# THE ROLLER COASTER RIDE CONTINUES

A look into COVID-19's economic hills and valleys.

JOSEPH NATARELLI AND ANIRBAN BASU

On a winter's day a bit more than six decades ago, Edward Lorenz, a "mild-mannered" meteorology professor at MIT, was simulating weather patterns with a computer program. He went to get a cup of coffee. When he returned, he observed a result that altered the course of science. According to MIT Technology Review, Lorenz had merely repeated a simulation he'd run earlier. He had rounded off a single variable from .506127 to .506. To his surprise, that tiny change drastically transformed the pattern his program had previously predicted. His insight came to be known as the "butterfly effect" after Lorenz suggested that the flap of a butterfly's wings might ultimately cause a tornado.[1] In short, even small changes in the environment can massively alter outcomes.

But COVID-19 was not a small environmental change. Neither were the policy responses to the global pandemic. Rather than trigger a single tornado, COVID-19 and the response thereto have spawned a wave of economic hurricanes that have buffeted contractors and other economic actors. In 2020 and 2021, policymakers around the world responded to a public health emergency by stimulating their economies, triggering both rapid rebounds in activity and pervasive inflation in the process. Last year, they collectively reversed course, tightening monetary policy by driving borrowing costs higher.

All the while, the economy has been through a series of valleys and peaks, with the initial valley experienced in spring 2020, followed by a surging tide of economic rebound, and is now potentially facing another valley. Even when the U.S. economy was recovering from the devastating economic setbacks of March and April 2020, contractors struggled to smoothly operate their enterprises. Among the numerous sources of challenge were equipment shortages, surging materials prices, and of course

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a structural deficiency of skilled construction workers.

What was not a challenge, at least in general, was a lack of demand for construction services. Quite the opposite. Many contractors have continued to operate at capacity, frustrated by their inability to recruit more workers in order to take on more projects. Despite 2022's rampant interest rate increases and financial market volatility, contractors enter 2023 with elevated backlog and some measure of optimism. According to the Associated Builders and Contractors' 2022 year-end survey, more contractors expect their sales and employment to expand over the next six months than otherwise.[2] Despite rising compensation costs and elevated materials prices, the average contractor expects to hold the line on profit margins over the near term.

There are even some reasons to be optimistic regarding economic prospects. Inflation appears to have peaked during the summer of 2022. Materials prices are no longer expanding rapidly on a monthly basis, and certain prices, including those of steel and natural gas, declined substantially during a recent 12-month period.[3] Remarkably, natural gas prices in Europe recently dipped below their Russia-Ukraine war level, a testament to the resilience and adaptability of free market economies.[4] Between November 2021 and November 2022, Natural gas prices in the United States declined 26 percent.[5] Meanwhile, steel mill product prices were down 27 percent, according to the Bureau of Labor Statistics.[6]

TO DATE, THE U.S. ECONOMY HAS BEEN ABLE TO AVOID RECESSION, LED BY CONSUMERS THAT CONTINUE TO BE SUPPORTED BY A STRONG LABOR MARKET.

Investors continue to actively await news of a federal pivot whereby monetary policymakers once again shift course, this time announcing a cessation of rate increases and eventually plans to reduce borrowing costs. Presumably, when that occurs, upward financial market momentum will be restored, resulting in greater capital flows and improved availability of financing for construction projects. To date, the U.S. economy has been able to avoid recession, led by consumers that continue to be supported by a strong labor market. Recent data indicate that demand for workers remains high, with more than 10 million available, unfilled job openings registered in November.[7] It is rather difficult to enter recession unless the consumer participates.

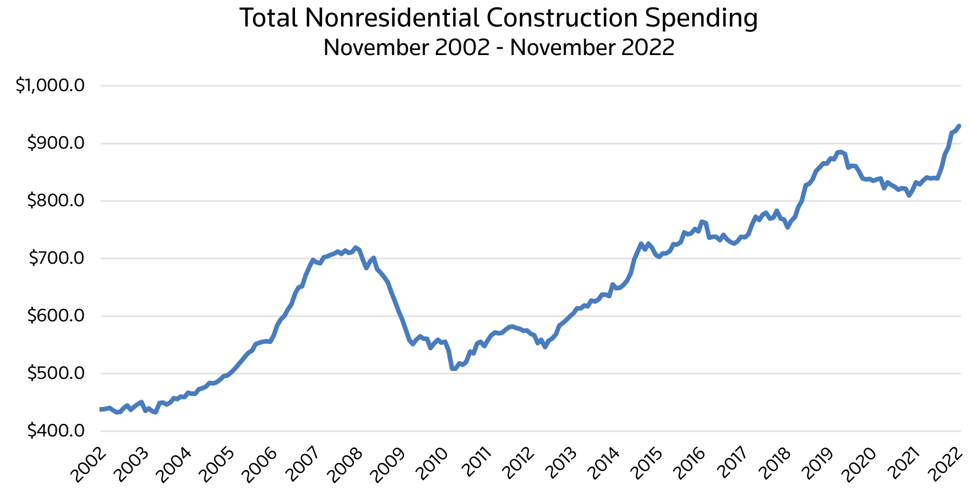
There are also certain economic segments gathering steam. Among these are infrastructure-related construction as well as construction related to bolstering domestic manufacturing capacity. Many state and local governments are flush with cash ready to be spent in part on infrastructure, partially the result of federal legislation such as the American Rescue Plan Act (March 2021) and the Infrastructure Investment and Jobs Act (November 2021). The most obvious implication is that even if the economy were to enter a downturn this year, contractors specializing in public workers can expect to remain very busy.

As reported by Electronics 360, according to the Semiconductor Industry Association, the Chips and Science Act (August 2022) has already spawned more than 40 new "semiconductor ecosystem projects" across the United States to the tune of nearly $200 billion.[8] These private investments span 16 states, including Intel Corporation's two fabrication facilities in Arizona ($20 billion investment), two in Ohio (also $20 billion), Micron Technology's new facility in Idaho ($15 billion), its investment in New York state ($20 billion), TSMC's two fabrication facilities in Arizona ($40 billion), and massive investments by both Samsung ($17 billion) and Texas Instruments (up to $30 billion) in Texas.[9] Based on this, it is easy to understand why there are many economists who think that the Federal Reserve can engineer a perfect soft landing, ridding the economy of excess inflation without triggering recession.

## Something unpleasant this way comes

There's an economics joke (not a great one) suggesting that economists have successfully predicted nine of the last five recessions. Forecasting is indeed challenging given the butterfly effect. Setting track records aside, many market experts have been predicting a downturn for several quarters, even as the economy added jobs at a healthy clip and consumers continued to spend. At the heart of the matter are the Federal Reserve's ongoing efforts to wring excess inflation

**EXHIBIT 1**
Total Nonresidential Construction Spending




Source: U.S. Census Bureau

out of the economy by softening economic activity.

Kathy Bostjancic, Nationwide Insurance's chief economist, expects a mild downturn to happen sometime in the middle of the year, stating, "Our view is that employment growth will continue to slow and eventually there will be outright job losses."[10] She adds, "That will have a material impact on consumer spending, and that'll be a big part of why we fall into recession. It's really been the labor market and the consumer that has kept the economy buoyant, but once that turns, then the overall economy will as well."[11]

While economists are known for prevarication and "on the one hand this, on the other hand that," there are some who say precisely what they think. Such is the case at Bloomberg Economics, where modelers stated in October that the probability of recession over the next 12 months is 100 percent.[12] They advise consumers build up emergency savings and pay down debt.

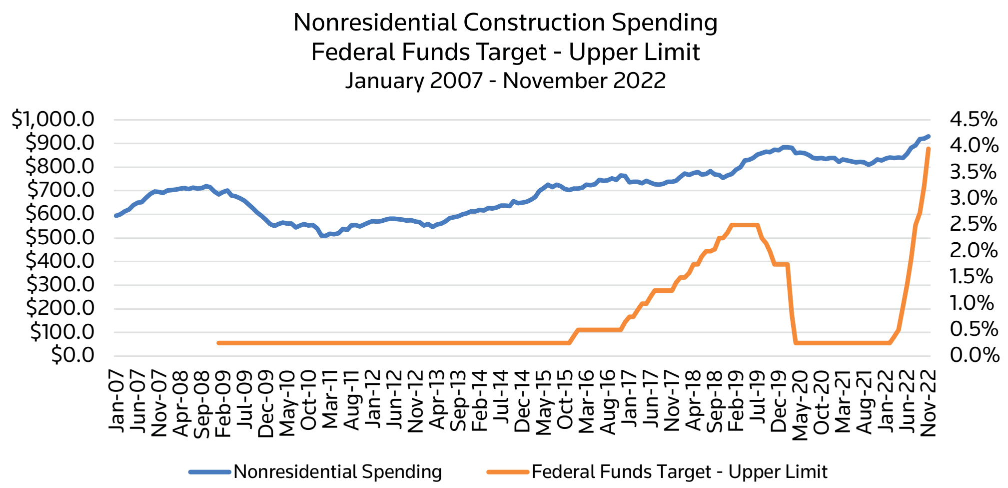
## Recessions and construction spending

While questions regarding whether recession is on the way linger, those who operate construction firms should be wary. The behavior of construction activity before, during, and after economic downturns can be instructive in this context. Take the initial decade of the millennium as an example. Exhibit 1 indicates nonresidential construction spending in the United States from January 2002 to the present. Nonresidential construction spending peaked during the worst of economic times at $719.1 million in October 2008, the month after Lehman Brothers faltered, triggering the worst global financial crisis since the Great Depression.[13] Over the next two years, nonresidential construction activity would decline sharply even as the balance of the economy commenced recovery by the summer of 2009, bottoming out at $508.6 billion in February 2011. From that point, spending began to rise, although it did not reach its prior high until June 2015.

Something similar happened in the wake of the earliest pandemic stages. Although construction was deemed an essential industry by many states, overall spending declined. In February 2020, the month before the pandemic undid the economy, nonresidential construction spending reached $884.8 billion, a new record.[14] Cyclically, it bottomed out in September 2021, dipping to $809.7 billion. By that point, the broader

**EXHIBIT 2**

Nonresidential Construction Spending Federal Funds Target – Upper Limit




Source: U.S. Census Bureau, Board of Governors of the Federal Reserve System

economy had been in rapid recovery mode for more than a year. Since then, nonresidential construction activity has rebounded rapidly, spawning a mad search for skilled and reliable construction workers as well as helping to push equipment and materials prices higher. According to the most recently available data, nonresidential construction spending reached a historic high of $930.1 billion in November 2022 (see Exhibit 2).[15] This was 5.1 percent higher than pre-pandemic levels in nominal terms.

Here is the point. For decades, construction activity has tended to lag behind the performance of the broader economy. Given hefty backlog entering the year, many contractors may not feel especially concerned regarding their 2023 prospects. But 2024 and/or 2025 could be more challenging, as backlog potentially dries up in the context of elevated project financing costs, pervasive pessimism, and recession. Accordingly, contractors may want to adopt Bloomberg's counsel to consumers by building up cash reserves and paying down debt.

As is well known, residential contractors have already been feeling the pain. Rather than lagging the broader economy, single-family homebuilding has tended to help lead the economy into recession. Such was the case prior to the Great Recession. After a period of surging home prices and rampant construction fueled in part by undisciplined lending, the housing market began to turn downward in earnest in 2006, about two years before the arrival of the worst of times.

It is happening again, albeit on a smaller scale. While the broader economy has yet to tilt into recession, the homebuilding market already has. Coming into 2022, the nation's housing market was positively frothy, with home prices racing higher in the context of low borrowing costs and ridiculously low inventory. Homebuilders strove to meet unmet demand by ramping up housing starts, only to find that the time to complete a home had expanded wildly due to a combination of diminished worker availability and component shortages, including a bewildering shortage of custom garage doors.

As the spring selling season ended and mortgage rates tilted higher, the froth quickly came off. According to Freddie Mac, in January 2022, the average 30-year fixed rate mortgage stood at 3.22 percent.[16] Later during the year, that rate would rise above 7 percent before settling above 6 percent.[17] On the West Coast and elsewhere, sales prices began to fall. Mortgage applications plummeted. By the very late stages of 2022, they had declined to their lowest level in 27 years.[18] Bidding wars have disappeared. Homebuilders suddenly find themselves in a market characterized by a paucity of willing buyers. Many homes remain under construction, but at least some builders are likely to find themselves in a situation in which the prices of homes being completed fall short of all the cost that has gone into them.

It may also be instructive to consider the relationship between interest rates and construction activity. After years of recovering from the Great Recession, the Federal Reserve began raising its benchmark interest rate in late 2015. It would continue to raise rates through 2018. Not coincidentally, a bit more than a year later, nonresidential construction spending begins to decline.

## Looking ahead

While recession appears likely in 2023, many contractors are poised to enjoy a decent year, as many enter the year with substantial backlog. Others specialize in construction segments that look promising, including public works, charging stations, data centers, manufacturing facilities, and health care. With materials prices no longer in rapid ascendancy, there is likely to be greater predictability and some support for margins.

Nonetheless, the environment is teeming with peril. Residential building permits, both single-family and multifamily, have been in decline recently. With the cost of capital on the rise and fears of recession widespread, more banks appear to have become reluctant to finance commercial real estate activity. The Federal Reserve continues to raise interest rates, roiling financial markets in the process and driving up construction project financing costs.

Given behavioral changes generated by the pandemic, weakness will be pervasive in several privately-financed construction segments, including office (remote work), hotels (remote meetings), and brick-and-mortar retail (e-commerce). In the final analysis, how construction firms fare during the quarters ahead will largely be a function of the segments in which they are active. ■

NOTES

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[6] "Producer Price Index by commodity: Metals and metal products: steel mill products," U.S. Bureau of Labor Statistics. Available at: https://fred.stlouisfed.org/series/WPU1017.

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[13] "Total construction spending: nonresidential in the United States," U.S. Census Bureau. Available at: https://fred.stlouisfed.org/series/TLNRESCONS.

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[15] *Ibid.*

[16] "30-year fixed rate mortgage average in the United States," Freddie Mac. Available at: https://fred.stlouisfed.org/series/MORTGAGE30US.

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