Tradeshift®

The Tradeshift Index of Global Trade Health

Q1 2023

Inventory glut provides another stress test for supply chains

Supply chains are back to normal. At least that's according to The New York Federal Exchange[1], whose Supply Chain Pressure Index tipped into negative territory in February for the first time since August 2019.

Our Index has been showing us signs of a broader slowdown in trade activity for a year now. That trend continued in Q1, with global transaction volumes across our network tracking at 5 points below the expected range. This trend, combined with the opening up of key freight routes out of China, has taken the heat out of overburdened supply lines, making it easier for businesses to secure the goods they need at the time they need them. So, on one level, at least, the New York Fed makes a solid point.

But normal remains a fairly broad spectrum. In the UK, for example, salad remains off the menu as the great post-Brexit supply chain reconfiguration forces supermarkets to start rationing tomatoes. At the other extreme, spare a thought for the toy manufacturer who recently had to incinerate $30 million of excess inventory they could no longer afford to store in warehouses.

Large buyers headed into 2023 still dealing with a massive post-pandemic inventory glut. Retailers, in particular, have found themselves with piles of unsold inventory ordered at a time when consumer spending patterns looked very different.

Our Q4 Index suggested organizations were putting a heavy brake on new orders as they tried to rebalance. We're now seeing evidence of that ordering purge hitting suppliers. In the US, invoice volumes fell to 7 points below the baseline in Q1, following an equivalent drop in order volumes in the previous quarter.

The good news, both in the US and at a global level, is that orders are starting to rise again, suggesting a period of readjustment that, while painful, is at least temporary. These are positive signs, suggesting a level of confidence across large buyers that has been lacking over the past year.

The picture in the Eurozone is a bit different. After a solid end to 2022, our Q1 data proved a reality check for supply chain operators grappling with stubborn inflation and a raft of economic headwinds. Total trade activity across the region fell to 8 points below the baseline in Q1. The UK also had a tough start to the year, with activity levels slipping to 7 points below the expected range. UK order volumes also crashed to 10 points below the baseline, suggesting a challenging outlook.

There was better news in China, where supply chain activity climbed back into the expected range for the first time in 18 months. However, China faces its own balancing act, as escalating tension with the West triggers large buyers to reevaluate their reliance on China as a critical link in their supply chains.

Reshoring, nearshoring, and 'friendshoring' are on the up. Our data shows eye-catching growth in trade activity across Vietnam, Mexico, and to a lesser extent, Malaysia and India. In an increasingly polarized world, supply lines are being redrawn, and it looks increasingly like these countries will be among the primary beneficiaries.

1 Reuters, NY Fed says supply chain pressures normalized in February

Key findings at a glance

1. Global trade activity **dropped to 5 points below the baseline** due to a slowing economy and an inventory glut.

2. Demand across the T&L sector continues to soften. Activity levels across the sector finished Q1 **9 points below the expected range.**

3. Retailers, in particular, are feeling the effects of post-pandemic inventory rebalancing. Activity across the sector fell to **12 points below the expected range.**

4. Low order volumes have left suppliers facing a short-term liquidity crunch. The number of invoices processed in Q1 dropped to a year-low of **7 points below the baseline.**

5. Trade in the US remained low, at **6 points below the baseline**, but rising order volumes suggest a brighter outlook.

6. China's reopening triggered a sharp rise in activity. **Transaction volumes climbed back into the expected range** for the first time in two years. But the outlook is complex.

7. Trade activity in Mexico and Vietnam has **grown at multiples of the global average** in the past year as businesses accelerate diversification efforts.

8. After a strong Q4, activity in the Eurozone **fell to 8 points below** the expected range. UK trade activity **dropped to -7 points.**

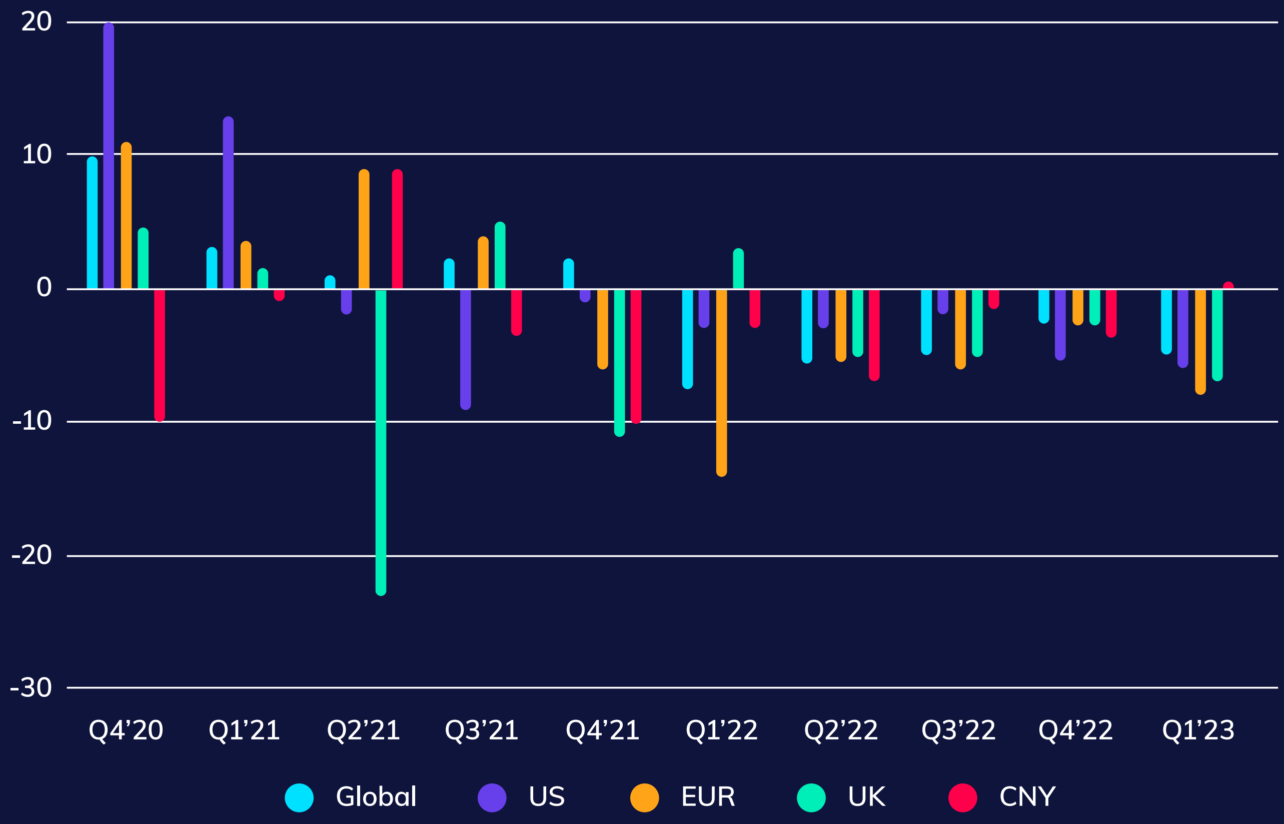

DF
DG
DG
Pallet Storage
BLUE
CG
CH

Volatility snapshot

Quarterly growth in world trade activity across the Tradeshift network indexed against historical trends.

Global view: China is on the up, but softening global demand could spoil

Transaction volumes - quarter on quarter growth indexed against historical trends



China's removal of Covid restrictions in December lifted supply chain activity across the country in Q1. Transaction volumes climbed back into the expected range for the first time in 21 months. China's massive domestic market should keep local factories busy. But export-focused businesses will have a nervous eye on the broader picture globally, where trade activity continues downward.

Global trade activity dipped to 5 points below the expected range in Q1, and this appears consistent with a broader slowdown across major economies.

US transaction volumes remained 6 points lower than the baseline in Q1. Several leading economic indicators suggest the US economy has been growing slower than expected since the end of 2022. Well-publicized issues in the banking sector are adding to the uncertainty.

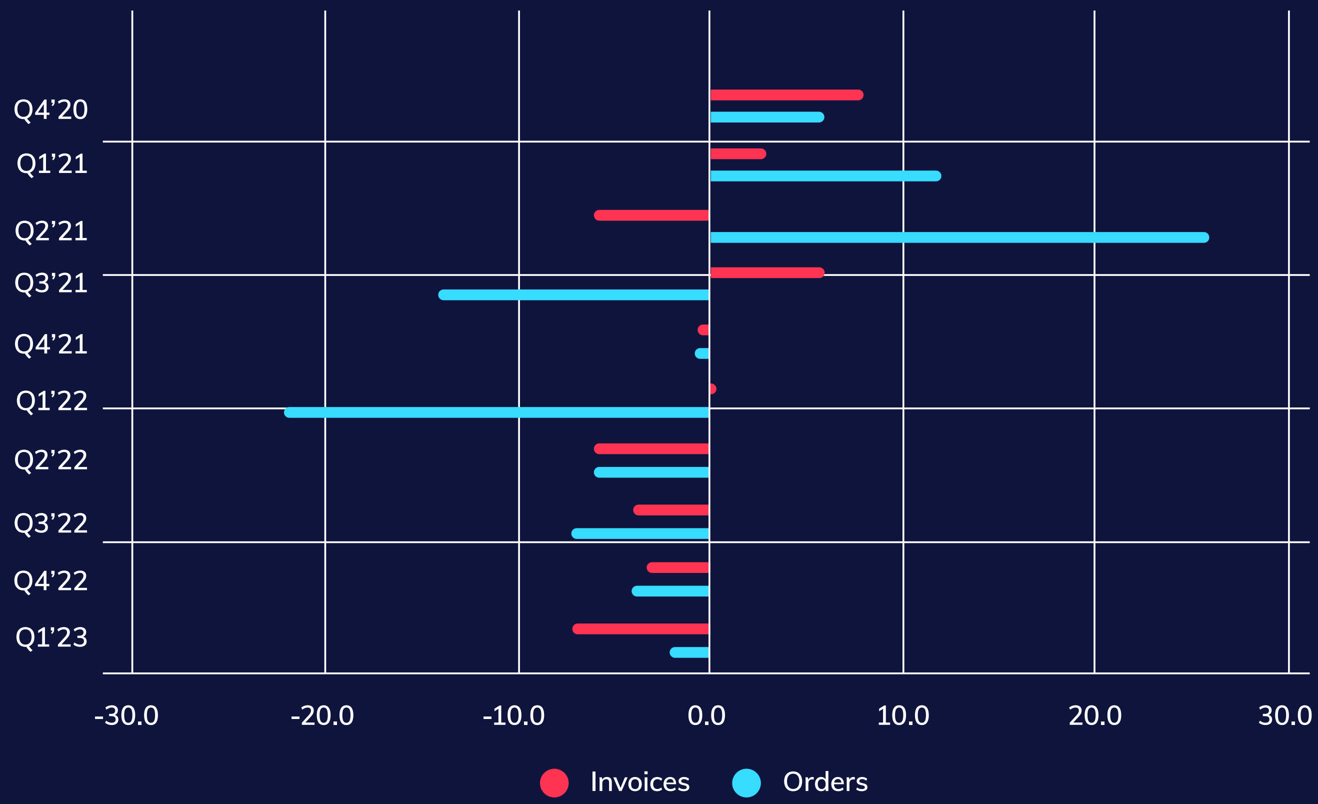
But consumer spending remains robust, and the low activity we're seeing may simply be the tail end of a bullwhip cycle. We'll know more next quarter.

Trade activity across the Eurozone recovered in Q4 thanks to falling energy prices and a general easing of supply chain bottlenecks. Q1 proved a reality check in reasonably challenging trading conditions across the region.

Economists at ING have pointed to stagnation across the Eurozone as consumers tighten their belts. Our data shows transactions falling firmly back into contraction territory in Q1 at 8 points below the baseline. A similar pattern is evident in the UK, where trade activity finished Q1 7 points below the expected range.

Cash flow: Suppliers counting the cost of inventory rebalancing

Invoice and order volumes - quarter on quarter comparison, indexed against historical trends



A post-pandemic bullwhip cycle left supply chains working through a chronic case of indigestion in the second half of 2022. In a slowing economy, keeping warehouses full of inventory no longer stacks up.

Research by HSBC[2] claims companies increased inventory by an average of 39% in the past two years to mitigate against severe disruption. Order volumes on our platform have since dropped as buyers tried to realign inventory volumes with changes in consumer spending. That readjustment appeared to bottom out at the end of 2022, but we now see evidence that this bonfire of orders is hitting suppliers.

Invoice volumes on the Tradeshift platform fell to 7 points below the baseline in Q1, the most significant reversal in two years. Suppliers will feel this in the form of lower cash flow. Ratcheting interest rates and well-publicized issues in the banking sector will complicate matters further.

The outlook is more positive. Order volumes remained in contraction territory in Q1, but only just, and trending upwards. We should see a corresponding uptick in invoice volumes. But this won't happen quickly. HSBC found[2] that suppliers are waiting an average of 56 days between submitting their invoices and receiving payment, and buyers have no intention of changing those terms in the foreseeable future. Payment terms of 120 days and more are also not uncommon. That leaves a gap of a quarter or more before suppliers see the benefit from any normalization in ordering activity.

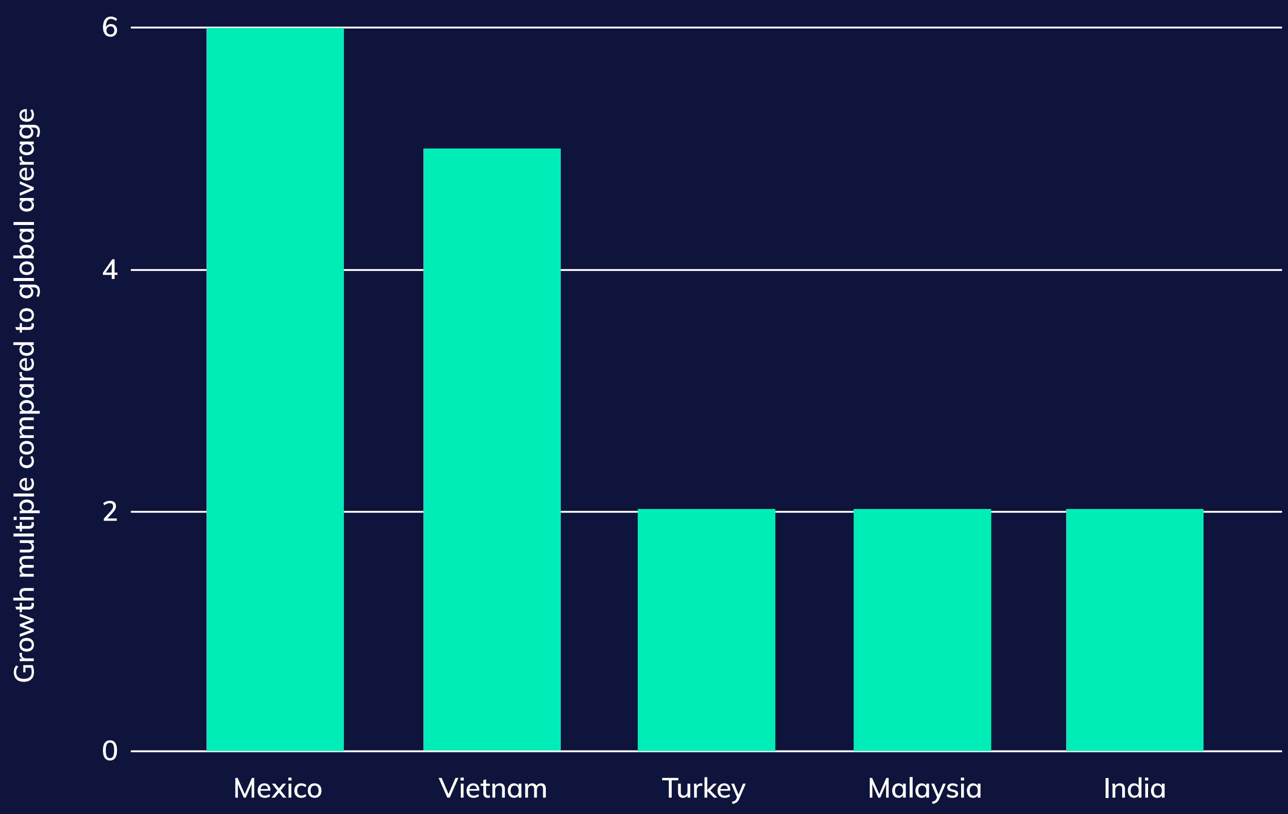
Access to capital through traditional lending services has become increasingly prohibitive, and we expect a considerable rise in demand for alternative funding sources. With suppliers seeking ways to unlock faster and more predictable access to working capital, HSBC's research[2] shows a particular spike in demand for receivables financing services.

---

2 HSBC, Global Supply Chain Networks of Tomorrow

Emerging marketings: Supply chain diversification bearing fruit

Transaction volume growth - year-on-year comparison across selected markets, benchmarked against the rate of growth globally



Apple announced in December[3] that it plans to move production out of China, telling suppliers to prepare more actively to assemble its products elsewhere in Asia, particularly India, and Vietnam.

Apple isn't the only large organization trying to shake its reliance on Chinese factories in its supply chain. A combination of ratcheting geopolitical tension and pure economics is accelerating moves to reshore, nearshore, and 'friendshore' production.

A survey conducted by the European Union Chamber of Commerce[4] found 23 percent of Western firms said they were considering moving operations away from China. Vietnam has been one of the primary beneficiaries of this reconfiguration. Its low-cost labor market and relative neutrality make Vietnam particularly attractive for companies evaluating a "China plus one' strategy.

Our data shows transaction volumes growing five times faster than the global average over the past year. For similar reasons, trade activity in Malaysia and India has also risen two times faster than the worldwide rate.

Mexico's proximity to the US makes it an obvious choice for businesses looking to bring production closer to home. We've seen the volume of trade activity in Mexico rise six times faster than the global average over the past year. The Mexican government says more than 400 companies[5] currently have shown interest in moving production from Asia to Mexico.

3 Wall St. Journal, Apple Makes Plans to Move Production Out of China

4 Bloomberg, Nearly One in Four European Firms Consider Shifting Out of China

5 Wall St. Journal, Mexico's Industrial Hubs Grow as Part of Trade Shift Toward Nearshoring

Q1 momentum deep-dive

Quarter-on-quarter world trade performance across key territories

US: Outlook brightens on rising order volumes

US trade activity - quarter on quarter index scores

Trade activity in the US finished the year firmly in the red zone. And on the surface, at least, things haven't improved much in 2023, with transaction volumes remaining 6 points below the expected range.

Quarterly trading updates across the US have been awash, with stories of excess inventory hitting bottom-line performance in the second half of 2022. Order volumes on our platform dropped sharply in Q4 as buyers sought to wipe the slate clean.

The hold on fresh orders in the second half of 2022 has now made its way through to suppliers. This explains the drop in invoice volumes we're seeing in Q1, which is weighing down total transaction figures.

The outlook is more positive, however, as we begin to see signs that this inventory glut may be working itself out. For the first time in a year, ordering activity has started to rise again, with volumes tracking at very close to the expected level.

All being well, invoice volumes should start to tick up in Q2. The big question is whether orders will start to drop again. Consumer spending in the US showed signs of resilience in Q1, but the banking crisis has some economists predicting a hard landing for the US in the latter half of 2023. And while our own data shows a general upward trend in ordering activity, it is worth noting that ISM's data[6] shows manufacturing orders at a 3-year low in March.

6 Reuters; US manufacturing activity nears three-year low; price pressures abate

Eurozone: Volatile trading environment triggers a sharp reversal

Eurozone trade activity - quarter on quarter index scores

Below expected range | Within expected range | Above expected range

Swing vs previous quarter:

-5 | **-4** | **-5**

The Eurozone finished 2022 on the up. Q1 appears to have brought things back to Earth with a bump as transaction volumes across the region fell to their lowest levels in more than a year. In contrast to the US, invoice volumes and ordering activity both fell in Q1.

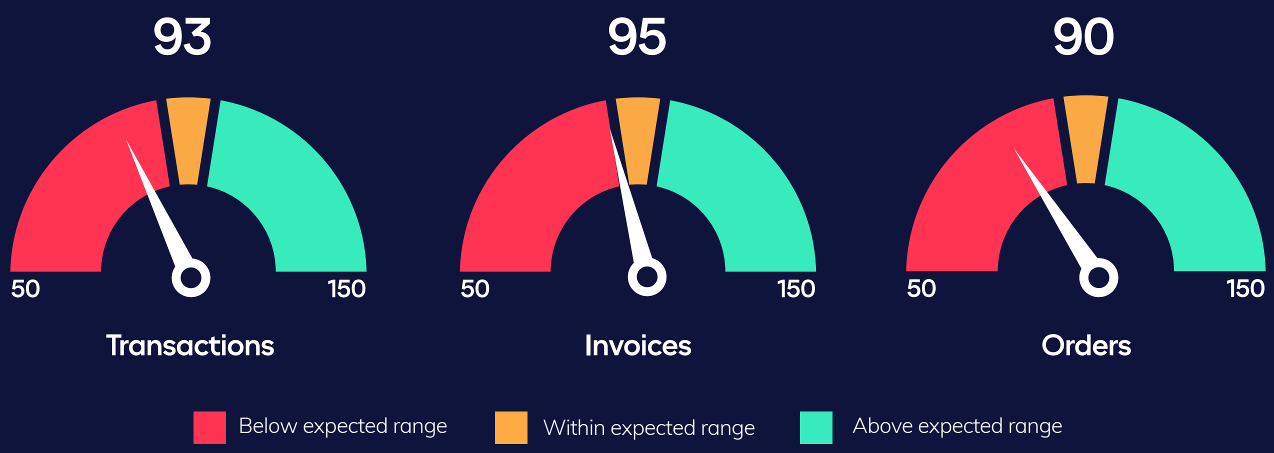
Economists admit that the jump in GDP reported by the Eurozone in Q4 caught them by surprise. They're now seeing economic sentiment begin to dip again. The recovery we saw in Q4 may well have been a reaction to positive news across a number of fronts, including stabilizing energy prices and the continued easing of supply chain bottlenecks.

Accurate forecasts have been hard to come by in the Eurozone, and if our latest data proves anything at all, it's that the trading environment remains volatile and difficult to judge for supply chain operators across the region.

The good news is that the drop in order volumes we've seen in Q1 is nothing like the alarming slump we witnessed at the beginning of last year when the outbreak of war in Ukraine sent commodity prices soaring. Order volumes dropped to 33 points below the baseline in Q1 2022. The fall in activity we've seen in Q1 is far less alarming. More accurately, it's a reality check on the current demand cycle across the Eurozone - contracting but by no means crashing.

UK: Orders evaporate as UK businesses confront the realities of Brexit

UK trade activity - quarter on quarter index scores



Swing vs previous quarter:

-4 **-3** **-5**

Just like its neighbors in the Eurozone, trade activity in the UK staged a minor recovery at the end of 2022. And just like the Eurozone, 2023 has brought it back down to Earth. Our Q1 data shows transaction volumes tracking at 7 points below the baseline.

Most alarming is the steep decline in ordering activity we've seen this quarter. Order volumes fell to 10 points below the baseline, the lowest level in a year. The gloomy figures mirror wider sentiment in the UK economy. The IMF predicts[7] that the UK will be the worst-performing major economy this year and the only country where GDP is forecast to shrink.

Macroeconomic headwinds, including an inflation-fuelled cost of living crisis, have their part to play. But businesses of all sizes and across all sectors are also seeing first-hand the impact of Britain's departure from the EU.

Local manufacturers have seen order books run dry, and according to a survey by industry trade body Make UK[8], 50 percent of British firms have found suppliers in Europe becoming wary about doing business in Britain.

Supply chain bottlenecks are easing globally, but ports across the UK remain clogged. Haulers that used to pass through borders unchallenged now wait 17 hours and more to board ferries as customs officials wade through mounds of paperwork.

As supply chain operators ramp up their efforts to reconfigure supply chains, the UK's post-Brexit challenges should serve as a warning of how quickly things can unravel when complex transitions take place on top of poorly planned and antiquated processes.

7 BBC, UK expected to be only major economy to shrink in 2023

8 Make UK, No Weak Links: Building Supply Chain Resilience

Retailers caught out by shift in consumer spending

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

	T&L	Manufacturing	Retail	Tech
Q1'22	101	75	94	86
Q2'22	96	97	97	101
Q3'22	92	89	91	98
Q4'22	89	93	97	101
Q1'23	91	99	88	99

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

Retailers woke up to a post-holiday hangover in Q1 as activity across the sector dropped to 12 points below the expected, the biggest deficit since the early days of the pandemic.

\A vicious bullwhip cycle appears partly to blame. Leisure-wear retailers that planned for a new world of working from home admit they were caught out by a return to the office that prompted consumers to switch to more formal attire. Consumers are also spending less overall as inflation hits their wallets.

\Waning demand is also impacting demand for freight capacity. Activity levels across the transport and logistics sector remained in the red zone in Q1. The silver lining is that transportation costs are also coming down. Analysts Drewry[9] reported the largest year-on-year reduction in shipping costs for at least 7 years.

Technology is one of the few sectors that appears to remain unaffected by the general economic slowdown. Our latest data shows activity across the sector remained within the expected range in Q1 as businesses continued to press ahead with investments designed to help digitize core systems and processes.

The uptick in activity across the manufacturing sector caught us a little by surprise. One possible explanation for this is that, on a global level at least, manufacturers are benefiting from the easing of bottlenecks that are allowing them to clear enormous backlogs. Is this sustainable? It's too early to tell, but our guess is that we'll see activity across the sector slide back into contraction later this year.

9 Drewry World Container Index - 30 Mar

Perspectives on the road ahead

FINAL THOUGHTS:

Supplier diversification efforts demand a reevaluation of traditional sourcing process

Business leaders watching this year's Oscars ceremony may have afforded themselves a wry smile when the film 'Everything, Everywhere All at Once' carried off the award for Best Picture. If ever there was a title for the ages, this was it.

Disruptions may not be headline news in quite the way they have been over the past two years, but according to research from Capgemini[10], supply chain risk is still the biggest challenge keeping business leaders awake at night.

The current inventory glut is symptomatic of a lack of agility within supply chains that has left them vulnerable to sudden demand shifts. There aren't many people out there who could have predicted a pandemic sending the world into lockdown. But the reality is that we live in a world where even a single viral video on Tik Tok can send a specific product line into overdrive.

Consumer demand shifts rapidly; the only variable that matches their speed is their intensity.

Supplier diversification is increasingly seen as central to the agility businesses need to embed into supply chains to manage all manner of different demand shocks.

Analysis of quarterly earnings calls in Q4 2022[11] showed a 122 percent jump in mentions of reshoring and nearshoring. Our data shows that Mexico has been one of the key beneficiaries of the shift towards shorter supply chains.

India and Vietnam are also benefiting from the 'China +1' strategy that is gathering momentum as geopolitical tension escalates.

Reconfiguration on this scale is complex, requiring businesses to quickly identify, vet, and onboard large numbers of new suppliers. Accommodating shifting demand patterns will also demand digital connectivity that allows buyers and suppliers to collaborate in real-time.

Procurement teams using 20th-century models and technologies will struggle to deliver the ingredients businesses need to remain agile. Diversification efforts aimed at building agility will quickly unravel if the systems and processes underpinning such a transition remain slow, cumbersome, and antiquated.

A recent report by EY[12] encourages businesses to accelerate their shift away from linear models and towards networked supply chains that promote visibility and agility through end-to-end digitalization.

The best example of these new networks is B2B marketplaces, which bring global buyers and sellers into a single connected ecosystem. Making the transition to this model is not a significant technical challenge. It does, however, require a substantial change of mindset for procurement teams accustomed to wearing complexity as a badge of honor.

When done correctly, embracing a B2B marketplace model can be transformative, providing easy access to a large selection of pre-vetted suppliers in a controlled environment where smaller suppliers are put on a more level playing field with large vendors. The same model can also help organizations short-cut the process of identifying and nurturing relationships with suppliers with strong ESG credentials - essential as businesses come under increasing scrutiny from regulators and consumers.

10 Capgemini, Where are organizations investing in 2023? Supply chains and tech are top of the list

11 IoT Analytics, What CEOs talked about in Q4/2022

12 EY, Supply chain goes from linear to networked ecosystem

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 provides us with a unique awareness of trading activity between businesses.

Tradeshift's Index of Global Trade Health analyzes anonymized world trade 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 world trade 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 Index of Global Trade Health compares business-to-business transaction volumes (orders processed from buyers and invoices processed from suppliers) submitted via the Tradeshift platform against a 'baseline' we have created by analyzing medium-term seasonal trends in the transaction data that flows across our platform.

A reading that meets the baseline indicates growth in line with expectations against historical trends. Readings greater than and below the baseline indicate above-trend and below-trend growth.

Looking at the data in this way helps give a sense of how volatile activity is across different sectors and geographies. For example, a sudden rise in orders might trigger orders to jump at a rate that exceeds what we would consider normal. By contrast, waning demand might trigger volatility in the opposite direction.

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.

About Tradeshift

Tradeshift is the cloud-based supply chain platform that transforms the way B2B buyers and sellers connect, transact and trade. We're a leader in e-invoicing and AP automation, offering full international compliance in 50+ countries, including China. We're also an innovator in B2B marketplaces and embedded fintech services that bring value, opportunity, and growth to any business that joins the network. Headquartered in San Francisco, Tradeshift's vision is to connect every company in the world, creating economic opportunity for all. Today, the Tradeshift platform is home to a rapidly growing community of buyers and sellers operating in more than 190 countries. Find out more at: www.Tradeshift.com

Tradeshift®