

Cash for Change

Working Capital Trends in the Automotive Sector 2017

May 2018





Cara Haffey

*Industrial
Manufacturing Leader*

PwC UK

M: +44 (0)7809 551517

E: cara.haffey@pwc.com

Foreword

A time to capitalise on working capital to fund further investments in technology

PwC's annual global cross-industry study of working capital – 'Pressure in the system' – Provides valuable insights into how companies are managing and using working capital. But it's at the industry level that we often find the data is most useful to management in formulating and executing their working capital strategies.

This sector-focused report into working capital in the global automotive industry is no exception. Our study has looked at the cash opportunity tied up in working capital in companies along the global automotive value chain, and has estimated it at some €215bn – a substantial sum for any industry.

At a time when automotive companies across the world are benefitting from rising global trade, and focusing investments on transforming their industry's technological landscape, our analysis also shows that their overall net working capital performance has deteriorated year-on-year by one day.

However, this relatively flat outcome masks a sharp divergence between OEMs and non-OEMs, with OEMs suffering deteriorating performance over the past year driven by increasing DSO and DIO, while non-OEMs' performance has improved. There are also wide variations within the two segments across different measures of working capital, with – for example – top non-OEM companies being the industry-wide leaders in DPO.

What do these figures tell us? Combined with our finding that only 24% of finance time is spent on insight-generating activities, they point to a clear opportunity for finance teams to help functions across the business understand the cash impacts of commercial and operational decisions. And they underline the need and potential for companies across the sector to continue to invest in new technologies to sustain their long-term competitiveness.

If there's one message that shines through in this report, it's that automotive companies should not regard their working capital simply as an overdraft, but should focus on it as the first option for funding investment in their business. This approach could be especially useful at a time when they're looking to invest in electrification of the fleet and developments around connected mobility. For automotive organisations, the cash to fund these investments is already sitting in their business as working capital. It's time to release it.

Cara Haffey

Industrial Manufacturing Leader, PwC UK

Contents

Foreword



Preface



*Overall
Performance*



*OEM
Performance*



*Non-OEM
Performance*



How we can help



Preface



Felix Kuhnert
Partner,
Global Leader, Automotive
PwC Germany

The year 2017 was yet another record year for the global automotive industry, although total production growth was hampered by weakness in the US and China. Still, on the back of record sales for the leading manufacturers, revenues and liquidity flowed satisfactorily on the OEM level, leading to an overall softening of working capital indicators – while suppliers kept their controls tight and continued to improve financial efficiency. Most saliently, DIO performance decreased four days for OEMs, while the non-OEM sector remained stable.

The automotive industry – especially with their OEMs - is still one of the leading sectors when it comes to NWC days. However, negotiating power in payment targets and conditions leads to significant differences in the performance of automotive companies. This gets especially visible if you look at Tier-1 suppliers that are directly serving OEMs. In the downstream sector – such as wholesale of spare parts – on the other hand, companies regularly operate with negative working capital due to their smart leveraging of negotiating power towards their suppliers and customers.

We hope that you will find this report insightful and practical for your daily operations. We would be happy to provide you with any additional information and discuss the topic further with you.

€215bn

of cash is tied up
in the balance
sheets of selected automotive companies



**OEM
performance
deteriorated** year
on year (YoY) by 11% leading to
a marginal deterioration of 2%
over a five year horizon



**Non-OEM
performance
improved** year on year (YoY) by
2% continuing the trend of the last years
and resulting in a five year improvement
of 8%



Both OEMs & Non-OEM have seen
deterioration in
DSO



DIO
performance has deteriorated for
**OEM by 4 days compared to
stable DIO performance
for Non-OEM**



For both OEM and Non-OEM **DPO**
Performance has improved by
a **stretch in payables**



9 out of 15 OEM
have seen improvement in
NWC days since 2012

Finance functions
spend only 24%
of time on insight
generating activities and
could do more to help the
Business understand the
cash impact of operational and
commercial decisions

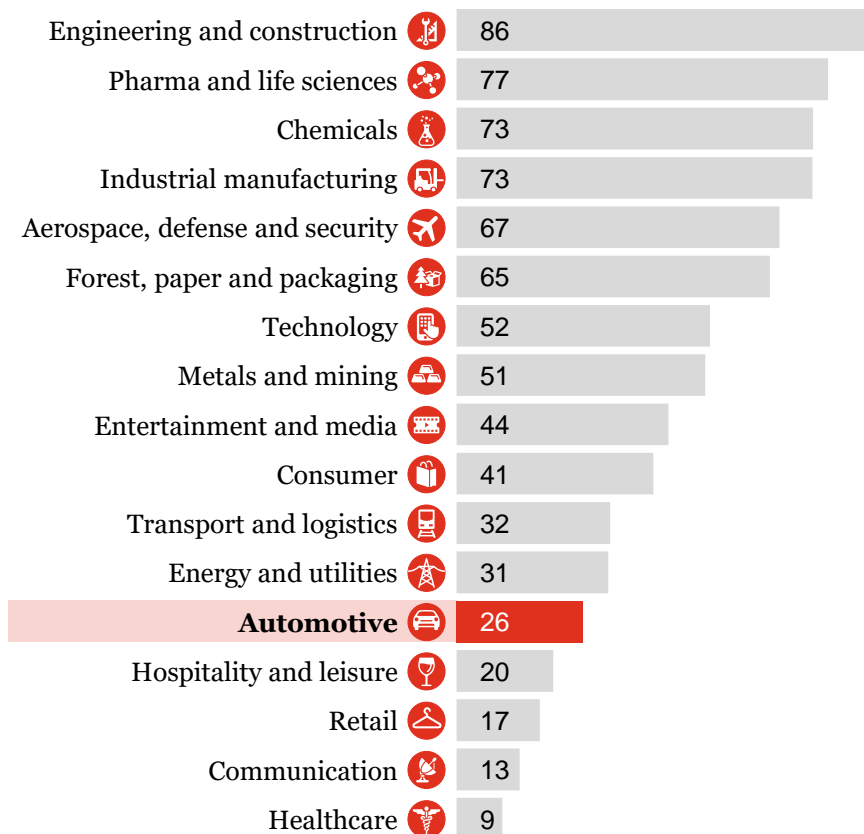


**Overall NWC
performance
deteriorated**
year on year (YoY) by 1 day
driven by the OEM
working capital
performance deterioration

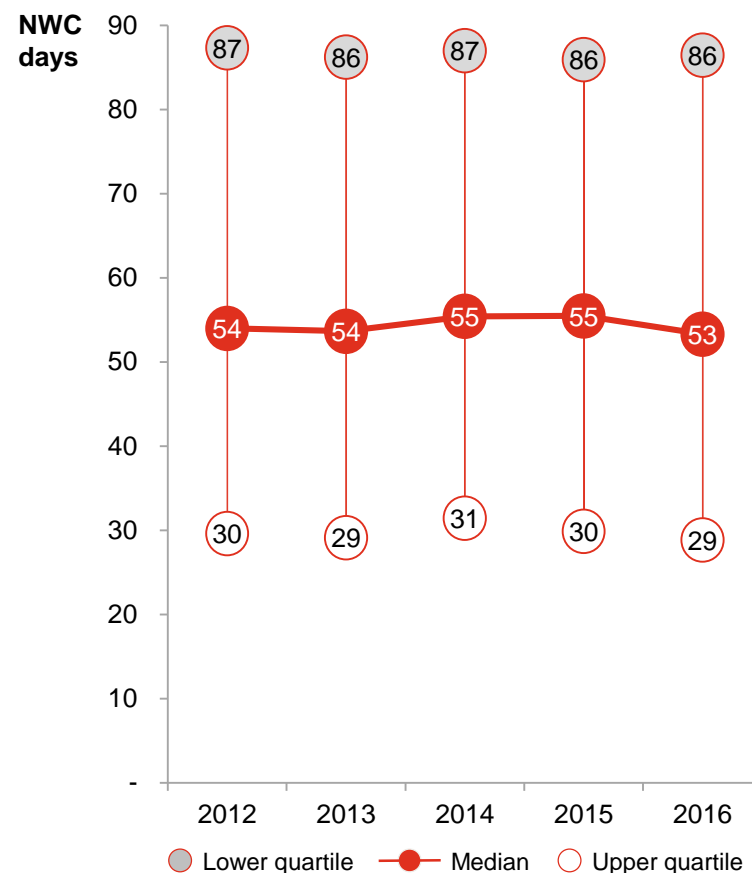


Despite positive working capital trends in the last years, recent deteriorating working capital performance leads to €215 billion in cash being tied up on the balance sheets

2016 average NWC days per sector

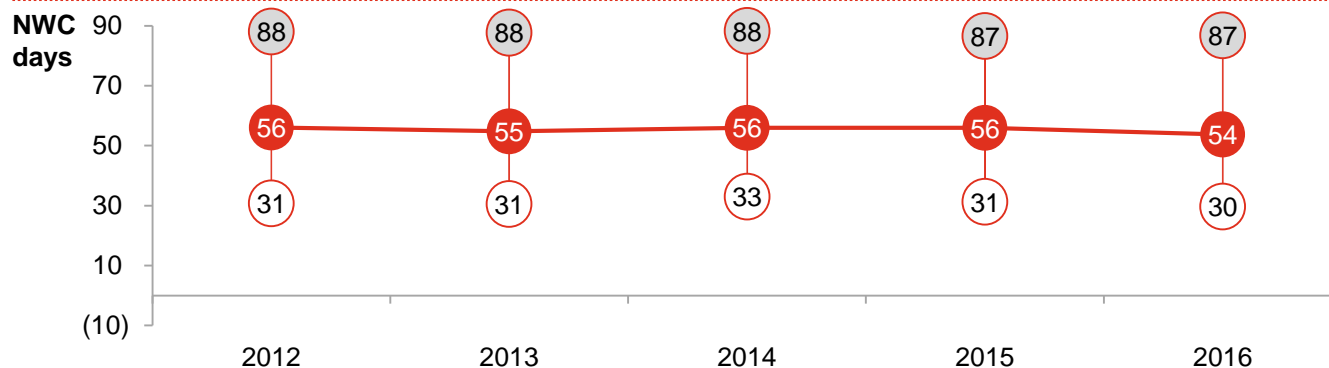


Overall WCM Quartile and Median Performance

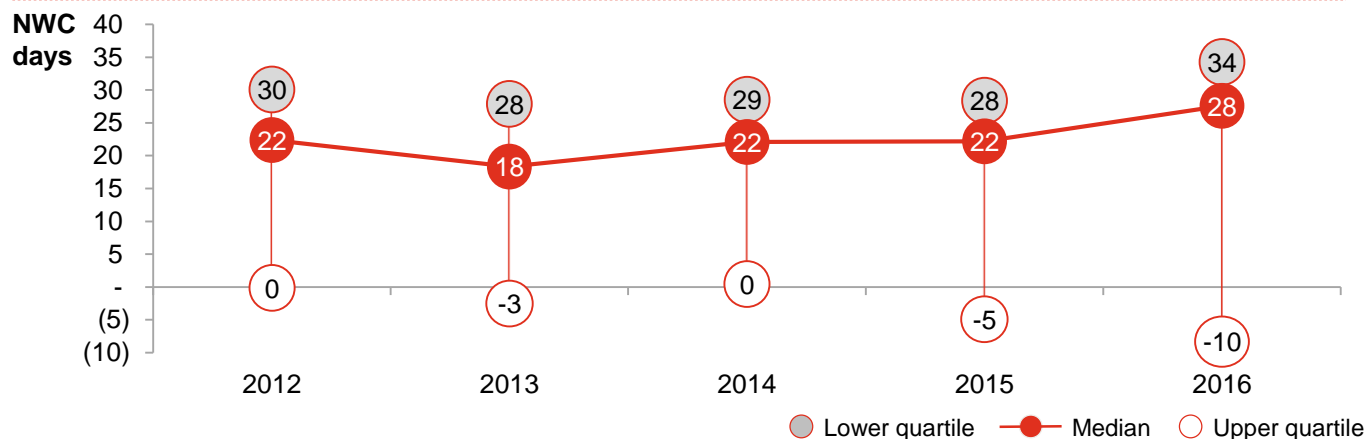


OEM companies show a deteriorating working capital performance trend whereas non-OEM have improved their performance over the last years. Still, each area has cash tied up, €84bn for OEM and €131bn for non-OEM

Non-OEM



OEM



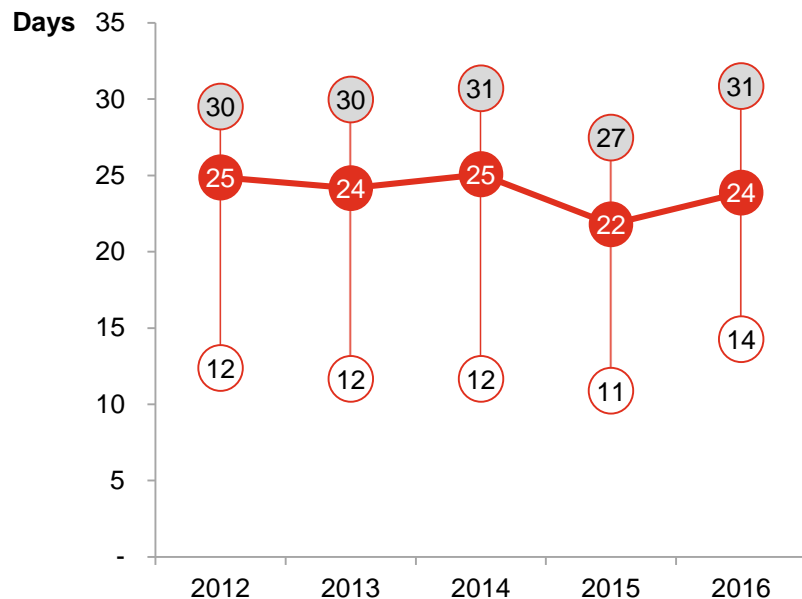
There are big differences between OEM and Non-OEM and also within the two groups.

The discrepancy between OEM and non-OEM (automotive suppliers) is partly driven by different business models and customers served but also fundamental differences in the management focus on cash and working capital.

We have identified a deterioration in the OEM sector of close to 11% compared to last year, whereas the non-OEM group improved by 2% over the same time period.

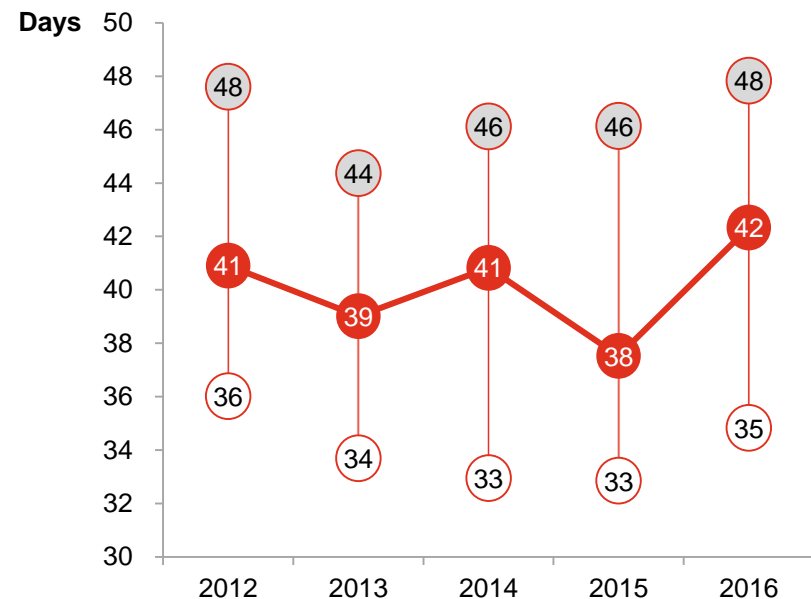
OEM's deteriorating working capital performance is mainly driven by increasing DSO and DIO levels...

OEM – DSO Trend



DSO improved marginally between 2012 and 2015 partially through improved receivables management in the field of joint ventures and strategic alliances. However this improved level could not be maintained and **DSO has deteriorated by 8%** compared to last year.

OEM – DIO Trend



After slight improvements in the past, **DIO levels have increased in the last year** by 9%, leading to a 5-year-high in DIO levels.

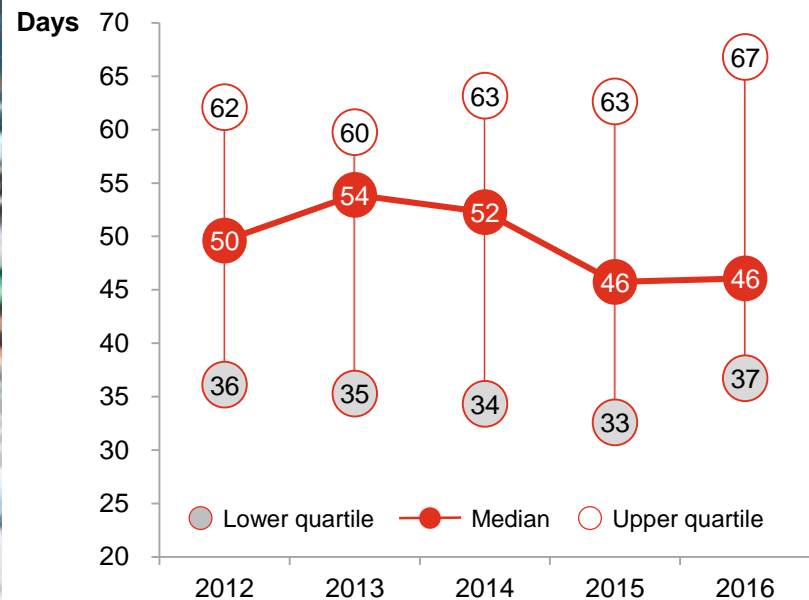
This indicates that initial successful DIO reductions were not sustainable and good working capital management practices are hard to maintain and require constant effort and focus.

● Lower quartile ● Median ○ Upper quartile

... resulting in more than €84bn in cash tied up



OEM – DPO Trend



Weighted average **DPO has increased** by 8% compared to last year's performance. Whilst the median performance is fairly stable, the upper and lower quartile's performance increased last year.

In these areas continued spend consolidation and the use of financial instruments like supply chain finance have contributed to higher performance levels.

There is a significant gap in DSO between the different categories of Non-OEM companies, with body and interior suppliers achieving the best DSO levels...

Observations/drivers for working capital performance:



Suppliers

Automotive suppliers' working capital performance depends on product footprint, regional set up and the level of collaboration with OEM.

Inventory is the area with the largest spread between the supplier segments caused by a different set-up of the supply chain, varying footprints as well as the dependency of the OEM.



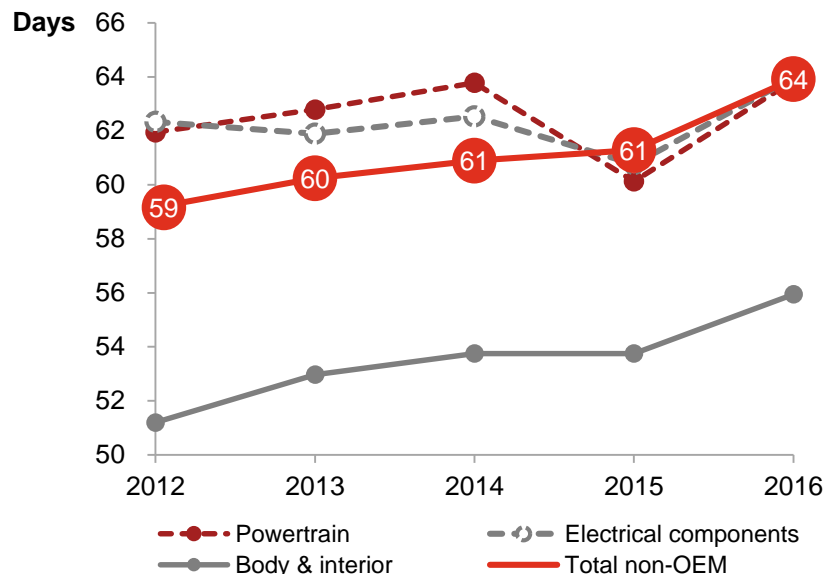
Inventory



Takeaways

Many suppliers have reported actions in the area of working capital management, especially in the area of billing and cash collection, supplier payment terms, and supply chain efficiency.

Non-OEM DSO performance 2012 - 16

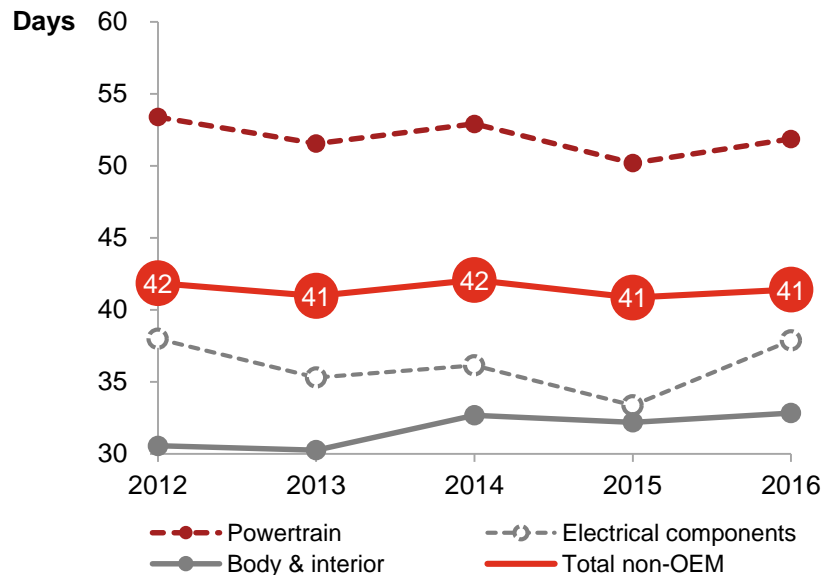


Gap between body and interior and other suppliers. There is a discrepancy between body and interior and other suppliers for all working capital areas with the largest one on the receivables side, with a variance of 8 days compared with all non-OEM companies.

The general DSO performance deteriorated to 64 days. In line with the positive DPO development at OEM level the non-OEM DSO levels are deteriorating – the fairly constant performance of the past four years could not be maintained.

... whereas the Non-OEM DIO and DPO trends show a wider range of performances resulting in more than €131bn being tied up

Non-OEM DIO performance 2012 - 16

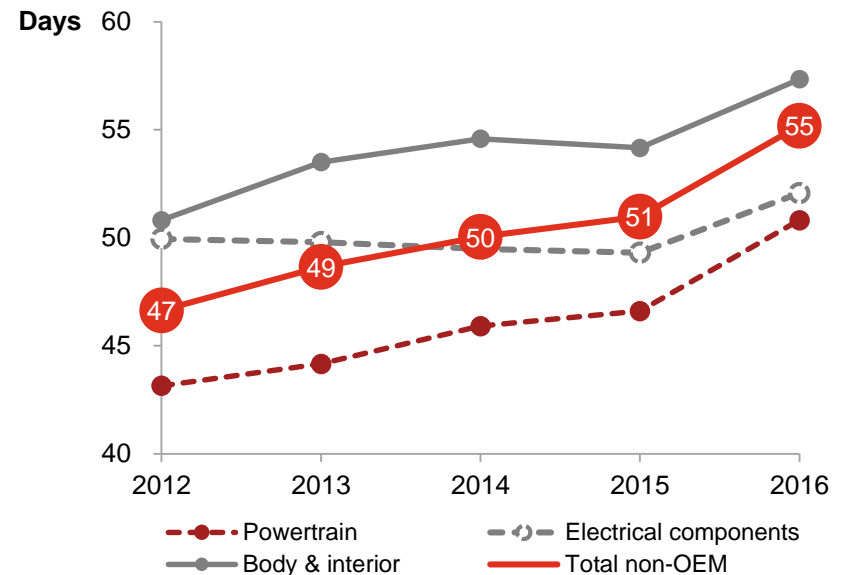


Converging performance

Besides a deterioration for electrical components the overall Non-OEM group shows a constant DIO performance around 41 days.

The marginally positive reduction of the past couple of years could be maintained. Key drivers in this area are more upstream and downstream collaboration in demand forecasting, better process coordination, and global sourcing optimisation.

Non-OEM DPO performance 2012 - 16



Top non-OEM are DPO leaders

Focus on procurement and working capital management has benefitted all segments over the past five years.

As a result, 2016 levels show a strong increase by 18% compared to performance levels of 2012.

Key drivers for the recent improvements are spend consolidation, supply chain streamlining, and global sourcing programs.

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

Electrical components



Company	NWC
Continental	44
Delphi	35
VOXX	98
ASTI	127
Visteon	23

Audio and telematics

Company	NWC
Continental	44
Delphi	35
Denso	53
Sumitomo Elec.	93

Electronics and electrical

Company	NWC
Sogefi	14
Calsonic Kansei	24
Denso	53
Valeo	(1)
Dometic	78

Climate control and engine cooling

Engine

Company	NWC
BorgWarner	19
Continental	44
Delphi	35
Denso	53
Mahle	58

Transmission

Company	NWC
Aisin Seiki	5
American Axle	37
Magna	35
Schaeffler	68
Valeo	(1)

Braking

Company	NWC
Akebono Brake	36
Continental	44
Hyundai Mobis	39
Cie Automotive	(8)
Cooper Standard	14

Axles, driveshafts and components

Company	NWC
American Axle	37
Dana	34
GKN	48
Magna	35
ZF Friedrichshafen	28

Steering

Company	NWC
SAIC	23
Nexteer Autom.	23
NSK	70
Takata	64
Robert Bosch	56

Wheels and tires

Company	NWC
Bridgestone	71
Continental	44
Goodyear	44
Michelin	90
Pirelli	14

Body and interior

Company	NWC
Korea Autoglass	68
Xinyi Glass	46
Asahi India Glass	88
Saint-Gobain	47
Webasto	56

Body glass

Company	NWC
Autoliv	56
Hyundai Sungwoo	40
Takata	64
Toyota Gosei	53
Kongsberg Autom.	46

Passenger restraints

Company	NWC
Faurecia	(16)
Johnson Controls	68
Lear	22
Magna	35
Toyota Boshoku	14

Interior

Company	NWC
Aisin Seiki	5
F-tech Inc.	56
Magna	35
Plastic Omnion	(2)
Tower	132

Body and structural

Fuel system

Company	NWC
Continental	44
Delphi	35
Denso	53
Robert Bosch	56
TI Automotive	73

Exhaust

Company	NWC
Calsonic Kansei	24
Eberspacher	33
Faurecia	(16)
Futaba	22
Tenneco	22

Suspension

Company	NWC
Benteler	19
Hyundai Mobis	39
KYB Corp	72
Tower	132
ZF Friedrichshafen	28

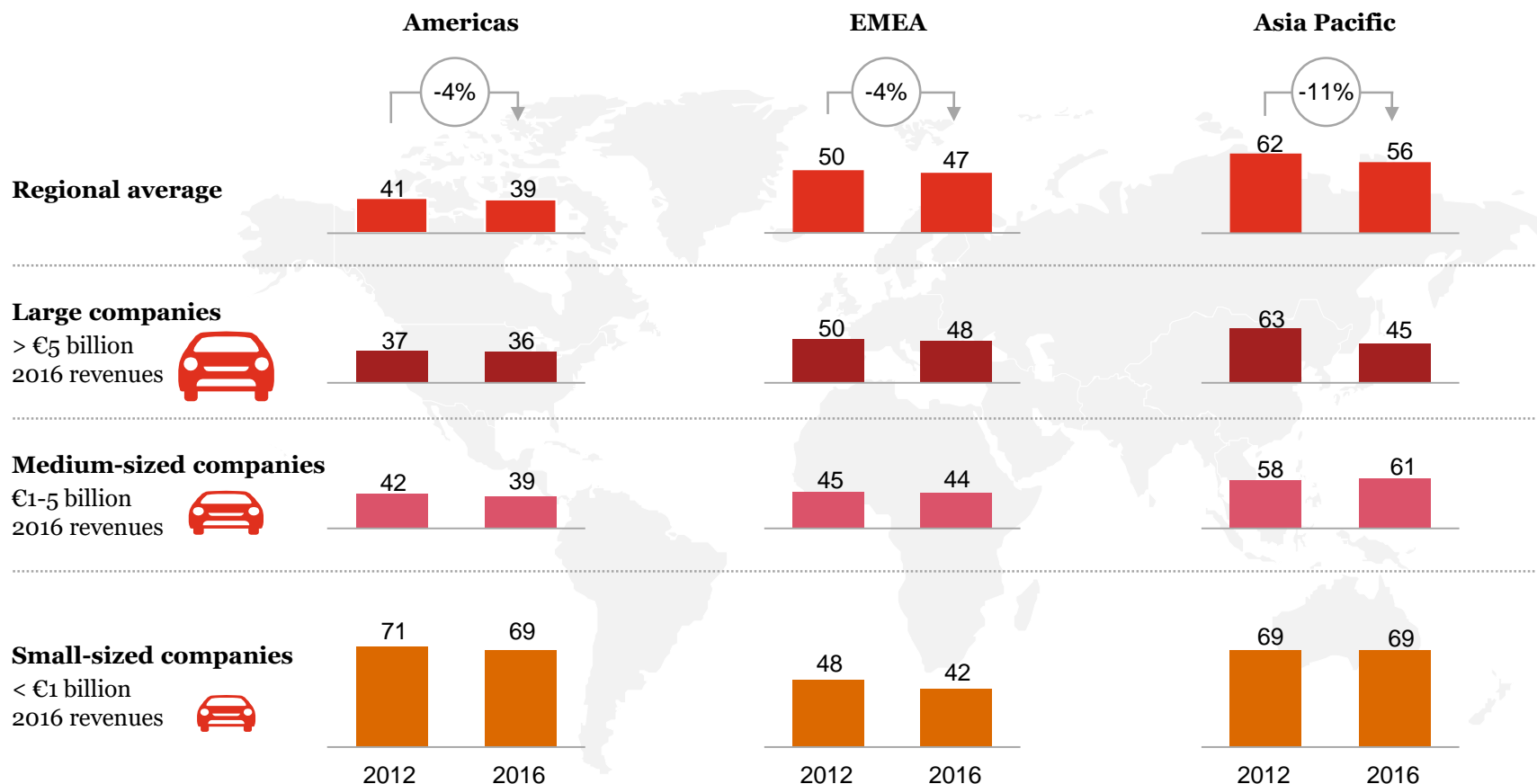


For basis of calculation and methodology see page 18

Powertrain

Size generally affects Non-OEM's average NWC days position but regional influence has a bigger impact

Evolution of Non-OEM suppliers' NWC days 2012 - 16



The role of the finance teams in working capital management

Only **24% of finance time** is spent on insight-generating activities



How leading finance functions are pulling ahead:

- 1 Building a clear role for business partners with the right skills to impact business decisions.
- 2 Investing in emerging technologies (e.g. data analytics, tailored collections pathways and robotic process automation).
- 3 Driving behaviour and cultural change across the organisation.
- 4 Driving large scale business transformation based upon sound financial analysis and measurable benefits.

The finance function traditionally plays a central role in the coordination of working capital management. In fact, businesses often place an overreliance on finance to solve working capital problems when many of the underlying drivers are operational rather than financial.

Working capital management is a broad topic with commercial and supply chain touchpoints where the value of cash is not always front of mind. Finance has a big role to play in helping the business to make good decisions in the midst of often competing financial

objectives and incentives. The reason that organisations turn to finance to play this central role is that often it's the finance team who are responsible for sourcing, validating and analysing the disparate data sets and inputs to this complex process.

The role of the new breed of finance business partner needs to focus on business outcomes. Working capital improvement is one area where positive business outcomes can really benefit the organisation and the finance team can help cross functional stakeholders to understand the cash impact of commercial and operational decisions.

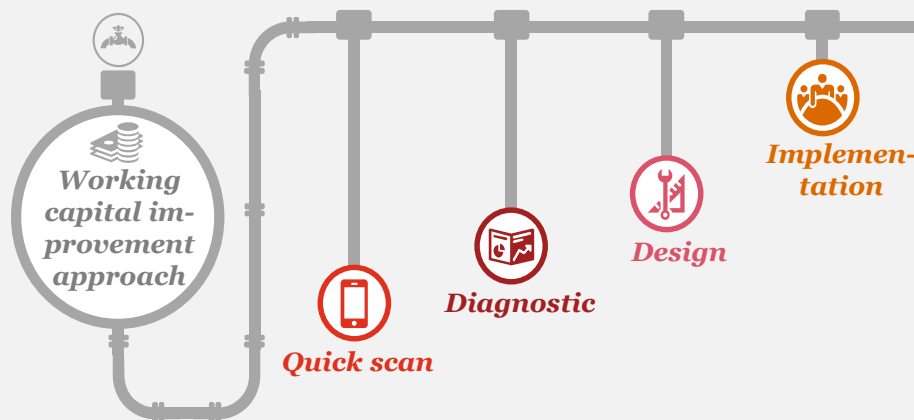
Stepping up:

How finance functions are transforming to drive business results.

In our 2017 PwC Finance benchmarking study we saw that less than a quarter of finance time is spent on delivering business insight. In order to help different functions to manage complex trade offs and identify improvement opportunities less time needs to be spent on transactional work, such as sourcing and reconciling data and more on these value adding tasks, including analysing data in order to generate actionable business insights.

To overcome this challenge our clients are investing in emerging technologies to increase process efficiency, upskilling business partners and driving behavioural change across the business.

How we can support you



We help our clients to deliver the following outcomes:

- Identification and realisation of cash and cost benefits across the end to end value chain.
- Optimised operational processes that underpin the working capital cycle.
- Digital working capital solution and data analytics.
- Rapid cash conservation in crisis situations.
- “Cash culture” and upskilled organisation through our working capital academy.
- Roll-out trade and supply chain financing solutions.

Examples of areas where PwC can help you to release cash from working capital:

Accounts receivable	<ul style="list-style-type: none"> • Tailored, proactive collections • Credit risk policies • Aligned and optimised customer terms • Billing timeliness & quality • Contract & milestone management 	<ul style="list-style-type: none"> • Systematic dispute resolution • Dispute root cause elimination • Alternative B2B Collection approaches • New players with pre-payment terms
	<ul style="list-style-type: none"> • Lean & agile supply chain strategies • Global coordination • Forecasting techniques • Production planning • Inventory tracking • Balancing cost, cash and 	<ul style="list-style-type: none"> • service level considerations • Inventory parameters & controls defining target stock • Inventory build up due to new technologies (e.g. Batteries)
Inventory	<ul style="list-style-type: none"> • Consolidated spending • Increased control with centre-led procurement • Avoid leakage with purchasing channels • Payment terms • Supply chain finance benefits assessment & 	<ul style="list-style-type: none"> • implementation • Reduce early payments • Payment methods and frequency
Accounts payable		

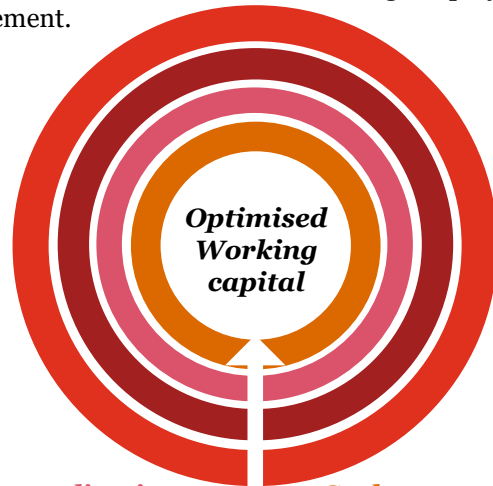
Our approach to sustainable working capital

Change management

Establish a more cash-focused culture that is able to sustain the higher levels of performance and drive continuous improvement.

Stakeholder management

Ensure that key stakeholders remain engaged during the project.



Benefits realisation

Ensure that cash generation objectives are achieved and maintained.

Cash management

Ensure effective utilisation and forecasting of cash.

We supplement our working capital and cash management methodologies with core consulting approaches to make sure that improvements are tangible and sustainable.

Case study:

Global Supply Chain Finance roll-out and implementation for Tier 1 Automotive Supplier

The key issue

The customer is a global automotive supplier with c. 12 billion of sales and over 50,00 employees. With in excess of 125 production sites in more than 25 countries all over the world the client was looking for an advisor to implement a global SCF-program. To ensure a successful global roll-out individual regional challenges and restrictions had to be considered and solved.

How we helped

Following the selection of banking and the design of Supply Chain Finance processes, the client wanted to start the roll out of Supply Chain Finance including:

- **Trained 200+ of client staff** across **4 continents** on the concept of Supply Chain Finance, next steps and roll out
- Linking between client and bank to **ensure robust set-up in all countries, KYC and legal requirements** fulfilled
- Locally setting up the **interface between client (SAP) and bank (SCF Portal)** and joint testing of functionality
- Developed a **validated Purchasing Framework on local and group level**, recommended target term
- Recommended and developed **Global Payment Terms for relevant suppliers**, leveraging economies of scale and ensuring standardised approach on supplier level within local legal requirements

The result:

Successful implementation of the global SCF-program covering c. 8000 suppliers, c. 8 billion spend for over 50 legal entities in more than 15 countries

Working capital team and global network

Authors of the study



Rob Kortman

Partner, PwC UK

Tel. +44 780 385-9001
rob.kortman@pwc.com



Stephan Dellermann

Senior Manager, PwC Germany

Tel. +49 151 26818204
stephan.dellermann@pwc.com



Sebastian Leidig

Manager, PwC Germany

Tel. +49 175 2271992
sebastian.leidig@pwc.com

Our global Working Capital network

Australia

Jonas Schöfer

Tel. +61 2 8266-4782
jonas.schofer@pwc.com

France

François Guilbaud

Tel. +33 1 5657-8537
francois.guilbaud@pwc.com

Middle East

Mihir Bhatt

Tel. +971 4304-3641
mihir.bhatt@pwc.com

Sweden

Johan Forsberg

Tel. +46 7 2584-9574
johan.forsberg@pwc.com

United Kingdom

Rob Kortman

Tel. +44 78 0385-9001
rob.kortman@pwc.com

Austria

Manfred Kvasnicka

Tel. +43 15 0188-2937
manfred.kvasnicka@pwc.com

Germany

Simon Boehme

Tel. +49 16 0680-8355
simon.boehme@pwc.com

Poland

Felker Krzysztof

Tel. +48 51 9504-153
krzysztof.felker@pwc.com

Switzerland

Reto Brunner

Tel. +41 5 8792-1419
reto.brunner@ch.pwc.com

United Kingdom

Stephen Tebbett

Tel. +44 77 1778-2240
stephen.tebbett@pwc.com

Belgium

Koen Cobbaert

Tel. +32 4 7998-6176
koen.cobbaert@pwc.com

Hong Kong

Michael P Gildea

Tel. +852 2289-1816
michael.p.gildea@hk.pwc.com

Russia

Konstantin Supatov

Tel. +7 49 5967-6106
konstantin.supatov@ru.pwc.com

The Netherlands

Danny Siemes

Tel. +31 8 8792-4264
danny.siemes@pwc.com

United Kingdom

Daniel Windaus

Tel. +44 77 2563-3420
daniel.windaus@pwc.com

CEE

Petr Smutny

Tel. +42 25 115-1215
petr.smutny@pwc.com

Italy

Marco Ghiringhelli

Tel. +39 02 6672-0345
marco.ghiringhelli@pwc.com

Singapore

Caroline Clavel

Tel. +65 6236-3047
caroline.yl.clavel@sg.pwc.com

Turkey

Tankut Ikizler

Tel. +90 21 2326-6527
tankut.ikizler@pwc.com

Denmark

Søren Lykke

Tel. +45 51 350-210
soren.lykke@dk.pwc.com

Malaysia

Ganesh Gunaratnam

Tel. +603 2173-0888
ganesh.gunaratnam@my.pwc.com

Spain

Enrique Bujidos

Tel. +34 9 1568-4356
enrique.buji@es.pwc.com

USA

Paul Gaynor

Tel. +1 92 5699-5698
paul.m.gaynor@pwc.com

Basis of calculation and methodology

Metric	Definition	Basis of calculation
NWC % (net working capital %)	NWC % measures working capital requirements relative to the size of the company.	(Accounts receivable + inventories – accounts payable)/sales
NWC days (net working capital days)	Indication of the total days to complete the full cash conversion cycle.	(Accounts receivable + inventories – accounts payable)/sales x 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 or after services have been delivered.	Accounts receivable/sales x 365
DIO (days inventories on-hand)	DIO gives an idea of how long it takes for a company to convert its inventory into sales. Generally, the lower (shorter) the DIO, the better.	Inventories/sales x 365
DPO (days payables outstanding)	DPO is an indicator of how long a company takes to pay its trade creditors.	Accounts payable/sales x 365

Term	Definition
OEM	Original equipment manufacturer. Data includes the 15 most relevant OEM based on 2016 revenue and available data; financial services have been excluded.
Non-OEM	Range of companies manufacturing automotive parts and components based on Capital IQ primary industry. Data includes 596 suppliers based on 2016 revenue and available data.
Powertrain	Selection of non-OEM companies based on Primary SIC code: producing components that generate power and deliver it to the road surface (engines, transmissions, wheels, etc)
Electrical components	Selection of non-OEM companies based on Primary SIC code: producing components related to transformers, meters, electrical coils, etc.
Body and interior	Selection of non-OEM companies based on Primary SIC code: producing components related to car bodies, plate work, seats, etc.

Methodology

Automotive data is based on the publicly available data of 611 companies in the automotive sector, according to Capital IQ sector segmentation.

The division in non-OEM is based on Capital IQ Primary Industry classification, whilst the segment categorisation is based on Capital IQ primary SIC codes (data available for 42% of sample). Division in regions is based on Capital IQ Primary Country.

OEM data is derived from the annual accounts of a selection of the top automobile manufacturers in terms of revenue. For OEM data the financial services arm has been excluded.

All facts and figures derived from PwC's *Pressure in the system* 2017/18 report.

This content is for general information purposes only, and should not be used as a substitute for consultations with professional advisors.

© 2018 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which a separate legal entity. Please see www.pwc.com/structure for further details.