Tradeshift

The Tradeshift Index of Global Trade Health

Q2 2022

Inflation is more than a passing phase

Data from Tradeshift's Q1 Index showed the steepest decline in quarterly activity since the beginning of the pandemic. In Q2 we saw more evidence of a looming recession, with global transaction volumes dropping by a further 6 points against our forecast range.

What's striking about this quarter's Index is the near-uniform pattern of declining transaction volumes across most of the world's largest economies. Supply chain activity in the Eurozone and the US fell for the second quarter in a row, dropping by 5 and 4 points respectively. Activity in the UK also slid a further five points against the forecast range.

The bad news doesn't end there. Order volumes on Tradeshift's platform fell by a further 6 points in Q2 against expectation, while invoice volumes dropped by 7 points, the steepest decline in quarterly invoice traffic we have seen in over a year. The figures suggest that the global economy is in for a rough ride over the months to come.

In ordinary times, this sustained decline in global activity would be the biggest economic story of the day. But it's overshadowed by the spectre of inflation, with rates hitting levels not seen in some economies for decades. Analysis of pricing volatility on the Tradeshift platform indicates that the average value of an invoice in 2022 is tracking 11% higher than last year's average.

The current bout of inflation has several causes, a number of them linked to the pandemic. Supply-chain disruptions have persisted across the global economy. Covid-19 cases in China and the imposition of lockdown restrictions continues to cause problems.

Our data shows supply chain activity across the region sank a further 7 points below the expected range in Q2. Russia's invasion of Ukraine is adding further pressure, especially to energy and food prices.

Some of the current challenges facing supply chains are transitory. It would be wrong however to ignore the structural changes in the world economy that could mean inflation remains a recurring problem.

The link between labour shortages and wage inflation is a good example. The 1980s ushered in a golden period for cheap labour as Eastern Europe and China opened up to international markets and Baby Boomers pursued their careers. This labour influx kept inflation low and removed much of the incentive for businesses to invest in automation, remaining wedded to labour-intensive manual processes, many of which remain a feature of the workplace today.

That cycle is ending, with an aging workforce and a younger generation asking harder questions about the type of work they want to do. Businesses are examining choke points in their supply chain and realizing that chucking more bodies at these problems is no longer an option.

According to one recent study, 78% of executives are planning to invest in automation to mitigate the impact of future labour shortages. Long viewed primarily as a way to reduce overheads, automation is fast becoming a key component of long-term risk management and resilience planning across global supply chains.

Key findings at a glance

1. Global transaction volumes fell for the second quarter in a row, sliding a further 6 points against the forecast range.

2. Transaction volumes in the Eurozone and the UK both followed the global pattern, falling a further 5 points below the expected range.

3. US supply chain activity fared marginally better. Transaction volume growth dropped by 4 points in Q2.

4. China's zero-Covid policy and regional lockdowns contributed to another 7 point fall in transaction volumes.

5. Order volumes fell for the second quarter in a row, dropping 6 points compared to the baseline.

6. A lack of fresh orders is now trickling through to suppliers. Invoice traffic fell by 7 points in Q2, the steepest drop in a year.

7. Orders might be tumbling, but costs have risen sharply since the beginning of the year. The average value of an invoice on Tradeshift is 11% higher than the 2021 average.

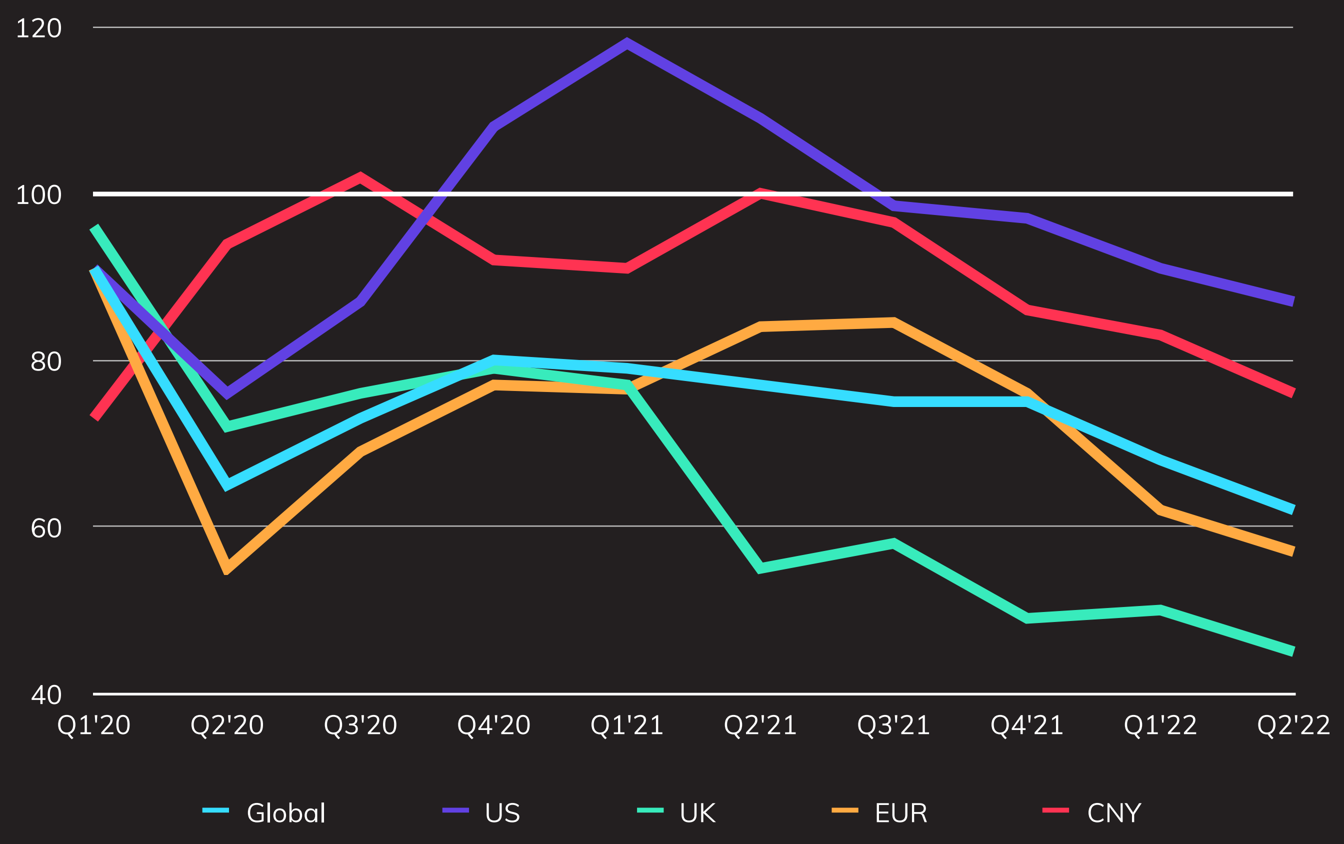
8. With demand softening, activity across the transport and logistics sector fell below the expected range for the first time in a year.

Volatility snapshot

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

New and familiar challenges place the 'Roaring Twenties' on hold

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



Credit Suisse has called 2022 a 'transition year.' [1] According to our latest data, it could prove a painful transition. Global transaction volumes continued to lose momentum in Q2, dropping by a further 6 points against the expected range. Taken together with the 7-point fall in Q1, this is the most significant contraction we've seen across consecutive quarters.

Transaction volumes across the Eurozone had dropped 14 points in Q1 as the combination of ongoing supply chain bottlenecks and the war in Ukraine proved an enormous shock. Soaring energy costs and waning consumer confidence contributed to a further 5-point decline in trade activity in Q2.

The UK followed the global trend in Q2, with trade activity dropping a further 5 points below the forecast range. A report from S&P Global [2] suggests another very difficult quarter for the UK with factory outputs slowing to near-stagnation in June. The same report also indicates a very similar picture in the US where our data showed transaction volume growth slipping by a further 4 points in Q2. China's zero-Covid policy also continued to exert pressure on local supply chains, with our data showing another 7-point fall in transactions against the expected range.

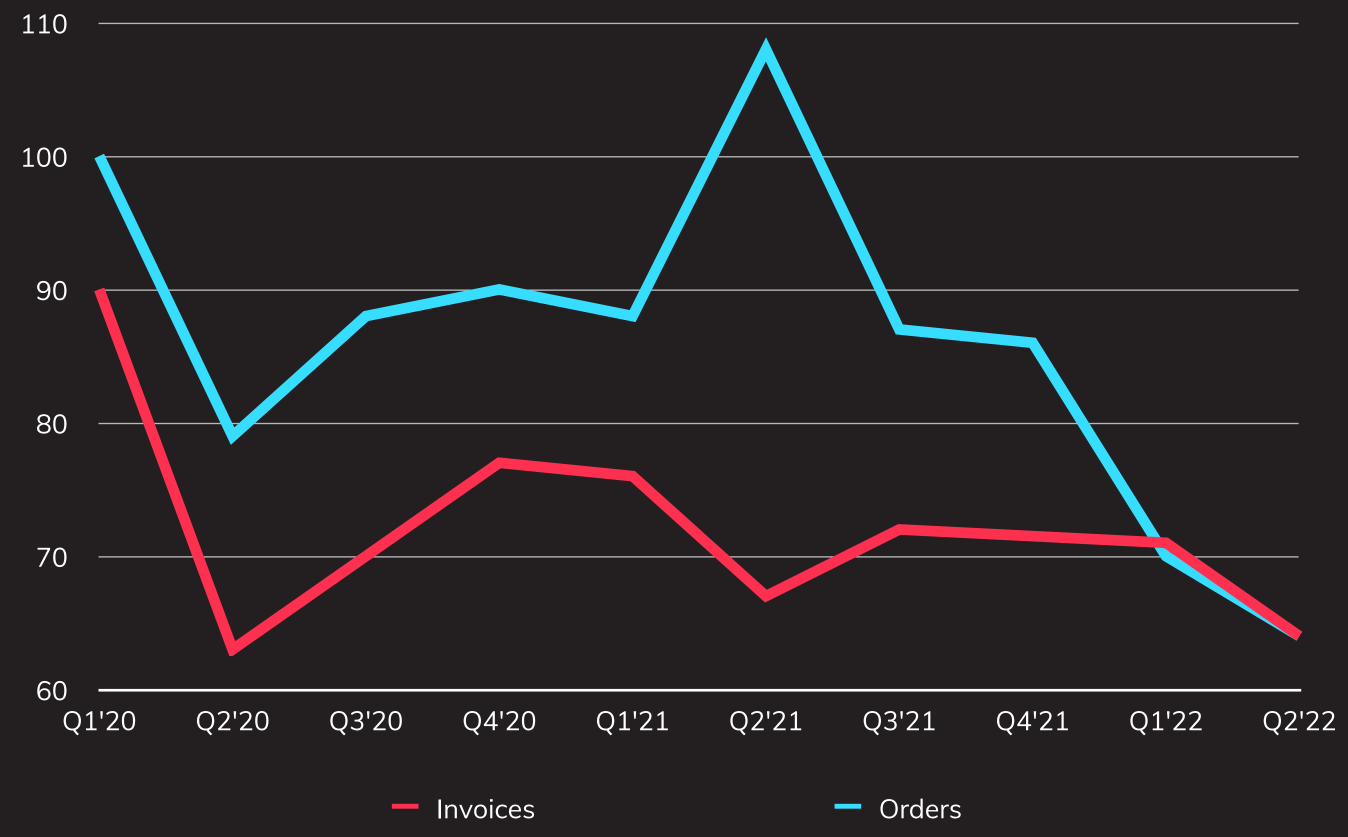
Businesses in every region are being challenged at a similar rate and by a familiar set of operational pressures, including sky-rocketing energy prices, supply chain bottlenecks and labour shortages. Given the near-ubiquity of these challenges, it's difficult to see a significant recovery in the second half of 2022.

1 Interview with Credit Suisse CEO, CNBC, 04/27/2022

2 IHS Markit, PMI Survey, 06/23/2022

All signs are pointing down

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



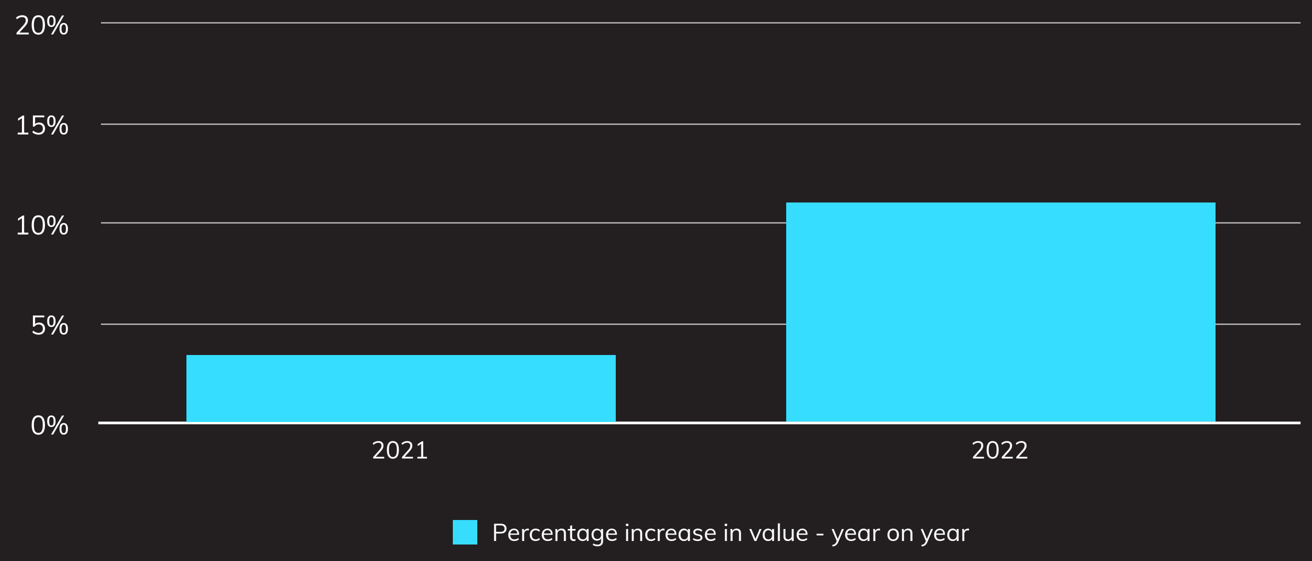
Order volumes give us a glimpse into where GDP could be heading in the next six months.. There is no disguising it: the future looks decidedly bleak with order volume growth on the Tradeshift platform falling by a further 6 points against the expected range.

The steep fall in ordering activity observed over the past two quarters is now hitting suppliers. Invoice traffic on the Tradeshift platform fell by 7 points in Q2, the steepest drop in a year and the first time since lockdown that we have seen a fall of this magnitude across both orders and invoices in the same quarter

The past two years have brought a variety of challenges to supply chains. We have become accustomed to wild swings in our data as the subsequent volatility impacts different elements of the supply chain in different ways. What we're seeing in Q2 is subtly but critically different, suggesting a prolonged period of declining order volumes that will test the cash flow of smaller suppliers at a time when many are struggling with soaring costs.

Rising costs and softening orders are a double-whammy for suppliers

Average value of a single invoice submitted on the Tradeshift platform - year on year comparison



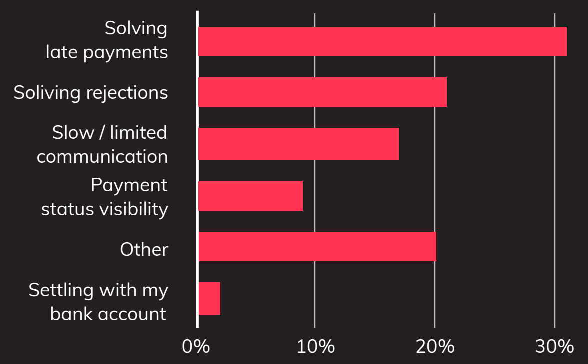
The latest official data puts US inflation at 9.1%. In the UK, economists believe inflation may hit 11% this autumn.

As inflation continues to dominate the corporate agenda, we looked at how the average value of an invoice submitted on the Tradeshift platform has fluctuated over time. Our analysis identified a sharp rise in the costs running through supply since the beginning of the year. In 2021, the average value of a single invoice submitted via the Tradeshift platform was 3.25% higher than the previous year. In the first six months of 2022 the average invoice values have risen by 11%.

Meanwhile, a combination of falling orders and high costs means supplier cash flows are likely to face significant cash flow pressures over the next six months or more.

In a challenging market, deferring payments and pushing out payment terms to suppliers are the primary levers for CFOs looking to conserve cash. Suppliers, who saw late invoice payments soar at the beginning of the pandemic, are becoming increasingly nervous that history will repeat itself.

If you could improve one thing about collecting payments from your customers, what would it be?



According to one report, six in ten suppliers[1] believe late payments will increase significantly over the next few months. Our own research suggests late payments ranks top among the list of challenges suppliers are looking to address with their customers.

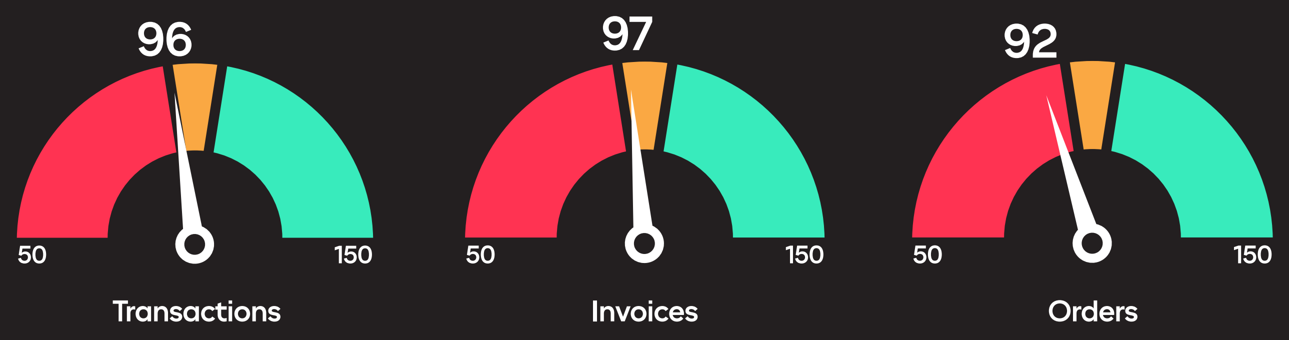
1 European Payment Report 2022, Intrum, May 2022

Q2 momentum deep-dive

Quarter on quarter performance across key territories

US: Can supply chains stop the rot before recession sets in?

US trade activity - quarter on quarter index scores



Below expected range | Within expected range | Above expected range

Swing vs previous quarter:

Transactions	Invoices	Orders
+2	0	+1

Total activity across US supply chains climbed slightly compared to the previous quarter, but remains just below the expected range in Q2. For all the obvious difficulties, our data suggests US supply chains are continuing to operate at a relatively healthy rhythm.

Manufacturers in the US have been better insulated from recent shocks than their counterparts in Europe or Asia and healthy invoice traffic during the quarter suggests that some of the recent bottlenecks in the supply chain may be easing.

One growing concern for supply chain operators is the impact of current economic conditions on demand for goods. Data from the U.S. Commerce Department[1] showed that consumer spending rose less than expected in May as motor vehicles remained scarce while higher prices forced cutbacks on purchases of other goods. Tradeshift's analysis shows that order volumes stayed below the expected range for the third quarter in a row.

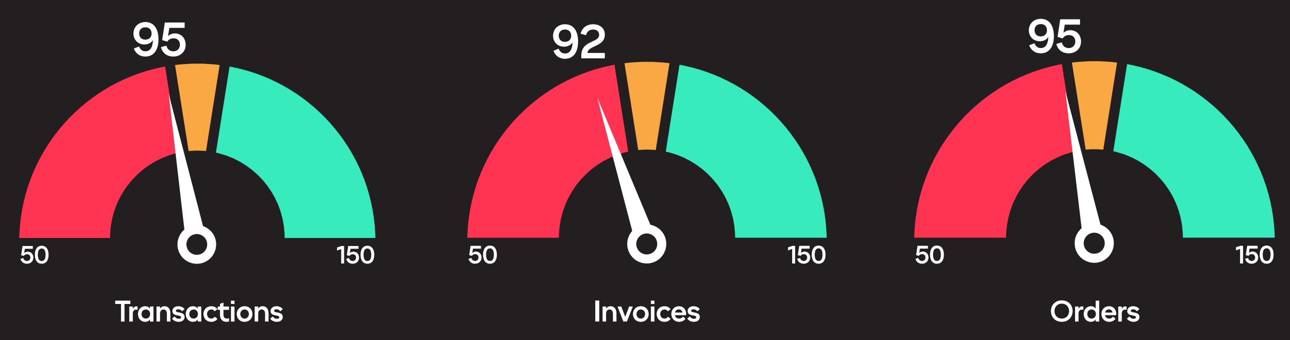
Most economists believe the current cocktail of challenges could tip the US into a recession by the end of the year, but others argue that softening demand could help ease inflation by allowing supply chains time to re-establish their equilibrium. A report by Dutch Financial Services Group ING[2] suggests US inflation may already have peaked; however, the author concedes that energy costs and labour shortages will result in a slow descent.

1 Bloomberg, US Consumer Spending Cools in Sign of Economy on Weaker Footing, 06/30/2022

2 ING, US inflation has peaked, but it will be a long slow descent, 05/30/2022

Eurozone: Low growth of a lower base

Eurozone trade activity - quarter on quarter index scores



Below expected range | Within expected range | Above expected range

Swing vs previous quarter:

Transactions	Invoices	Orders
+9	-1	+31

The outbreak of war in Ukraine triggered the biggest fall in activity we have seen on the Tradeshift platform since the first days of the pandemic. Unsurprisingly, in Q1 the Eurozone was hit hardest with order volumes dropping to near record lows.

The hit to supply chain operators in Q2 was far less severe. Transaction volumes were just 5 points below the baseline, compared to 14 points in Q1, but these are small mercies in very challenging times.

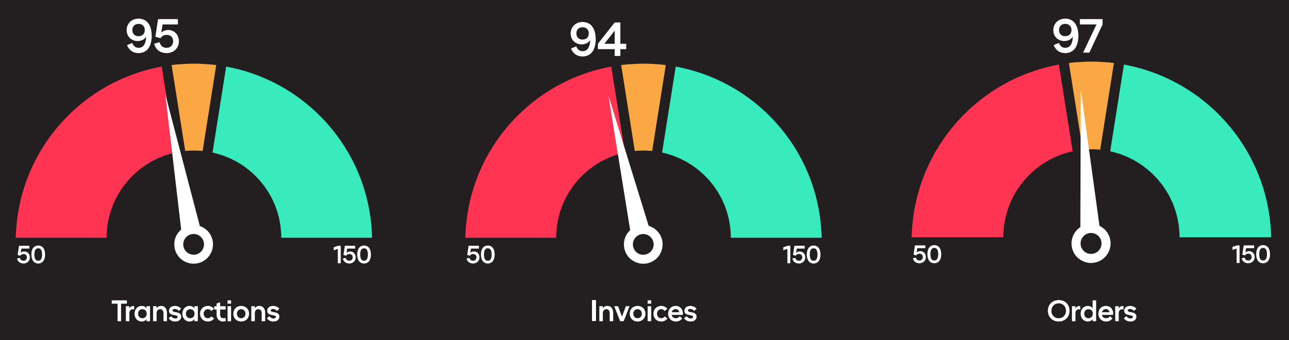
Invoice volumes across the Eurozone lost some momentum in Q2 suggesting that the alarming drop in orders we saw across the region in Q1 is beginning to trickle through to suppliers. Worse could be still to come. Order volumes recovered in Q2, but quarter-on-quarter growth remains below the baseline. What we're seeing is lower than expected growth coming from a very low base.

A recent report from Accenture[1] suggests that disruptions from COVID-19 and the war in Ukraine could end up resulting in the Eurozone's GDP losing up to €920 billion (or 7.7%) by 2023. A swathe of regulations aimed at decarbonising supply chains is likely to trigger further challenges in the short term including even higher costs. But a focus on sustainable sourcing and green energy could well represent Europe's best hope of breaking the current cycle once and for all.

1 Accenture, From disruption to reinvention: The future of supply chains in Europe, 05/23/2022

UK: Reality bites

UK trade activity - quarter on quarter index scores



Below expected range | Within expected range | Above expected range

Swing vs previous quarter:

Transactions	Invoices	Orders
-5	-4	+4

A slight rise in transaction activity during Q1 had us wondering how the UK had escaped the headwinds hindering supply chains in other parts of the world. Q2's lower-than-expected growth suggests that this may have been the supply chain equivalent of a 'dead-cat bounce.'

A relatively healthy quarter-on-quarter picture in the UK data flatters to deceive. Transaction volumes in the UK are less than half the level we had forecast prior to the pandemic. Set into context, the fact that UK transaction volumes lost more momentum in Q2 should be a significant concern.

Ordering activity dropped 7 points below the baseline in Q1 and remained 3 points below the expected range in Q3. Robust order volumes have long been the saving grace for the UK's supply chains, but we've now seen successive quarters of declining volumes.

Lower than expected order volumes are now trickling through to suppliers. Invoice volumes tipped back into the red zone in Q2, dropping by 5 points compared to the previous quarter. Many of the issues facing UK supply chains are global but some, notably the complications stemming from Brexit, are unique to UK business. Medical firm Pfizer has put the cost of adapting its supply chain to meet Brexit trading conditions at over $100m.[1] Labour shortages triggered by restrictions on free movement are also fueling inflation at a time when businesses can ill-afford it.

1 Fierce Pharma, As Brexit costs mount, Pfizer estimates $100M to adapt its supply chain 09/04/2018

Reduced T&L activity mirrors the wider slowdown

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

	T&L	Manufacturing	Retail	Tech
Q2'21	91	92	83	89
Q3'21	97	110	95	105
Q4'21	104	73	95	94
Q1'22	101	75	94	86
Q2'22	96	97	97	101

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

The transport and logistics industry is the first casualty of any recession; this quarter we saw activity in this sector dipping below the expected range for the first time in a year. Demand remains high, but our data suggests lower order volumes may reduce the pressure on shipping capacity. Analysis by Drewry[1] shows that shipping container prices have been falling since March, a pattern which maps the decline in order volumes on the Tradeshift platform since the beginning of the year.

Activity across the manufacturing sector found some rhythm in Q2 after a very challenging period during which order volumes fell to their lowest level since the first COVID lockdown. An Index score of 97 in Q2 suggests this loss of momentum could well extend into the second half of the year, albeit at a slower rate than we have seen in previous quarters.

The retail sector followed a very similar pattern to the one we have seen over the past year. Transaction volumes continued to grow at slightly below the expected range with a combination of rising costs and waning consumer confidence likely factors.

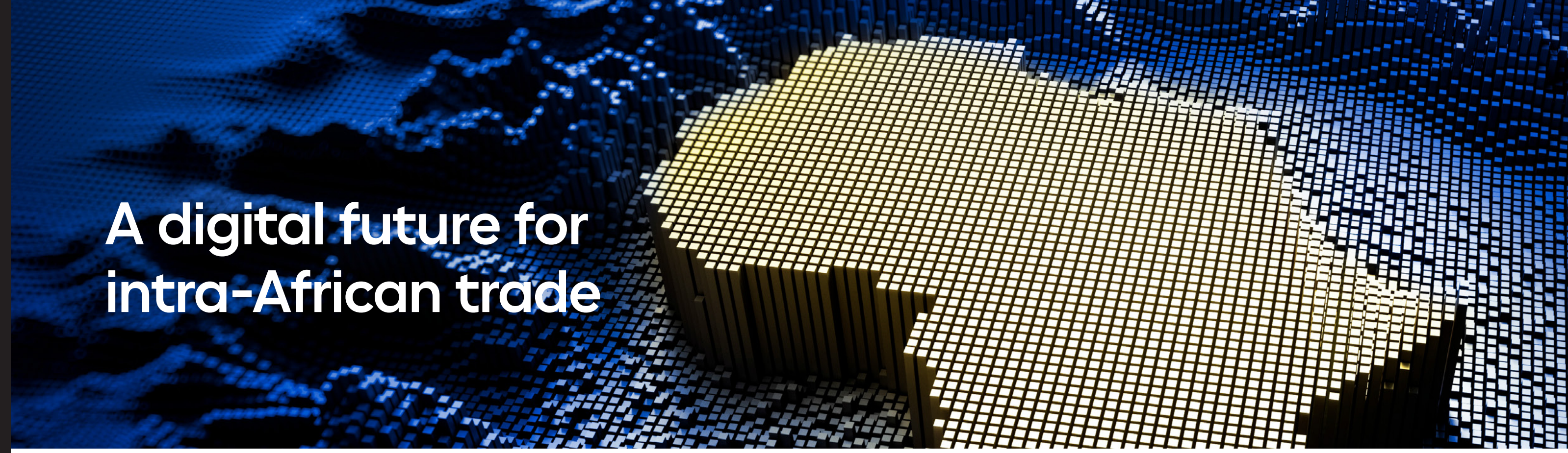
Technology spending, which dropped steeply in Q1, recovered sharply in Q2 with quarter on quarter growth lifting activity above the expected range for the first time in a year. According to a recent Morgan Stanley survey of CIOs,[2] a majority say that the prospect of a recession would have little to no impact on planned investments designed to digitize operations.

1 Drewry World Container Index, 7 July, 2022

2 Techrepublic, If a recession hits, this is where CIOs plan to cut spending, 06/23/22

What's next?

Perspectives on the road ahead



A digital future for intra-African trade

Toby Sparrow is CEO of Dooka, a B2B marketplace that aims to transform the way African businesses connect and trade with each other. We spoke to Toby about structural and macro-economic challenges that businesses in Africa face and the role technology can play in accelerating intra-African trade.

Trade in Sub-Saharan Africa was hit hard by the pandemic. Why is it that trade in developing nations has suffered disproportionately over the past two years?

The story of African procurement is rooted in complexity. Even before the pandemic, African procurement departments have faced disproportionate challenges in regulation, operations, and execution. For example, ports in Sub-Saharan Africa have the worst efficiency globally – averaging 222 hours to import goods, 130 times worse than their high income OECD equivalents. This situation was exacerbated by the global pandemic.

Covid-19 hit African trade where it hurt. Sub-saharan businesses weren't digitally ready. As one example, African businesses lagged global peers in having digital source-to-pay systems by 10%. This lag meant that African businesses struggled to adapt to new operating conditions during lock-downs which were widespread across the continent. This issue is addressable.

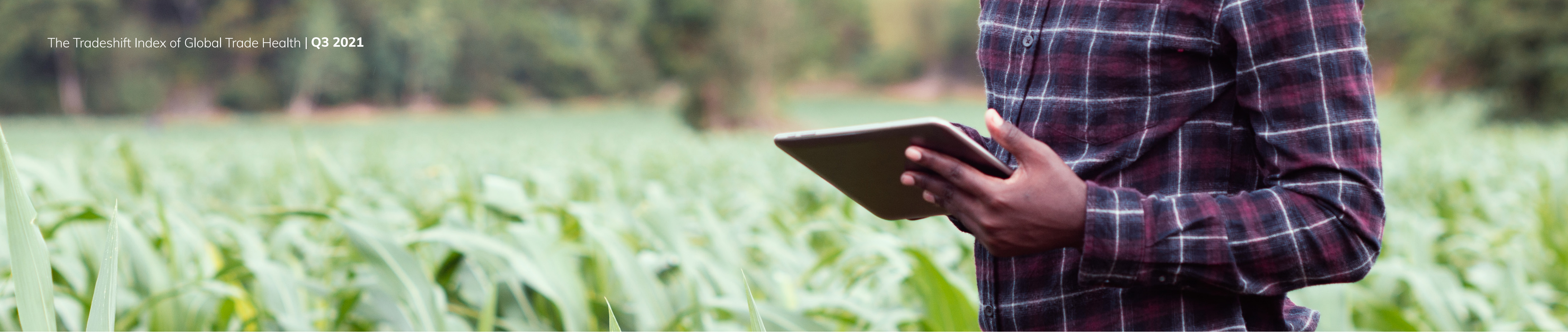
Sub-saharan Africa needs to address these challenges by implementing digital tools to support hybrid working in the event of further lockdowns and local sourcing to shorten the supply chain and import issues. The fragmented nature of the supply chain suggests that B2B marketplaces may be a good fit. They are able to support complex sourcing and purchasing requirements whilst optimizing for efficiency and transparency.

The pandemic has triggered a broad reassessment of the way supply chains are built and operated. What opportunities might that reassessment bring for Africa?

The African continent has an opportunity to step ahead of global counterparts. This is a "leapfrog moment."

Historically, "leapfrog" has been used to describe how circumstances enable a country's technology adoption that suddenly makes the country move from laggard to leader in the adoption of that technology. A good example was the rollout of mobile phones across sub-saharan Africa instead of fixed landlines. Now, large businesses have a similar opportunity to change how they purchase. Historically, digital purchasing systems have been like the "fixed landlines" in the mobile phone example - they have slowly changed to digital where the same paper processes are replicated in code. However, now Africa has an opportunity to be the first continent that extends the marketplace revolution in purchasing from the consumer world to the business world.

The pandemic is at the heart of this opportunity. Covid-19 has caused a reassessment of what is



possible in Africa and how digital can work across the continent. Now, African businesses want to increase their use of digital processes by 32% by 2025. We need to harness this desire to be world-leading and change how we go about purchasing. This new reality needs to be smooth, needs to be efficient and most importantly needs to be more transparent. These are all things which we will be introducing over the coming months as businesses large and small join the Dooka marketplace. It is going to be a beacon and example for the world of how smoothly business can be transacted. We can bring business purchasing to the same level of user experience as buying at home.

Much has been made of the African Free Trade Agreement as a way to stimulate intra-African trade. But some commentators fear it may lose steam. What might accelerate the process?

The African Continental Free Trade Area is poised to open intra-Africa borders. The agreement, ratified in 39 countries, creates a single market across Africa by dropping 90% of tariffs. The widespread ratification of the AfCFTA is one of those milestones that heralds the much-awaited ignition of the African growth engine.

But, as you have rightly pointed out, it has had its stumbling blocks. AfCFTA will fall short if the next generation of trade in Africa is going to be an extension and acceleration of the status quo. The future of a new generation of trading is not pushing more paper faster. It is the elimination of paper and red tape. It is the embracing of the digital revolution to ensure that orders are received faster, goods get shipped faster, invoices get sent instantly, and suppliers get paid faster - with transparency across the entire process. These behaviours need to become the norm, not just for individual consumer purchases, but for business purchases - and business purchases across Africa. If African trade can make that crucial step into the digital world then the establishment of the AfCFTA will become that much more real.

Can you tell us more about the inspiration for Dooka and the issues it aims to address within the context of trade in Africa?

The name Dooka came from the Swahili word 'duka' meaning a shop or market. As large companies embark on their digital journeys, there is a risk that innovation, that is to say really reimagining how things can be done for optimal value, gets forgotten. Just making something digital doesn't necessarily make it better or right. The idea of bringing the consumer online shopping revolution into the corporate digital journey is one of those things that really does bring about positive change. That's what inspired us to launch Dooka in Africa.

Dooka is going to power this transformation across the African continent. In 2021, our founders came together to pair deep local know-how and leading international technology to change the way that corporations buy goods and services across the African continent. We have a vision of a digitally connected Africa where buyers and sellers can be part of this trade transformation.

We believe that African procurement can be a force for development, a force for change, a force for growth.

For buyers, it is our vision that the phrase "Just Dooka it!" will become popular when looking for cost-effective purchasing of indirects and tail-spend items. We make it slick and easy the next time you have to buy a set of pens or get a last minute food caterer. Rather than going through an extensive procurement process, we let business buy on a marketplace (just like you do at home) whilst keeping the controls to prevent rogue spend.

For sellers, Dooka is a portal to more sales and increased opportunity. We are a bridge for sellers to connect with large buyers and expand what they can do.

Our latest Index mirrors other economic indicators in suggesting a difficult period ahead. How might the kind of digital infrastructure Dooka is building with Tradeshift help to mitigate against such pressures?

Currently, we face a difficult period which will bring acutely difficult challenges for the African continent. In an environment where resources are increasingly scarce and difficult to deliver Dooka has a unique opportunity to build stronger digital connections between buyers and sellers using the Tradeshift network. Furthermore, when times get tough, cost efficiencies and savings become more important, and Dooka is all about making purchasing as cost efficient as possible in a corporate environment.

Taking out your crystal ball, what does the ideal future of trade in Africa look like in five years, and what role does digitalization have to play in enabling this?

Five years from now, we want sub-saharan Africa to be an interconnected trade block. A block where AfCFTA has opened the door to intra-African trade and digital marketplace are the the bridges to connect sellers and buyers.

Our ambition is to have built Dooka, which was merely an idea back in 2021, to be an essential part of the African business landscape. We want to ensure 50% of African corporate indirect spending goes to African companies by achieving our own three significant milestones - serving 30+ large customers across 20 African nations, having handled over $1b in transactions, and supporting our suppliers with $100m in trade financing. We are committed to fundamentally increasing the African value creation of large corporations.

dooka
AFRICA'S B2B MARKETPLACE

Final Thoughts: Business leaders keep their eyes on the horizon

For years now, governments, business leaders and policymakers have been predicting a major shift in the global economy driven by the rise of technology in the workplace, increased geopolitical uncertainty and a requirement to move towards more sustainable business practices. The history of that 'Big Shift' is now being written as business leaders face the reality of a changed world.

At the recent World Economic Forum in Davos, much of the conversation centred around the coming economic storm. It would be an entirely natural impulse to batten down the hatches and wait. We saw this early on in the pandemic when large organizations reacted by cancelling orders and slowing payments to suppliers. We know now that this attempt at short-term self-preservation merely exacerbated the deep-seated structural issues within the current supply chain model.

Recessions are typically short-lived and followed by long periods of growth and prosperity. A 2010 study by Harvard Business Review[1] analyzed the strategies of companies during the previous three recessions, to identify which traits led to post-recession winnings.

They found that "companies that master the delicate balance between cutting costs to survive today and investing to grow tomorrow do well after recession."

Business leaders in every sector are now acknowledging what we have been saying for all these years. Amid the gloomy short-term forecast, supply chain resilience, access to finance and a focus on sustainable trade are seen as the fastest route to a brighter future.

Alan Jope, CEO of Unilever, suggests we need to accept crisis as the new normal.[2] If that's the case, there is no alternative but to keep our sights on the challenges we will face once the current storm has passed. Technology gives us many of the tools we need to lessen the resurgent influence of not only inflation but other nagging supply chain issues as well.

Adversity is always a good motivator for both creative thinking and collaborations of common interest. The pressure to decarbonise and diversify supply chains represents an enormous and immediate challenge. Conversely, it could also be the catalyst for a *Wirtschaftswunder* for the whole world. With the advent of new technology and energy sources, we could be on the cusp of a new industrial revolution; one where highly skilled, rewarding work delivers tangible long-term value for all.

1 Harvard Business Review, Roaring out of a recession, March 2010

2 Reuters, Unilever CEO sees crisis as new normal for industry, 06/21/2022

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 expectations 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 5 and 6 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 11, 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

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