

THE BROAD DIMENSION

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The Fed's Difficult Task

The economy is in a peculiar situation with indications of slowing in industries such as housing and many companies are reducing their financial projections, while the labor market remains strong, with around twice the number of available jobs as there were job seekers in August, and wages are rising. Consumer spending remains strong but has been showing declines. Corporate defaults have been predicted to rise through the start of 2023, but corporate balance sheets are generally in good shape, although companies are warning of slowdowns. The manufacturing sector had been growing during the start of this year, but





new order rates have been contracting as stores try to reduce their high inventory levels and clear up backlogs.

Oil prices seem to have peaked for now and pulled back for a time, but they are projected to stay noticeably higher than before the pandemic, even allowing for what we have become used to as normal inflation. Copper prices had been dropping, which is often seen as an indication of where business activity is heading, but that drop could be partially resulting from previous stockpiling after the Ukraine war started and to China's reduction in activity due to Covid lockdowns.

Most people seem to agree that the Federal Reserve needs to pursue its reduction of support for the economy in order to reduce decades-high inflation. However, there has been growing concern that the pull-back could go too far and instigate a new wave of job losses, throwing growth into reverse. The Fed maintains that a "soft landing", where they bring down inflation without tipping the economy into recession, remains possible, but restoring price stability is the Fed's number one priority. Unfortunately, a soft landing is beginning to look as realistic as the Fed's earlier talk of inflation being transitory.

The workforce decreased during the pandemic, with some people retiring, although some of those are being tempted back into the workforce. There are still health-related concerns, Long-Covid, the availability of daycare, and immigration restrictions reducing the availability of workers. Getting everyone back in the office stopped when Omicron hit, and companies are now trying to see how flexible working will resolve itself. Employers may want people in the office while employees often want to keep working from home, but the overall effect has been a reduction in the need for office space. Regarding Covid, we seem to

have effectively achieved herd immunity via vaccination (about 80% of the population with 1 or more shots) and the latest variants giving vaccinated and unvaccinated alike a booster through infection.

Companies attract workers by offering higher pay, but that means building in inflation. Trying to bring labor cost inflation down by reducing production capacity just decreases supply, which allows manufacturers to push up prices, fueling inflation from another direction. The question is whether wages and salaries keep up with inflation or drive it. The Fed has a tough balancing act as it tries to keep the economy stable. There have been some layoffs (often pandemic-related tech jobs), but the travel industry, restaurants, and some other businesses picked up. A number of companies, seeing potential slowdowns, are simply not filling open positions. Unemployment numbers may start rising, but they are still likely to be at historic lows for quite a while. Household debt hasn't risen much, however, national debt now stands at \$31 trillion. That's not helped by the Federal government's \$1T infrastructure package and \$1.9T "American Rescue Plan" which is going to help keep unemployment low but keep pressure on wages as companies look for employees.

The US housing market has been cooling due to the high prices and rising mortgage rates, which has led to layoffs at banks and other mortgage brokers. Luckily, housing loans have not been given out as freely as before the 2008 bubble-burst in the housing market.





Inflation disrupts the economy, affecting those on fixed income the most, but rising interest rates make it harder for companies to finance their businesses. The indications are that there will almost certainly be more challenging growth situations in the near future, and a (hopefully) shallow recession late this year or early next year seems very likely. The likelihood is that the Ukraine war continues, resulting in oil prices staying high, enabling inflation to persist. Unfortunately, commodity prices, fuel costs and supply chain problems are largely beyond the Fed's ability to control.

The Architectural Billings Index in July showed the slowest growth since January, but there was still a small increase in billings and project inquiries. With the unbalanced economy that we have, companies will be less willing to invest in new construction projects, but the Fed's efforts, probably assisted by a mild recession, should restore a large element of balance. When an end to the Russian invasion of Ukraine can be achieved, that will help the energy crisis and the supply chain problems to resolve themselves.

Geoff Canham, Editor, TBD San Francisco

The Supply Chain

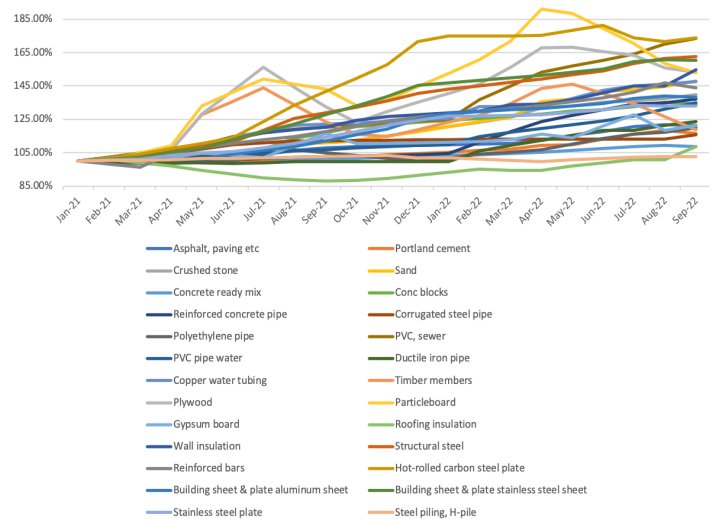
The Covid lockdowns led to major disruptions in the supply chain and, with China being a big exporter of construction materials, our industry certainly felt the impact. Construction

material prices were showing wild swings as supply and demand were both changing in unpredictable ways. Then, just as it seemed that things were getting back to normal, we had the Russian invasion of Ukraine disrupting energy markets which went on to affect just about everything else.

The Omicron variants showed that Covid was not giving up easily, and once more we were seeing lockdowns in China and other Asian countries, and deliveries were slowed as drivers got infected. To add to that, we have ongoing port congestion, general labor shortages, and strange weather conditions hampering supply at a time when demand was starting to rebound.

Office construction remains in the doldrums due to the shift towards work-from-home and retail has been hit by lockdowns and the consequent move to online shopping. However, healthcare has remained strong, housing may be slowing but is still in demand, warehousing and datacenters have been benefiting from the move to online shopping, and manufacturing has recently been picking up steam too. That has been reflected in demand for new-build and renovation projects. Although the continuing inflation of construction costs has been keeping demand tempered from one side and from the other side, the ability of contractors to staff projects affects their ability to meet demand. The infrastructure package approved by Congress is starting to add to demand for materials as well, so it seems that volatility in construction material prices will remain for some time, although hopefully we have seen the worst of it.

Material Price Changes Since Jan 2021 per ENR



The supply chain companies have been working to provide a more predictable service. Individual companies have been establishing networks that allow companies to have access to resources that may be underutilized by others and provide sources for materials that might otherwise be unavailable to them. Such networks build more resilience into the system, and the use of open-source software that all the companies can connect into provides better tracking of deliveries from the source of production through to the end user. Automation of warehousing is helping with the staff shortages, provides good tracking of where products are, and brings some unexpected cost savings such as not needing to provide lighting and HVAC when buildings are not being occupied by humans.

These kinds of improvements help to speed up deliveries of materials to the construction site as well as provide the deliveries on a more predictable schedule. The improvements to the warehouse infrastructure and the provision of new warehouses also brings additional workload for the construction industry. It is true that Amazon recently announced a cutback in its plans for additional warehouses as people move back to using real brick-and-mortar shops a bit more, but other companies are still playing catch-up to Amazon's next-day-delivery service, and even smaller retail outlets are starting to offer online services as well.

So, while supply chain issues are improving, they are not going away immediately, and construction professionals are still having to find ways to mitigate the problems. That generally involves collaborating to find options and alternative solutions where supply is more reliable. Using procurement methods such as Design-Build, Integrated Project Delivery, and Construction Management at Risk are various options that integrate the builder (the best source of information about what materials are readily available) into the design process at an early stage. As we've seen, such supply can change at fairly short notice, so it is a good idea to get everyone together for a value engineering session during the design process to review not only how the design is meeting the owner's needs but also how the solutions are tying in with current supply chain conditions. Trying to source products locally can lessen the impacts of transportation, but if any of the components of such products come from further afield, that may still result in delays. Recycling materials and adapting existing buildings are other ways to reduce exposure to supply chain issues and increase your building's sustainability rating.

Interest Rates on the Up and Up

After a year of suggesting that inflation was temporary, the Federal Reserve has reversed course and started trying to bring inflation under control by aggressively raising interest rates. That does not directly affect prices but is aimed at lowering demand because it is the balance between supply and demand that traditionally sets the price level for a product. High demand means that manufacturers must ramp up production, which increases their costs. Often manufacturers will offset those costs with higher prices. Those high prices will, in turn, entice others into supplying the product or service. This brings increase in supply, leading, in time, to suppliers cutting prices in order to maintain their share of the market. The problem the Fed has, is trying to balance the effects on demand so that they can bring inflation under control while not sending the country into recession.

We have had low interest rates for years, as the Fed tried to spur the economy after the Great Recession and then to counter the disruption caused by Covid-19. Unfortunately, the latter was not a disruption that responded well to the tools available to the Fed. While the markets loved the idea of cheap money, Covid was a medical crisis that kept people at home and gave them limited opportunity to spend their stimulus checks on goods and services,



and low interest rates meant that leaving the money in the bank wasn't a good idea. By default, the money got put into the stock market, which pleased Wall Street no end, while leaving High Street with struggling businesses and shuttered storefronts.

During the lockdowns, the work-from-home climate gave people reason and opportunity to look for larger housing units and maybe move out of that city apartment and into a house. That increased demand in the housing market got prices rising, helping to spark inflation. Covid hasn't gone away, but the situation has changed, allowing restrictions to be rolled back and permitting people to get out and spend. That gave increased demand for all types of goods and services, which suppliers were not necessarily able to meet. Restrictions that were imposed as Covid moved in waves around the globe had disrupted the supply chain, and workers had been forced to discover that they had options in what they did, leading to manufacturers being limited in how much they could produce, disrupting the supply-demand balance again.

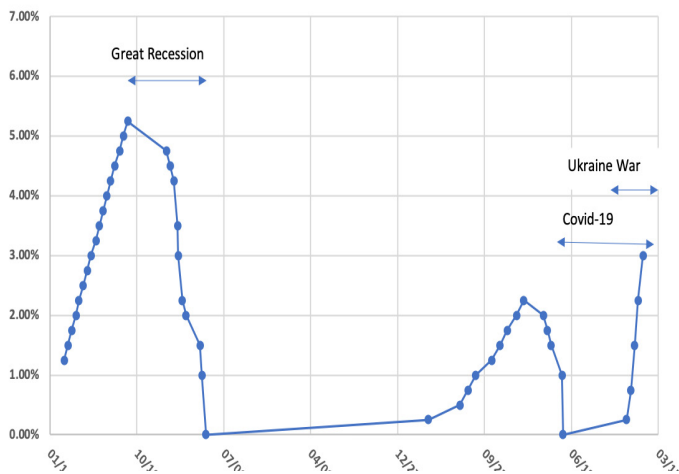
back to beating estimates and unemployment figures were heading lower again. That sounds like good news, but not when the Fed is trying to rein in inflation. The reason for that is that having a lot of unfilled job positions available gives leverage to job seekers to push wage levels higher, moving inflation the wrong way again.

Recession has been a big topic of conversation recently, and by the popular definition of the word (two consecutive quarters of reducing GDP) the US was already in recession by August. Officially, the US is never in recession unless a select group of economists picked by the National Bureau of Economic Research says it is, and, so far, they are not saying that because, in general, the economy is still doing quite well. However, there is a general feeling that a recession is looming if for no other reason than we talk ourselves into it, even if market forces don't force one on us. While the Fed hopes to avoid such a recession, that seems to be a price they are willing to pay to bring inflation under control.

One area that has started to feel the effects of rising interest rates is the housing market. Mortgage rates are not directly linked to the Fed's interest rate, but they have a tendency to follow them, and rising mortgage rates have been having an effect on demand for new housing. Of course, that has been starting from a high level of demand and a level of supply that was struggling to meet the demand. However, house prices have not shown much of a downward movement. Rents have also been rising in line with other costs, and rents get locked in for a year or more, so we are not likely to see those costs reducing much.

One effect the construction industry could see from a reduction in the housing market is that contractors who work in that market are going to be looking for other work to bid on. That can lead to even more competition for what is likely to be a diminishing volume of work as building owners face increasing finance costs and reduced demand for their goods and services as recession fears rise. This should bring construction costs under control and maybe reduce them, leading to opportunities for those who can afford to take them. Reductions in material costs are being seen, but they are mostly still well above the prices from a year ago, as are prices generally, so the Fed seems to still have reason to keep interest rates elevated. Unfortunately, since the inflation is largely a result of supply-chain issues, Covid, and the Russia-Ukraine war – none of which is under the Fed's control – keeping inflation low is likely to be a tough job.

Fed Interest Rate



To add to the problems, Russia went and invaded Ukraine sparking a fuel shortage that OPEC seems reluctant or unable to compensate for. The war also affected the food supply, which was already being hampered by climate change and workers being unavailable due to Covid. Fuel and food prices have been dropping from their highs, but they remain elevated well above pre-pandemic levels.

Unemployment has been close to record low levels and, while job growth figures faltered a bit in May, by July it was