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MOCA Systems, Inc.

Today's Construction Economy

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Introduction

Today's Construction Economy captures key insight directly from leaders in the construction industry. The newsletter pulls from these observations to determine the market's message.

The much-anticipated recession has not arrived, and an increasing number feel it won't — we are more likely to be in for a soft landing. While construction labor and materials are still relatively expensive, inflation is easing, and selling price escalation should recover to closer to the 3% historic average. That inflation has added to sales but masked the fact that volume is sliding. Our focus continues to be on the primary drivers of selling price to owners.

Third Quarter 2023

Prepared by Tom Sanders, CCEA, CBA Chief Economist (850) 389-8127 MOCA Systems, Inc. is a full-service Owner's Representative and software development firm serving the design and construction industries.

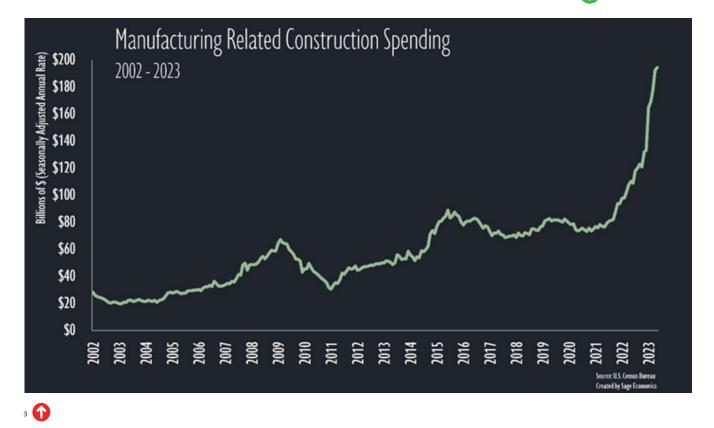




Growth, Spending, and Selling Price

The PPI for new nonresidential building construction — a measure of the price that contractors say they would bid to build a fixed set of buildings — was flat for the month (May). Although this "bid price" index rose 11.0% (year-over-year) y/y, the y/y change has decelerated for nine consecutive months after rising 24.1% from September 2021 to September 2022.¹

The Dodge Momentum Index fell 2.5% in July but rose 25% y/y, Dodge Construction Network reported on Tuesday. The index "is a monthly measure of the initial report for nonresidential building projects in planning, shown to lead construction spending for nonresidential buildings by a full year." The commercial component rose 3.1% for the month and 17% y/y.²



Construction spending (not adjusted for inflation) totaled \$1.93 trillion in May at a seasonally adjusted annual rate, up 0.9% from the upwardly revised April rate and up 2.4% y/y, the U.S. Census Bureau reported on Monday (July 10th). However, without a deflator, it is impossible to say how much of the y/y gain is in units vs. price.⁴

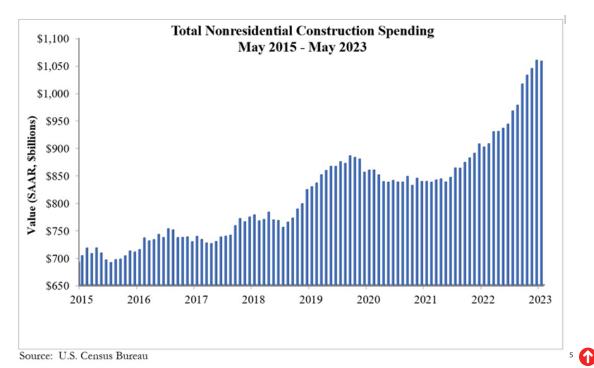
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Growth, Spending, and Selling Price

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"Nationally, construction cost escalation remains problematic, and in the most recent quarter, rose from 1.35% in the January quarter to 1.55% in the [January 1-April 1, 2023] quarter," Julian Anderson, president, North America, for construction consultancy Rider Levett Bucknall, wrote in RLB's Quarterly Construction Cost Report. Costs are based on RLB's calculations for 12 U.S. cities. "However, the year-over-year rate fell from 8.11% to 7.22%, a sign of an overall downward trend....Chicago, Denver, and Las Vegas all experienced increases above the quarterly national average during Q2 2023. Locations below the national average included Boston, Honolulu, Los Angeles, New York, Phoenix, Portland, San Francisco, Seattle, and Washington, D.C." ⁶

THE MARKET'S MESSAGE

Nonresidential construction spending continues to drive toward all-time highs, largely aided by selling price inflation rates. The U.S. Administration's financial stimulus has had a large impact on manufacturing construction. While inflation is subsiding, it is still substantial. Some of the earlier momentum in volume has slowed in recent months, suggesting backlogs may be shrinking.

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 ⁶Data Digest, Vol. 23, No. 24, Jun 26-30, 2023.





Labor and Wages

There were 396,000 job openings in construction, not seasonally adjusted, at the end of May, the second-highest May total in the 23-year history of the series and a decrease of 37,000 (-8.5%) y/y from the all-time May high of 433,000 in 2022, (the U.S. Bureau of Labor Statistics) BLS reported on Wednesday (July 12th) in its monthly Job Openings and Labor Turnover Survey (JOLTS) release.¹

The "first year of new settlements reached from January through June of 2023 (2023-Q2) for union craft workers in the construction industry had an average increase of 4.4%," the Construction Labor Research Council reported on July 14th.²

Vear-over-year growth in posted wages, 3 month avg, Mar 2019 - May 2023 Construction — Overall C.5% 2.5% 2019 2020 2021 2022 2023 2021 2022 2023

Construction wage growth is fading, but still elevated

[For] construction workers for whom we have a year's worth of pay data..., those who stayed in the same job over the past year received a pay bump of just more than 6%, in line with other industries. But we found that these in-demand workers can boost their pay a lot by switching employers. Job changers in construction saw their pay rise by 14.6% [y/y], a bigger increase than the 11.2% [increase for] job changers overall." 3

Seasonally adjusted average hourly earnings for production and nonsupervisory employees in construction (craft and office) rose 5.7% y/y to \$34.09 per hour, a "premium" of 18.2% over the private sector average of \$28.83, which increased 4.7% y/y. ⁴

The unemployment rate for workers with construction experience dipped from 3.7% in June 2022 to 3.6%, the lowest June rate since the series began in 2000.⁶

The prime age (25-54) employment to population ratio increased to 80.9% in June. That's the highest it's been since 2001 and just one percentage point below the record high of 81.9% in April 2000.⁷ \bigotimes

In the first months of the pandemic, nearly four million prime-age workers (ages 25-54) left the labor market, pushing participation in early 2020 to the lowest level since 1983 - before women had become as much of a force in the workplace. Prime-age workers now exceed pre-pandemic levels by almost 2.2 million.⁸

Contractors "are projecting 2023 construction staff wages to increase an average of 4.42% (excludes 0% projections), reported by over 360 companies," construction compensation consultant PAS reported on Wednesday (June 28th) in its Construction/Construction Management Staff Salary Survey. 2023 staff pay predictions are increasing each month and will exceed 5% by fall.⁹

THE MARKET'S MESSAGE

Finding affordable construction labor is still the biggest challenge to new projects. As more workers enter the U.S. workforce, construction must compete for labor. New jobs are popping up faster than the current ones can be filled. As a result, wages are still rising faster than the national average, and workers have their choice of employers. Owners should expect to pay premiums for construction labor.

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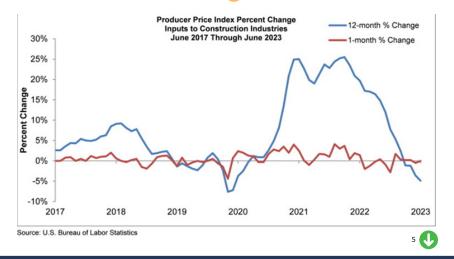
Materials Pricing

"The pandemic-induced period of rapid construction input cost increases is over," said Anirban Basu, chief economist at ABC (Associated Builders and Contractors) in the release (ABC's analysis of U.S. Bureau of Labor Statistics Producer Price Index data released July 13th.) "This recent moderation is partially due to a drastic improvement in supply chains; both international and domestic freight rates have plunged back toward pre-pandemic levels."¹

The index for diesel fuel tumbled 6.9% in May and 49% y/y; steel mill products, -0.6% and -18%; aluminum mill shapes, -1.3% and -10.7%; and copper and brass mill shapes, -3.1% and -8.5%. In contrast, the PPI for concrete products rose for the 31^{st} month in a row, by 0.3% and 11.3% y/y.²

We are seeing an easing of escalation in subcontractor bids as material cost increases have leveled off and subcontractors' backlogs are starting to diminish, resulting in a tightening of their bids. Commodity costs are easing, which takes the pressure off the price escalation of construction materials.³ U

Despite the overall flattening of construction materials prices, costs went up in 7 of 19 commodity categories in June, according to the (Associated Builders and Contractors July analysis) report....That's because strong nonresidential activity is keeping price pressures on sought-after materials, such as concrete and steel, said Chris Delaney, commercial manager in the Americas division at construction consultancy firm Linesight.⁴



THE MARKET'S MESSAGE

The wild construction materials pricing levels that contractors and ultimately owners had to deal with over the past 18 months have come down drastically. Supply chains have improved, and supply and demand are approaching equilibrium. Even the cost-drivers like oil and steel have settled at reasonable levels.

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⁵lbid.

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Manufacturing Construction Leads the Way

"While spending is up more than 17% over that [11-month] span (May 2022- April 2023), manufacturing-related construction accounted for the majority of that increase," said Anirban Basu, ABC chief economist. "Excluding the manufacturing segment, nonresidential construction spending is barely outpacing inflation, up just 6% over the past year."1 🏠

Basu agreed that aside from manufacturing construction, spending in other categories largely slumped during the month (May). Nine of the 16 nonresidential categories posted drops in spending, according to (the) ABC analysis. That slowdown could stick around for the remainder of the year, he said.² \bigcirc

Two federal pieces of legislation have provided significant funding to encourage manufacturers to invest in new facilities within U.S. borders. The CHIPS Act, passed in 2022, supports an increase in the number of semiconductor plants (or Fabs) within the U.S. to counteract the growing influence of China in this market. Also, the Inflation Reduction Act of 2022 (IRA) provides funding to improve supply chains and bolster new investment in domestic manufacturing. These two pieces of legislation will keep manufacturing construction starts well above historic norms this year.³ $\mathbf{\Omega}$

Figure 1: Real Total Manufacturing Construction Spending



Amazon will invest about \$7.8 billion by the end of 2029 to expand its data center operations in central Ohio, according to a company press release....Amazon's commitment represents the second largest single private sector company investment in Ohio's history. That ranks only behind Intel's \$20 billion investment in January 2022 to build its semiconductor facility.⁴

seasonally adjusted, annualized rate. Nominal spending deflated by the Producer Price Index for Intermediate Demand Materials and Components for Construction, Bureau of Labor Statistics.

THE MARKET'S MESSAGE

Federal support has propped up manufacturing construction, which has led nonresidential activity this year. Strong demand for data centers and semiconductor plants will continue to lead the way. Other nonresidential activity, however, is not doing so well.

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Trends and Forecasts

Investors have long expected inflation to fall back to the Fed's 2% target relatively quickly, a bet that is starting to look better now than it did a few months ago.¹

The Federal Reserve keeps raising rates, forecasters keep warning that a recession is around the corner, inflation is still a problem, and consumer surveys show people feel down in the dumps. And yet, Americans manage to keep on spending.²

To be clear, no one is predicting a recession anywhere near the severity of 2008, but unless everything we think we know about monetary policy is wrong, high interest rates will eventually catch up to the economy. When that happens, a shallow period of economic contraction still appears likelier than not.³

Meanwhile, architectural activity, which also provides a forward-looking gauge for upcoming construction work, was mixed. The Architectural Billings Index rose back into positive territory in its most recent report (May 2023). But billings dropped for the ninth consecutive month at firms with a commercial specialization, according to the American Institute of Architects, providing more evidence that commercial activity is waning.⁴ \bigcirc

"High interest rates and tightening lending standards are leading to uncertainty among owners and developers, also creating hesitation among stakeholders, leading them to carefully assess whether projects will break ground," said (Dodge Data's chief economist Richard) Branch. "These conditions will persist through the remainder of the year, meaning little forward motion in construction starts."6 🔗

However, the construction sector will be severely bifurcated — residential and commercial construction starts will be noticeably weaker, while sectors dominated by publicly funded projects will fare much better....Nonresidential starts will fall 2%, while infrastructure dollars pouring into state and local government coffers will support a 17% increase in nonbuilding starts.7

Commercial construction is particularly vulnerable to a downturn this year since it is more exposed both to general economic weakness and banking woes than most other construction sectors. In addition, the large, and now overbuilt, warehouse market will enter a long period of decline as the largest player in the space, Amazon, has opted against building any new warehouse facilities for the foreseeable future.⁸ 🕔

Maybe the biggest threat (and biggest unknown) is commercial real estate. Office buildings are worth a lot less than they were before the pandemic, and the interest-only loans that finance them are coming due. Predictions on the fallout range from the owners of that debt taking a painful but survivable haircut to full-blown financial collapse.⁹ 🕕

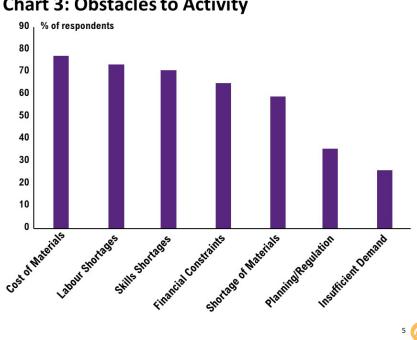


Chart 3: Obstacles to Activity

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Trends and Forecasts

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The impact of the climate law (Inflation Reduction Act) is already evident, with announcements of 47 new plants to make batteries, solar panels and wind turbines since it was passed, according to American Clean Power, a trade association....Clean energy companies are digesting the administration's guidance on how the tax credits will be allocated, and finding some unworkable in ways that may slow deployment.¹⁰

Multifamily permits sank 14% from May to an annual rate of 467,000, down 33% y/y and the lowest rate since October 2020. While there were 977,000 multifamily units under construction — the most in the 54-year history of the series — the drop in starts and permits suggest(s) multifamily spending may soon shrink.¹¹

In addition to weakness in the warehouse space, traditional office buildings will also struggle to gain traction. One positive element for offices will be data centers, which are included in the office category.¹²

THE MARKET'S MESSAGE

The much-anticipated recession has yet to materialize primarily because the American consumer continues to spend. There may be troubles ahead, however. Labor and materials costs are still stubbornly high, and interest rates keep rising, leading to reduced commercial building. Uncertainty will lead to flat construction growth through 2023.

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Final Thoughts

Trends that have defined the post-COVID recovery are levelling off as we enter a new normal. Labor rates and materials costs are still high, and labor is scarce, but massive federal financial infusions have buoyed construction demand across key sectors like manufacturing and warehouses/data centers. Selling price inflation has masked the fact that construction volume has not really grown much although spending is at record levels. Nonresidential construction should continue to be healthy but expensive as it appears we have avoided recession for the time being.

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