the 9:05 An excerpt from Bailard's Quarterly Review of Economic and Market Developments Q4 2021

The Current Supply Chain Crisis and its Impact on Real Estate

Jamil Harkness, Research and Performance Associate - Real Estate, explores the spectrum of impacts the persistent supply chain bottlenecks have bestowed upon the real estate sector.

Until approximately 18 months ago, very few people outside of logistics providers, manufacturers, and retailers gave much thought to the supply chain. Since the start of the post-WWII consumption boom in the U.S., whenever consumers wanted something (a car, clothing, electronics, whatever), they would go to the store (or online), buy it, and take it home (or have it delivered), never giving much thought to its source or how it got to the store. This all changed with COVID, the recession it triggered, the government's response to the pandemic and recession, and the ongoing recovery. The aftermath of the pandemic-induced recession has resulted in a snarled global supply chain causing delays in the delivery of raw materials, components, and finished goods from all over the world to the U.S.

Goods in global transit

According to the U.S. Census Bureau, approximately 33% of United States imports come from five Asian countries: China, Japan, South Korea, Taiwan, and Vietnam. Of these, China is by far the largest, accounting for 18% of all imports into the U.S. and a disproportionate share (55%) of imports from Asia. In addition, 90% of all items exported to the U.S. from the Far East travel by sea.[1] So, when there are problems at Asian ports and/or holdups at domestic ports, this strains the ability of U.S. manufacturers to produce products and U.S. retailers purchasing finished products from Asia to satisfy consumer demand for everything from toys to appliances to computers.

In a recent article by *The Wall Street Journal*, Phil Levy (chief economist at Flexport, a San Francisco-based tech company providing logistics services) was quoted saying that "The typical transit time for a container pre-pandemic was 71 days. That's how long it took for the container to depart from Shanghai; discharge in Los Angeles; proceed to a warehouse near, say, Chicago; get trucked empty back to California; and then return to Shanghai. The current transit time is 117 days or more. The greatest delays are in the U.S., owing to port bottlenecks and trucking shortages."

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Ports are built to meet peak demand. The peak season is usually August through November as retailers seek to stock their shelves for the Thanksgiving through Christmas holidays. The pandemic was the catalyst for supply chain bottlenecks at Asian and domestic ports alike, disrupting the smooth flow of products into and around the U.S. So, what's going on?

First of all, excessive fiscal and monetary stimulus, provided by both the U.S. government and the Federal Reserve, catalyzed extraordinary liquidity for U.S.

1 *"An Insider Explains the Supply-Chain Crisis", The Wall Street Journal, 12/18/2021*

consumers. Secondly, lock-downs stimulated significant pent-up demand for "stuff" and created a tilt in U.S. consumer behavior to buying more goods (from 31% of total consumption expenditures to 35%) and less services (from 69% of expenditures to 65%).[1] Third, work-place restrictions, generous unemployment benefits, and mandates have disrupted the delicate employment balance at ports and in transportation networks, fueling a labor shortage. Finally, as Phil Levy says, "a system that can barely handle a normal peak season has seen above peak demand for about an entire year and a half, placing it under a cumulative strain that it wasn't really built for." All of these factors are interrelated and exacerbated by each other: a perfect storm of elements rippling through the U.S. economy provoking frustration, concern, anger, and higher prices.

What does this all mean for real estate?

Each of the four main property types has been, and will continue to be, severely impacted until the kinks in the pipeline have been ironed out.

The most obviously "disrupted" property category is industrial.

Consumers' voracious appetite for goods at a time when those goods (durables and non-durables) are not readily available is driving unprecedented demand for industrial space for both in-store and e-commerce retailers. As a result, the industrial vacancy rate hit a record low (4.6%) at the end of Q3 2021 at the same time that rents increased 7.1%, year-over-year, to a record high, according to CoStar. The increase in demand has caused companies to build more flexibility and resilience into their supply chains. The goal seems to be to move from a "just-in-time" to a "just-in-case" inventory supply strategy. Industrial user appetite for space remained insatiable, which triggered record construction of space: 164 million square feet (SF) in the third quarter, with speculative development representing the lion's share of that activity. In addition, supply chain logjams are impacting delivery of space; according to Prologis, development project timelines are likely to increase by four to eight months over the next two to three years.

Another issue caused by the current supply chain mess is rising transportation costs to move goods from ports to warehouses inland. According to the CBRE Supply Chain Advisory group, transportation costs are increasing faster than rents. Companies are combatting the rise in transportation costs by renting more space in "convenient" locations to try to minimize long-distance transport. Many of these warehouses are close to ports exacerbating a supply/demand imbalance and driving sky-high rents even higher.

The impact of supply chain backups on the retail real estate sector overlaps with industrial as most retailers aggregate inventory in warehouses before distributing it to stores. Retailers are acting across multiple fronts to control volatility and guarantee that products are accessible to meet consumer demand. For example, major retailers such as Walmart, American Eagle, Home Depot, and others have invested in direct shipping strategies (via chartering ships). In addition, theses retailers are diversifying the U.S. ports receiving their products. Retailers are also transporting goods on planes to get them to stores in order to satisfy consumer demand… an expensive, yet necessary, strategy for higher-value goods. In Q3 2021, retail space demand surged to 32 million SF, the highest quarterly net absorption in the last four years. And, over the first three quarters of 2021, net absorption was a positive 54 million SF, more than making up for the losses in 2020. Rents reacted accordingly, increasing to an average of $22.30/SF… 10% higher than the ten-year average.

Supply chain gridlock is negatively impacting multifamily developers and operators alike as construction timelines get extended because the delivery of building materials, appliances, furniture, and supplies is delayed. At the same time, the cost of everything from lumber to concrete, copper pipes, carpeting, and paint is increasing at the fastest pace in 40 years as demand swamps supply. According to the U.S. Bureau of Labor Statistics (BLS), water heaters, major appliances, and plumbing fixtures cost 12.0% more than they did a year ago. Inflationary pressures on critical input items to multifamily residential construction have increased development costs (including labor) by ~17.0%, year-over-year.[2] The effects of higher development costs are impacting developers' ability to produce adequate new supply. According to CoStar, as of Q3 2021, the number

2 *https://fred.stlouisfed.org/series/WPUIP231120*

of under-construction multifamily units was 655,000, down 4.3% year-over-year. The fall-off in development activity—combined with a surge in demand—resulted in average rental rate increases of 10.3% during the year, while the vacancy rate fell to a record low of 4.6%. Higher construction costs will make it increasingly difficult for multifamily developers to keep pace with demand.

Office properties are going through a generational reckoning the likes of which investors haven't seen in 30 years. The twin body-blows of anemic demand (driven by a fundamental "re-think" of office space utilization) and soaring tenant improvement costs (resulting from supply chain logjams) have put immense financial pressure on building owners. Higher build-out costs—especially for "MEP systems" (Mechanical, Electrical, and Plumbing)—due to the increased cost of copper, aluminum, plastic pipes, and valves are making lease economics ever more challenging for landlords. Copper and aluminum prices are up 28.0% and 39.0%, respectively, year-over-year. In addition, plastic pipe and valve prices are also up 70.0% and 6.0%, respectively.[3] MEP systems usually account for 40% to 45% of a tenant improvement project's cost.[4] Office property owners are engaged in "hand-to-hand combat" to keep existing tenants and attract new ones at the same time that lease economics are being squeezed by higher construction costs. For the near term, all office markets will be groping for a semblance of supply/demand equilibrium. Depending upon specific market economic drivers, that balance could come in the next 12 to 18 months or it could take several years. One thing for sure, tenants should enjoy negotiating leverage with landlords until there is a discernable shift in that equation.

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The continued influence of inflation

The elephant in the room in the current supply chain crisis is inflation. President Biden believes that current inflation (the highest since the early 1980s) is primarily attributable to supply chain bottlenecks, temporary price spikes on cars, and price-gauging by businesses. Economist and *The New York Times* columnist Paul Krugman cites a recent report from the Bank for International Settlements, which estimates that price rises caused by supply chain kinks have contributed 2.8% (of the 6.8% inflation rate) to the overall increased cost of goods during the past year. Regardless, the impact of supply chain snarls is real in terms of its impact on prices, extended development/construction timeframes, and overall increased "friction" to the process of buying and selling raw materials, parts/components, and finished goods. And the impact on all property types has been, is, and will remain material. However, as long as the economy roars ahead and the demand by consumers for goods and services remains robust, any negative fall-out for property owners should be manageable.

Wrinkles in the supply chain won't be ironed out anytime soon. In many ways, the supply chain crisis has revealed nuances and information vital to each property sector's long-term success. The lessons will be valuable for all real estate owners if they are open to learning from them. The current challenges can be a catalyst for companies to establish new relationships and implement new processes to better hedge against future disruptions. As is usually the case, property owners that have a learning culture and thrive on change because of their adaptability will weather the current crisis better than their less-nimble peers.

3 *https://tradingeconomics.com/commodity/aluminum, https://tradingeconomics.com/commodity/copper, https://fred.stlouisfed.org/series/PCU32612232612213*
4 *https://www.cushmanwakefield.com/en/united-states/insights/office-tenant-improvement-cost-guide-north-america*

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Since 1978, we've held a weekly company-wide meeting during which we talk about the prior week's activities and those anticipated in the week to come. We refer to this meeting, which begins just after nine each Monday morning, as "the 9:05." Just as the 9:05 enables us to share our knowledge and insights with each other, this newsletter provides us with a valuable means of communicating with our clients. Hence its title: *the 9:05*.

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