Tradeshift

The Tradeshift Index of Global Trade Health

Q4 2021

Global trade passes the latest resilience test… for now at least.

The Omicron variant proved an unwelcome Christmas gift for global trade in Q4. But unlike previous waves, supply chains have so far passed the latest test of their resilience.

Our latest Index of Global Trade Health shows that cumulative transaction volume growth across the Tradeshift platform stayed flat in Q4 compared to pre-pandemic forecasts. Recent history suggests that things could have been a lot worse.

Fears that the significant drop in order volumes we saw in Q3 could be the beginning of more profound and protracted slowdown in activity also proved unfounded. Instead, ordering activity appears to be returning to a more predictable pattern. With recent data also suggesting that the supply chain bottlenecks of the past year are beginning to ease, we could well be looking at a gradual calming of the waters heading into 2022.

That doesn't mean it will necessarily be plain sailing. US supply chain activity appears to be pulling away from the pack on the back of a booming economy that seems - so far at least - largely unaffected by spiking Covid cases. Supply chains across the UK and the Eurozone have had a tougher time however, with activity levels receding in Q4. Low invoice volumes across almost every region are also a reminder that while fulfilment issues may be easing, suppliers are still facing significant cash flow and capacity pressures. This will continue to have a knock-on effect on global trade in the quarters to come.

Then there's China. The country's tough stance on containing the spread of Covid means local supply chains are more vulnerable to shutdowns than other manufacturing heavyweights. Our latest data shows Chinese trade activity has continued to slow, dropping by 10 points in Q4. An Index score of 86 at the end of 2021 means activity across Chinese supply chains is lower than at any point since the beginning of the pandemic.

As disruptions caused in the early stages of the pandemic have shown, pressures in one country have significant knock-on effects both up and downstream. A spate of lockdowns in key industrial regions across China could trigger more shortages of crucial manufacturing components and extended order backlogs. Omicron may not have been quite the Grinch that stole Christmas, but don't be surprised if it has a sting in the tail.

At a glance findings

1. Cumulative growth in transaction volumes remained flat against pre-pandemic forecasts despite early predictions that the Omicron variant could trigger a steep fall in activity.

2. Order volumes appeared to stabilize in Q4 after wild fluctuations over the previous two quarters. Invoice volumes however remained flat, suggesting suppliers are still struggling to clear a backlog of orders from earlier in the year.

3. US supply chain activity finished the year with an overall Index score of 97, just 3 points below the level Tradeshift had forecast for the period prior to the pandemic.

4. In China, tough Covid prevention measures, together with weakening demand triggered a 10 point fall in transaction volumes against the forecast range. Q4's Index score of 86 puts cumulative growth in Chinese supply chain activity at its lowest level since the beginning of the pandemic

5. The recovery in supply chain activity across the Eurozone stalled in Q4, dropping 8 points compared to the expected range. A 20 point quarter-on-quarter fall in invoice volumes indicates fulfilment issues remain a key concern across the region, though the overall picture is less volatile than in recent quarters.

6. Activity across UK supply chains fell by 9 points in Q4. Demand appears high, with order volume growth remaining comfortably above the expected range, but a steep drop in invoice volumes during the quarter suggests ongoing pressures within the supplier base.

7. Activity across the worldwide transport and logistics sector climbed above the expected range for the first time in six months during Q4. The acceleration supports claims that supply chain bottlenecks are beginning to ease.

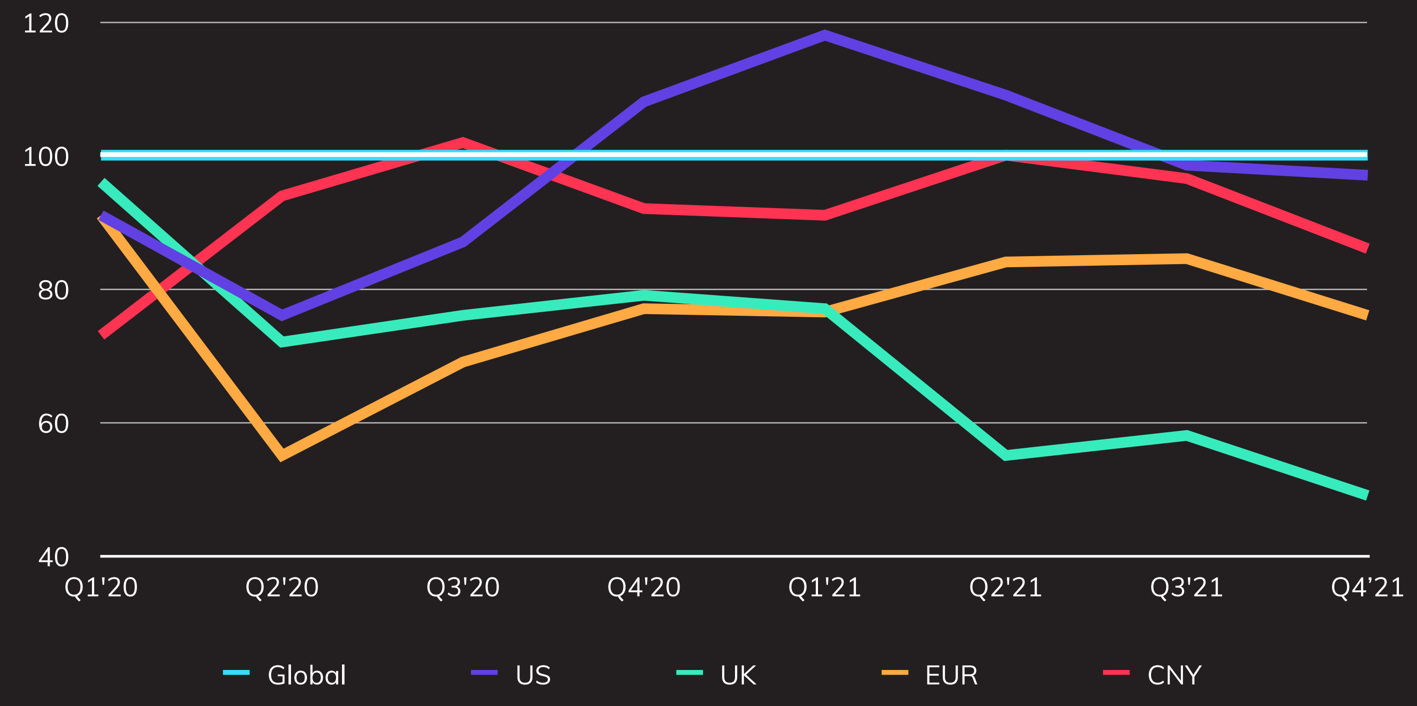
8. Transactions volumes in the manufacturing sector dropped sharply in Q4, finishing the year well below the expected range. Some commentators attribute the slowdown to a reluctance from customers to place orders before inventories were worked through.

Charting the recovery

Cumulative activity growth between buyers and suppliers on the Tradeshift platform since Q1 2020

Global trade activity stabilizes despite COVID spike

Cumulative transaction volume growth (orders + invoices) indexed against pre-pandemic forecast



Surging cases of the Omicron variant tempered momentum across global supply chains in Q4, but Tradeshift's data suggests supply chains are now better prepared to weather disruption.

Global transaction volume growth across the Tradeshift platform remained flat in Q4, finishing the year 25 points below the pre-pandemic forecast range. The data indicates we are still some way from 'normal,' but the fact recent disruptions have not triggered a significant fall in momentum is encouraging.

Supply chains activity in the US is opening up a gap on rest of the world, and seems to have shed some of the volatility which characterized activity across the region in previous quarters. Growth remained flat against the pre-pandemic forecast range in Q4. But an overall index score of 97 puts US supply chains very close to the expected range.

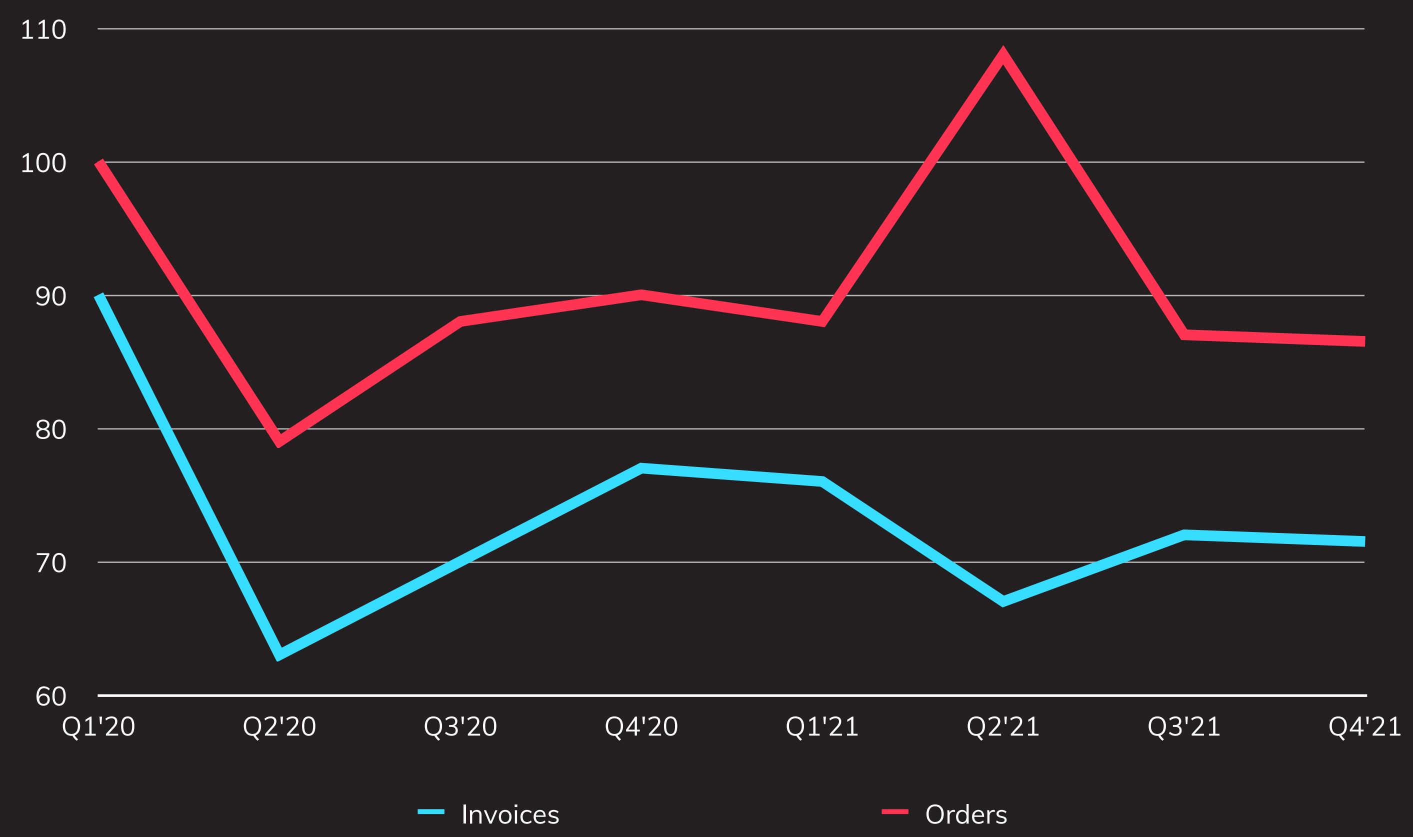
Chinese supply chains had a more challenging Q4. Weakened demand and a strict lockdown policy which caused disruption to factory production, meant trade activity slipped by 10 points.

Activity across the Eurozone also lost momentum in Q4, falling a further 8 points below the forecast range. The imposition of tough new coronavirus containment measures appears to have had an impact on supply chain activity across the region. A similar pattern emerged in the UK during Q4 where trade activity dropped 9 points, leaving overall activity growth since the pandemic barely half the forecast range.

This loss of momentum in the UK and Europe is significant, but underlying activity levels during the quarter appear relatively stable (see our section on QoQ performance across territories). If things stay as they are (and that's a big 'If'), we should see activity begin to accelerate again in 2022.

Demand spikes settle, but low invoice volumes suggest backlogs could last another year

Cumulative growth in invoices and orders indexed against pre-pandemic levels



Order volume growth dipped by 0.5 points in Q4, and appears to be settling after a pronounced spike in activity in Q2. The modest dip in order volumes suggests news of the Omicron variant did not spook buyers in the way that previous waves had done.

With demand appearing to taper, there are some early signs that the bottlenecks which plagued supply chains are starting to ease.

Ocean freight rates have started to fall after reaching record highs, while a recent survey of executives by Oxford Economics found that almost all believe that the supply chain crisis may have peaked.

Cooling order volumes are likely to offer some welcome relief to suppliers who have been buckling under pressure to accommodate spikes in demand through the pandemic.

The fact that invoice volume growth on Tradeshift's platform also flattened in Q4 is concerning however, since it suggests suppliers are still struggling to accelerate delivery cycles on orders stemming from earlier in the year.

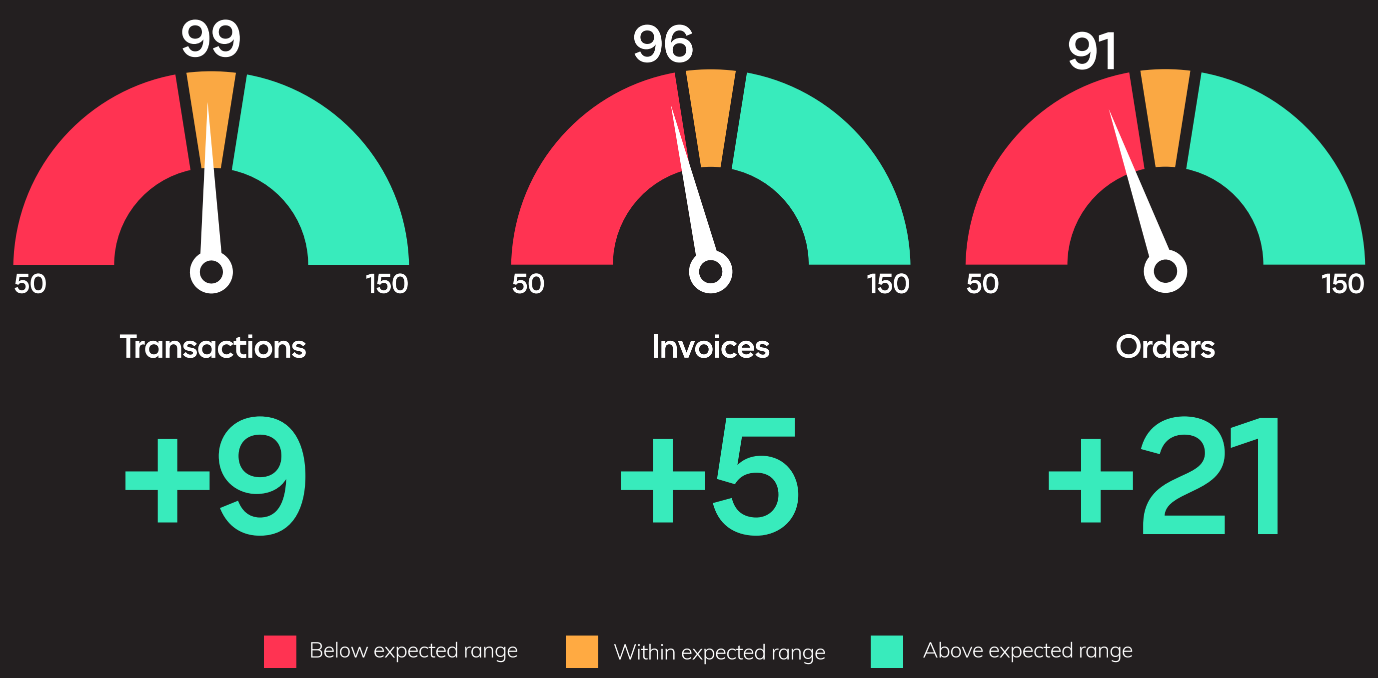
The very worst of the supply chain crisis may be over, but if invoice volumes continue to follow the current trajectory, then it could be at least a year before we see order backlogs fully subside. Breaking this cycle will require a far more collaborative relationship between buyer and supplier including measures to inject additional working capital into the supplier ecosystem.

Q4 momentum deep-dive

Quarter on quarter performance across key territories

US: Supply chains head into 2022 on a stable footing

US trade activity - quarter on quarter index scores



US supply chains were the stand out winners from Q4, being the only territory to come close to pre-pandemic predictions for trade activity.

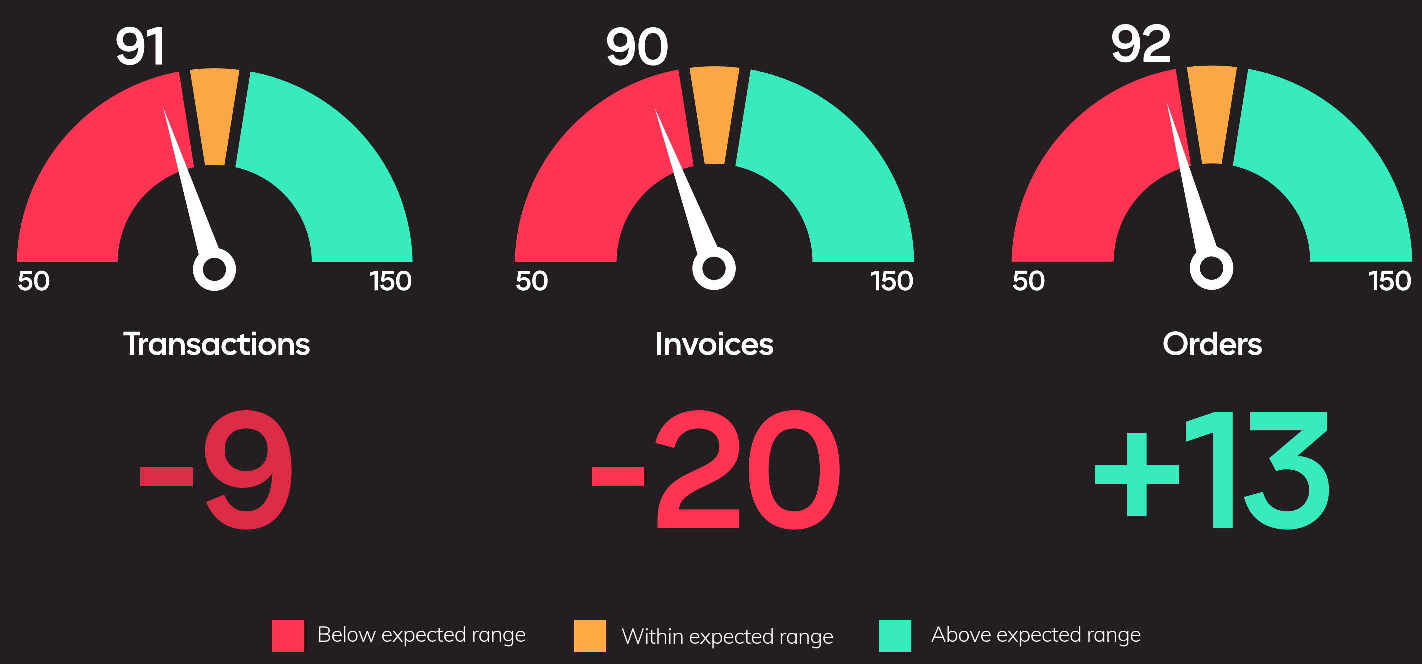
One of the most encouraging signs from our deeper dive into the data is the continued acceleration in invoice numbers from US suppliers. In our Q3 index we saw invoice traffic climb 12 points compared to the previous quarter. A further rise of 5 points in Q4 means invoice volumes finished the year comfortably within the expected range. The acceleration suggest that suppliers are starting to clear orders at a faster rate.

Order volume growth also climbed sharply in Q4 having tapered off significantly during the previous quarter. A 21 point swing compared to the Q3 is clearly unusual, and a sign that demand cycles remain volatile. Crucially however, ordering activity does not appear to be overheating in the same way that it had done in the first half of 2021.

The pandemic continues to cause significant difficulties, but the US seems to be ploughing through these obstacles, with a booming economy no doubt offsetting some of these challenges. Our latest data presents a relatively healthy picture for US supply chains heading into 2022.

Eurozone: Low invoice volumes put supply chain activity into the red zone

Eurozone trade activity - quarter on quarter index scores



Fears over the spread of the Omicron variant across Continental Europe led analysts at [Oxford Economics] to downgrade their Q4 forecasts for economic growth across the region

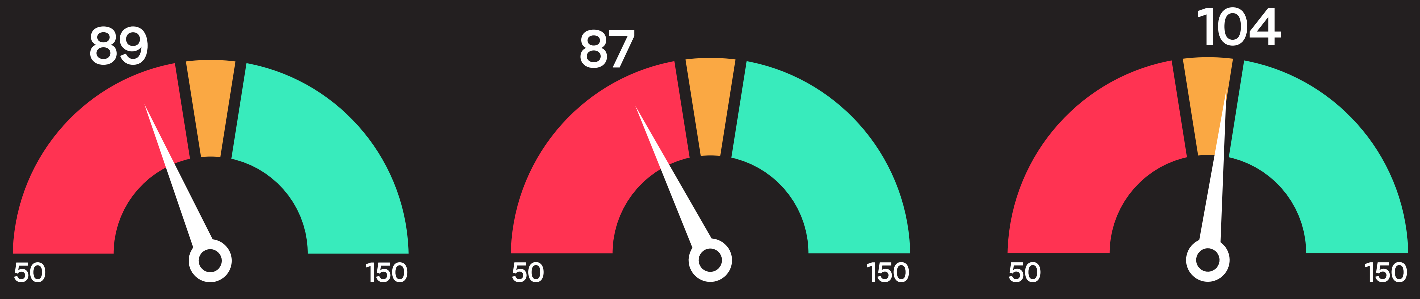
Tradeshift's data supports this prediction. In Q4, total transactions across the Eurozone dropped below the expected range for the first time since the beginning of the pandemic after a 9 point dip from the previous quarter.

Invoice volumes, which had been growing at a healthy rate in Q3, dropped by 20 points in Q4. Ordering volumes across the Eurozone had dropped off alarmingly in Q3, so a corresponding drop in invoice traffic during the following quarter is not unexpected. Ongoing challenges in the supply chain may also be a factor however. [Recent data] suggests that while logjams have started to ease, rising prices and shortages of key components continue to impact suppliers in the industrial heartlands of Germany and France. Stricter Covid measures added to the operational challenges facing suppliers.

Ordering activity across the Eurozone climbed back towards the expected range in Q4, but a score of 92 means the growth in Q4 is around 12 points lower than the average quarterly score since the first lockdown. On the one hand, this could be a sign that ordering activity is starting stabilize. On the other hand it may suggest that challenges in the supply chain are causing buyers to think twice about loading their suppliers with fresh orders.

UK: Robust demand, but supply issues weigh down activity

UK trade activity - quarter on quarter index scores



Transactions	Invoices	Orders
-17	-19	+2

Below expected range · Within expected range · Above expected range

Delivery logjams easing, but manufacturing slowdown suggests cautious approach from buyers

Quarter-on-quarter transaction volumes - Index scores by sector

	T&L	Manufacturing	Retail	Tech
Q2'20	81	60	49	95
Q3'20	106	112	145	103
Q4'20	102	112	110	114
Q1'21	104	104	86	93
Q2'21	91	92	83	89
Q3'21	97	110	95	105
Q4'21	104	73	95	94

significantly below expectation · below expectation · within expected range · above expectation · significantly above expectation

The UK's supply chain activity has long be at the bottom of the international pack in terms of recovery since the pandemic. And after a relatively strong Q3, transaction activity fell by 17 points in Q4.

Much of the slowdown comes from a fall in invoice traffic, which dropped well below the expected range in Q4. Conversely, ordering activity, which has been consistently strong since the end of the first lockdown, rose to slightly above the expected range in Q4.

The pattern observed in our data suggests that while underlying demand for goods is consistently strong, delivery and fulfillment problems among the supplier base are hampering the overall integrity of local supply chains.

The data mirrors the findings of a recent report from the Confederation of British Industry which revealed that while order books are tracking at above normal levels, inventory volumes across suppliers tumbled to record lows in December.

With recent data suggesting that some of the problems facing UK supply chains have begun to ease, we could yet see invoicing volumes begin to catch up with orders. New Brexit customs controls, which began on January 1, won't make things any easier however. And with rising inflation threatening to trigger a cost of living crisis, we may start to see order volumes falter as demand weakens. If this happens then overall activity may not accelerate at the level it needs to in order to mount a strong recovery in 2022.

Activity across the Transport and Logistics sector rose above the expected range for the first time since the beginning of 2021. The acceleration in activity across the sector suggests goods are once again moving at pace after six months of logjams.

Manufacturing activity continued to show signs of volatility, dipping significantly below expected levels in Q4. Dampening demand and caution from buyers over fulfilment issues within their supply chains are likely contributing factors to the slowdown. Data from IHS Markit found US manufacturing output dipped to a one-year low at the end of 2021 with analysts citing a reluctance from customers to place orders before inventories were worked through.

Retail supply chain activity remained unchanged in Q4 with growth just below the expected range. A number of commentators had predicted that the supply chain crisis and the Omicron variant could have a significant impact on the sector in the run-up to Christmas. But our data suggests that supply chains remained relatively stable.

Spending on software and technology slowed in Q4, finishing the year just below the expected range. It is worth noting however that overall spending on technology has remained remarkably consistent throughout the pandemic. Analyst firm Gartner predicts the level of spend on enterprise IT to rise by 5.5% in 2022.

Two years of pain, but many valuable lessons

Final thoughts from Christian Lanng, CEO and co-founder, Tradeshift

It might seem madness to make predictions in the middle of a pandemic, but here's one I will hang my hat on. At some point in the next 12 months an event will unleash disruption that will once again test the resilience of global supply chains. Experts now expect a major shock to hit supply chains once every 3.7 years. Heading into a third year of a global pandemic, our index suggests businesses have learned a number of lessons which are enabling them to become better problem solvers in the face of fresh challenges.

One of the most important lessons is the need to build slack back into a system that had become far too lean prior to the pandemic. The financial advantages of having less standing inventory, and only holding enough to meet the needs of the next operation, are considerable. But as the pandemic showed, "just in time" operations leave businesses incredibly vulnerable to just one major adverse event. As this realisation has dawned on the world's organisations, it's no surprise that research by Morgan Stanley found more than 50% of retailers said they planned to increase inventory buffers across their supply chains in first three quarters of 2021.

Such a shift in operating models will require much greater transparency and closer collaboration between buyers and suppliers. Most large organizations have learned it is in their own interests to build a deeper understanding of their supply chains, including getting a handle on their "health" of their end-to-end operations, all the way to the source. There is also a growing acceptance among buyers that protecting their own interests requires them to consider the interests of the entire ecosystem. Applying pressure to supplier organisations in the expectation that they will deliver product won't work in the new normal. What works for buyers, also needs to work for suppliers.

Ultimately, the most efficient and resilient supply chains are, in effect, digitally networked ecosystems of suppliers, distributors, retailers and every other partner to the manufacturer. This is the only model that enables participating businesses to exchange real-time information, accurately forecast changes in demand, and communicate effectively with partners. Preparing for future disruptions has a present-day cost. But these investments pay dividends over time, not only minimizing losses, but also improving digital capabilities and fostering healthier, more sustainable relationships that are capable of flexing to meet future issues..

The coming months could turn out to be critical for supply-chain leaders. Some companies will build upon the momentum they gained during the pandemic, with decisive action to adapt their supply-chain footprint, modernize their technologies, and build their capabilities. Others may slip back, reverting to old ways of working that leave them struggling to compete with their more agile competitors on cost or service, and still vulnerable to shocks and disruptions.

About Tradeshift's Index of Global Trade Health

Purpose

Many of the world's largest buyers and their suppliers use Tradeshift's trade technology network to exchange digitized purchasing and invoicing information. The data these transactions yield provide us with a unique awareness of trading activity between businesses.

Tradeshift's Index of Global Trade Health analyzes anonymized data flowing across our platform to reveal a timely perspective of how external events are impacting business-to-business commerce around the world.

We acknowledge that there are limits to how accurately our view of what is happening on our network can reflect how complex global supply chains are reacting to a variety of external factors. What our data does provide is a useful snapshot that provides clues as to what might be happening to the global economy. The patterns we see in our data become more valuable as we combine them with other third-party data and expert insight, something which you will see us draw on throughout this report.

Methodology

The new model compares business-to-business transaction volumes (orders processed from buyers and invoices processed from suppliers) submitted via the Tradeshift platform since Q1 2020 against a 'baseline' we have created by analysing medium-term seasonal trends in the transaction data that flows across our platform.

A reading of 100 indicates growth in line with expectation against historical trends. Readings greater than and below 100 indicate above-trend and below-trend growth.

We consistently strive to improve and evolve the accuracy of our analysis. As a result it is possible that from time to time you may see small revisions to historical numbers reported in previous versions of the Index.

How to read the charts

On pages 6 and 7 we have expressed the index scores cumulatively from Q1'20 onwards. If the index score in Q1'20 is 90 this would indicate that activity was tracking at 10 points below the baseline for that period. If our index score for the next quarter is also 90, then the cumulative score in Q2 would appear as 80, suggesting activity is losing momentum against where we would expect it to have reached by that period.

Looking at the data in this ways helps show how much momentum transaction volumes lost during the early stages of the pandemic. It also gives us some clues as to how long it might take before cumulative growth normalizes against projections we made based on transaction flows prior to the pandemic.

On pages 9 to 12, we looked at how index scores are changing quarter on quarter. Looking at the data in this way provides a useful indication of how the level of activity is fluctuating across different sectors and geographies from one quarter to the next.

About Tradeshift

Tradeshift is a market leader in e-invoicing and accounts payable automation and an innovator in B2B marketplaces and providing access to supplier financing. Its cloud-based platform helps buyers and suppliers digitize invoice processing, automate accounts payable workflows and scale quickly. Headquartered in San Francisco, Tradeshift's vision is to connect every company in the world, creating economic opportunity for all. Today, the Tradeshift Network is home to a rapidly growing community of buyers and sellers operating in more than 190 countries. Find out more at: Tradeshift.com