Working Capital Report 2019/20: Creating value through working capital

Unlocking cash in a digital age





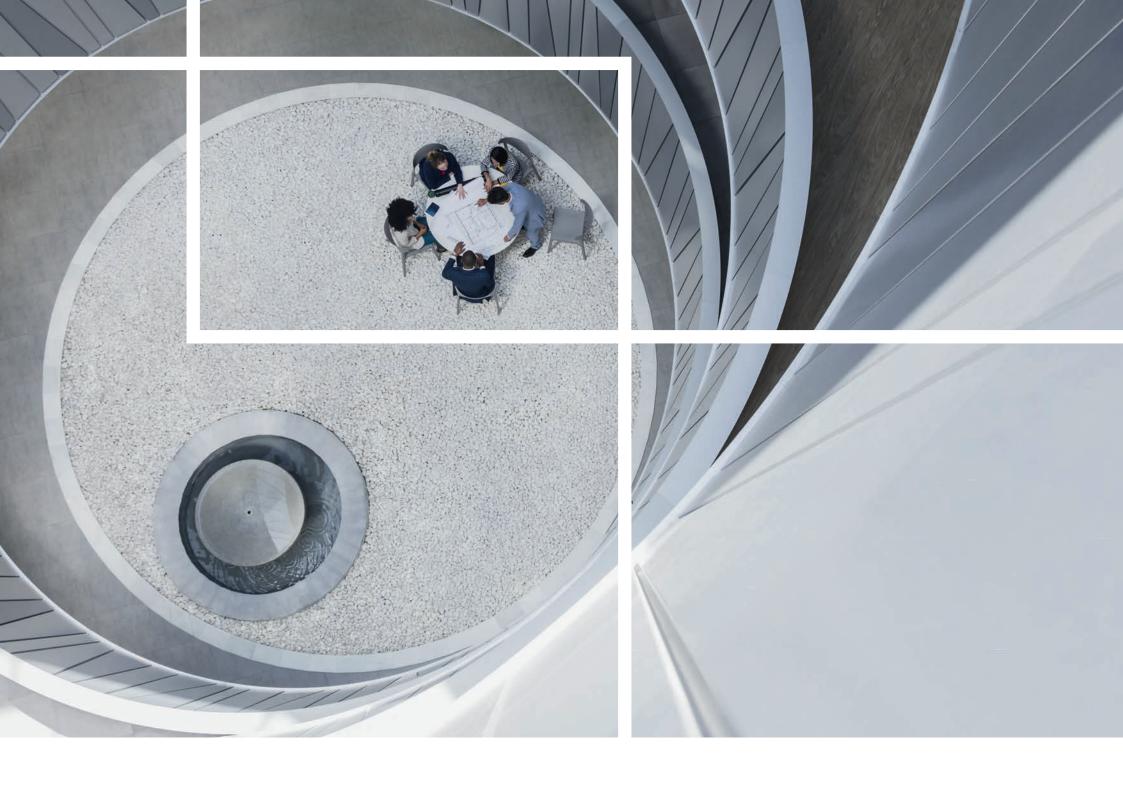


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Executive summary

Why it matters

Working capital is the cash tied up in the everyday running of a business

Each year, PwC UK review the financial performance of the largest global listed companies, assessing their working capital performance and related key indicators. In this year's report we have continued to review five-year trends (2014 – 2018) and reflected on the advent of digital and its potential for creating value through improved working capital management.

In the face of rapidly-changing business models and disruption, cash and working capital are fundamentals that businesses can easily lose sight of. Harnessing the power of digital presents a singular opportunity to take back control, addressing the challenges presented by organisational silos, complex systems and conflicting targets. Companies that are able to exploit digital's benefits will lead the way in unlocking cash and creating more value.

Digital enablers are now sufficiently accessible and flexible that they should be a standard tool for accelerating working capital improvement. Data analytics can be used to help achieve transparency in relation to cash performance and to better align the efforts of different commercial and operational functions. Furthermore, artificial intelligence (AI), specialist cloud-based solutions and robotic process automation (RPA) are becoming increasingly central to the optimisation of working capital.

Over the past five years, we have seen the gap between the higher and lower working capital performers stay relatively stable. More than half of the industry sectors have made some progress in addressing the working capital challenge, but not all. This indicates that there is still plenty of opportunity to create value through optimising working capital levels.



Source: PwC analysis. Analysis uses data available from 13,328 globally listed companies between January 2014 and June 2019

What's the story?

Looking at the financial performance of the largest global listed companies in the past five years, we have noticed five key trends:

1. Working Capital is the next value driver

Improvements in returns have mostly come through EBIT. Some of the value created has, however, been offset by stalling net working capital (NWC) performance, restraining the improvement in return on invested capital (ROIC). Addressing excess working capital would lift overall ROIC by up to 30bps (basis points).

2. Working Capital is finally improving

While net working capital increased by €360bn in 2018 (up 9.4% on 2017), relative performance in terms of days has improved marginally by 0.1 days.

3. As predicted, Payables Days have been unsustainable For the second successive year we have seen a decrease in Days Payable Outstanding (DPO), underlining that the use of DPO as a quick fix is not sustainable in the long term as a working capital management strategy.

4. Receivables and Inventory are major sources of opportunity

Many companies have finally started to achieve significant improvements in both "days sales outstanding (DSO) and "days inventory outstanding" (DIO). This has been much needed in light of the downward pressure on DPO. DSO has shown its first improvement in five years as companies have begun to address the asset side of the balance sheet.

5. The need for cash is increasing

While revenues are up 10% over, in 2017, in 2018 operating cash flows (OCF) have declined as a proportion of sales. Companies are facing operational challenges in converting revenue into cash. During the same period, capital expenditure (CAPEX), as a percentage of revenues has continued to decline, which could suggest that companies are managing cash levels by limiting investment.

€1.2tr

excess working capital tied up on global balance sheets

3.8% decrease in Days Payables

Outstanding

Sectors have improved working capital

The working capital profile

Globally, our research has revealed an absolute increase in net working capital (NWC) of €360bn in 2018 (up 9.4% on 2017). In relative terms, however, NWC days have improved for the first time in five years.

The increase in NWC was offset by a 9.6% increase in revenue from the previous year, resulting in a small decrease in NWC Days to 47.5. In our 2016 and 2017 working capital studies, we highlighted a trend of companies maintaining working capital performance at the expense of their suppliers, and noted that this approach would not be sustainable in the long term.

For the second successive year there has been a decrease in DPO, strongly suggesting that the continuing push on creditor days is not sustainable. This was compounded by increased government and regulatory pressure on prompt payment, especially in Europe. After performance plateaued in 2017, DPO has now started to decline more sharply, falling by four days compared to 2016 as companies ensure suppliers are paid earlier and the value chain is not squeezed. This is the most significant swing in the past five years in what has been historically the most popularly deployed working capital lever. This readjustment of the Trade Payables position is placing pressure on some companies' ability to improve performance in Trade Receivables and Inventory, which historically many companies have found difficult to achieve.

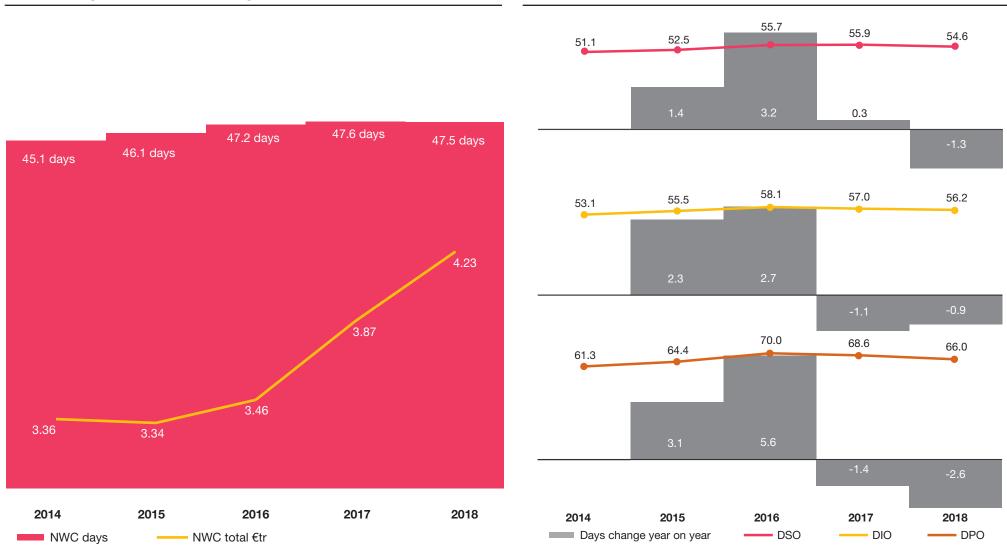
After years of deterioration in Receivables and Inventory performance, many companies have finally started to achieve significant improvements in both DSO and DIO. DSO has shown its first improvement in five years, reflecting more focused collections activity and cautious granting of payment terms ahead of anticipated market uncertainties. Inventory performance has continued to improve, a trend that started in 2017.

We assess that these developments suggest the asset side of the balance sheet is moving closer in line with Payables days, even if overall DPO is still 9 to 10 days longer than Inventory or Receivables days.

As we explore in the study, these trends are not the same across all companies and industries. A closer inspection reveals that the Industrial Manufacturing and Energy sectors were major contributors to revenue growth during the past year. When these two sectors are excluded, there was actually a global decline in NWC performance of 1.7 days.

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The asset side of the balance sheet is finally getting some much-needed attention and is moving closer in line with Payables days.



Net working capital and working capital days

DSO, DIO and DPO trend

The next value creation lever

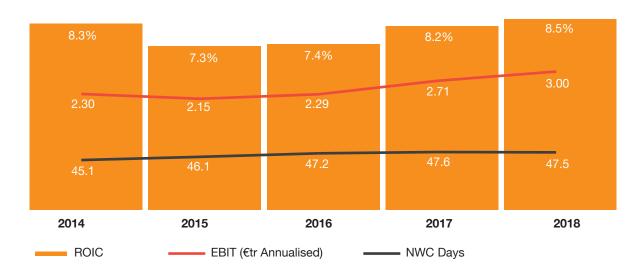
At a time of digital disruption and dramatic shifts in business models across industries, companies' ability to create value has never been more important.

Working capital presents a value creation opportunity not only in "business as usual" circumstances but also in a deals environment. Our analysis suggests that more can be done to boost ROIC through working capital management. Capital-efficient, profitable growth underpins value creation — and while companies have managed to improve returns as measured by ROIC, they have mostly achieved this through closely managing EBIT. Some of the value created through EBIT growth has, however, been offset by stalling NWC performance, restraining the improvement in ROIC.

A singular focus on 'profitable growth' is still common, and ignores other value creation levers. Often, such a focus will include extending customer terms to 'buy' market share or increasing inventory ahead of forecasted ambitious growth. More often than not, the latter approach leads to overstocking and to an increase in slow-moving and obsolete stock.

Our recent report "Creating value beyond the deal" surveyed 600 senior corporate executives from a range of industries and geographies. In the research, 83% of sellers said there is room for improvement on extracting working capital. This suggests a need for companies to have a comprehensive value creation plan – a guideline, not a checklist, with working capital as a core component.

EBIT/ROIC trend



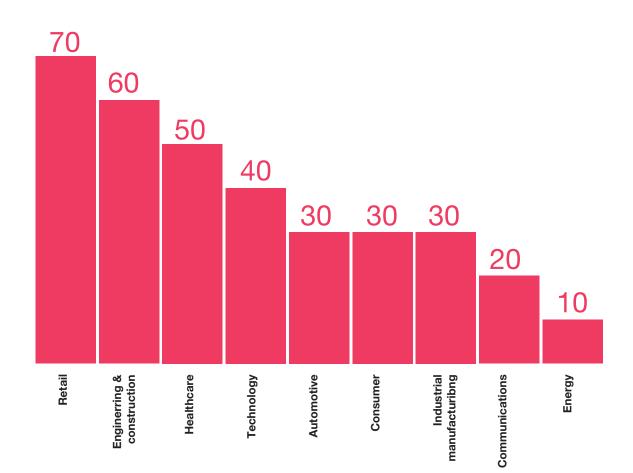
BPS improvement in ROIC through eliminating excess Working Capital

We further assess that the overall trend in returns could have been further improved by around 30 bps if companies were to address excess working capital. The most significant uplift would likely come from sectors that are already under pressure both in terms of revenues and working capital, such as Retail, Engineering and Automotive.

We judge that companies that are able to release more cash from working capital, would likely further improve their return on investment – particularly if revenue growth were to slow.

We believe the total global cash opportunity that companies could release through better working capital management is €1.2tr, which would lift overall ROIC to 8.8%.

Working capital therefore presents an attractive prize in both "business as usual" and deal situations — and should be high on the agenda for prospective buyers and sellers as they look to build a comprehensive value creation plan pre and post-deal.



Eight out of 18 sectors have improved working capital since 2017

Industry Performance



When we analyse how sector performance has evolved in the past year, we find large disparities – with only eight sectors out of 18 showing an improvement.

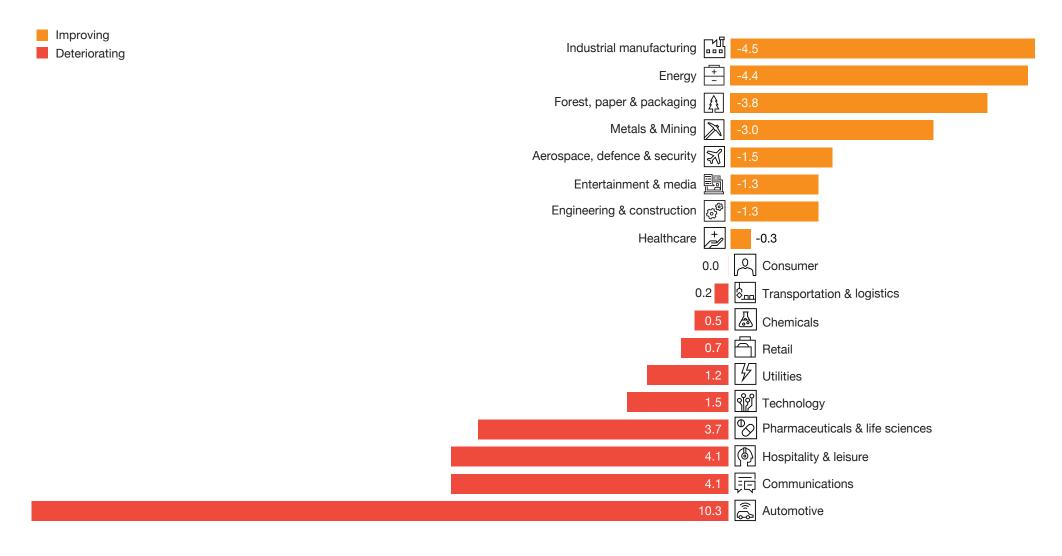
Industrial manufacturing saw an improvement of 4.5 days in NWCD in the past year, the largest reduction of any sector. This was driven by improvements on the asset side of the balance sheet, with significant decreases in both DSO (6 days) and DIO (2.9 days).

The Energy sector came a close second, with companies achieving a 4.4 day reduction in NWCD, driven by decreases in DSO (6.5 days) and DIO (5.5 days), offset by an 8.5-day reduction in DPO.

By contrast, the Automotive sector has experienced the largest deterioration in performance in the past year. This has been driven by an increase in DSO of 8 days. Global trade uncertainties are likely affecting DIO and the working capital impact that is expected.

Furthermore, while sector-level trends give us an indication of the challenges facing certain industries, performance also varies widely at a company level within each sector.

Working capital change 2017-2018 expressed in days



Some sectors are still lengthening payables to maintain Net Working Capital



The visualisation on page 11 shows the key levers that are driving changes in working capital performance at a sector level.

Sectors in orange have seen a reduction in net working capital days (NWCD) in the past year, while those in red have seen a decline in performance.

While at a global level DSO and DIO have declined, this is only the case for seven sectors, led by Energy (10.4-day reduction) and Industrial manufacturing (7.6-day reduction). Due to their large size, these sectors have a significant weighting that gives them a relatively strong influence on overall global performance.

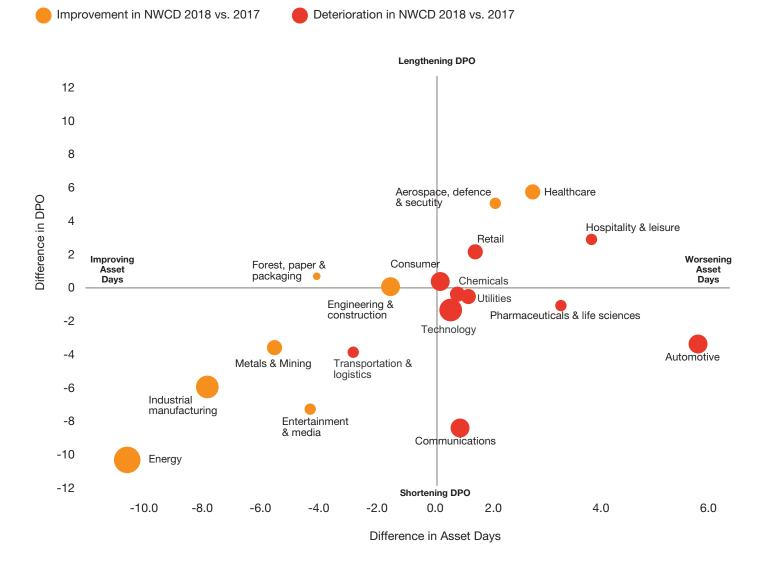
This year we have seen seven sectors lengthen their payable terms, a reduction from the 11 sectors that did this in 2017. The Aerospace and Healthcare sectors have stretched payables to improve overall working capital performance, despite worsening asset performance.

The sectors in the bottom left-hand quadrant – Industrial manufacturing, Entertainment & Media, Energy, and Metals & Mining – have improved overall working capital performance despite a reduction in DPO. This suggests that these sectors are seeing the benefits of a more holistic approach to working capital improvement.

DPO/Asset days

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Automotive performance is under pressure from all angles, while Industrial Manufacturing and Energy have seen improvement despite shortening DPO.



Asset days = (trade receivables and inventory)/revenue *365

A large gap between the best and the rest

Data from the past five years indicates tha the gap between the highest and lowest working capital performers has stayed relatively stable at a global level, increasing by just 0.2 days.

At a more detailed level, all metrics have seen the performance gap widen. With DSO, the gap has increased by 0.6 days, driven by the bottom quartile worsening by 1.5 days and the top quartile worsening by 0.9 days. Similarly, the DIO gap has grown by 1.4 days. This has been driven by an improvement in the top quartile of 0.2 days and a decline in the bottom quartile of 1.2 days.

DPO is the only metric where both the top and bottom quartile have improved. However, the significant improvement in the top quartile of 2.7 days has outpaced the 0.3 day improvement in the bottom quartile.

This overall trend is not consistent across industries, either in terms of the size of the gap or the degree of change from the prior year. For example, Aerospace, Defence & Security has a gap of 119 days between the top and bottom quartiles, the largest of any sector. By contrast, the gap in Transportation & Logistics is just 34 days.

Some sectors have seen the gap narrow.

- Healthcare has seen a reduction in the gap of 6.1 days. This has been driven by a small decrease in performance in the bottom quartile of 0.2 days, compared to a large decline in performance of the top quartile companies of 6.3 days.
- Utilities has seen the gap decrease by 5.8 days, driven by an improvement in the bottom quartile of 1.7 days, while the top quartile has declined by 4 days.

Conversely, some sectors have seen the opposite trend, with the gap widening.

- Pharmaceuticals and Life Sciences has seen an increase in the gap of 4.7 days, driven by worsening performance in the bottom quartile of 9.4 days.
- Consumer companies are the only sector where the top quartile has improved and the bottom quartile has worsened, leading to an increase in the gap to 4.8 days.

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Consumer companies are the only sector where the top quartile has improved and the bottom quartile has worsened.

Number of companies		196	583	781	513	1,464	650	1,009	395	219	393	390	2,198	752	475	854	1,656	292	508
 DSO ⊥ Top performers ∞ Median ⊤ Bottom performers 	- 160 140 120 100 80 60 40 20 -	91 44 20	85 61 38	96 64 41	96 62 32	66 44 25	79 44 26	138 90 52	95 T 66 L 41	86 60 44	89 63 42	47 19 8	115 76 50	68 41 19	113 82 57	49 24 7	111 77 53	68 51 35	79 T 52 38
 DIO ⊥ Top performers ∞ Median ⊤ Bottom performers 	- 250 200 150 100 50	1 <u>0</u> 3 15 5	90 59 38	104 72 47	72 28 8	118 74 47	45 20 4	114 58 18	30 5 0	99 68 49	121 43 11	65 17 6	115 67 22	115 78 46	2 <u>0</u> 3 142 90	169 97 50	94 52 13	37 7 1	37 19 7
 ► Top performers ★ Median ▲ Bottom performers 	- 160 140 120 100 80 60 40 20	85 46 27	95 64 41	89 58 58 35	131 73 40	87 51 30	98 41 25	1 <u>1</u> 7 74 44	105 53 27	83 57 14	82 52 28	64 40 23	105 62 36	80 45 26	116 73 43	86 54 35	90 56 32	61 39 24	99 59 36
		Aerospace, defence and security	Automotive	Chemicals	Communications	Consumer	Energy	Engineering & construction	Entertainment & media	Forest, paper & packaging	Healthcare	Hospitality & leisure	Industrial manufacturing	Metals & mining	Pharmaceuticals and life sciences	Retail	Technology	Transportation & logistics	Utilities

Unlocking cash in the digital age



Digital technologies have been a driver of innovation and transformation for many aspects of business, across industries. This year's 22nd PwC Annual Global CEO Survey found that 72% of UK CEOs agree that key enablers and disruptors such as AI will have a significant impact on the way they do business in the next five years.

Harnessing the power of technologies such as data analytics, artificial intelligence (AI) and robotic process automation (RPA) is also becoming increasingly central to the optimisation of working capital.

Digital enablers have the potential to overcome the complexity and fragmentation that have historically hindered companies' working capital performance. Consumer markets such as retail and automotive present good examples of this potential. Both sectors have been struggling in the last several years with deterioration in working capital ratios, as well as limited visibility along their entire supply chain. Companies in both industries have found that predictive analytics and AI can be deployed to expand forecasting models to include an ever-wider range of data points, from the latest demand data to what's trending on social media. As the diversity of data points grows, machine learning is helping to improve accuracy, which – for example – can help organisations identify and set the optimal inventory levels.

However, the overall adoption rates for digital enablers remain low, with many companies lacking the capability or understanding of how to use them to generate value. In PwC UK's work with clients, we see a number of areas that need to be on the working capital agenda to drive optimal performance:

- applying data analytics to transform information into insight and focus operational activity
- delivering immersive visualisation to finance, factory floor, commercial reps and procurement alike, building a shared awareness of the importance of cash
- deploying predictive analytics to enhance inventory models or the efficiency of customer collection processes
- using drone technology to achieve accelerated inventory count
- applying RPA to automate back-office processes, such as billing
- deploying AI algorithms to enable early payment to suppliers while managing dilution risk
- using behavioural economics and social media flags to prevent bad debts in Order to Cash processes and debt management
- fine-tuning ERP systems to accommodate leading practice processes and supplementing capability with specialist cloud-based applications where applicable.

We have seen many companies where deploying a data-centric and digitally-enabled working capital approach has delivered a significant improvement in performance. To start the journey to digitally-enhanced working capital practices, we believe executives need to think through four key steps:



1. Build your data foundation



3. Improve business performance



2. Apply advanced analytics



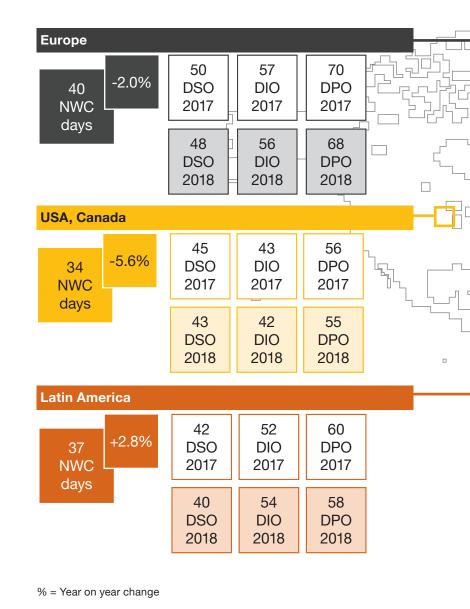
4. Explore innovation opportunities

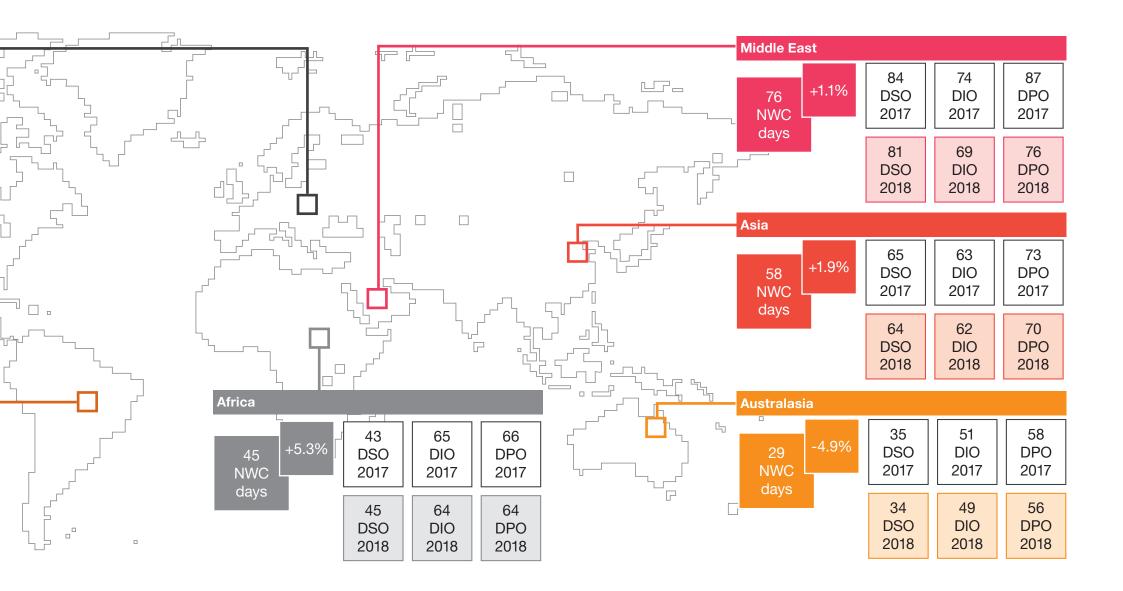
A global view

In an increasingly turbulent global trading environment, regional differences in working capital performance persist, driven by variations in payment methods, cultural norms and levels of cash maturity. Within any given region, there is a wide spectrum of working capital performance.

As we saw in last year's study, the continued rise in the impact and weighting of the Asian market also marks a shift in the centre of gravity with regard to working capital.

	Region weighting					
	Asia 8,247 15.9	Europe 2,020				
Number of companies	8,247	7.5				
Revenues (€tn) – total (annualised)	15.9					
		Latin America	Africa 268			
	USA, Canada 1,779	406 0.8	0.3 Australasia			
	7.2		298 0.5			
			Middle East 283 0.3			





Net Working Capital days in the UK has deteriorated at a rate of 6% per year over the past five years, while the EU as a whole has seen Net Working Capital days deteriorate at a lower average rate of 1% per year.

A view from Europe: a need to focus on "value preservation"

Overall working capital performance across Europe has seen a steady but marginal increase in terms of Net Working Capital days over the past five years.

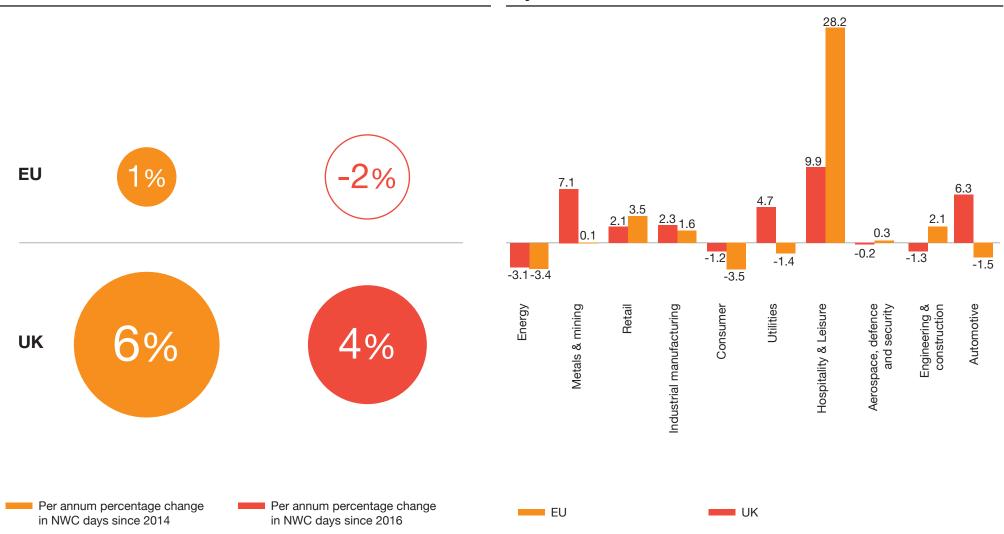
However, there are major events on the horizon that have the potential to impact working capital performance in the region, including Brexit and the slowdown in major economies such as Germany.

Historically, the UK has been more cash-focused than continental Europe, and it continues to exhibit more efficient (i.e. lower) levels of working capital. However, Net Working Capital days in the UK has deteriorated at a rate of 6% per year over the past five years, while the EU as a whole has seen Net Working Capital days deteriorate at a lower average rate of 1% per year. This has been driven by upward pressure on working capital, especially in France and Germany, where working capital days have been increasing by 5% year on year.

In contrast, the UK has seen a rise of 4% per year since 2016 - a trend that holds true across all the individual elements of working capital. Receivables days have grown twice as fast in the UK as in the EU27, while inventory days have deteriorated faster in the UK.

Some industries have been assessed as more at risk than others, as our findings indicate:

- 59% of sectors in the UK are still outperforming the EU27
- However, six of the largest 10 sectors in terms of revenue in the UK have seen a deterioration in working capital
- The largest relative deteriorations have occurred in the Metals & Mining, Hospitality, and Automotive sectors
- Retail and Automotive also exhibit lower working capital performance than other sectors, as well as experiencing a more significant deterioration in performance in the UK than the EU27
- The EU27 have now caught up with the UK in terms of operational cash flow performance. Since 2016, operational cash flow as a percentage of revenue has deteriorated by 2% per year in the UK. CAPEX has also deteriorated in the UK by 5% per year since 2016, and is now at its lowest level for the past five years. This suggests that keeping control of working capital is becoming increasingly important.



Rate of change in Net Working Capital days

EU vs UK per annum percentage change in Net Working Capital days from 2014 to 2018



In 2018, there was a significant improvement of 6%, driven by DSO and DIO.

25%

Over the past five years, the Consumer and Healthcare sectors have seen improvements in working capital.

A view from North America

Working capital performance in North America has been relatively flat over the past five years, with an overall 2% increase in investment in working capital.

Interestingly, both DSO and DIO performance have declined by approximately 8% each, offset by a 15% improvement in DPO. This is not surprising, given the market trend towards companies extending terms with their suppliers and introducing other techniques.

In 2018, there was a significant improvement of 6%, driven by DSO and DIO of 4% and 3% respectively offset by a 1% decline in DPO performance. There are a number of possible explanations for this: DPO increases may have subsided, while companies might be beginning to address their large investments in accounts receivable and inventory to further streamline their balance sheets. Over the past five years, the Consumer and Healthcare sectors have seen improvements of nearly 25% in working capital, while Energy has experienced a 50% increase. In 2018, some interesting differences have also emerged between different industries:

- Energy and Healthcare have experienced the largest improvements in working capital, with double-digit decreases year-on-year.
- Other sectors showing signs of improvement include Manufacturing, Consumer, Technology, and Utilities, with notable decreases in the high-single digits.
- The Communications and Automotive industries were the key outliers, with net increases in working capital of around 10%.
- Despite the low interest rate environment, the uncertainty about the global economy and the fact that companies would rather redeploy working capital to more productive uses, working capital improvement should become a greater focus for North American companies looking to unlock cash, while at the same time driving operational excellence and making themselves fitter for growth.



A view from Asia

Over the past five years, the Asia Pacific region has shown a slight deterioration in overall NWC performance.

DSO has increased from 60 to 64 days, but this is matched by a similar rise in DPO from 66 days to 70 days. The market fundamentals having a direct impact on working capital performance in the region include, the ongoing devaluation of some major Asian currencies; the relatively higher interest rates in Asian markets; the uncertainty and nervousness around the China/US trade war.

From an industry perspective, overall NWC days have worsened in five out of Asia's 10 largest sectors, most prominently in Automotive, Communications, and Retail. We judge the overall results for the region are materially driven by its largest economy—China—which has shown a mild deterioration in overall working capital performance. With China's GDP growth running at a five-year low of 6.6%, its economy is facing intensifying downward pressure and a resulting squeeze on liquidity.

Against this background, China's NWC days have increased by 2%, a rise we assess is mainly attributable to a 14% surge in DSO. The five-year average DPO in China is 21 days higher than the average for the region, with companies in China habitually paying suppliers significantly later than in most other countries in the region.



The need for cash is increasing

Over the past five years, CAPEX spending relative to revenue has declined at a compound annual rate of 3.0%.

In the past four years, companies have also been experiencing a more gradual decline in operating cash flow relative to revenue.

While both operating cash flow and CAPEX are increasing in absolute terms, neither is keeping pace with rising global revenue levels.

In absolute terms, the increase in CAPEX represents only 55% of the increase in operating cash flows, illustrating the competing demands on companies' cash.

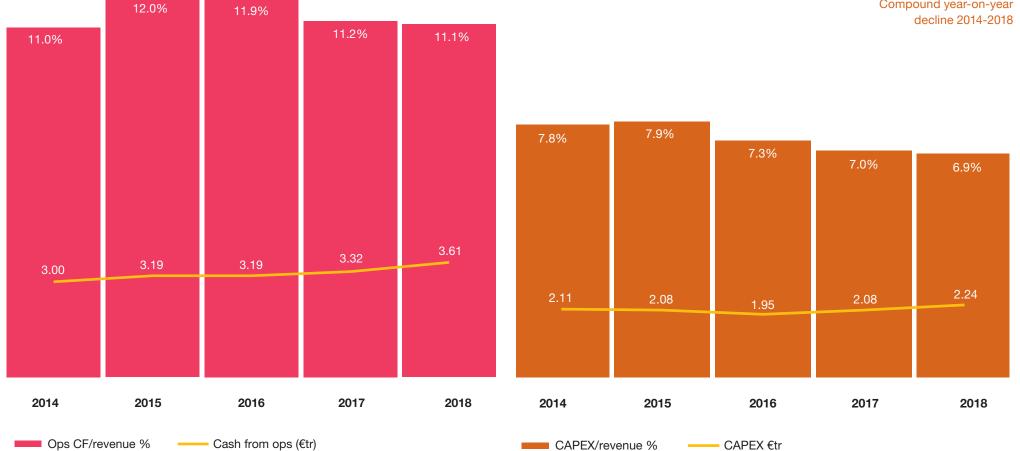
Investment may help in the current uncertain global trading environment, both to exploit opportunities and to protect against the impacts of disruption in rapidly-changing markets.

With this in mind, addressing Working Capital structurally and sustainably is an opportunity that companies need to prioritise.



CAPEX/revenue trend

Compound year-on-year



How we can help

We help our clients to:

- identify and realise cash and cost benefits across the end-to-end value chain
- optimise operational processes that underpin the working capital cycle
- implement digital working capital solutions and data analytics
- achieve rapid 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.





Our Working Capital improvement approach



Quick scan



Diagnostic



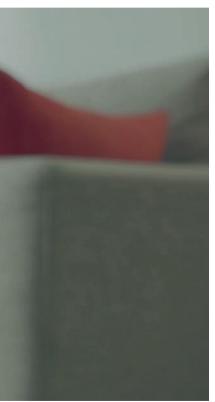
Design





Implementation





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 & 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 & 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 & implementation
- Helping eradicate early payments
- Payment methods
- Negotiation strategy and support

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