

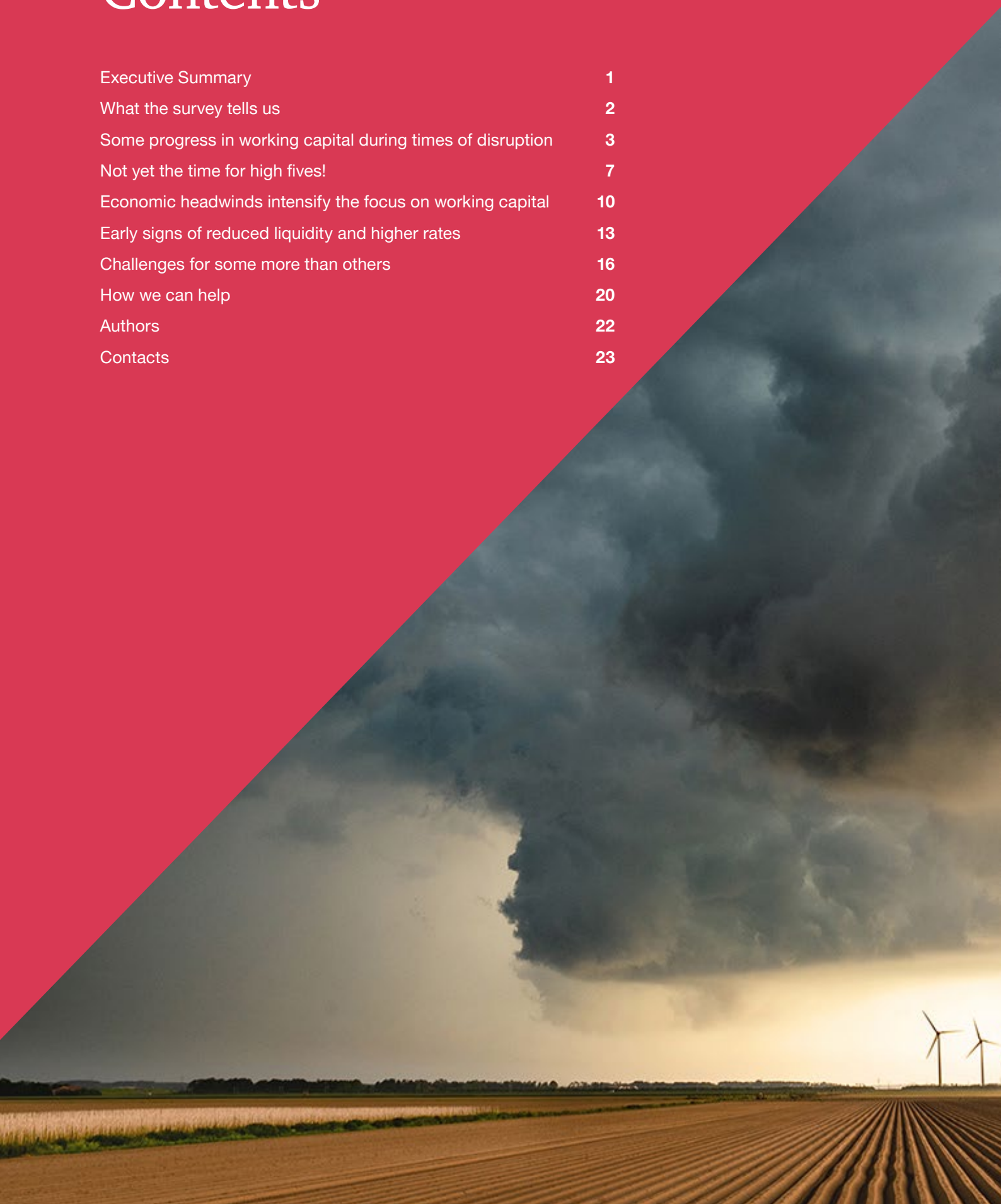
Working Capital Study 22/23

**Fasten your seat belts,
turbulence ahead**



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Executive Summary

As economic turbulence mounts and debt funding becomes harder and more expensive to secure, the pressure on liquidity is steadily increasing. This makes it more important than ever to sharpen your focus on cash flow management and drive working capital optimisation.

Looking at the headline numbers in our 22/23 Working Capital Study, you could easily come away thinking that all is reasonably well. But superficial signs can be deceptive.

Last year's PwC Working Capital Study showed how working capital and supply chains were slow to react to external shocks, though they did subsequently begin to recover. In this year's analysis of the largest 18,000 global corporations, we see some stability in overall working capital ratios and some continued recovery from the heightened levels reached during the pandemic.

Trouble brewing under the surface

So is this the cue for high fives all round and a sigh of relief for having weathered the storm? Unfortunately, the short answer is no. The working capital ratios set out in the last annual financial statements show some signs of recovery. But, when we dig into the details, there are still some worrying trends and untapped opportunities to boost capital efficiency. Overall we believe there is likely to be €1.49 tn of excess working capital currently on companies' balance sheets; money that could be put to much more productive uses.

From just-in-time to just-in-case

The main source of improvement has been closer management of customer receivables. This is to be expected given the pressure on payment morale during the pandemic. But inventory performance hasn't changed. This is likely to have been masked by the fact that the continued disruption in supply chains is leading to shortages of some materials, as well as panic overstocking of others. More and more businesses are adopting a 'just-in-case' approach to bolster resilience which is likely to have negative impacts on working capital.

Quarterly performance actually shows that the most consistent trend since the shocks of early 2020 is a steady climb in nominal working capital. So companies need more cash to continue to operate. Net working capital (NWC) days have fluctuated by 6.5 days (17%) over the two year period, and have experienced a further 3.4 day increase more recently.

The impact of inflation

The macroeconomic headwinds heighten the pressure on your business to manage your working capital more actively. Economic growth has been sluggish and the slowdown looks set to continue, which will filter through to changes in demand and supply chain requirements. Further, inflationary pressures are intensifying and are likely to continue for the next two years.

Lending squeeze heightens need to optimise NWC

Interest rates are increasing in most major economies. As a result, funding and working capital will come at a higher price. Not only is there an impact on cost of capital, but the availability of liquidity is also changing. Early warning signs can be seen in the leveraged loan and high yield bond markets, where new issuance has dropped significantly and costs have risen. There is no liquidity crisis yet, as the corporate bank market continues to be a primary source of funding. But banks are becoming more selective about who they lend to.

The current economic and geopolitical challenges will continue to weigh on NWC performance. As your business comes up against a combination of sluggish economic growth and increasing cost pressures, maintaining a healthy level of working capital will become even more crucial. Uncertainties over supply chains mean that determining the right level of working capital will be increasingly important and even more complex.

Questions for your organisation

If we bring the macroeconomic developments and working capital trends together, four critical questions emerge:

- Beneath the surface of the headline indicators, what is the optimal level of working capital for your business?
- What economic, supply chain and other adverse developments ahead could jeopardise your working capital position?
- As funding becomes more expensive and difficult to access, how can you uncover and release the cash tied up in your business?
- Are operational processes ready to react at pace to future disruption and proactively protect your company's cash flow?

Addressing these questions isn't just critical in strengthening operational resilience and steering through the turbulence ahead, but can also help boost funding for investment in transformation and growth.

What the survey tells us

Net Working Capital

2.5%
fall in annual NWC days

Despite significant change and disruption, this has meant that NWC days have marginally improved by 1.1 days since 2020, reaching a five-year low.



Cash levels in companies

10%
decline in cash days

2021 has witnessed a significant fall in cash days for companies. However the data shows that companies are still operating with a cash buffer to withstand uncertainties.



Inflationary pressure

14%
expected inflation to hit a peak
at a four-decade high

Pressures on costs and prices for companies will put further stress on cash positions and working capital for businesses.



Less abundant and more expensive debt

**Institutional loan volumes are
down significantly in comparison
to 2021 levels**

As cost of debt increases in line with interest rates rising globally to counteract inflationary pressures, this will result in companies struggling to source cheaper debt, as seen in 2021.



Some progress in working capital during times of disruption



Working capital becomes increasingly important in times of uncertainty. This includes bolstering liquidity and improving your ability to respond to future shocks. Following a sequence of economic jolts stretching from the impact of the COVID-19 pandemic through to supply chain disruption, rising inflation and the war in Ukraine, the focus on cash has become ever more critical.

Looking at the headline working capital indicators, it seems that corporations around the world have responded to the shocks by stepping up their focus on, and protection of, cash flows and working capital. Despite significant change and disruption, this has meant that NWC days have marginally improved by 1.1 days since 2020, reaching a five-year low. But the bounce in post-pandemic revenue has also resulted in a nominal increase in working capital of €0.8 tn.

While overall NWC appears stable, there are some more significant movements when looking at each of the individual components. Notable areas of progress include receivables' performance as measured in Days Sales Outstanding (DSO), with a 3.2% decrease down to 51.7 days. However, this movement is only a partial correction of the increase seen from 2019 to 2020.

The continued supply chain disruption has also led to a mixed picture when looking at Days Inventory Outstanding (DIO). Continuing sourcing challenges have made it difficult for many businesses to sustain normal levels of DIO. At the same time, others have looked to increase stock holdings to protect against shortages. The push and pull of over availability and shortages have offset each other and led to the overall global DIO number holding steady, though the real picture is one of volatility.

The positive movements on the asset side have been partially offset by a decline in Days Payable Outstanding (DPO) of 1.5%, down to 72.6 days. The lack of real movement in receivables and payables in comparison to the increases from 2020 will be of particular concern to companies as payment fatigue appears to have entrenched itself within operations.

Figure 1: Net working capital and working capital days

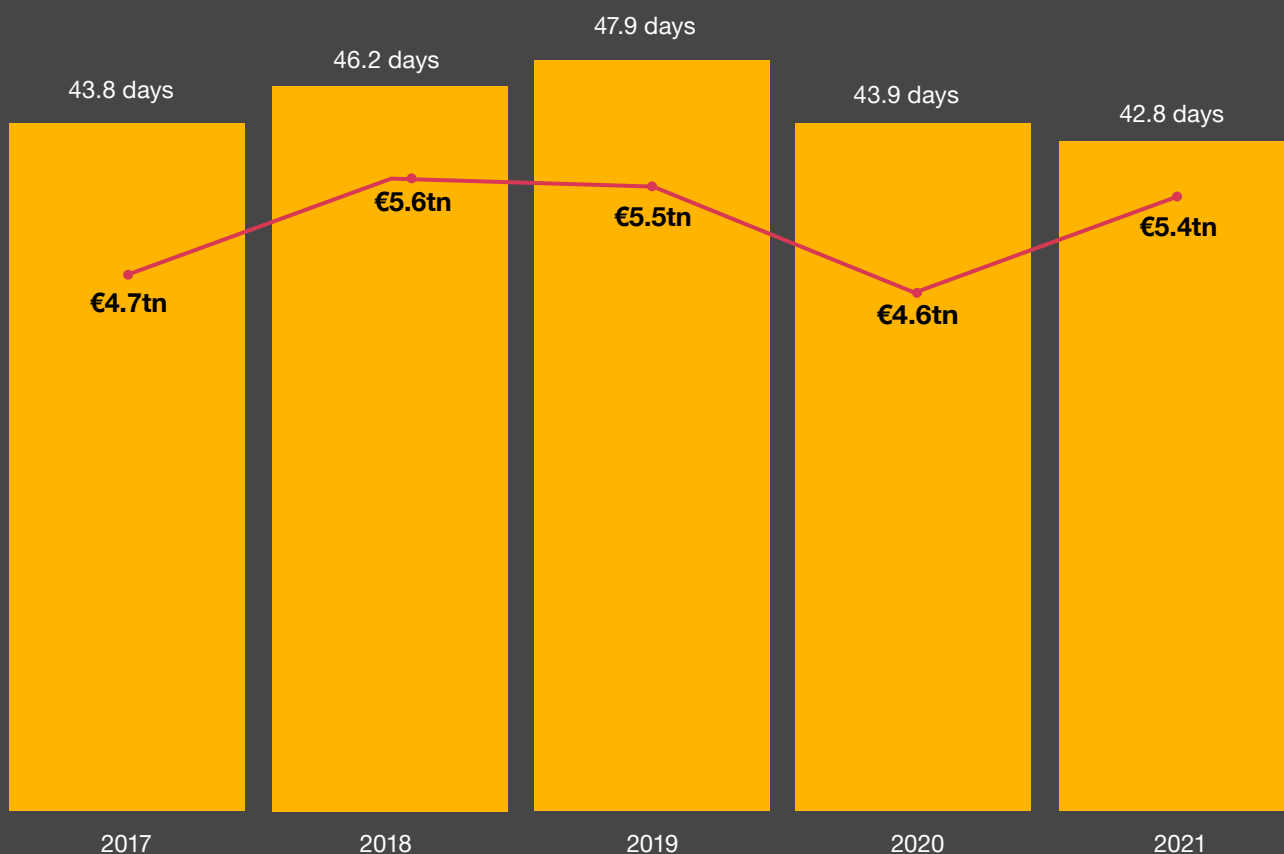


Figure 2: DSO, DIO and DPO trend



Days change year on year

Days (Sales Outstanding / Inventory Outstanding / Payables Outstanding respectively)

When we look at the cash position, the overall picture is encouraging. Despite cash days declining by 10% in 2021 from 70 to 63 days, they remain relatively high in relation to the five-year average following the substantial increase during 2020. This indicates that companies are still operating with a cash buffer to withstand uncertainties.

Figure 3: Cash Days (to cover Operating Expenses)



Not yet the time for high fives!

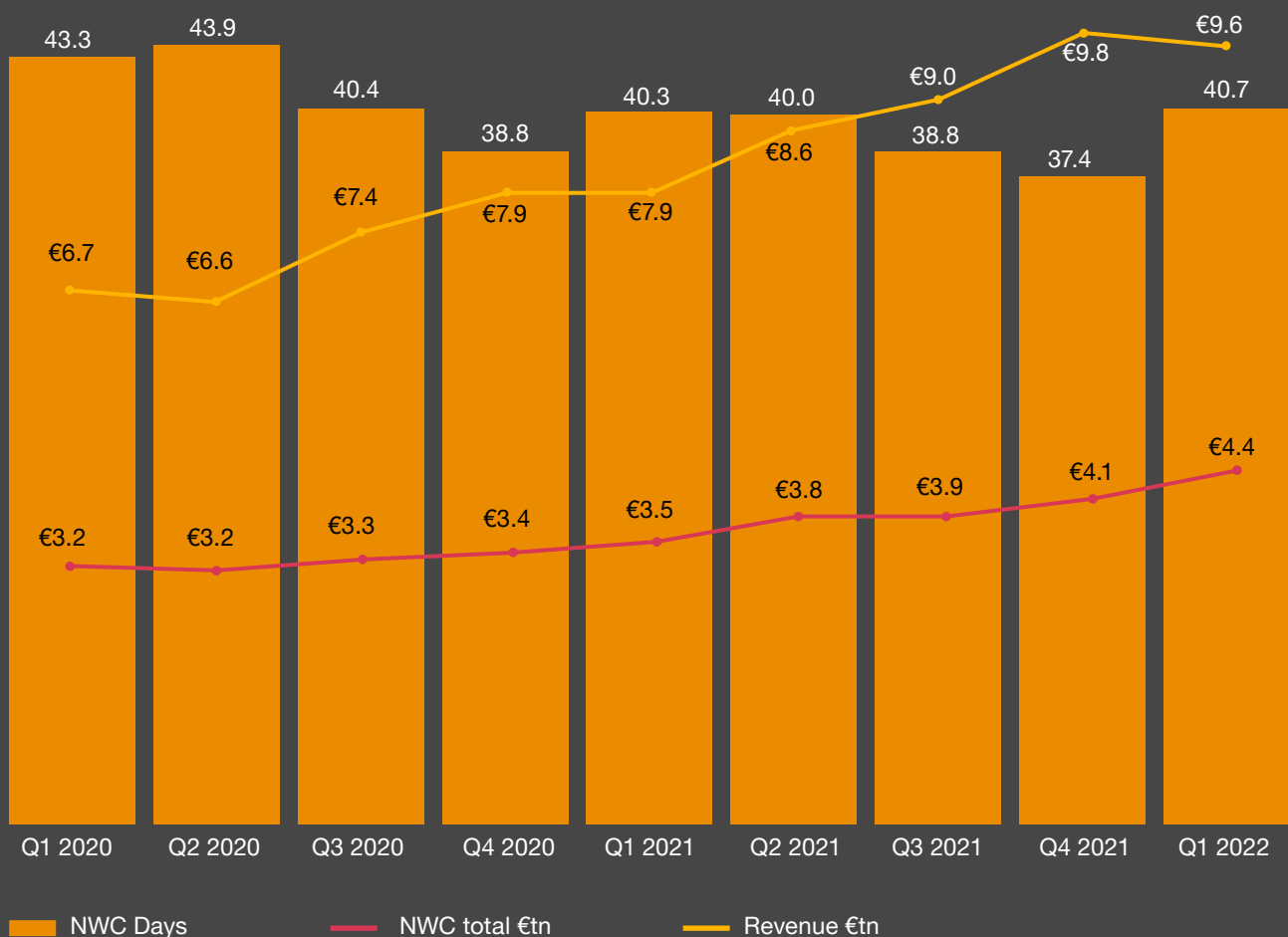


So with the headline working capital ratios and inventory levels holding steady, should we all be breathing a sigh of relief? The problem is that the financials set out in the financial report indicate a lag that may be giving us a false sense of security, especially now we're in a period of heightened economic and political volatility.

Looking at quarterly performance for a subset of corporates where this data is available, the most consistent trend since the shocks of early 2020 is the steady climb in nominal working capital. This gradual increase hasn't consistently tracked with revenue. As a result, quarterly NWC days have fluctuated by 6.5 days (17%) over the two-year period, and increased by 3.4 days in the most recent quarter.

Our analysis shows that the improvements in the working capital ratio have stalled. And while it is still better than before the pandemic, we're starting to see more signs of supply chain disruption filtering through to working capital performance. In our previous report, we saw evidence of a lag between revenue shocks and the related movement in working capital. So there is a risk that companies have treated the symptom rather than the cause and that history could repeat itself, with inventories and receivables built back without fundamentally addressing the operating model and processes which led to the issue. We can see that inventory and payable days are fluctuating significantly, with notable increases in the first quarter of 2022.

Figure 4: Quarterly movements in revenue, net working capital and working capital days



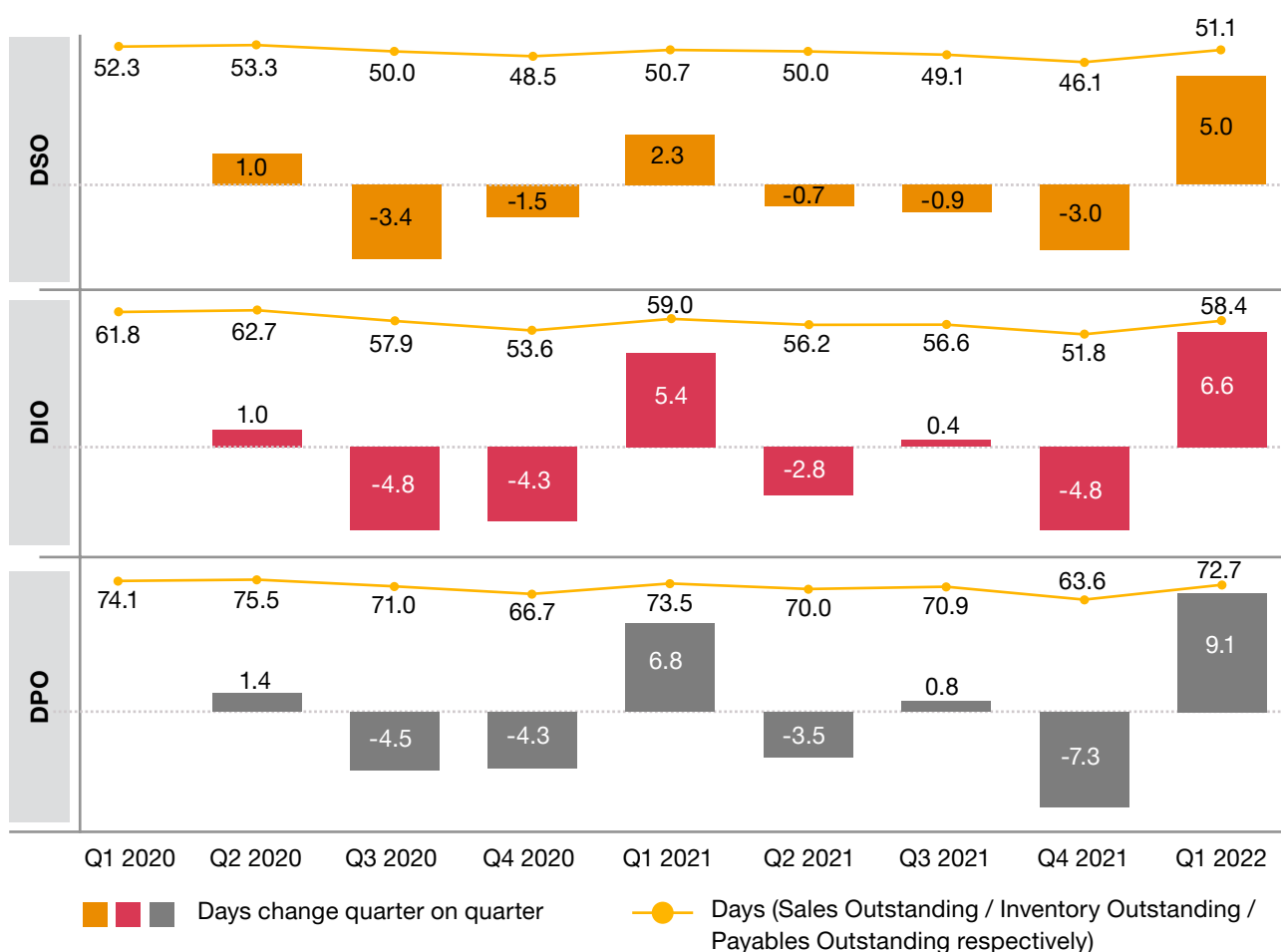
The fluctuation in inventory days also points to the growing adoption of a just-in-case approach as companies look to strengthen operational resilience in the face of supply chain challenges such as empty shelves, lack of raw materials and components. But as our market observations underline, there can be serious drawbacks with this approach including:

- Over-ordering leading to inventory levels that fail to match market demand.
- High stock write-off costs.
- Shortfalls and constrained capacity, driving the need for additional allocation planning.

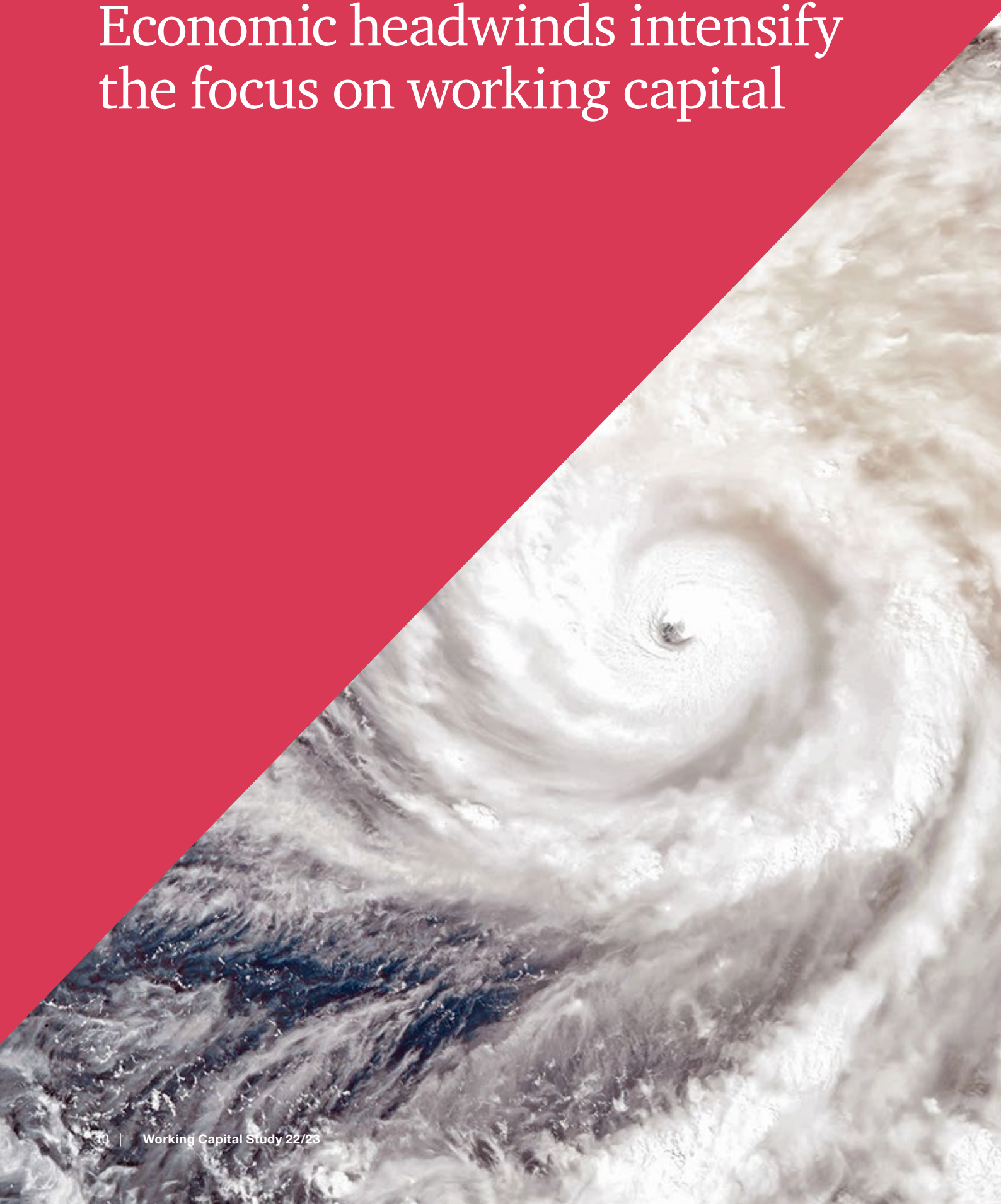
- Heightened sourcing disruption, market distortion and risk of protectionism as firms compete to secure supplies.

This approach provides some comfort, but also exponentially increases the risks of future obsolescence by extending the response time to dips in demand, as well as increased capital consumption from running at higher safety stock levels. Working capital and stock reduction may therefore require a possible rethink especially when considering the wider economic and liquidity headwinds looming.

Figure 5: Quarterly DSO, DIO and DPO trend



Economic headwinds intensify the focus on working capital



As the world grapples with the aftermath of the pandemic, heightened geopolitical tensions and rising inflation, there are three key macroeconomic trends that could potentially impact performance of net working capital in the coming years.

1 Slow economic growth is likely to drag on

While most advanced economies have returned to their pre-pandemic levels of output, growth in 2022 is likely to be weak. Recent downgrades in predicted growth attest to the challenges ahead. For example, GDP growth forecasts for the US, UK and the EU have been halved to around 2.5%, 3.6%, and 2.6% respectively compared to predictions made six months ago¹. The OECD has also forecast that the UK would be the weakest G7 economy next year as higher interest rates, tax rises, shrinking trade and rising food and energy prices exacerbate the cost of living crisis. Latest data shows the UK economy has shrunk slightly by 0.1% in Q2 2022 despite stronger than expected growth of the construction sector, and recovery of consumer-facing businesses as travel and entertainment activities resume².

From a working capital perspective this means that any forward commitments and investment in inventories need to be critically evaluated and payment behaviours closely monitored. This is key for avoiding unnecessary working capital exposures that may have originally been based on a more 'aspirational' business outlook.

2 Inflationary pressure is expected to continue for at least two more years

Inflationary pressures continue to intensify in the wake of the Russian invasion of Ukraine: Prices of energy and food, which have been the most impacted by the war, have surged to an unprecedented level. Over the last 12 months, crude oil prices have risen 50% and wholesale natural gas prices have risen by over 200%. This has had a knock-on effect on the prices of many other goods and services. As a result, the OECD has doubled and, in some cases, tripled their 2022 inflation forecasts for member countries³.

For the UK, our model predicts that inflation would peak at a four-decade high of around 14% in Q1 2023, and would not return to the 2% target until at least the end of 2024.

Surges in material prices, combined with the ongoing supply chain challenges could also have a knock-on effect on their ability to maintain a healthy level of inventories. This would make businesses more vulnerable to future supply shortages and price fluctuations. As a result there is some forward buying and 'speculative' upstocking to protect against future price rises. However this could present upward pressure on working capital, a drain on cash, as well as increase the risk of future inventory obsolescence.

3 Further interest rate rises leading to higher financing costs

Central banks across the world have continued to tighten monetary policy and roll back quantitative easing. Bank rates and projected rates have also risen sharply in response to the record high inflation. The US and EU have joined the global trend of pushing up interest rates, with the Federal Reserve raising interest rates by 75 bps twice consecutively, to 2.5% in from 28 July (the biggest rate hike in 30 years)⁴ and the ECB pushing up the rates by 50 bps (the first time in 11 years)⁵. Similarly, in its Monetary Policy Committee meeting on the 4th of August, the Bank of England (BoE) raised interest rates by 50 basis points (bps) to 1.75%, the sixth time in succession it raised Bank rates in just under a year⁶. And further rate hikes are expected in the coming years as the UK faces double-digit inflation of 10.1% in July for the first time in 40 years⁷. This means that borrowing, and therefore working capital, is coming at a higher price.

¹ OECD Economic Outlook, June 2022

² ONS

³ OECD Economic Outlook, June 2022

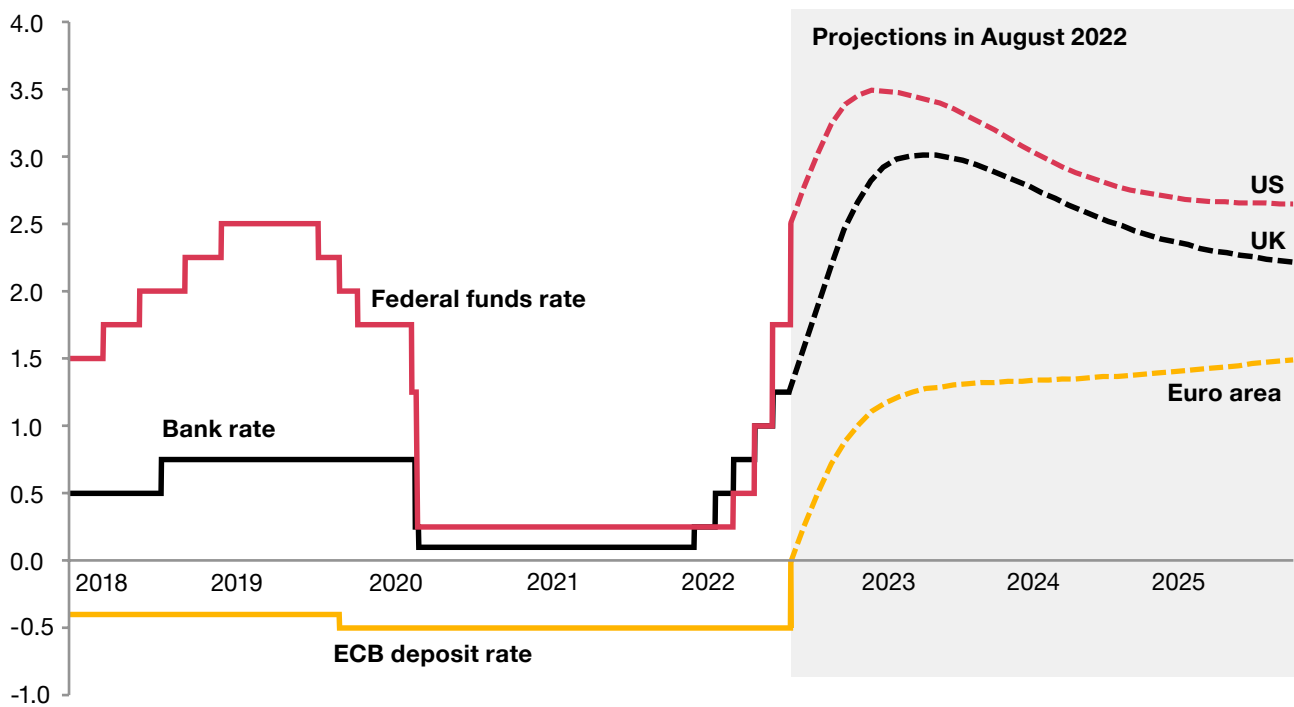
⁴ BBC

⁵ The Guardian

⁶ Bank of England

⁷ Bloomberg

Figure 6: International forward interest rates, %



Source: Bloomberg Finance, [ECB](#), [BoE Monetary Policy report- August 2022](#)

Note: Data as of 26 July 2022, except for ECB deposit rate and Federal funds rate which are to 27 July 2022. The August curves are estimated using instantaneous forward overnight swap rates in the 15 working days to 26 July 2022. Federal funds rate is the upper bound of the target range.

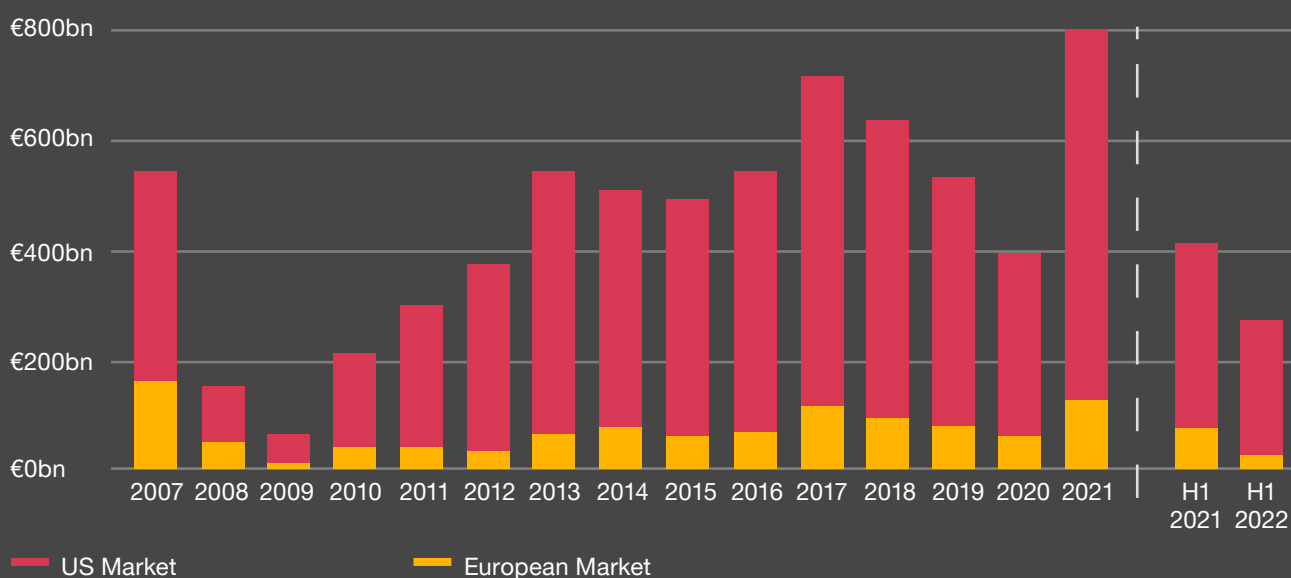
Early signs of reduced liquidity and higher rates

With central banks around the world increasing interest rates to combat inflation, corporate cash flows are coming under increasing pressure. Meanwhile, the economic headwinds discussed earlier – namely cost inflation, supply chain and the war in Ukraine – are impacting lender sentiment and the global debt markets. As a result, the need to manage liquidity and working capital is firmly back on the radar.

1 Institutional leveraged loan markets

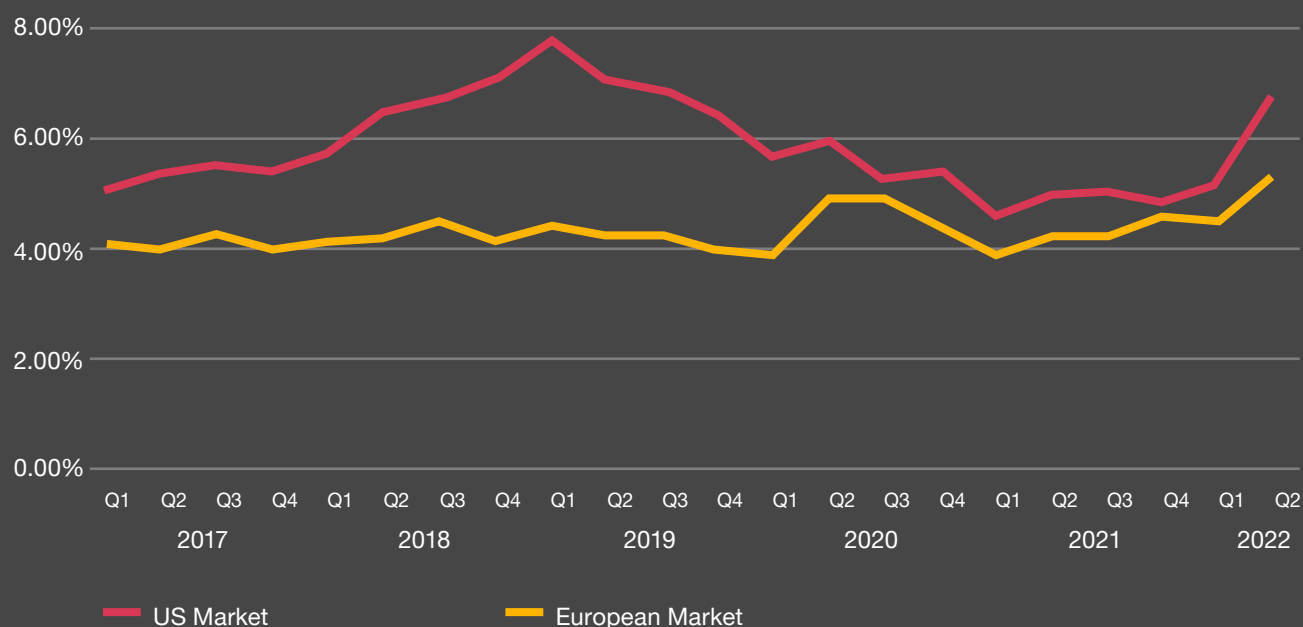
Primary debt issuance in both the US and the European institutional leveraged loan markets is significantly down compared to last year. Macroeconomic and political concerns have had a significant impact on volumes in both markets during the first half of 2022, as illustrated in the chart below. US institutional loan volumes in Q2 2022 were 50% below Q1 2022 and 66% below Q2 2021.

Figure 7: Leveraged Loan Issuance



Secondary prices in both of these markets declined well below par for a sustained period of time. This has reduced the appetite for new primary debt issuance, as well as making pricing of any new leveraged loans more challenging. Rates increased sharply in the second quarter of 2022 for new single B-rated loans in both the US and European markets.

Figure 8: Yield to Maturity, B-rated (rolling 3-months)



2 High yield bond markets

Similar trends have been seen in the high yield bond markets in both Europe and the US. Russia's invasion of Ukraine was the initial trigger, with the high yield bond market in Europe recording no issuance for nine straight weeks from the middle of February 2022. New high yield issuance in Q2 2022 was significantly down on the previous year in both markets. Overall there has been an outflow from specialist high yield bond funds, reducing liquidity available to invest in new primary high yield bond issuance.

3 Debt fund markets

While there are challenges facing the debt markets, there is not a liquidity crisis as was seen during the global financial crisis. One debt market that continues to see a lot of activity is the debt fund market, which has been an increasingly popular source of financing for both private equity and corporate borrowers. Debt funds are however being more selective about sectors they lend into, with some focusing on more defensive sectors such as technology and healthcare.

4 Corporate bank markets

For the wider corporate market, banks continue to be a primary source of liquidity. Banks remain open but are being more selective around borrower relationships. Banks are also becoming more return-focused, ensuring that the pricing of loans meets internal bank hurdle rates, as well as pushing borrowers for ancillary 'share of wallet'.

With continued concerns over the wider economic environment, we are expecting asset-based lending to become more popular for asset-heavy businesses. This is where banks lend against a borrowing base of specific assets, such as inventory, machinery and/or receivables.

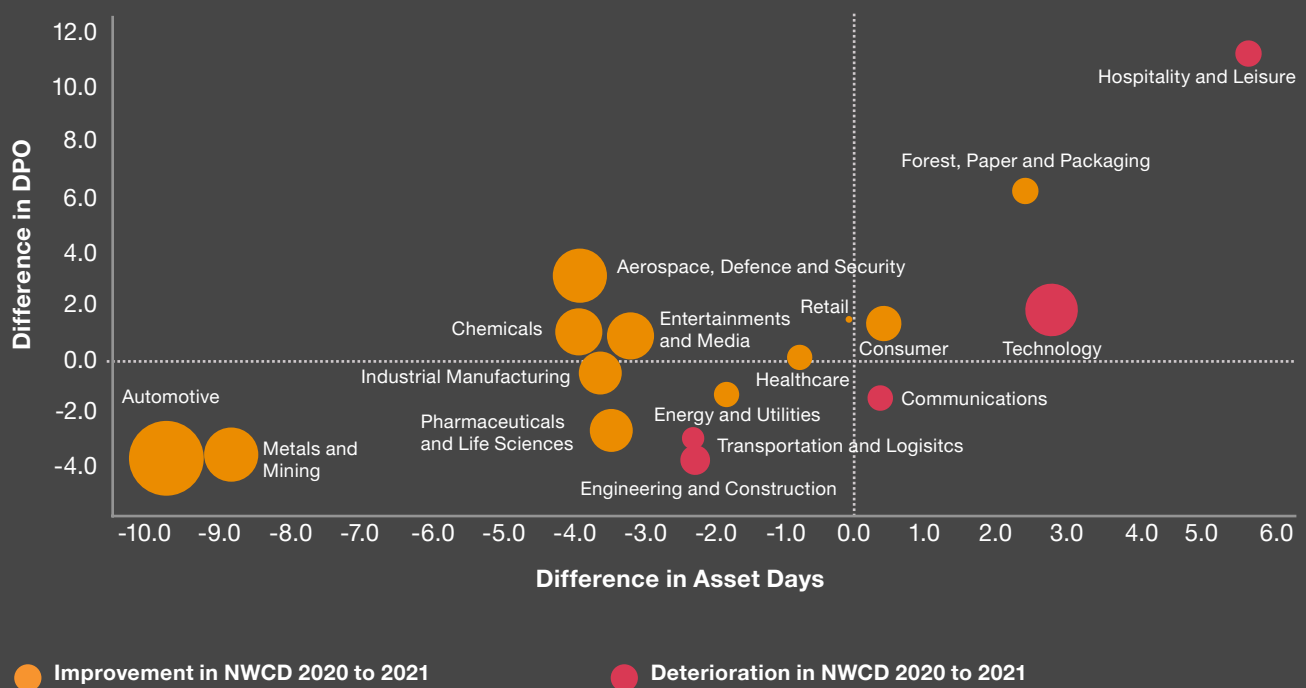
Challenges for some more than others



Sectors

While 12 out of 17 industries experienced a reduction in NWC days during 2021, most only saw a relatively minor change. However, the picture varies depending on each of the working capital indicators. Compared to previous years, we're seeing an increased focus on driving improvements in receivables, with these having a positive impact on overall asset days for many sectors. The extension of supplier payments is not featuring as the predominant lever, with some sectors shortening the overall payables days.

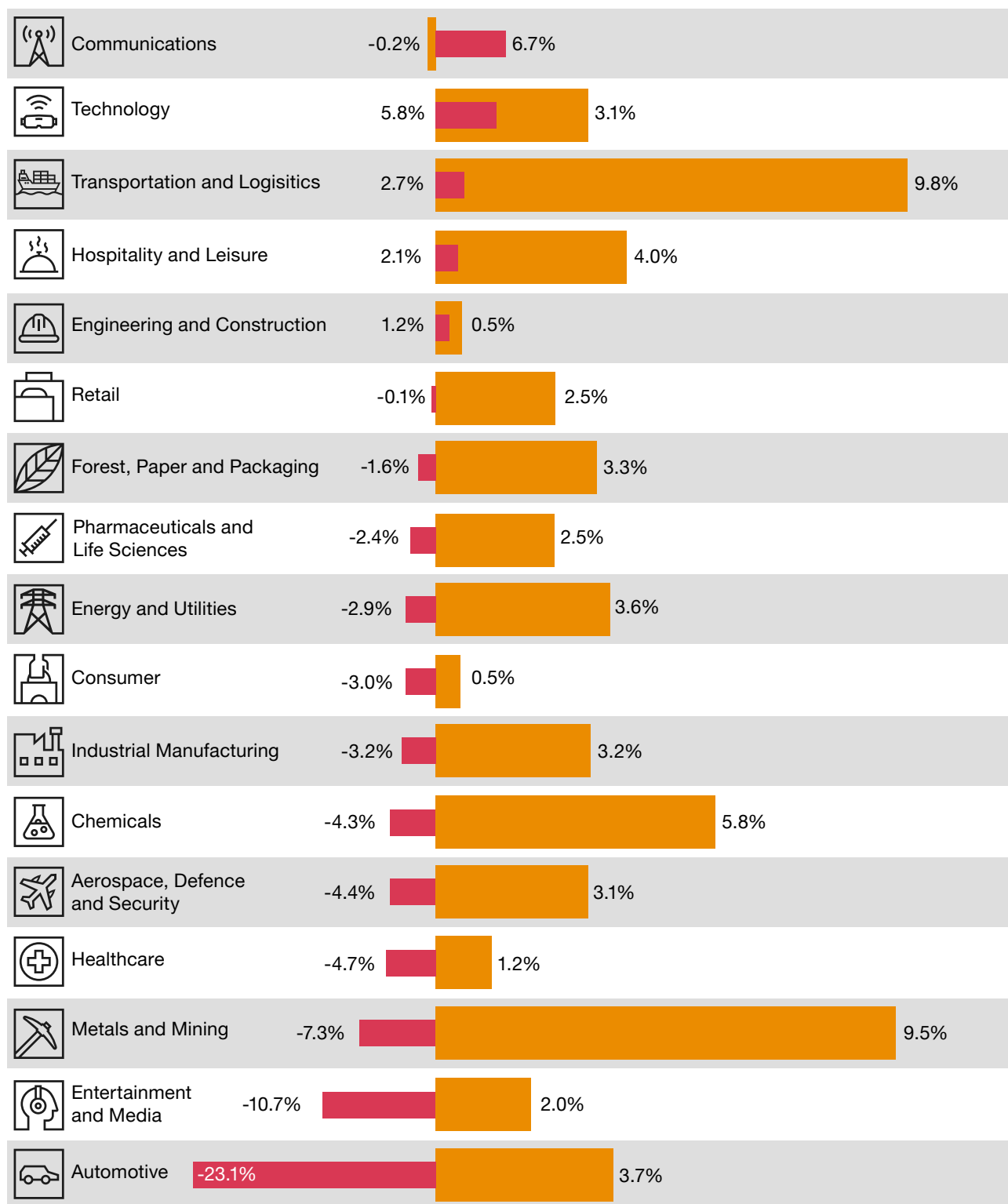
Figure 9: Year on Year change in Asset days and DPO by Sector



Working capital is a key driver for the capital side of the return on invested capital (ROIC) equation. Interestingly, all sectors that suffered a decline in ROIC also experienced an increase in NWC days, indicating that returns could be increased and value created for corporates by managing working capital better.

Figure 10: Net Working Capital days and ROIC performance for 2021 by Sector

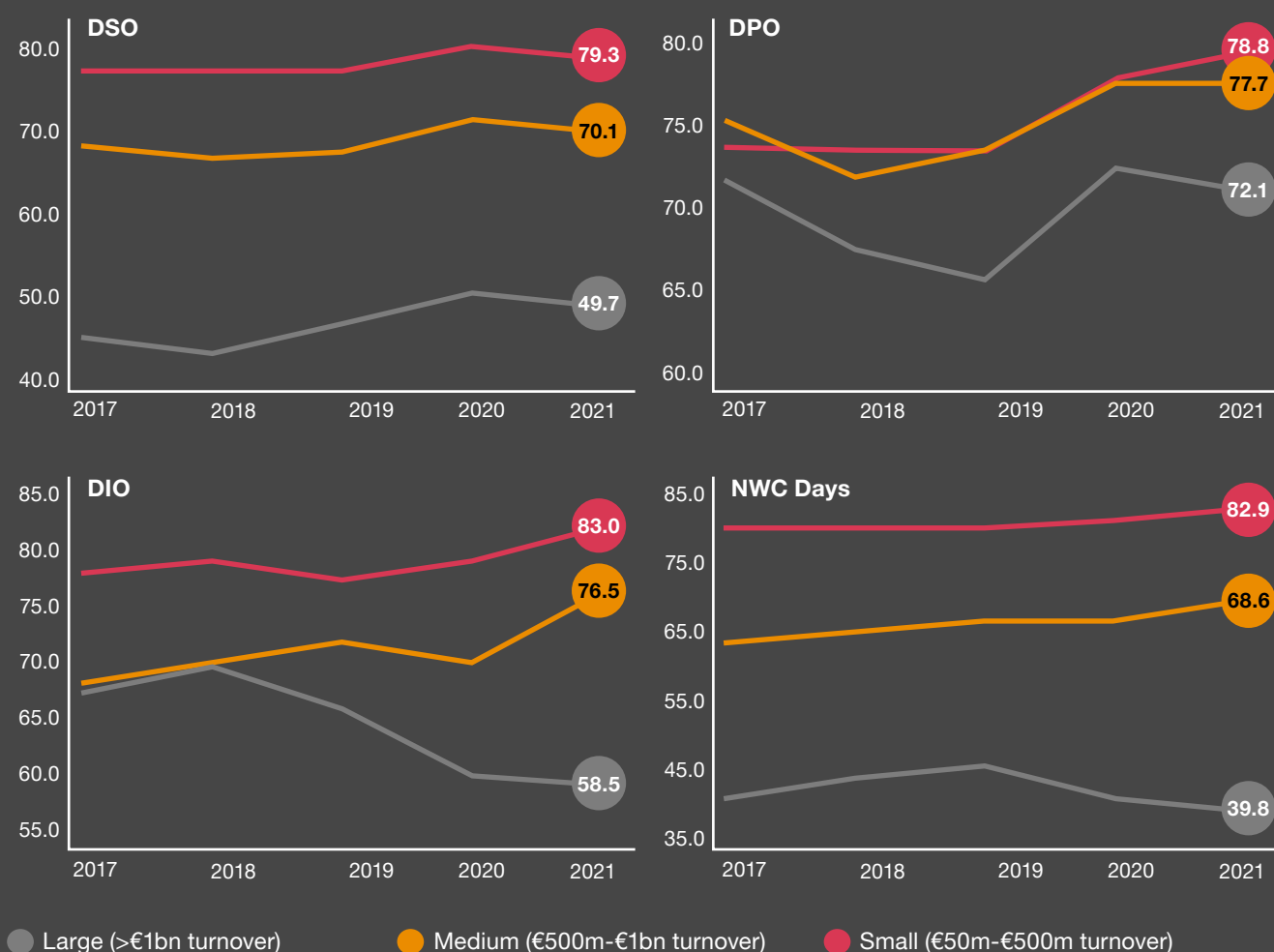
Sectors



■ % change in Net Working Capital days from 2020 to 2021 ■ Percentage point change in ROIC from 2020 to 2021

Company size

Figure 11: DSO, DIO, DPO, NWC days trend by company size



The disparities in working capital efficiencies between small and large corporations are increasing. The gap in NWC days between larger and medium sized companies has increased from 20 to 29 days. Large companies have historically always shown better performance in receivables and inventories.

Where DIO for smaller companies is 4.8 days higher than in 2019 and 4.5 days higher for medium-sized companies, large companies have decreased their inventory days by 6.6 days over the same period.

The one area in which large companies are relatively worse off, is DPO days, which sit at 72.1 days in 2021 and is the lowest out of all of size groups. A key reason for this is due to the continued global rollout of tighter regulation for larger companies in regards to the payment terms they are able to negotiate with suppliers. A further factor is the regulatory monitoring of on-time payments, which is designed to ensure fairness in the market, but can limit the levers available to companies to improve DPO performance.

How we can help



We help our clients to:

- Identify and realise cash and cost benefits across the end-to-end value chain.
- Improve operational processes that underpin the working capital cycle.
- Implement digital working capital solutions and data analytics.
- Achieve cash conservation in crisis situations.
- Create a 'cash culture' and upskill the organisation through our working capital academy.
- Roll out trade and supply chain financing solutions.
- Create short term cash flow forecasting and related action plans.
- Stand up surge teams and resolve backlogs.

Where and how we could help you to release cash from Working Capital



Accounts receivable

- Tailored, proactive collections.
- Credit risk policies.
- Aligned and optimised customer terms.
- Billing timeliness & quality.
- Contract and milestone management.
- Systematic dispute resolution.
- Dispute root cause elimination.
- "Surge" operational bandwidth.
- Negotiation strategy and support.



Inventory

- Lean & agile supply chain strategies.
- Global coordination.
- Forecasting techniques.
- Production planning.
- Inventory tracking.
- Balancing cost, cash and service level considerations.
- Inventory parameters and controls defining target stock.



Accounts payable

- Consolidated spending.
- Increasing control with centre led procurement.
- Helping avoid leakage with purchasing channels.
- Payment terms.
- Supply chain finance benefits assessment and implementation.
- Helping eradicate early payments.
- Payment methods.
- Negotiation strategy and support.

Our working capital improvement approach



Quick scan



Diagnostic



Design



Implementation

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#ActNowToRecover

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