Logistics post-COVID

Global distribution networks in a post-virus world | White paper

By: **Sean Rymell,** Real Estate & Private Markets, Research & Strategy

Following our series on the changing nature of offices, we now turn to the industrial and logistics market. In this paper, we consider how structural drivers may accelerate the creation of localized supply chains within Europe.

Long after the medical impact of the virus has passed, operators will need to rethink how best supply consumers and businesses operate effectively while mitigating the risk of any future major disruptions.

Has COVID-19 changed logistics forever?

This paper explores the impact of COVID-19 on both the industrial sector and European distribution networks. We leverage a variety of economic and high frequency indicators to see how the demand for logistics real estate may evolve in the coming years.

Setting the scene

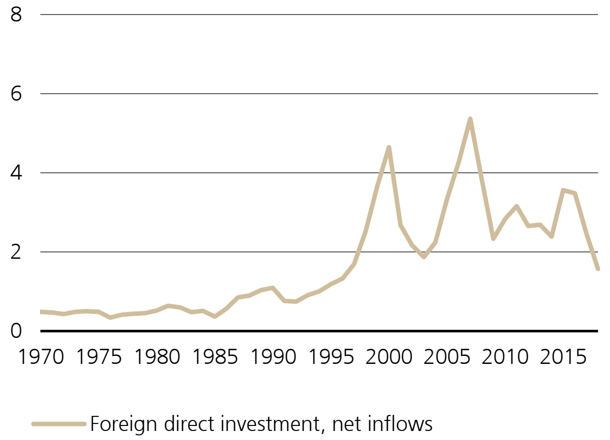
Before we consider trade networks in the present, it is worth briefly noting how we got to where we are today. Globalization is actually a more transient phenomenon than people think, and has come and gone throughout history. We can talk about different eras of globalization; the previous period of globalization 1870-1914 for example, was a period of greater global integration than the present day in terms of trade, net migration and capital flows. Trade expanded exponentially driven by imperial expansion, railways and steam boats enabled mass movement of people, while finance was raised in Europe to fund various investments in exotic locations, such as Latin America.

This golden age of progress was tragically snuffed out by the First World War and trade did not reach this level of integration until the1960s/1970s. Subsequently, trade and cross-border flows of capital began to increase, aided greatly by the fall of the Iron Curtain in 1989 and the accession of China to the world trade organization in 2003. This saw big increases in cross-border flows of goods, capital and labor and ushered in an era where growth rates in trade consistently outperformed GDP.

Since then, things have stagnated somewhat. There are many hard and soft indicators of globalization but on pretty much all categories the direction of travel is down or sideways. Trade as a share of GDP has been largely stagnant since the global financial crisis, while foreign direct investment has fallen away significantly (Figure 1). This has been driven by several factors; an increasingly fractious atmosphere among world leaders, and political hostility among votes has led to the re-imposition of trade barriers, particularly the tariffs imposed by the US on China. On the other side of the spectrum, rising inflation and wage costs have gradually started to chip away at China's status as the engine of global export markets.

In this white paper, we will argue that alongside these push factors, there are also numerous pull factors that may draw more activity back to Europe: self-sufficiency, digitalization, ecommerce 2.0 and ESG. These themes are well known, but the crisis has thrown them into even sharper focus.

Figure 1: Exports of goods and services, foreign direct investments (net inflows, % of GDP)



Source: World Bank; OECD, 2020

1. Self-reliance: a new, stronger economic model

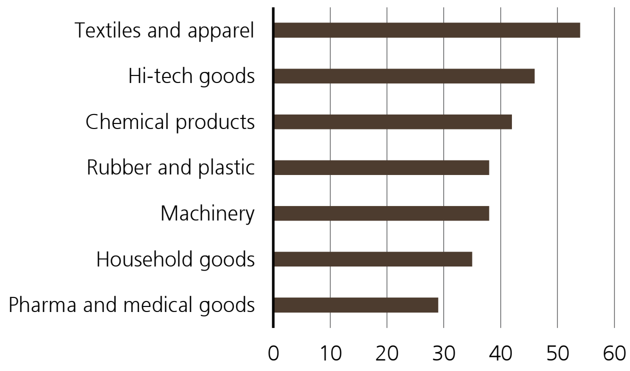
During a speech on the 14 June in which the French president Emmanuel Macron announced the relaxation of lockdown measures, he also commented on his vision of economic relations in a post-COVID-19 world:

"The only answer is to build a new, stronger economic model, to work and produce more, so as not to rely on others."

You would be forgiven for thinking that this comment actually came from US president Donald Trump. However, France like the rest of Europe was caught out by the onset of COVID-19 and ultimately its dependence on global supply chains. As the virus took hold, supply chains began to fracture and governments struggled to source medical supplies and medicines, with rumors even swirling at one point that the supermarkets may run out of food.

During the pandemic the focus was on essential goods, however there are various discretionary segments which are similarly reliant on global supply chains (Figure 2). Textiles and apparel are the most exposed with 54% of products sourced in China, while high-tech goods such as electronics come a close second with around 46% of their stock originating in China. Even the lowest category, pharmaceutical and medical supplies has just fewer than 30% coming from China, which is still a large chunk. Moreover, as described above, this was a sector that was shown to be vulnerable during the pandemic.

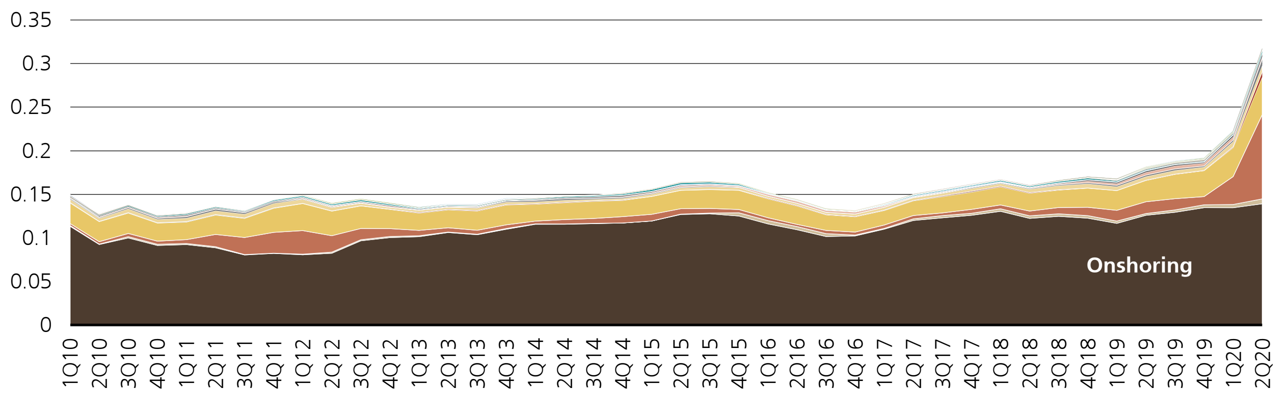
Figure 2: Share of exports from China (%)



Source: UBS Investment Bank, May 2020

This is reflected in the private sector as well; UBS Evidence Lab has developed a tool called Earnings Call Analyzer (see Figure 3), which uses natural language processing algorithms to look at the frequency of certain terms used by CEOs and analysts in official company communications. The second quarter of 2020 saw a 42% increase in terms related to supply chain diversification; while terms such as "onshoring" and "nearshoring" featured prominently, the largest increase by far was in the phrase "supply chain disruption." This introduces an interesting shift in the concept of global supply chains; having previously been driven by considerations of cost, the emphasis appears to now be on risk management.

Figure 3: Mention of supply chain-related terms (# mentions per transcript)



Source: UBS Evidence Lab, June 2020

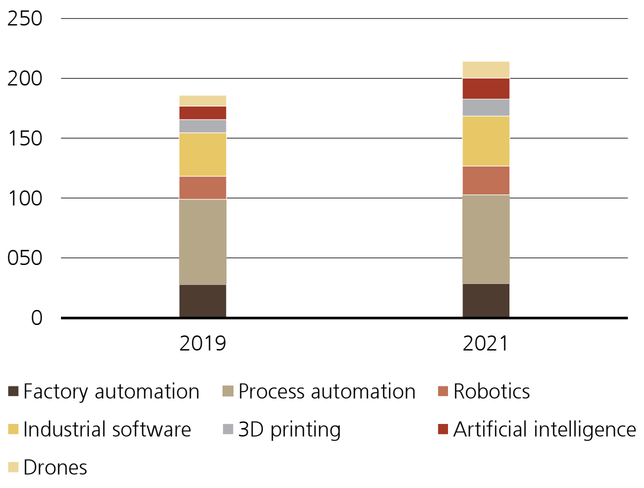
This trend is further illustrated by a recent survey from BCI group, which established that end-to-end visibility in supply chains was the biggest concern of CEOs in charge of logistics companies. Further to this, Prologis argued recently that we would switch from a "just in time" to a "just in case" model, which would see companies stockpile around 5-10% more inventory. In the US alone, this would require a further 285-570 million sqm of warehousing space.

Finally, widespread investment in infrastructure is likely after COVID-19 to provide fiscal stimulus to the local market. There have already been various EU-wide projects to invest in road, rail, port and air infrastructure and the recent GBP 5 billion pledge by British Prime Minister Boris Johnson should play a similar role in the UK. If implemented well, this has the potential to drive efficiencies in local networks and integrate more peripheral locations.

2. Digitalization: the rise of the robots?

The growth of the digital economy should have a transformative effect on European industrial markets as well. A push factor in much of the outsourcing of the 1990s and 2000s was higher labor costs and greater unionization among European workers. Increased use of automation in modern warehouses is likely to mitigate this to some extent. By now, most of us are familiar with Kiva robots in Amazon warehouses and Ocado's grid system for automating palette operation. While this remains a relatively small part of the market, there are other relevant areas which are expected to grow rapidly related to improved software, process automation and even 3D printers (Figure 4).

Figure 4: Global automation market size, by segment
(USD bn)



Source: Statista, May 2020

Many landlords have begun thinking about the future in terms of making sure warehouses have large power sources, charge points for electric cars, and ensuring warehouses have full connectivity to enable electronic tracking systems and other efficiency drivers. Over the short to medium-term, it is conceivable this could erode the cost benefit of outsourced production even further.

Moreover, besides supporting traditional industrial, the digitalized economy has created demand for another type of warehouse: data centers. The growth of tech-enabled devices such as smartphones, driverless cars and cloud services has precipitated huge increases in processing power, as well as the need for greater data storage. This trend has been driven further by COVID-19, as home-restricted consumers have made much greater use of social media and online streaming services.

It is expected that the global cloud infrastructure market will grow at a CAGR of 25% over the next five years, and unlike with traditional distribution these facilities need to be present locally.

A data center's useful value is largely determined by latency, which is the speed at which data transfer can occur. Along with the quality of the fiber optic network, it is essential that the data center (or a node of the network) is located close to the end user or to high quality digital infrastructure

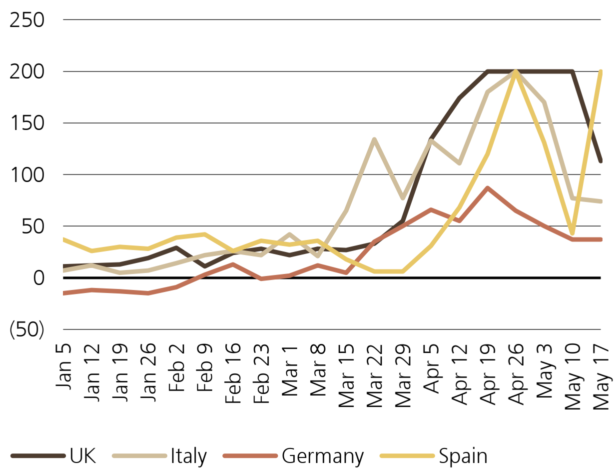
3. E-commerce 2.0: bigger and better

A further driver of the greater need for warehouse space in Europe is a topic which has been on the agenda for a while; e-commerce. Since the onset of the pandemic, online retail sales have surged across all major European economies (Figure 5), as consumers have been partly mandated to stay at home and partly stayed away from the shops for fear of infection. This has had a particularly devastating impact on physical retailers, with some commenting the pandemic has brought the demise of the high street forward by several years.

There are question marks about the permanence of this shift, however, the evidence suggests occupiers are not viewing it as entirely temporary. 2Q20 set a new record for take-up in the UK logistics market, the lion's share of which was driven by ecommerce-related functions. More interestingly, only around one fifth (22%) of these were short-term lets (12 months or under). Additionally, of the 175,000 personnel hired by Amazon during the pandemic, 70% were on permanent contracts. Jeff Bezos always argued you should create the future rather than anticipate it, and maybe Amazon is doing just that.

In the context of logistics real estate, this has fueled themes which pre-dated COVID-19, mainly the drive among tenants to secure enough space both in terms of XXL format warehouses and smaller last mile facilities close to city centers. Urban logistics in particular has been a focus for investors over the last year, and this area has seen increased activity since the onset of the pandemic.

Figure 5: Weekly increase in online orders (YoY)



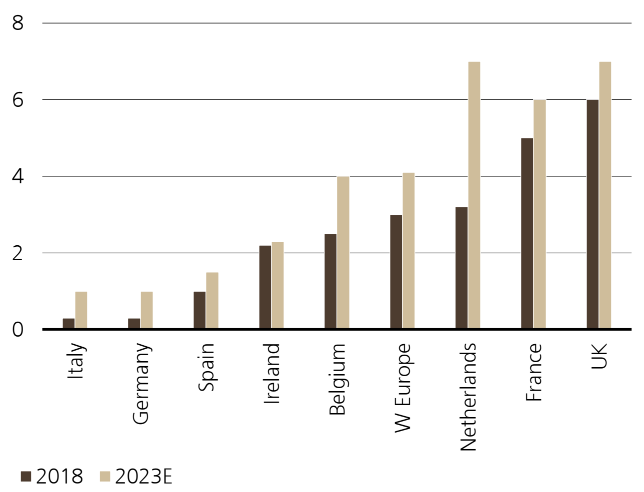
Source: Statista, June 2020

This suggests demand from this sector will remain high and, due to the more granular nature of e-commerce distribution, is likely to see very different requirements come to the market in Europe when compared with traditional industrial uses. Due to the granular nature of the business and high volume of reverse logistics (returns), warehouses need to be generally bigger, higher spec and more tech-enabled.

One area which has majorly benefitted from COVID-19 has been online grocery shopping (Figure 6). This particular retail segment was somewhat fledgling pre-COVID-19; as most European countries see a very low share of food shopping done online (less than 5%). There has been relatively little growth in these segments as both supermarkets and consumers have had relatively little enthusiasm for it, the former because it is margin dilutive and the latter largely due to mistrust in the supermarket to pick fresh products.

However, the necessity of quarantine has most likely made consumers more comfortable with online shopping. UBS CIO estimates from company reports and various data sources that online grocery retail will grow from around USD 50 billion today, to around USD 365 billion in 2030, a CAGR of 16%.

Figure 6: Online food shopping (% share)



Source: UBS Investment Bank, May 2020

Online grocery remains relatively fragmented and niche in terms of its profile but widespread adoption of online grocery shopping would most likely drive further growth in this sector.

To accommodate this demand requires investment in more specialized branches of logistics, such as cold storage facilities to preserve a greater variety of products for longer timespans. Supermarkets will also need to move away from relying on human pickers in store to meet online demand.

There will most likely need to be an 'Amazonification' of supplier networks, encompassing large fulfillment centers, as well as a wider network of micro-fulfillment centers, similar to last mile facilities.

4. ESG: going green

It is probably now quite difficult to remember a world in which COVID-19 did not dominate every headline. However, when we do cast our minds back it is possible to remember that ESG was very much at the top of investor agendas. The pandemic will sharpen this debate as well as we have observed how nature thrived during the lockdown and reduced production has led to notably lower emissions in most major global cities, particularly in APAC.

Consumers are therefore likely to take a more dim view of globalized supply chains and the greater associated carbon footprint. While many operators have managed to avoid this issue for many years, the growth in ESG focused funds in both the private and public markets, will most likely lead to increased pressure and eventually material discounts on any company seen to be not keeping up.

Another highly topical issue is that of food storage. Globally around 30% of food is lost across the supply chain, before you even account for products expiring following post-purchase. This has been a key focus especially as public awareness of food poverty has risen. To offset this, Europe will need more cold storage facilities and will also need to retrofit existing facilities to meet demand. This theme ties in well with increased online grocery demand discussed in the previous section, as more granular delivery will require more care in preserving food products.

There is also the 'social' side of ESG to consider. Oxford economics is currently forecasting Eurozone unemployment to reach nearly 10% in 3Q of this year, and warehouses typically rely on large pools of labor. Developing new large-format schemes in areas of high unemployment could allow some of this slack in the labor to be taken up and create new jobs locally for displaced workers. There is a chance automation may limit this somewhat, although in the short-term it is likely that labor will still be important for most occupiers.

Finally the growth in green energy has created new opportunities for landlords. Logistics warehouses are very well suited to solar panels, due to their large flat shape and green energy currently attracts large subsidies from the EU. As a result, industry sources have suggested that fitting large warehouses with solar panels – either to sell to tenants or sell back to the grid – can actually be highly accretive to returns. Even if these subsidies end, the growth in green-oriented fund management is likely to see carbon neutral warehouses attract a decent premium in capital markets.

So what's the catch?

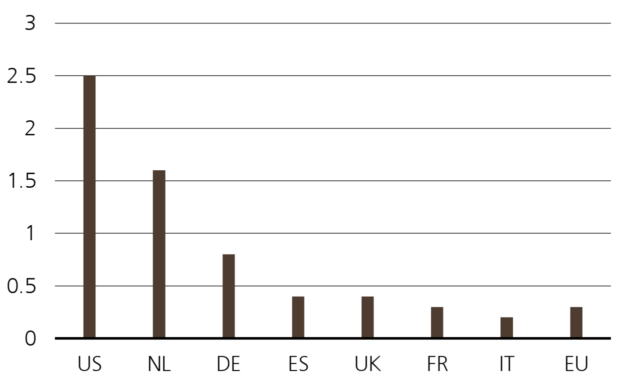
There are certainly drivers for renationalization of industrial functions to Europe but it is not realistic to see this as an inevitable process for four reasons.

1. Capacity

First and foremost, there are practical constraints to bringing production back on a large scale. Europe is lagging behind many other global regions in terms of modern warehouse stock per capita, particularly the US to which it is often compared (Figure7).

This is particularly apparent in the e-commerce sector, when during the pandemic home deliveries took weeks rather than days and many operators were forced to close their websites. Moreover, as operators become increasingly aware of their ESG obligations minimizing the distance goods are transported, as well as creating jobs closer to home markets will become more attractive. This could act as a brake within e-commerce as, once lockdown is over, consumers may be less keen to have vans and trucks bring them products available at their local store.

Figure 7: Modern warehousing stock per capita



Source: Prologis, 2019

2. Constrained development

The ability to expand stock may quickly become challenging as well, since developers have been reluctant since the GFC to take on speculative development risk. This is changing, albeit generally not rapidly enough to keep up with demand.

Moreover, modern logistics networks require warehouses to be close to major centers of consumption, particularly e-commerce operators.

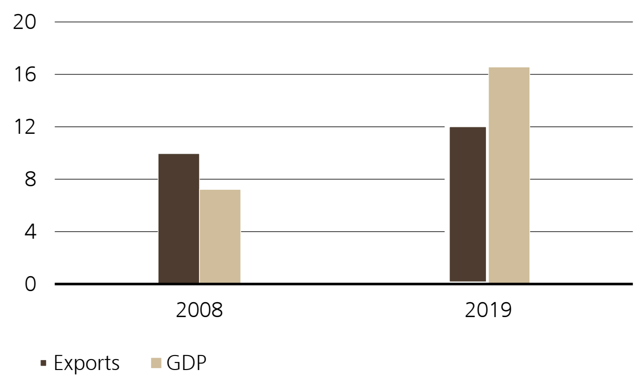
Planning authorities are generally reluctant to zone land for industrial uses as it provides less tax revenue than alternative uses and is unpopular with local residents due to its perceived 'dirty' status. London, for instance saw industrial land lost at 3 x the projected rate over a five year period[1]

3. China's dominance

Putting questions of capacity and elasticity aside, it is no small measure just to bring everything back from China. As Figure 8 shows, China has massively increased its share of both global GDP and exports over the last decade, a process which cannot be reversed overnight.

In any case, it is possibly Eurocentric to think about reshoring exclusively in an east-west context. China will soon be the world's largest economy and is gradually transitioning to a consumer-led model. This will likely mean they will have greater needs in terms of provision of goods; in fact the aforementioned Earnings Call Analyzer saw the greatest mention of words linked to nearshoring by companies based in APAC.

Figure 8: China as share of world GDP (%)



Source: Oxford Economics, June 2020

We have heard anecdotally that some Chinese car manufacturers were aggrieved that they did not receive car parts from Europe in order to complete their final assemblies during COVID-19 and are now thinking of moving this production function to China as well.

China also vastly improved its innovation capabilities in recent years; having been seen as largely imitative before, it now leads the US in terms of R&D intensity, high-tech density and researcher concentration[2]. Taking all this into account, it is conceivable we could see an east-west pull rather than vice versa.

[1] Segro, Keep London Working, 2017
[2] Statista survey, 2020

4. Complexity of modern supply chains
Finally, localization is not as simple as taking a factory from China and placing it somewhere in Europe. In fact, most modern supply chains are multi-continental in scope and contain a vast range of raw materials and intermediate goods before the finished goods are even ready for export. It is not uncommon for there to be multiple assemblies in different locations. As a result of this, it is very difficult to talk about re-shoring without specifying what exactly is being re-shored and where to.

Looking to the future

It is very easy in extreme times to over-extrapolate from current data. Much of the talk about homeworking and the death of the office, for example, overlooks the fact that the same thing was predicted when email was invented. Similarly, it did not take air passenger numbers long to return to their previous levels following the 9/11 attacks.

Nearshoring is no different; operators will not (and cannot) bring all production processes back to Europe. It is equally unlikely that post-COVID-19, consumers will simply remain at home the whole time streaming video content and ordering everything online. It is noteworthy that a UBS Evidence Lab survey showed that far more respondents who bought streaming subscriptions to platforms like Netflix and Hulu said they would cancel after lockdown. The large queues outside British shops on June 15 also indicated some of the e-commerce gains may not be permanent.

However, change is typically a dialectic process in which the two extremes meet somewhere in the middle. Additionally, COVID-19 is not the cause of this shift, rather a catalyst for it. As we argued in the first section, most of these themes were underway before the virus hit.

Nonetheless, we have noticed a discernible shift in supply chain management from cost control to risk management and mitigation. Occupiers are beginning to value being close to the end consumer and making sure they can have confidence in execution and continuous operation of their distribution networks.

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It is hard to envision how things will progress in these difficult times, but there are indications the importance of global logistics networks are diminishing slightly. A more feasible longer-term view is a multi-regional world in which the benefits of global and local supply chains are both utilized, and in which various trade 'blocs' interact with each other despite having a reasonable amount of self-sufficiency.

The increasing needs of data storage will need to be accommodated within these blocks as well, as will heightened levels of online retail provision. While this will not lead to a wholescale reindustrialization of Europe, it will certainly drive demand for much greater warehousing stock; this will partly be in terms of large format schemes in more peripheral locations, but mostly urban warehouses of varying size which remain in chronic under-supply.

Real Estate Research & Strategy Team – Europe
Gunnar Herm
Zachary Gauge
Sean Rymell

For more information, please contact:

UBS Asset Management
Real Estate & Private Markets (REPM)
Real Estate Research – Europe

Sean Rymell
+44 207 901 5102
sean.rymell@ubs.com

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