Supply Chain Sustainability

Achilles Supply Chain Resilience Index

Q2 2023

Please contact James Auger, Product Director, for more information about the release.

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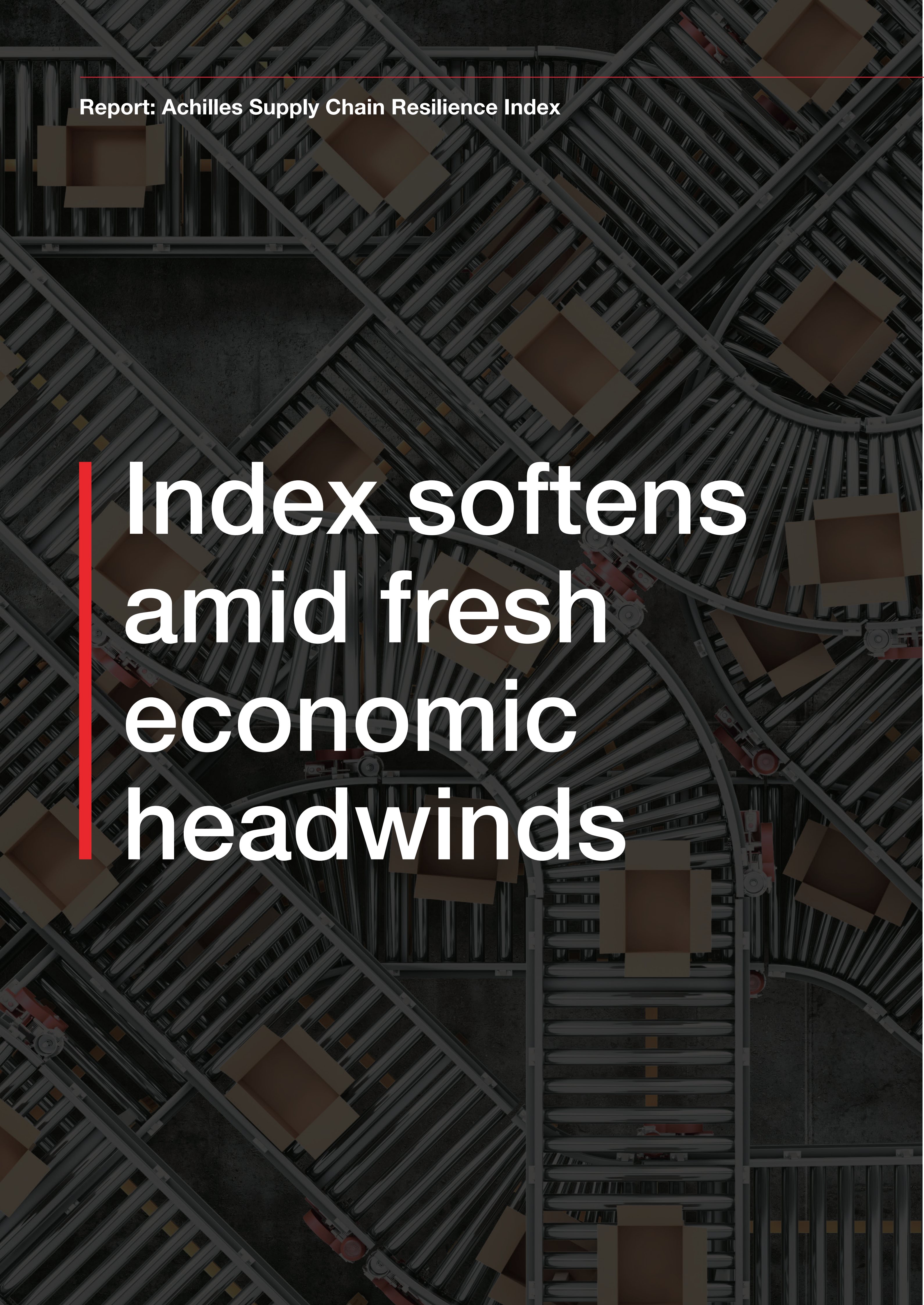


Index softens amid fresh economic headwinds

ASCRI, Achilles' supply chain resilience index, points to weaker resilience overall, with headwinds for the remainder of the year intensifying rather than easing.

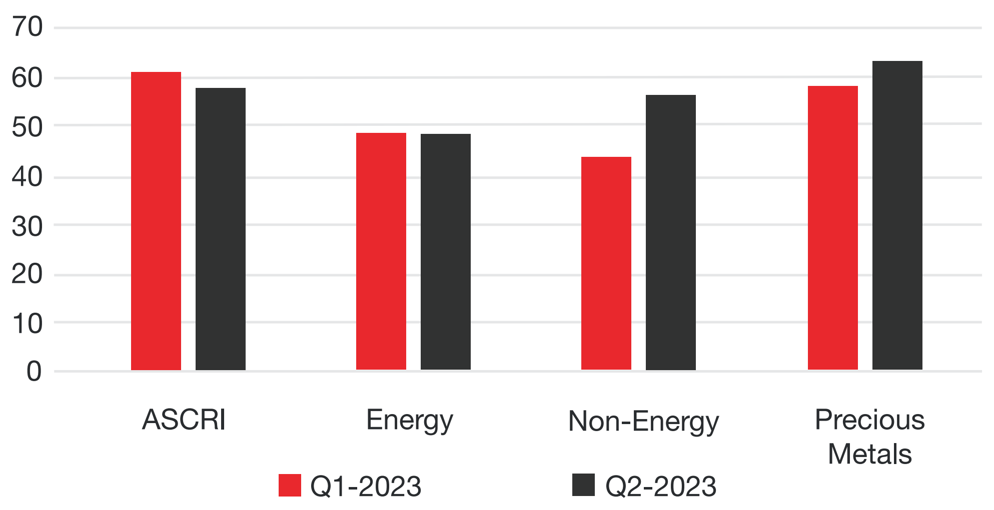
The headline figure has softened from 60.9 in Q1 to 58.6. While the index movements in Q2 are not large, the continued presence of drags and turmoil show a slow recovery of supply chains, with downward revisions a strong possibility. In Q3 we have already seen fresh trade restrictions, highly destructive natural disasters in many parts of the world and continued risks relating to the Ukraine conflict.

Looking into the figures, some reduction in price volatility was overwhelmed by inflationary effects and negative trends in Achilles' own supplier data. The overall score remains in the 'Moderate' range. The index has a scale of 0-100 with 100 representing maximum resilience. The ASCRI is a widely watched indicator of the global business climate. It combines Achilles' own assessments of supplier performance with external supply chain frictions and price pressures. The flash reading for Q3 2023 suggests a renewed firming to 60.5, but this is subject to revision.

Price volatility drivers

The chart below shows how price volatility lessened somewhat in Q2, particularly for precious metals. With inflation easing central banks are pausing rate increases and reducing volatility in the financial markets. Non-energy volatility improved to 56.4, while energy price volatility was essentially flat. Energy prices continue to be more unpredictable than the other categories, however.

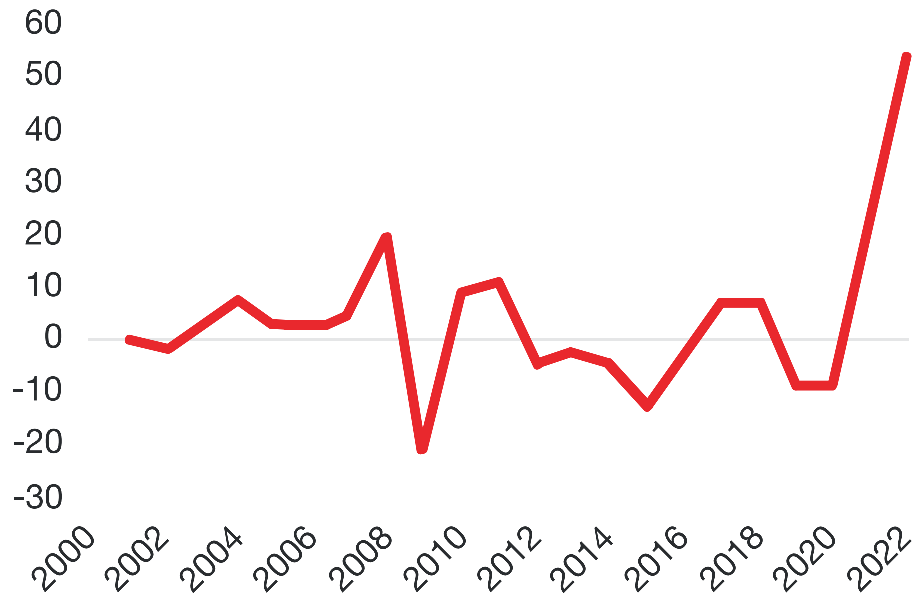
ASCRI and Price Volatility Drivers



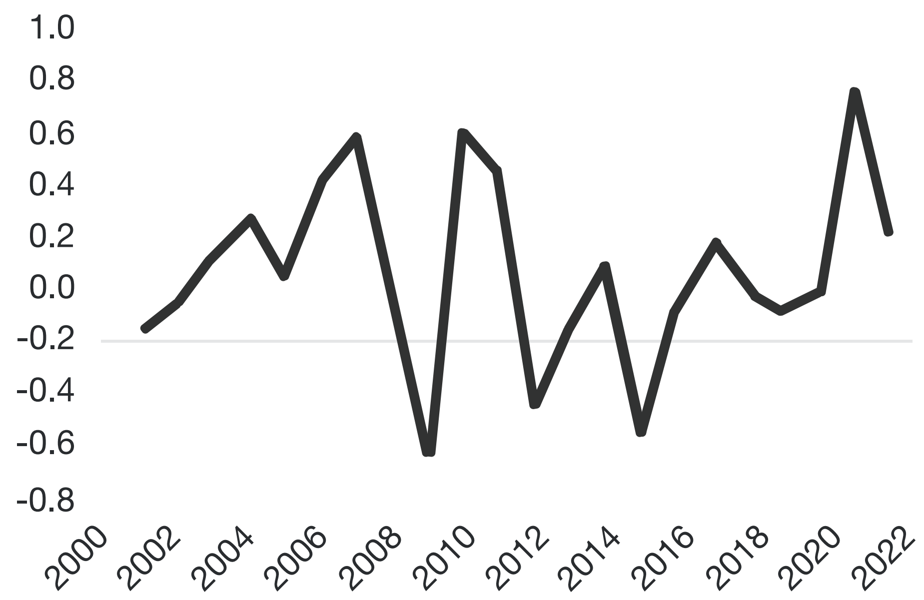
	Q1-2023	Q2-2023	Change
ASCRI overall	60.9	58.6	-2.3
Energy	48.4	48.6	0.2
Non-Energy	44.3	56.4	12.1
Precious Metals	58.1	63.3	5.2

We can see from the chart below that in historical terms, energy price volatility has been extremely high over the past two years. The range is much lower for non-energy prices, perhaps counter-intuitively given all the discussion of cost-of-living pressures in the UK and elsewhere.

Energy Price Volatility



Non-Energy Price Volatility



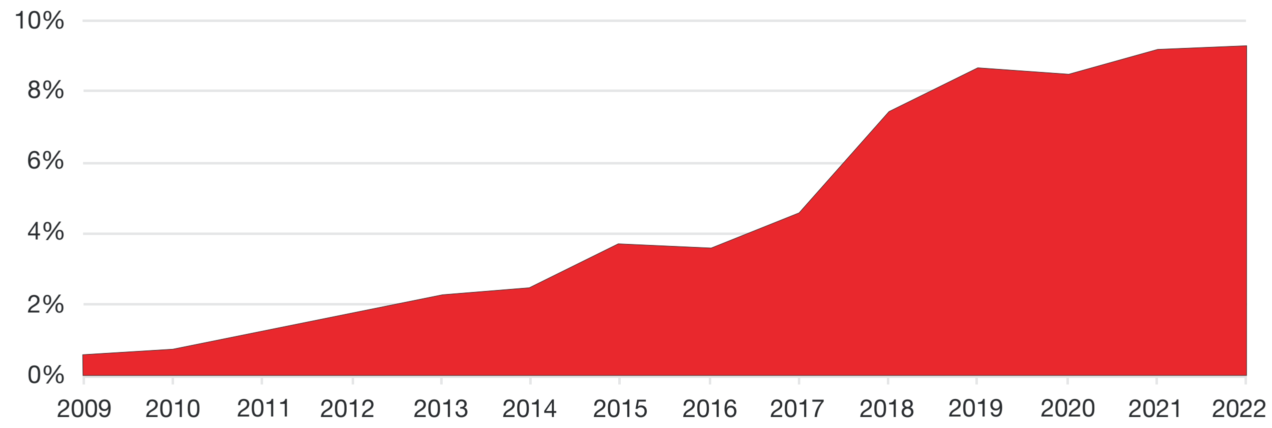
Protectionism and regionalism clouds recovery

After previous downturns – 2007-08 notably – trade and globalisation were seen as the path to recovery. This time, global trade is seen much less favourably and barriers to ‘cheap imports’ are more prevalent. Security concerns also play a part in this narrative.

At the start of September, Apple’s share price fell on the back of stories that Chinese government officials would be banned from using iPhones. A small group of users, perhaps, but a harbinger of possible further bans. This Chinese ban would mirror sanctions by the United States, among others, of Chinese companies like Huawei telecoms equipment and TikTok.

Though too soon to be called a trade war, such tit-for-tat skirmishes are undermining confidence in trade. Gauging the impact is difficult, but the OECD estimates that over 9% of global merchandise is now subject to import restrictions.

Share of global merchandise imports affected by restrictions (%)



Source: OECD, June 2023

The BRICS (Brazil, Russia, India, China and South Africa) has lately added six new members – Argentina, Egypt, Ethiopia, Iran, Saudi Arabia and the UAE. This broad church of countries contributes around 45% of the world’s population, 29% of global GDP and, significantly, 40% of global crude oil (OPEC countries produced 34.1%). With this increased heft, the group can further ambitions to represent the “South” and balance the US/Europe centric “West”. A new acronym eludes the group, but another super-trade bloc will further striate trade flows, likely setting back globalisation.

The trade situation is further complicated by a recent set of policies to promote specific industries. Case in point are some designed to help the energy transition – the US Inflation Reduction Act (IRA) and the EU Critical Raw Materials Act. Under the IRA, Australian lithium, for instance, can attract a price premium in the US over Chinese lithium. Under the free trade deal, cars with Australian lithium attract a tax rebate. While functionally a commodity, price-wise lithium is not.

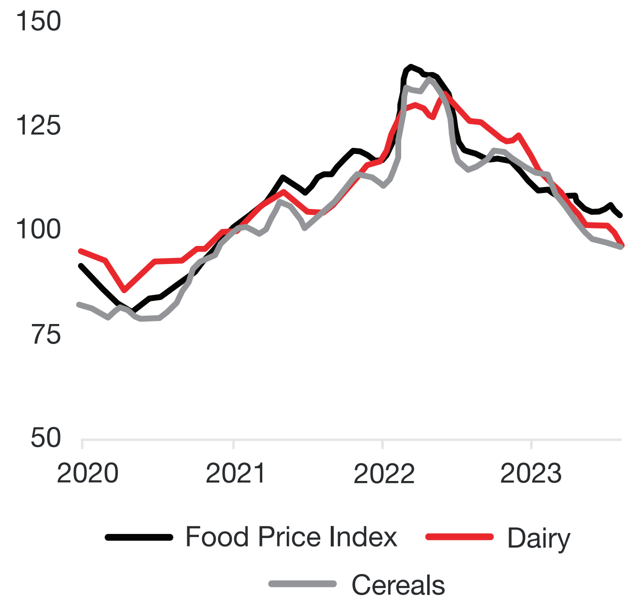
Trade data evidence

The long-term effects of these developments on economic growth is unclear. What is apparent is that trade is already slowing. The value of exports from China's was down 14.5% year-on-year in July and down 8.8% in August. Revenue at DHL's Global Forwarding, Freight division fell by 40.7% in Q2 2023 due to lower volumes and rates. Chinese trade routes were particularly adversely affected and saw a 47.2% drop in earnings. AP Moller-Maersk forecasts that container demand in 2023 will contract in the range of -4%- -1% relative to 2022. At the start of the year, its forecasts were -2.5%- +0.5%. Worryingly, this contraction in trade was after the lifting of stringent Chinese lockdowns, which were still in place in Q2 2022. This is not to single out specific companies, but to point out the weakness of global trade and highlight a step-down in the Chinese economy, which dipped into deflation in July, before 0.1% growth in August.

Central banks tread tightrope

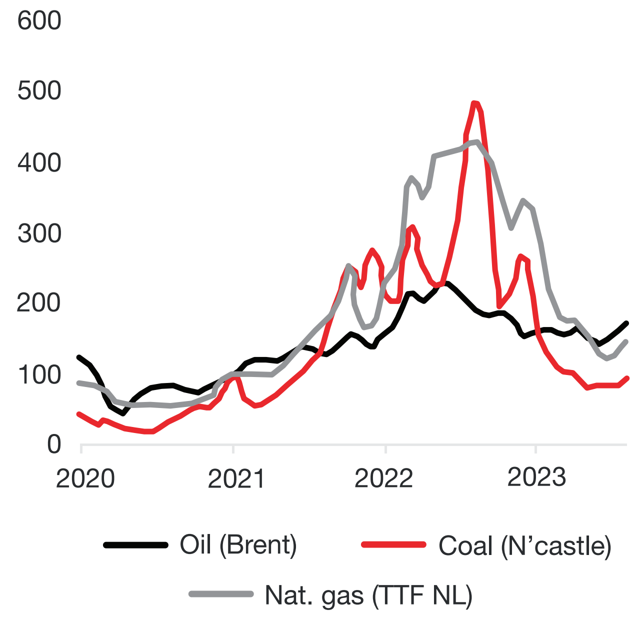
Threats of slower trade and weaker economic growth are not stopping central banks tackling the issue of high inflation. And with noticeable improvement in many countries. While still above the nominal 2% targets set for many central banks, levels are more manageable for businesses and consumers. Both food and energy inflation have dropped noticeably, and with wages starting to catch up with inflation in many countries, consumers' discretionary spending is also recovering.

Food price indices (Jan 2021 = 100)



Source: OECD

Energy benchmark prices (Jan 2021 = 100)

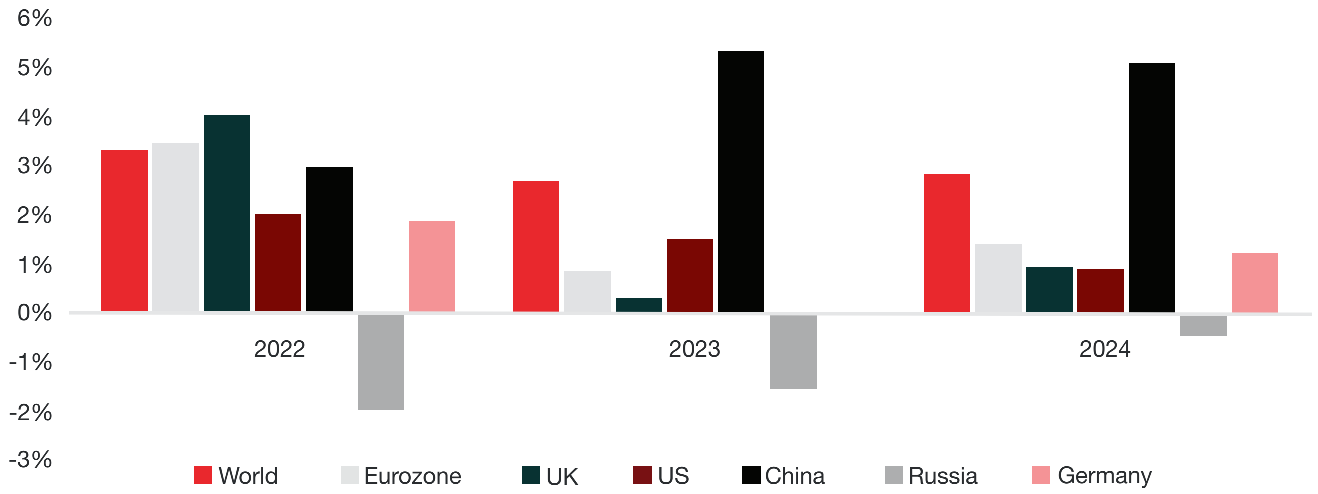


Source: OECD

Inflation has proven to be more stubborn than expected. So, despite the threat of pushing the bloc into recession, in September the European Central Bank raised inflation for the tenth month in a row. The expectation is that this may be the last rise, but that rates will be held at the current 4.0% for the next 12 months. Policy makers in other countries are looking at data to understand how rates should be massaged.

GDP outlook brightens somewhat, Germany struggles

Putting to one side the trade-related risks, global economies are on a firmer footing than even last quarter. The success in bringing down inflation is largely to thank. The threat of a global recession has diminished, though a few dark spots persist. Economic growth prospects are expected to improve in almost all countries. Though near-term improvements may be marginal.



Source: OECD

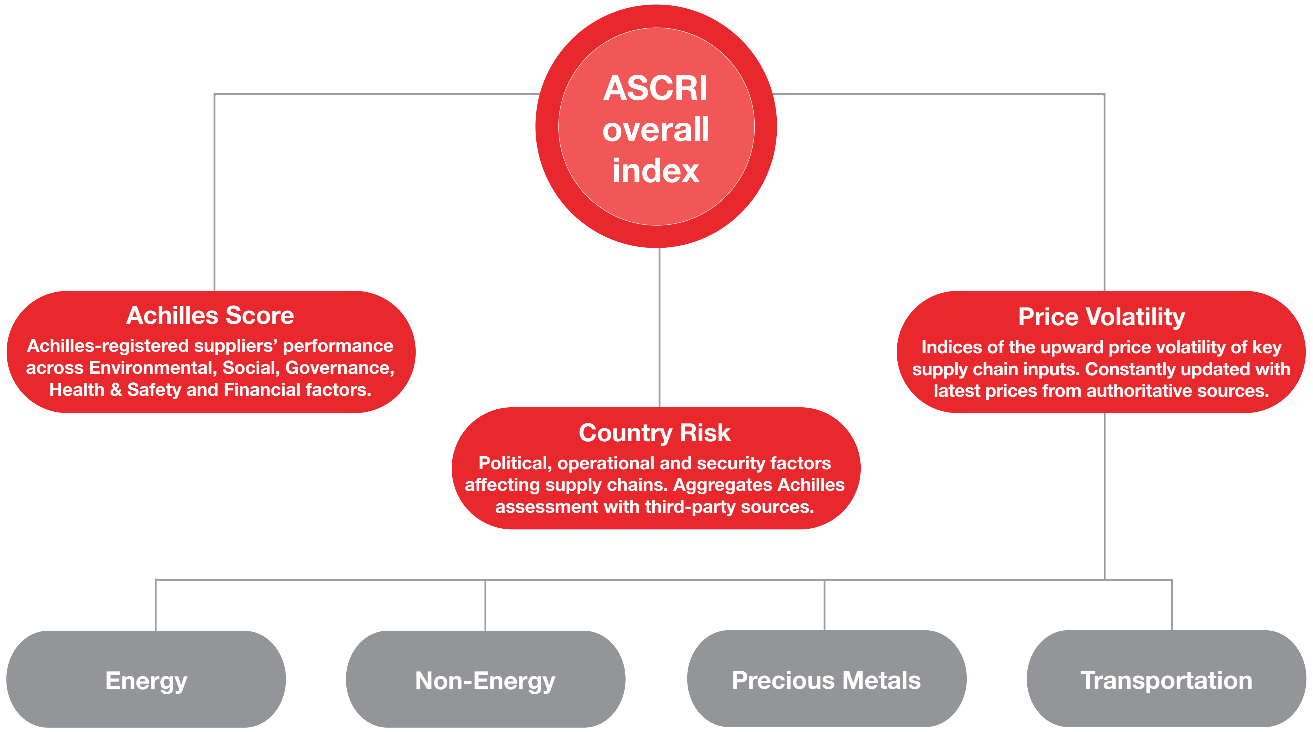
One of those dark spots is Germany. Its export-led, manufacturing economy had been the bedrock of the European economy for many years. Today, a weakening export market and higher prices for energy, due to the loss of natural gas from Russia, has hit the manufacturing sector hard. Germany is expected to see no improvement in GDP over 2023. Other EU countries, notably Spain, will help the region to grow, but a weaker Germany will restrict growth in the region.

Taking a positive view, globally the economy is standing stronger than at the start of the year. Careful steps by central bankers and governments alike have overcome what looked like a certain descent into global economic contraction. Threats from slower trade and protectionism, and other factors like weaker construction markets and growing government debt, may unwind all the progress. Absent these developing, 2023 will see broad improvement and set the stage for stronger growth 2024. A long and winding road, indeed, but movement in the right direction.

Appendix: How is ASCRI calculated?

ASCRI draws on a unique methodology that combines Achilles' proprietary data on supplier performance with country risk factors and price volatility. The output is the most comprehensive index of supply chain resilience available. The minimum score of 1 would show extremely low resilience (high supply chain risk), while 100 equates to maximum resilience (minimal supply chain risk). It is produced by our in-house data science team and has been built on the basis of extensive analysis and benchmarking against other providers. Different data sources are refreshed at different times which means we offer flash estimates of the latest quarter, followed by actual data in following quarters. In Q2 2023 we added more indicators from the International Labor Organization (ILO) to our country scores, covering areas such as child labour rates, size of the informal economy and work stoppages.

The inputs can be summarised as follows:



81-100	Resilience is very high, and risk is significantly lower than average
61-80	Resilience is high and risk is relatively low
51-60	Resilience is average and risk is moderate
41-50	Resilience is lower than average and risk is high
1-40	Resilience is quite low, and risk is very high

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