

# Cash to drive the shift

Automotive sector working capital report 2021



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# Executive summary



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## Cash to drive the shift

The COVID-19 pandemic has evidently accelerated already existing challenges in the automotive industry, such as shifts in product technology consumer habits, digitalization, and changes in international trade relations.

Since the beginning of the COVID-19 crisis, global OEMs and suppliers have been confronted with major supply chain disruptions, industry-wide factory shutdowns in the early lockdowns and significant fluctuations in demand. In addition, supply disruptions of certain key supplies such as semiconductors, OEM cost- and restructuring-programs as well as a wave of consolidation among suppliers have been key challenges and developments in the industry.

As OEMs and suppliers are recovering from supply chain disruptions, the route to recovery is unlikely to be smooth, and automotive companies have to define their way to act in a rapidly changing sector.

These changed dynamics have resulted in an urgent shift in priorities, requiring companies to conserve liquidity, increase cash visibility, protect balance sheets and improve flexibility as the current environment evolves. Focus working capital management can mitigate challenges and contribute to performance:

- Future disruption is creating strong pressure on cash management for automotive companies and their supply chains
- Unlocking working capital is a 'free' source of capital (to support rejuvenated growth, supporting investments, acquisitions, changing business operations, etc.)
- Strong cash and working capital disciplines supported by enhanced visibility and transparency enable better operational and financial performance
- Improved working capital management increases enterprise value

Now is the right time to focus on cash and working capital management. Focus on cash is both an opportunity to drive value and enhance cash flow to successfully drive the shift

Source: PwC analysis. Analysis uses data from 842 globally listed companies from January 2016 to December 2020

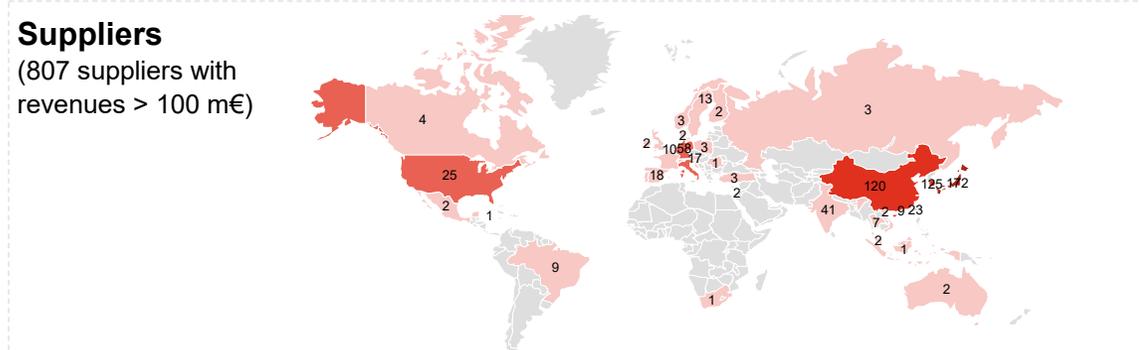
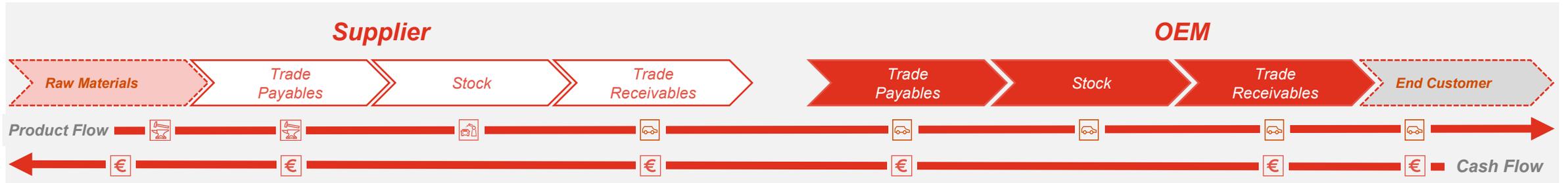




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# Overall Net Working Capital Performance

# COVID impacted the entire value stream of Supplier and OEMs: Balance sheet effects visible along the end-to-end product and cash flow



**€157bn** of cash are tied up in the balance sheets of selected automotive supplier companies

**€100bn** of cash are tied up in the balance sheets of selected automotive OEMs

**Suppliers performance improved**  
Revenues increased by 7% and NWC days improved by 5 days over a five year horizon.

**DPO** Performance has improved by 7 days over a five year horizon.

**Revenues** are largely driven by the APAC region with a revenue share of 54% of global revenues in 2020.

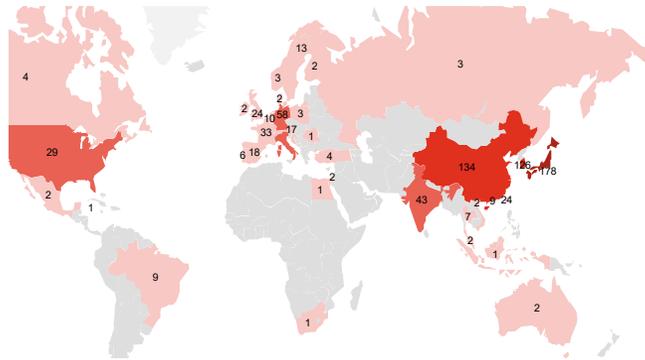
**OEM performance deteriorated**  
Revenues increased by 2% but NWC days deteriorated by 10 days over a five year horizon.

**DIO** performance has improved by 2 days over a five year horizon but increased by 20 days when comparing Q2 2019 with Q2 2020 (Covid-19 impact).

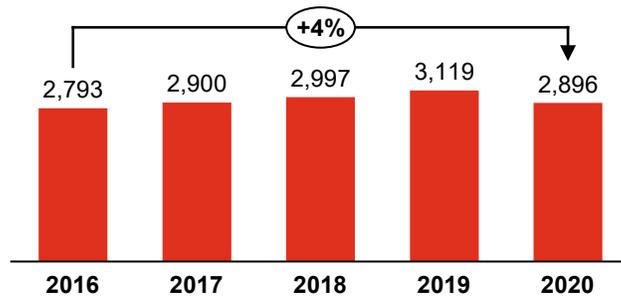
**DSO** significantly deteriorated due to the pandemic by 16 days when comparing Q2 2019 with Q2 2020, whereas **DPO** improved by 16 days when comparing the two quarters of 2019 and 2020.

# Days Working Capital (DWC) deteriorated by 4 days from 2016 to 2020, mainly driven by working capital performance of car producers (OEMs)

## OEMs and suppliers (842 companies)

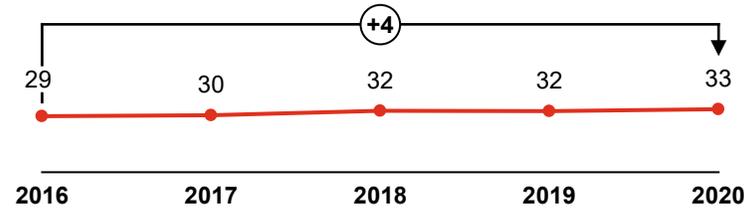


## Revenues (in €bn)

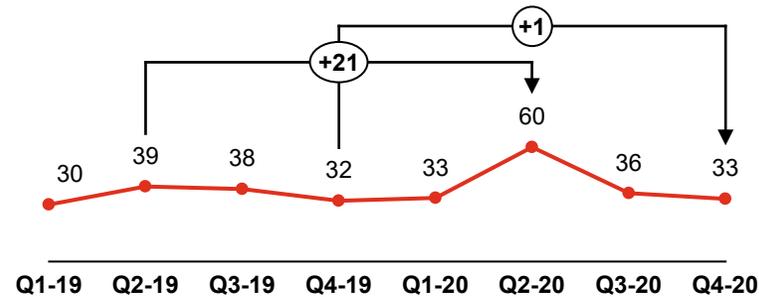


## Overall working capital performance

### DWC (annual)



### DWC (quarterly)



## COVID-19 and signs of resilience in 2020

### Working capital performance: 2016–2020

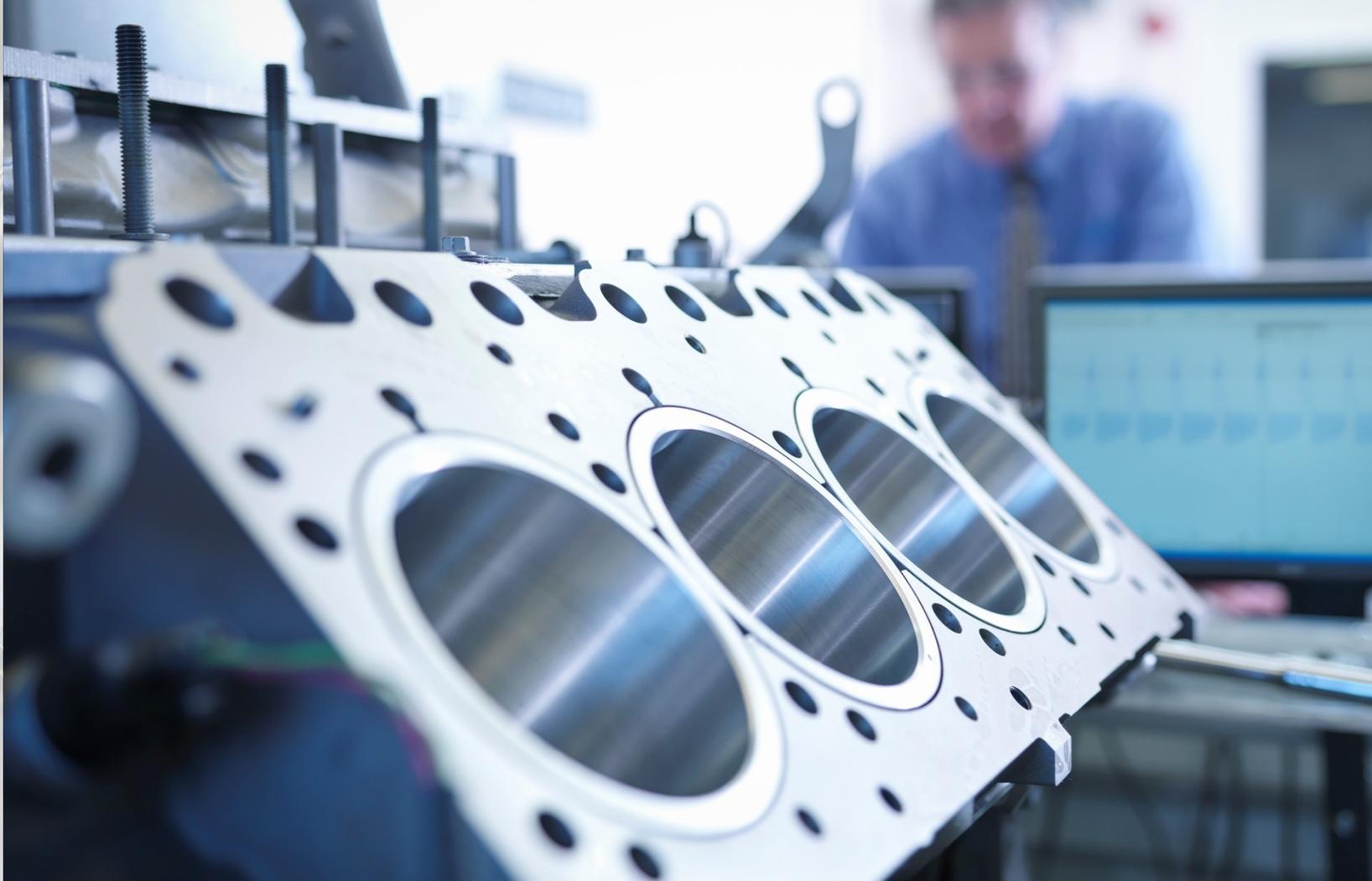
Between 2016 and 2020, revenues grew by 4%, but fell by 7% from 2019 to 2020. DWC increased by 4 days over the five-year period, and increased by 1 day from 2019 to 2020.

### Impact of COVID-19 and signs of resilience in 2020

There were major challenges for the automotive industry in 2020: interrupted supply chains, with many production lines shut down in the early lockdowns; fluctuations in demand; and seamlessly maintaining supply chains when ramping production down and ramping it back up again.

DWC was 21 days higher in Q2 2020 than in Q2 2019. Nevertheless, comparing Q4 2019 and Q4 2020 reveals that the automotive industry has shown resilience during the pandemic. However, it has not yet returned to its pre-pandemic strength.

Source: PwC analysis. Analysis uses data from 842 globally listed companies from January 2016 to December 2020

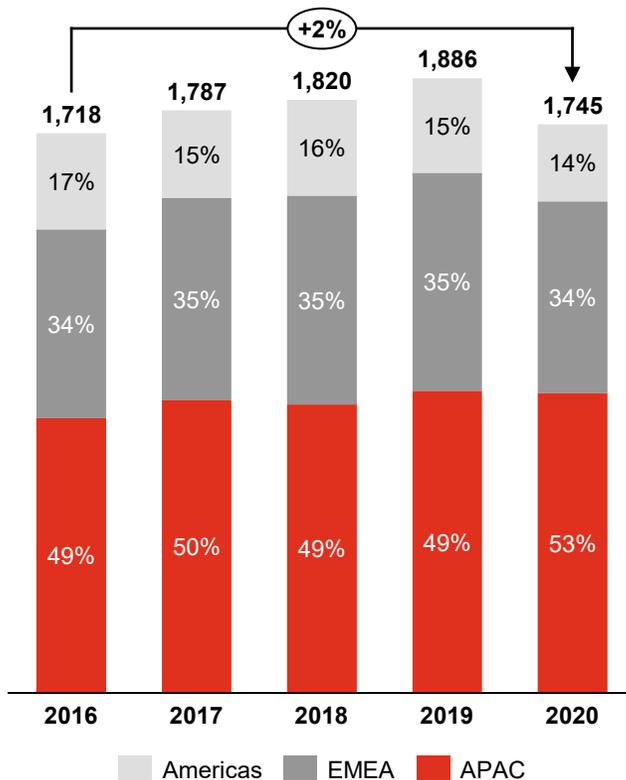


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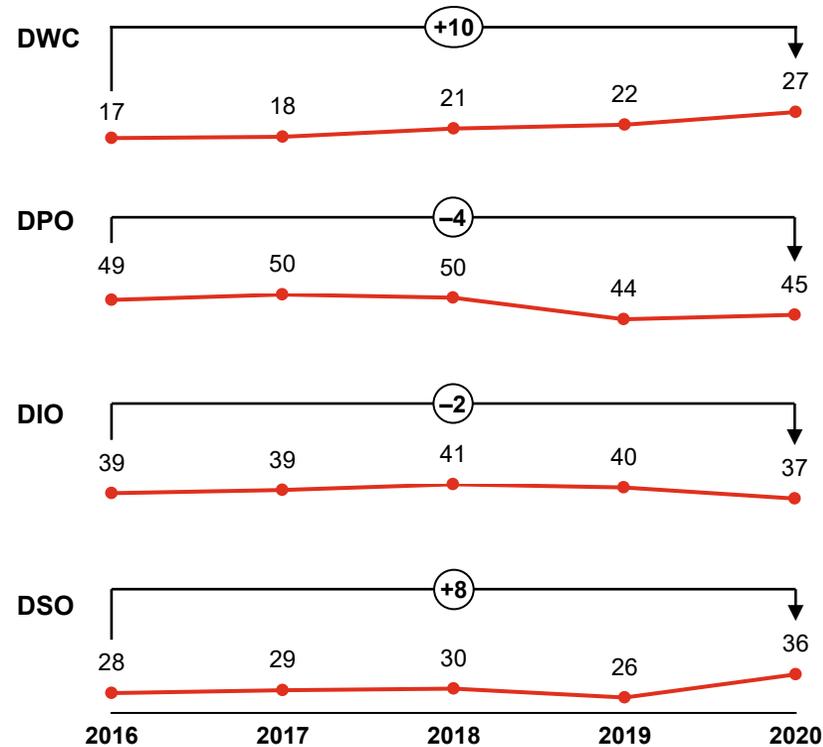
OEM performance

# OEM working capital performance deteriorated, mainly driven by deteriorating DSO and DPO

Revenues by region (€bn)



Annual working capital performance (2016–2020)



## Key challenges for OEMs prior to COVID-19

OEMs were already facing significant challenges before COVID-19, such as changes in technology, consumer habits and international trade relations.

Automation, ride-sharing and electric vehicles were all focal points for OEMs prior to the COVID-19 crisis.

## Working capital performance

Between 2016 and 2020, revenues grew by 2%, but fell by 7% from 2019 to 2020 due to COVID-19.

DWC increased by 10 days between 2016 and 2020, and increased by 5 days from 2019 to 2020.

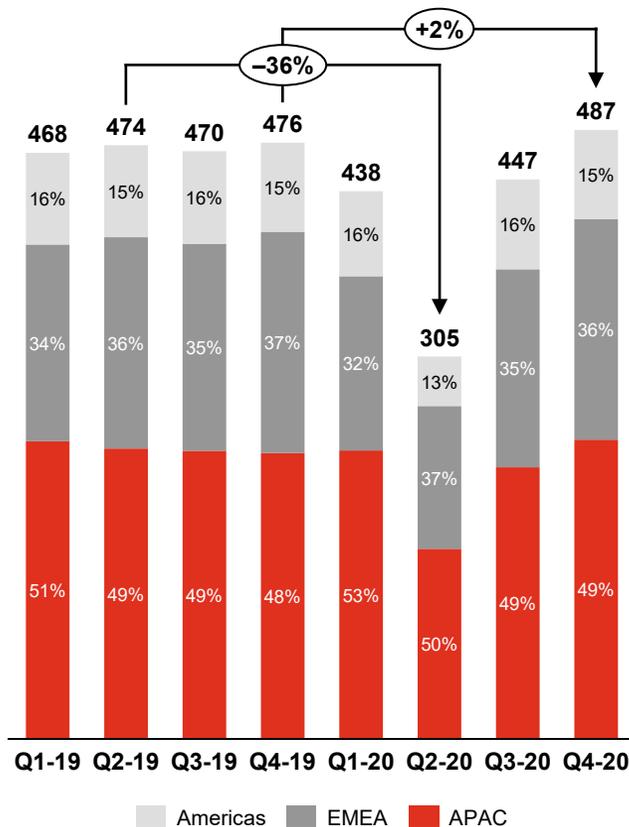
DPO decreased by 4 days between 2016 and 2020, and increased by 1 day from 2019 to 2020.

DIO decreased by 2 days between 2016 and 2020, and decreased by 3 days from 2019 to 2020.

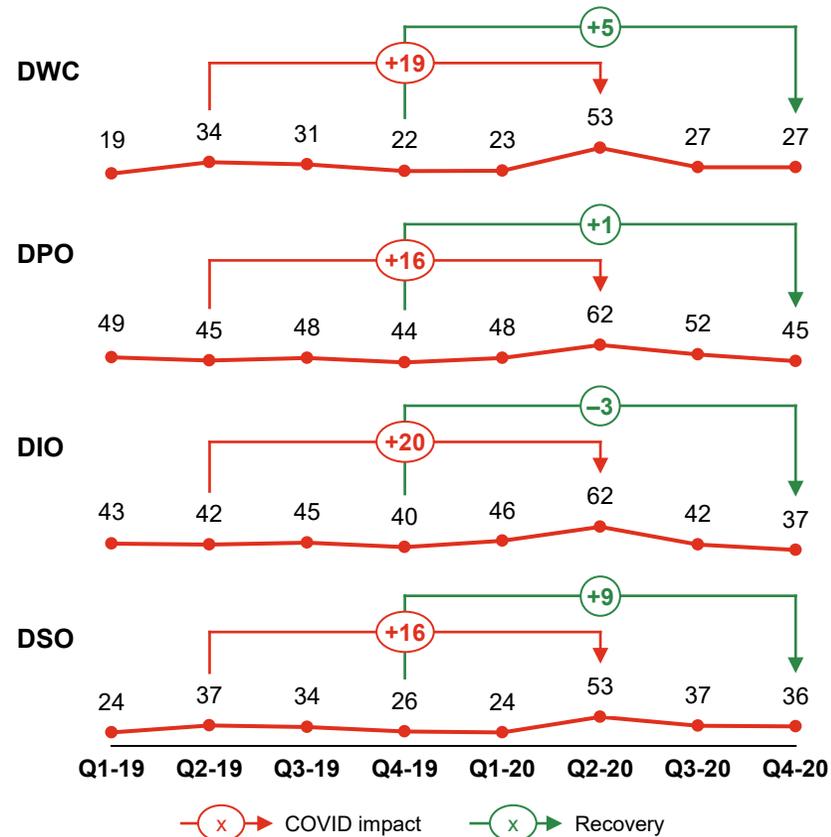
DSO increased significantly: by 8 days between 2016 and 2020, and by 10 days from 2019 to 2020.

# COVID-19 had a major impact on working capital performance in Q2 2020. However, this impact had been absorbed by the end of the year in all areas except DSO

Revenues by region (€bn)



Quarterly working capital performance (2019–2020)



## COVID-19 and signs of resilience in 2020

In this year's report, we have examined shifts in performance on a quarterly basis (Q2 2019 vs. Q2 2020) to highlight the impact that the pandemic has had on working capital in 2020.

The pandemic has created a variety of operational challenges for automotive companies, including industry-wide factory shutdowns in the spring of 2020 and non-availability of certain key supplies such as semiconductors. These challenges are specifically reflected in the performance of working capital in Q2 2020.

Nevertheless, comparing Q4 2019 and Q4 2020 reveals that the automotive industry has shown resilience during the pandemic.

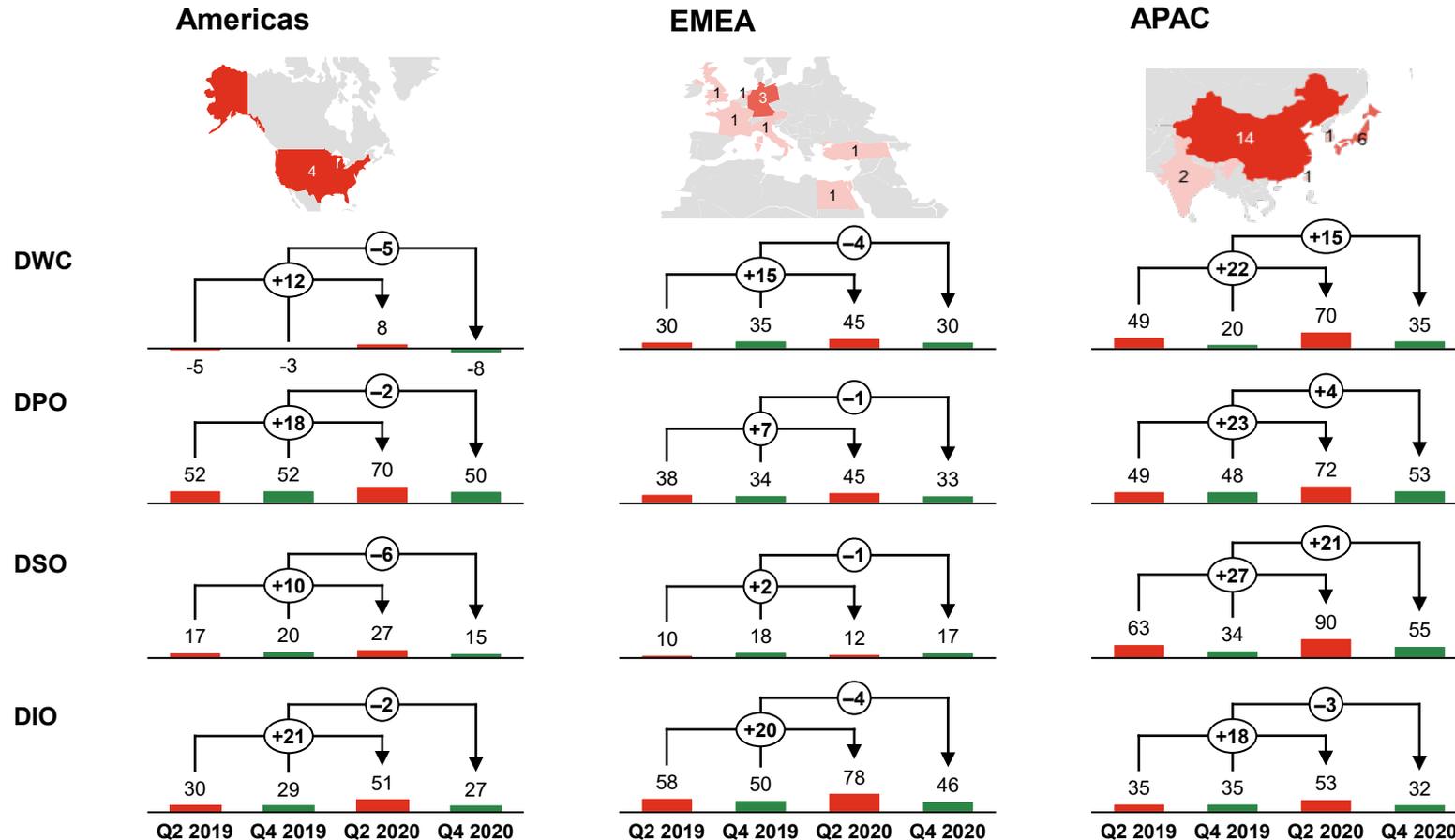
### Working capital performance

DWC was 19 days higher in Q2 2020 than in Q2 2019, mainly driven by a 20-day increase in DIO.

DSO also deteriorated by 16 days, while DPO improved by 16 days.

In Q3 and Q4 of 2020, OEMs managed to improve their performance and slowly recover from the crisis.

# The crisis had a negative impact on all regions, but there were regional differences. The hardest-hit region in terms of working capital performance was APAC



## Regional impact of COVID-19 on OEMs

China, Japan and South Korea – countries that have been heavily impacted by the pandemic – account for a significant share of global automotive manufacturing. China's Hubei province, the epicentre of the pandemic, is also one of the country's key automotive production centres.

Despite the ongoing challenges associated with COVID-19, OEMs in the Americas and Europe, Middle East and Africa (EMEA) regions seem to be overcoming most of the challenges. This can be seen from the comparison of Q4 2019 and Q4 2020 working capital performance.

## Working capital performance

**COVID impact:** analysis of performance on a quarterly basis (Q2 2019 vs. Q2 2020) shows that working capital performance was most severely impacted in the APAC region, with DWC increasing by 22 days.

**Recovery:** the Americas and EMEA regions managed to recover in Q4 2020, with DWC decreasing by 5 days (Americas) and 4 days (EMEA) compared to Q4 2019. Meanwhile, APAC continued to struggle.

COVID impact Recovery

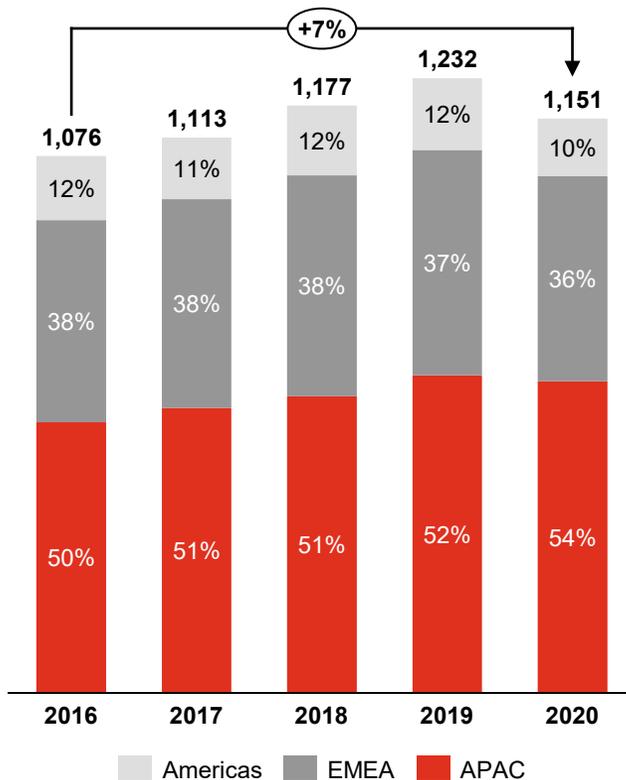


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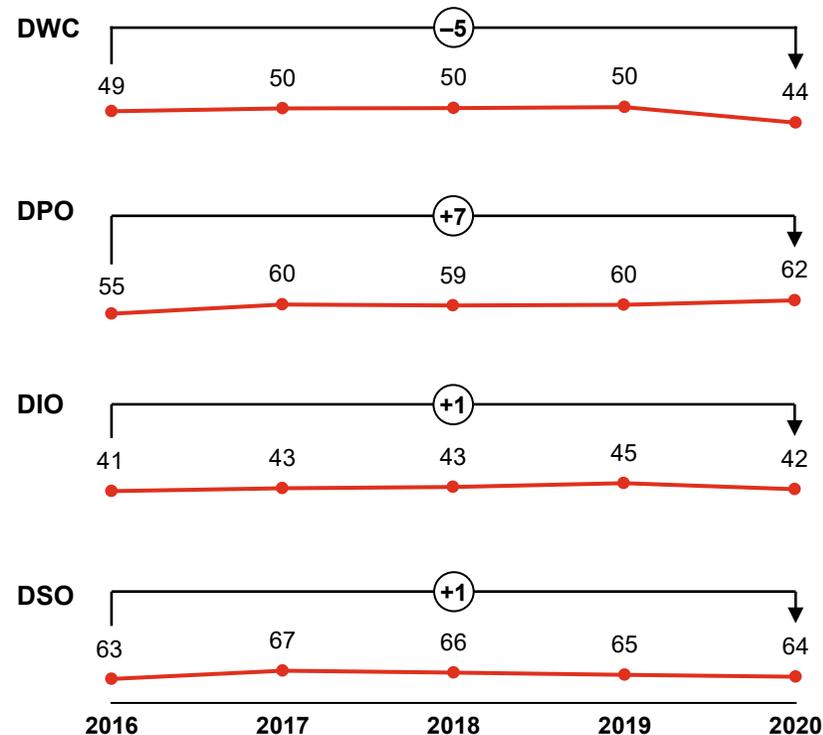
Non-OEM supplier performance

# Contrasting effects among suppliers: deteriorating DSO/DIO but improving DPO. This shows that the OEM push has been transferred to their suppliers

Revenues by region (€bn)



Annual working capital performance (2016–2020)



## Key challenges for suppliers prior to COVID-19

Automotive manufacturers were looking to accelerate the move to more regional parts suppliers to increase reliability. There was a trend of larger suppliers selling or spinning off non-core activities. This is a trend which is expected to continue and accelerate, as the need to overcome COVID-related losses has increased the need to free up cash and resources.

## Working capital performance

Between 2016 and 2020 revenues grew by 7%, but fell by 7% from 2019 to 2020 due to COVID-19.

DWC decreased by 5 days between 2016 and 2020, and decreased by 6 days from 2019 to 2020.

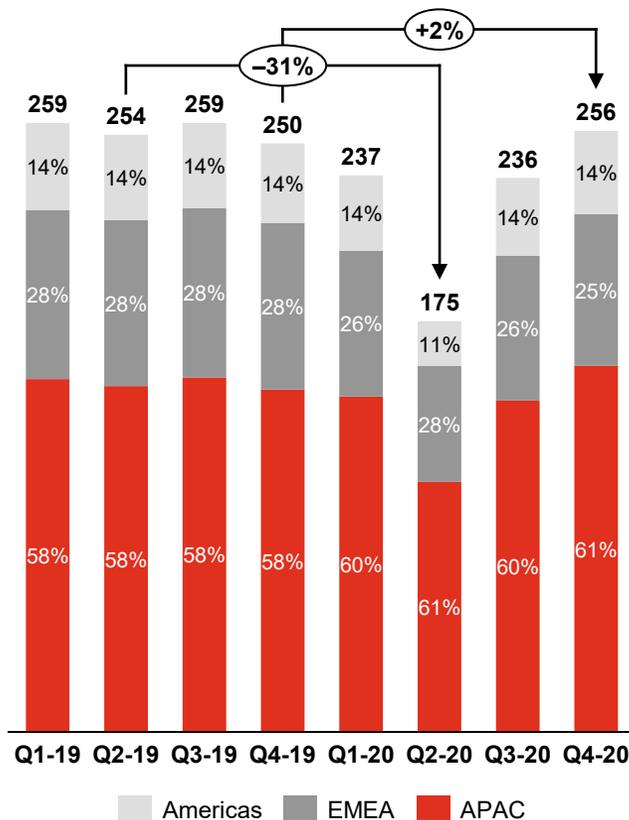
DPO increased by 7 days between 2016 and 2020, and increased by 2 days from 2019 to 2020.

DIO increased by 1 day between 2016 and 2020, and decreased by 3 days from 2019 to 2020.

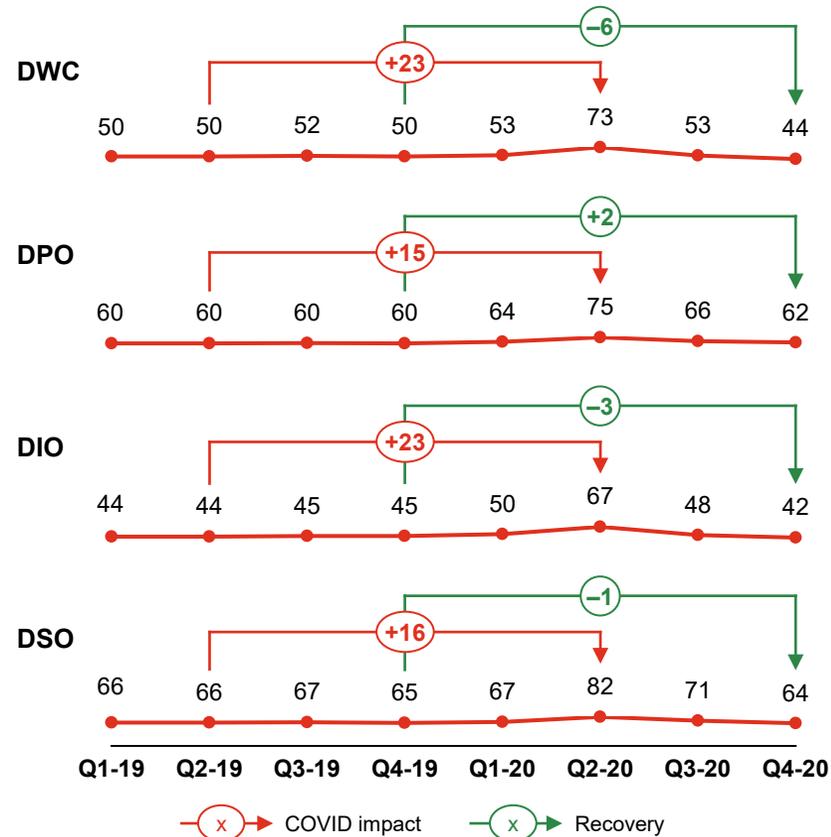
DSO increased by 1 day between 2016 and 2020, and decreased by 1 day from 2019 to 2020.

# COVID-19 also had a major impact on suppliers' working capital performance. However, suppliers recovered in the course of the year, giving overall positive year-on-year performance

Revenues by region (€bn)



Quarterly working capital performance (2019–2020)



## COVID-19 and signs of resilience in 2020

Although automotive suppliers are used to regular summer shutdowns, the production stoppages due to COVID-19 were not anticipated. Suppliers with low liquidity were left vulnerable by high ramp-up costs.

Nevertheless, OEMs were very accommodating to their supply bases during the crisis. Various measures were observed, such as shortening payment terms, along with a general willingness to support and help the supply base get back online.

## Working capital performance

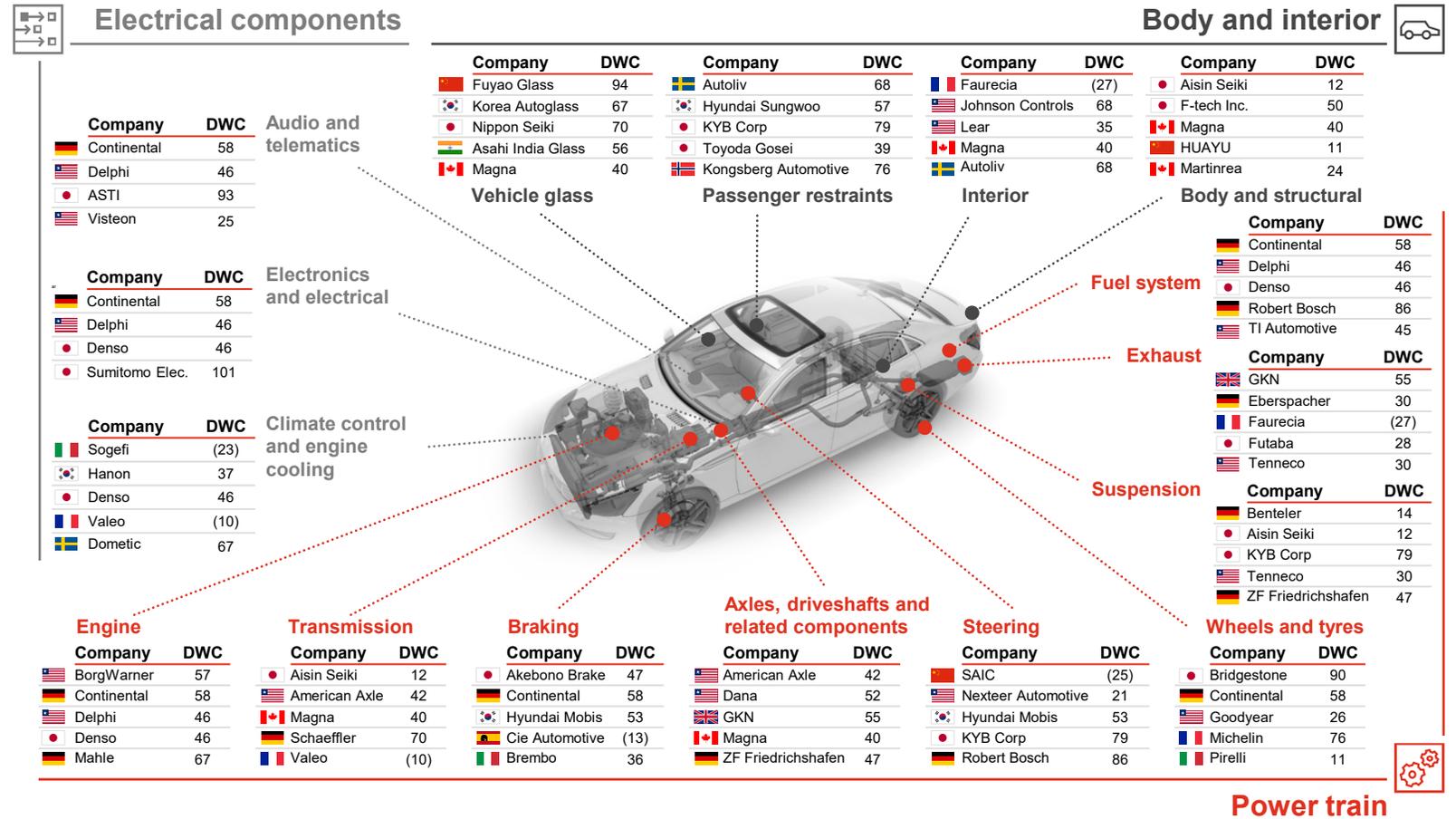
DWC was 23 days higher in Q2 2020 than in Q2 2019, mainly driven by a 23-day increase in DIO.

DSO deteriorated by 16 days, while DPO improved by 15 days.

As with OEMs, automotive suppliers managed to improve their performance in Q3 and Q4 of 2020 and slowly recover from the crisis.

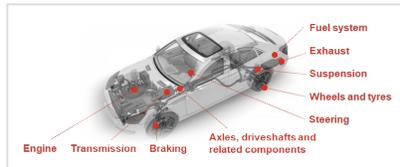
The automotive industry has demonstrated resilience and rebounded at a surprising pace following the global halt in production in April and May. However, there are still obstacles on the road to a full recovery, and we expect to see an increase in mergers and acquisitions through 2021 as suppliers look to increase scale and efficiency and optimise cost structures.

# There are significant differences between – and even within – different automotive supplier segments

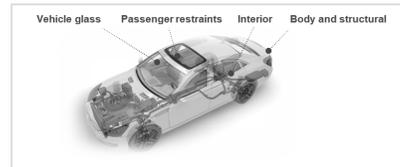


# Although COVID-19 affected power train suppliers the most, these suppliers were also the most resilient and managed to recover quickly from the crisis

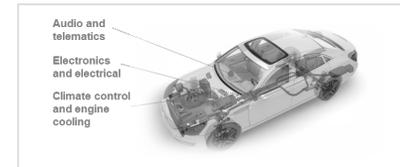
## Power train



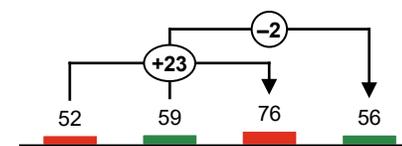
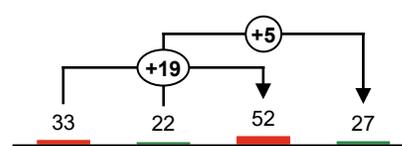
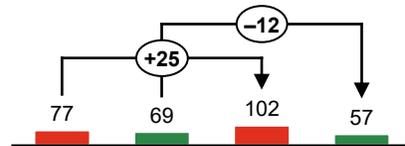
## Body and interior



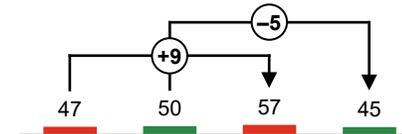
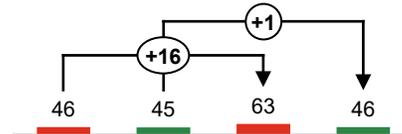
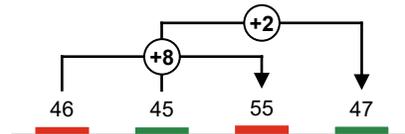
## Electrical components



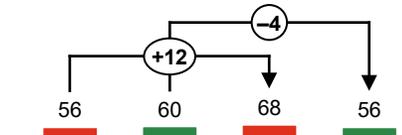
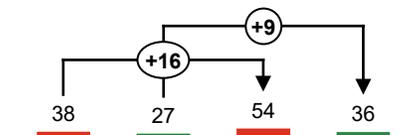
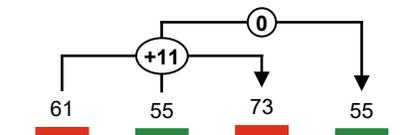
DWC



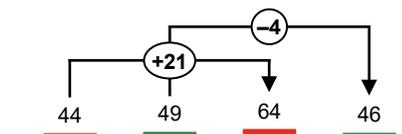
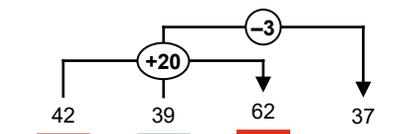
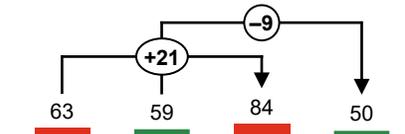
DPO



DSO



DIO



Out of all automotive suppliers, power train suppliers were affected most severely by the COVID-19 crisis: DWC in Q2 2020 was 25 days higher than in Q2 2019.

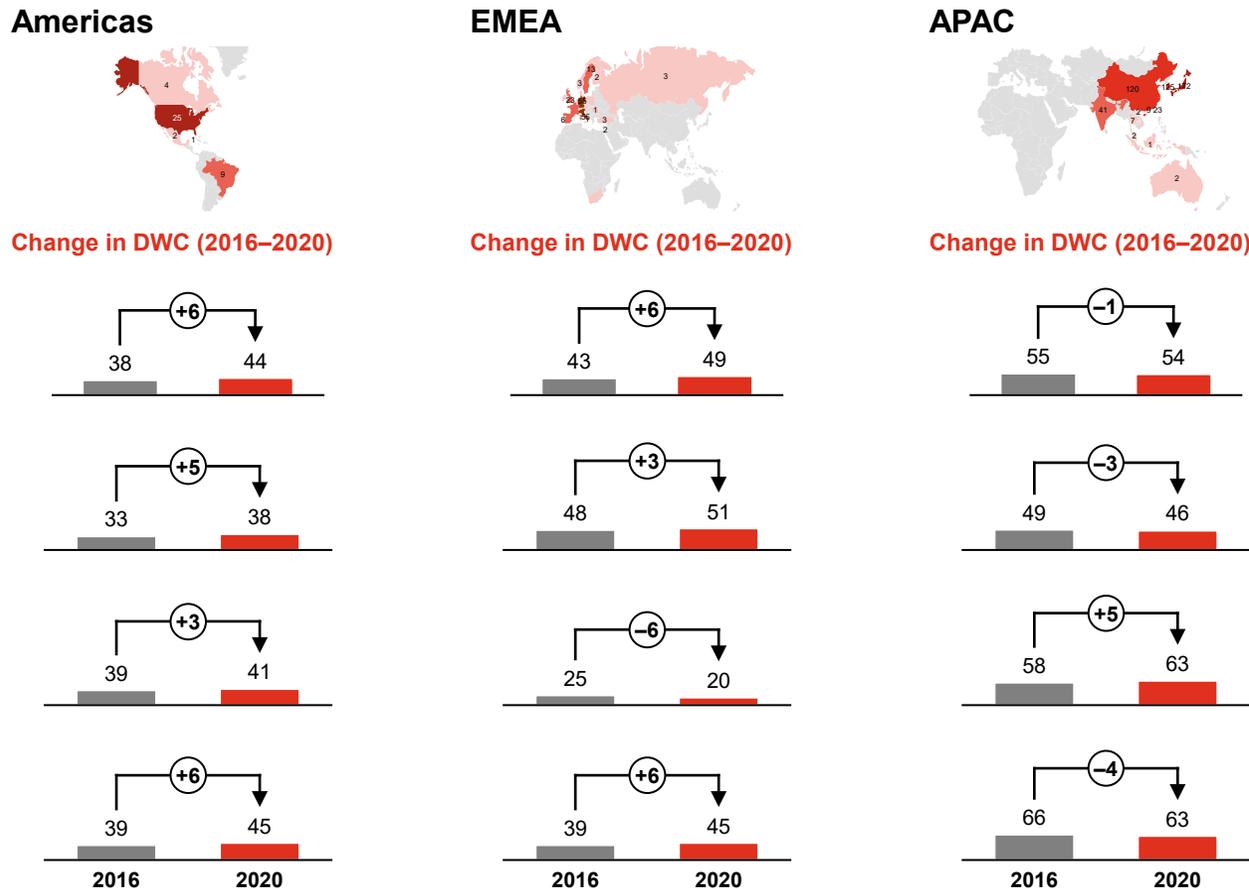
Before the crisis, power train margins were already under pressure from intense competition, the cost of innovation and the rise of electric vehicles.

Nevertheless, most power train suppliers were able to keep their finances stable. Alongside traditional bank financing, state aid was a very relevant factor, especially for medium-sized and privately owned players: these players only had limited access to the capital markets, even before the COVID-19 crisis.

The comparison of Q4 2019 and Q4 2020 shows that power train suppliers managed to recover quickly. Electrical component suppliers are also showing signs of recovery, whereas body and interior suppliers are still struggling.

COVID impact Recovery

# Size generally affected suppliers' average DWC (2016–2020), but location had a bigger impact. Performance slightly improved in APAC, but deteriorated in the Americas and EMEA



The deeper a company is integrated into the supply chain, the greater the impact of the pandemic is likely to be.

Automakers with global supply chains are likely to see tier 2 and tier 3 suppliers most affected by pandemic-related disruption. This is underlined by the 6-day rise in DWC among small companies in the Americas and EMEA.

While many major automotive OEMs have instant online visibility into top-tier suppliers, achieving this is more challenging at lower tiers.

Region

Overall performance by region

Company size

Large companies

> €5bn revenue (2020)



Medium-sized companies

€1–5bn revenue (2020)



Small-sized companies

< €1bn revenue (2020)





4

Areas for improvement and how we can help

# Building resilience: repair, rethink, reconfigure and report

Key considerations to ensure that working capital is fit for purpose in these uncertain times:

## Do policies, targets and incentives drive the right decisions?

Governance frameworks will need to be aligned to ensure that the right trade-offs are made and that the organisation has the right guidance to operate.

## Do people have the guidance and skills to take the right action?

Operational functions will need guidance to enable staff to take the right steps and to prevent “business-as-usual” behaviour.

## Is the right operational data available to enable fast decision-making?

Historical models that most processes rely on are limited in their usefulness. Real-time, bottom-up transparency is necessary for informed action.

## Are processes still fit for purpose?

Operational working capital processes need to be adjusted to the “new normal”.



### Receivables

- Realign and focus collections
- Credit limits, insurance, ability to trade
- Renegotiate/alter terms
- Availability of factoring capacity
- Focused resolution of disputes and claims



### Inventory

- Reconfigure demand forecasting model
- Update replenishment triggers and lead times
- Reconfigure safety stock calculations
- Align production campaigns and plans
- Product portfolio contribution alignment



### Payables

- Increased payment controls
- Manage change requests for credit terms
- Understand supplier stability and health
- Supply chain financing options

## How resilient is my supply chain?

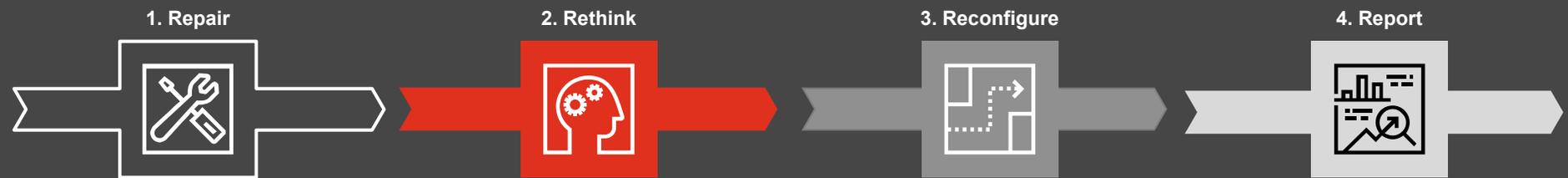
The supply situation and financial health of critical suppliers needs to be clear before ramping up, and contingency plans need to be implemented.



# How we can help

## Building Working Capital resilience: repair, rethink, reconfigure and report:

- Identify and realise cash and cost benefits across end-to-end value chains
- Optimise operational processes that underpin the working capital cycle
- Use data analytics and digital working capital solutions to enhance transparency and performance
- Ensure rapid cash conservation in crisis situations
- Develop resilient supply chains to guard against unexpected risk events and disruption
- Create a “cash culture” and upskill your organisation through our working capital academy
- Roll out trade and supply chain financing solutions



# Authors and working capital contacts

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## Methodology

This study provides a view of the top 842 globally listed companies from January 2016 to December 2020, following PwC analysis and sectorisation. All calculations are based on publicly available data. The division of sub-sectors is based on the Capital IQ Primary Industry Classification system (data available for 100% of sample). Royal Dutch Shell and Anheuser-Busch InBev were not included due to company size.

## Metrics

## Definition

## Calculation

DWC:	Days working capital	DWC days offers an indication of the total days to complete the full cash conversion cycle.	$(\text{Accounts receivable} + \text{inventories} - \text{accounts payable}) \div \text{sales} \times 365$
DSO:	Days sales outstanding	DSO is a measure of the average number of days that a company takes to collect cash after the sale of goods.	$\text{Accounts receivable} \div \text{sales} \times 365$
DIO:	Days inventory outstanding	DIO gives an idea of how long it takes a company to convert its inventory into sales.	$\text{Inventories} \div \text{cost of goods sold} \times 365$
DPO:	Days payables outstanding	DPO is an indicator of how long a company takes to pay its trade creditors.	$\text{Accounts payable} \div \text{cost of goods sold} \times 365$