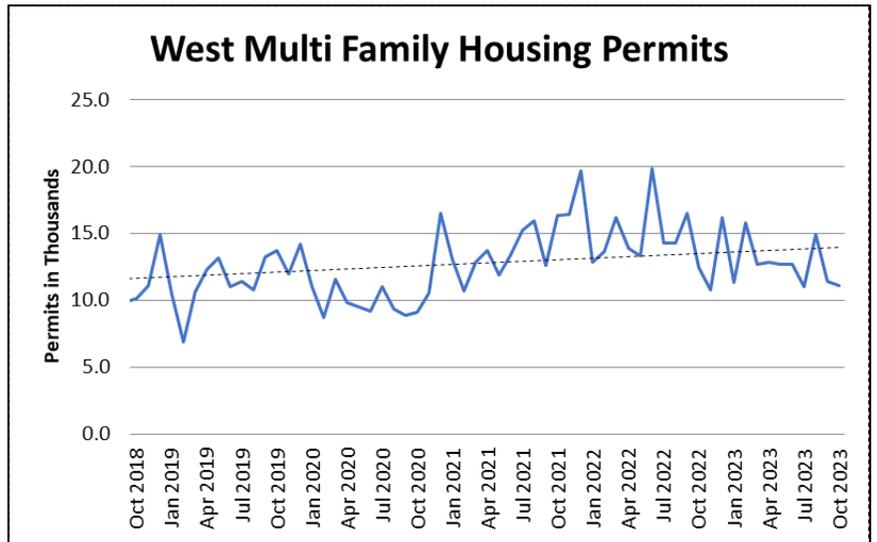
- Western region total monthly housing permits were up 1.8% M/M (-20.1% last month).
- On a 3-month rolling average basis, they were up 1.2% (-4.5% last month).
- On a year-over-year basis, permits were up 10.4% Y/Y (-11.4% in the last update).



- Single-family permits were up 5.1% M/M (-17.4% last month).
- On a 3-month moving average basis, permits were up 0.3% (-7.0% in the last update).
- Year-over-year, single family permits were up 31.0% (11.3% in the last update).



- Multi-family permits were down 2.6% M/M (-23.5% in the last update).
- On a 3-month rolling average, it was up 3.1% (-0.5% in the last update).
- Year-over-year, multi-family unit permits were down 10.5% (-30.9% last month).



Industry Outlook

ASA Sales were stronger by 3.4% Y/Y (+2.7% last month) in October (latest available). Year-to-date through October, sales were up 4.1% (+5.9% in the last update). For the trailing twelve months prior, sales were up 4.9% (7.6% in the last update). ASA Pulse Report findings are reported monthly. The following chart shows the breakdown by primary business type and region.

	October Y/Y % Change in Total Dollar Sales	YTD % Change vs. YTD 2022	Trailing Twelve Months % Change
All Businesses	3.4%	4.1%	4.9%
By Primary Business			
PHCP	4.0%	3.1%	3.7%
PVF	2.9%	8.3%	8.5%
PHCP & PVF	3.3%	3.9%	5.1%
By Region			
1 (SWPD & WSA)	9.2%	2.2%	1.8%
2 (ASA Central)	4.7%	4.5%	5.6%
3 (SWCD)	-10.3%	5.6%	6.2%
4 (NCWA)	6.4%	4.9%	5.0%
5 (ASA Northeast)	3.0%	4.0%	5.9%
6 (SWA)	2.6%	6.6%	7.8%
*ISD - Insufficient Data			

The US Transportation Services Freight Index (TSIFRGHT), which typically leads ASA Sales by about five months, was delayed this month with the new release. The last report available was still from August and it showed that the TSI was at 138.5 for freight, up 0.2% M/M but was down by 1.9% Y/Y (down 0.9% 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 November (latest available) that spot truck freight demand was **41.3% lower than it was a year ago**. Spot trucking rates have fallen 12.8% Y/Y, and now fuel surcharges are down -19.0% Y/Y.

Forecast data still shows that oil production in the US may have exceeded the 13 million barrels per day levels, ahead of expectations. Total oil inventories are still low on the 5-year average range, and the Strategic Petroleum Reserves are still at the lowest levels since the mid 1980's and rebuilding activity is slow. Government officials have suggested that there are physical limits to how much oil can be replaced in the SPR and that the current replacement rate is the fastest possible given those constraints. But more recent data suggests that Cushing, Oklahoma is running at a low capacity level.

OPEC continues to cut production as expected and added another 1 million barrels per day to those cuts (bringing the current total cuts to nearly 2 million barrels per day), and those cuts are now expected to be extended through the first quarter of 2024. But oil prices are still falling rapidly due to lack of global demand and hints (as mentioned above) that the US is well supplied, and inventories could rebuild quickly based on current consumption rates. A strong dollar also helps keep prices lower.

Retail sales were relatively flat in October and were mixed across many categories of retail month-over-month. Total retail sales were 0.1% lower month-over-month but were 2.5% higher year-over-year.

When adjusted for inflation, sales were slightly lower month-over-month in October by 0.2% and were lower by 0.7% compared to last year at this time (they were lower by 1.2% year-over-year last month).

Home improvement retail sales volumes were still sluggish in October, falling by 0.3% M/M and they remained marginally lower by 5.6% against last year. Again, when adjusted for inflation, sales were even lower year-over-year.

Economic growth is still outpacing expectations and is still expected to be higher in Q4 by 1%-1.5%. Looking forward, the risks for economic growth will come in Q1 and Q2 as consumer spending softens. Consumers are expected to start working on paying down debt (which is still at record highs).

Non-residential construction is expected to keep current momentum into 2024, which will continue to keep the supply industry chasing opportunities. Job openings in the construction sector have surged over the past 60 days and government investment from the Infrastructure Bill, CHIPs Act, and Inflation Reduction Act will likely boost spending on construction activities in 2024. Private spending across many sectors is also expected to be strong spanning manufacturing, health care, lodging, and even logistics and transportation spending will pick up pace in the back half of 2024.

Much of this will depend on the Federal Reserve and interest rate policy moving forward. Current estimates from the Fed suggest that some rate cuts could start as early as the end of Q2 of 2024, but those rate cuts are likely to be mild for the full year (perhaps a quarter point or less). The Fed has set a longer term rate target of 2.5% to 3%, but that can change.

Kind of Business	Percent Change	
	Oct. 2023 Advance from --	
	Sep. 2023	Oct. 2022
Retail & food services,		
total	-0.1	2.5
Retail	-0.2	1.6
Motor vehicle & parts dealers	-1.0	3.3
Furniture & home furn. stores	-2.0	-11.8
Electronics & appliance stores	0.6	0.9
Building material & garden eq. & supplies dealers	-0.3	-5.6
Food & beverage stores	0.6	1.0
Grocery stores	0.7	0.9
Health & personal care stores	1.1	9.6
Gasoline stations	-0.3	-7.5
Clothing & clothing accessories stores	0.0	0.8
Sporting goods, hobby, musical instrument, & book stores	-0.8	-3.8
General merchandise stores	-0.2	1.9
Department stores	-1.2	-4.1
Nonstore retailers	0.2	7.6
Food services & drinking places	0.3	8.6