pwc.com/workingcapitalsurvey

Bridging the Gap
2015 Annual Global Working Capital Survey

pwc

Contents

Executive summary

1

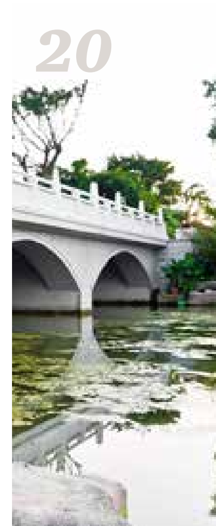
What is driving working capital?

11

1. Industry analysis

14

2. Geography analysis


20

3. Size analysis

28

4. Financial performance analysis

32

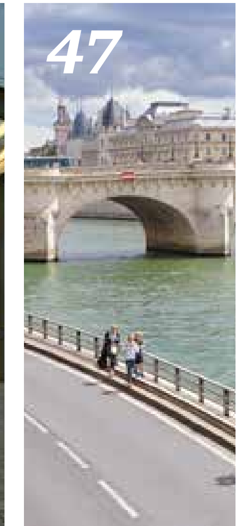
How we can support you

37

Appendices

39

Contacts


47

Executive summary Bridging the Gap

Robert Smid
UK Partner, Working Capital Practice Leader

"working capital is the easiest and fastest source of cash to bridge funding gaps"

Daniel Windaus
UK Partner, Lead Author

"this year's survey also revealed surprising performance gaps, listed on the next page"

After years of working capital deterioration, companies have realised that optimising working capital is crucial, and failure to manage it properly can have a serious impact on their ability to fund their day-to-day operations. In 2014, we witnessed the first significant decrease in global working capital in 4 years, with a 2.9% year-on-year improvement. This improvement has directly contributed to an 11.3% jump in the level of cash held by companies, making them more awash with cash than they have been for the last five years.

However, this is no time to rest on one's laurels. To sustain the recent revenue growth rates, companies will need EUR 237 billion of cash to finance next year's growth alone. At the same time, net debt levels have experienced continuous growth while the ability to generate new cash through operations (cash conversion efficiency) has stagnated.

Working capital is an obvious way to bridge the gap.

Our survey shows that a company's working capital performance is driven by four main factors:

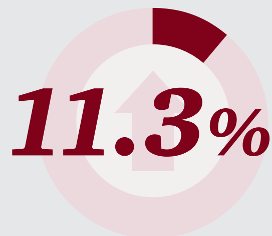
Firstly, the industry sector it operates in. Some sectors require more working capital than others. However, our analysis shows there is a wide gap between the bottom and top performers in every industry, demonstrating that some companies are more adept at playing the cards they are dealt.

Secondly, the economic maturity of the region. Companies operating in developed economies have been able to fine-tune their operational processes over many years and adjust their business models if needed. In the emerging, fast growth economies cash and working capital are typically managed less well, as cash flows are growing each year. Only when growth curves flatten or even decline, cash and working capital management become a top priority in the boardroom.

Thirdly, company size is important. Larger companies tend to be better at managing their working capital. Smaller, at times even fledgling businesses, often have less sophisticated working processes, systems and functional expertise, whilst arguably they have a greater need for effective cash management to finance their growth.

Lastly and most significantly, the importance that management places on cash and working capital. Every company needs cash to run their day-to-day operations, but not every company attributes good working capital management to improved and more reliable cash flows. Too often management turns to banks or investors to fund their working capital rather than finding ways of generating more free cash flows themselves or reducing the funding requirements by becoming more working capital efficient. This need for cash goes far beyond working capital funding. Businesses are under increasing pressure to pay dividends or to invest in growth. Our analysis shows that market leaders recognise the true value of cash and manage their working capital tightly, despite current highs in cash-on-hand and continued low interest rates.

First significant improvement in global working capital since 2010, driving an impressive 11.3% jump in cash over the past year

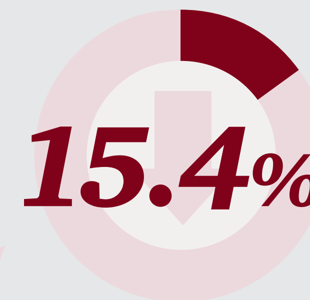


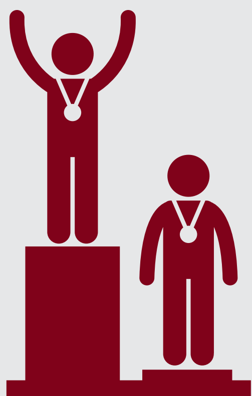
However, the revenue trend in the last five years suggests that

EUR 237bn

of additional working capital is needed to enable next year's growth

Debt burdens rose to a five-year high and return on capital deteriorated by





There is a ***wide gap between top and bottom performers*** across all sectors

7/16

Only 7 out of 16 sectors managed to improve working capital since 2010

Asia lags behind most other regions in terms of working capital performance and the gap is widening

Small enterprises have a significantly ***higher NWC %*** than large corporations and the gap is widening

Companies that are top performers in working capital, are also significantly better at ***generating cash***

EUR 950bn

could be released from the balance sheets of global listed companies by addressing poor working capital performance

Working capital is the life blood of every company. During the 2007/08 global financial crisis companies were slow to respond to declining sales, resulting in excess inventory. Combined with the reduced payment morale this led to a steady increase in working capital ratios.

2014 has seen the first shift in this trend. Globally, working capital has decreased significantly, showing the first improvement since 2010.

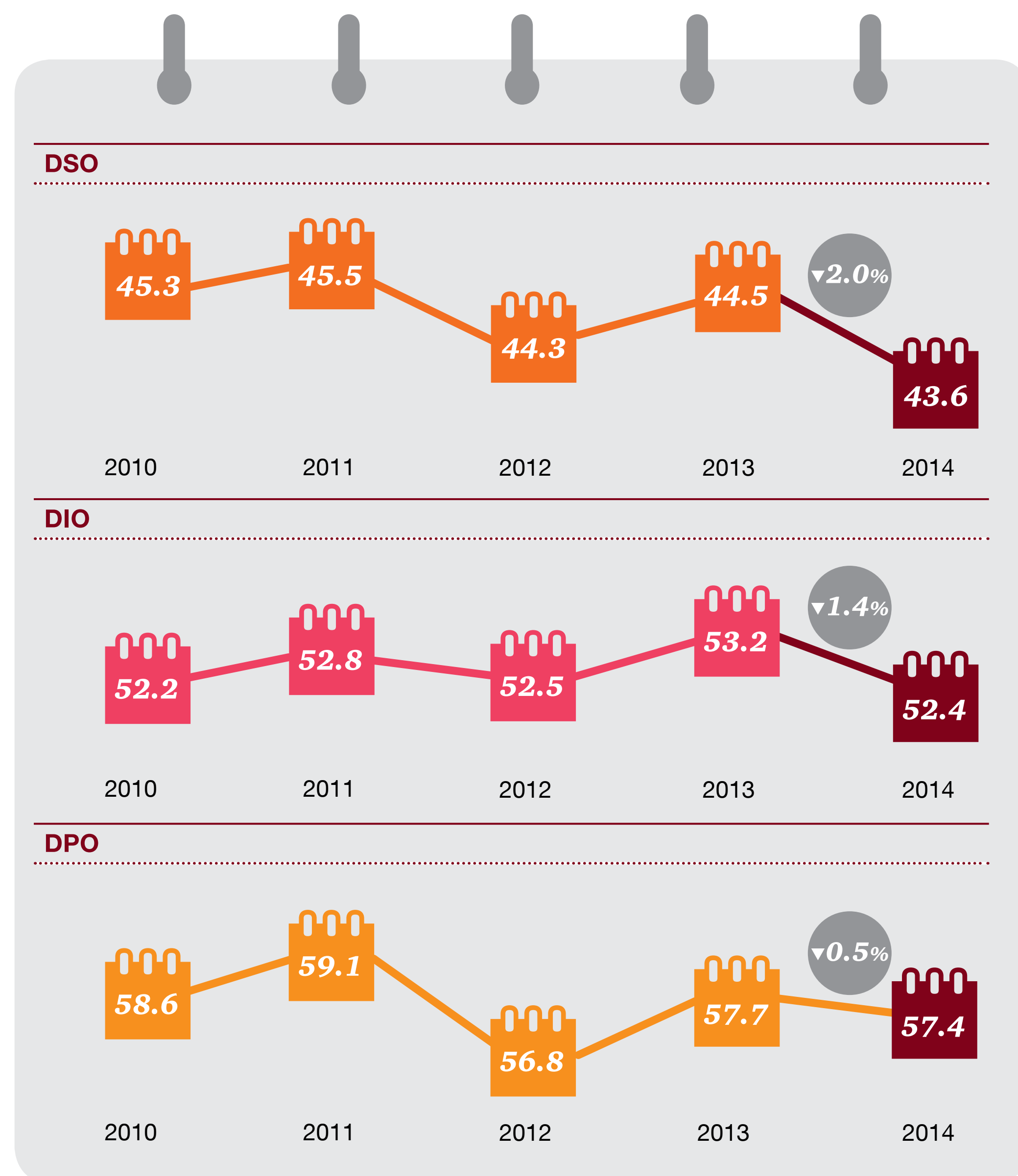
Despite the current low interest rates, top performing companies are focused on improving operational cash flows and working capital efficiency, which releases cash from the balance sheet. This allows them to invest, make acquisitions, reduce risk, etc., allowing them to maintain their lead.

Working capital has shown the first significant improvement globally since 2010, as companies are waking up to the need for cash

Days working capital movements

In the early years after the global financial crisis, working capital continued to increase marginally. However, 2014 saw a significant reduction by almost 3%, bringing working capital performance to levels achieved before the crisis.

The largest improvements came from the asset side of the balance sheet, particularly from enhancements in receivables management



The improvement in working capital performance was mainly driven by reductions in receivables and, to a lesser extent, in inventory.

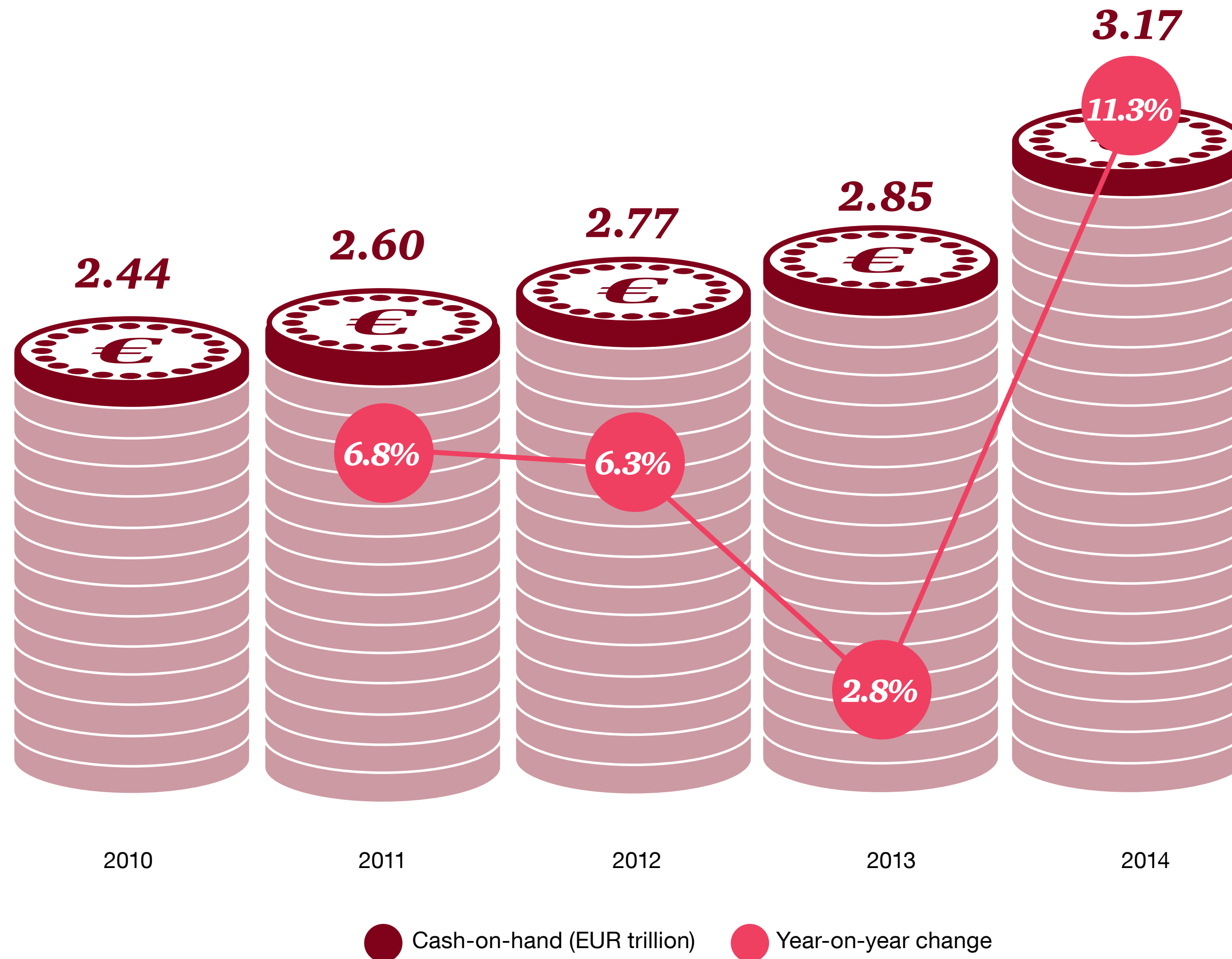
Receivables performance, measured in days sales outstanding (DSO), is at a five-year low of 43.6 days. Many corporates consider overdue reduction programmes, combined with delayed supplier payments, as the easiest and safest way to improve working capital. It is not unreasonable to assume that the European Late Payment Directive, which was introduced in 2013, has been a contributing factor to the DSO improvement in Europe. Opportunities relating to billing timeliness & quality, dispute resolution & root cause eradication, trade-offs in logistics & inventories, securitisaton & outsourcing, terms & conditions, etc. have remained unaddressed.

Inventory performance, measured in days inventories on-hand (DIO), has shown a year–on-year reduction of 0.8 days (1.4%), although at 52.4 days, this is still slightly higher than the five-year historic best. However, DIO has been largely stable over the past five years. Both corporates and advisors typically focus on supply chain efficiencies, leaving many inventory reduction opportunities unaddressed. There are also some key trends at play that impact performance, such as the changing global economy or increasing environmental considerations, which have encouraged more companies to source or manufacture locally, thereby changing the retail landscape.

The gains made on the asset side of the balance sheet were somewhat countered by a deterioration on the liability side. Payables performance, expressed as days payables outstanding (DPO), was likewise affected by the European Late Payment Directive. As with inventories, the focus is usually on efficiency (cost) improvements. There is certainly untapped opportunity in this space relating to new developments such as supply chain finance, dynamic discounting platforms and overall supplier performance (including goods in transit, inventories and returns). It is often argued that changes in payables and receivables are a zero sum game for the value chain as a whole: the improvement for one entity is eliminated by the deterioration for the other. However, this is not strictly true. Towards the beginning and the end of the value chain (end-users, commodity settlements, etc.) the terms usually remain unchanged. More importantly, many corporates are starting to think about trade-offs between cash, cost and service. A change in payment behaviour for one can therefore result in a cost saving for the other. Lastly, the difference between the sector DSO and DPO can also be seen as evidence that it is not a zero sum game.

This improvement has contributed to a significant jump of 11.3% in the cash-on-hand balances, which grew to EUR 3.17 trillion in 2014

Cash-on-hand

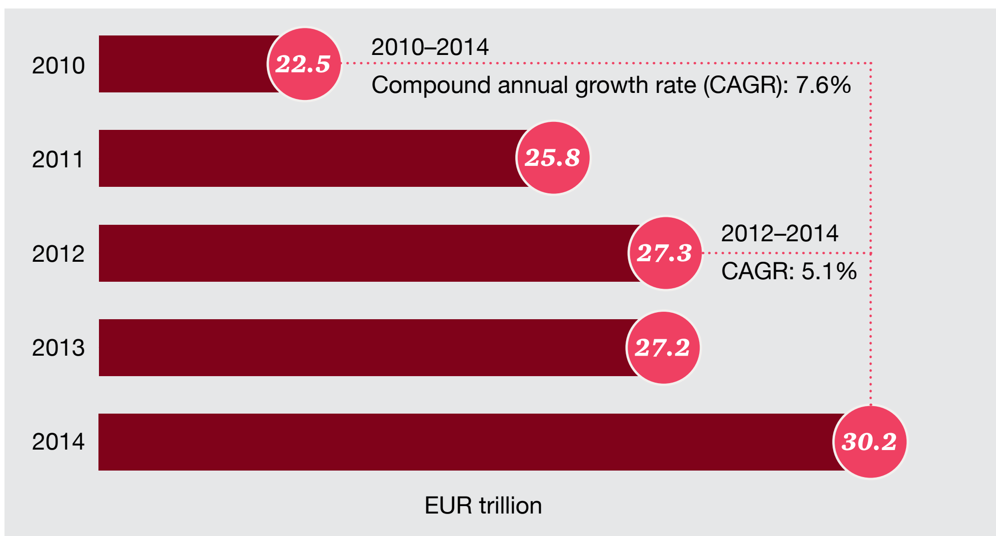


Companies appear to be more awash with cash. The upward trend was at a steeper rate than revenue growth and in 2014 the growth in cash-on-hand jumped by 11.3%. The release of cash through better working capital ratios is a key contributing factor.

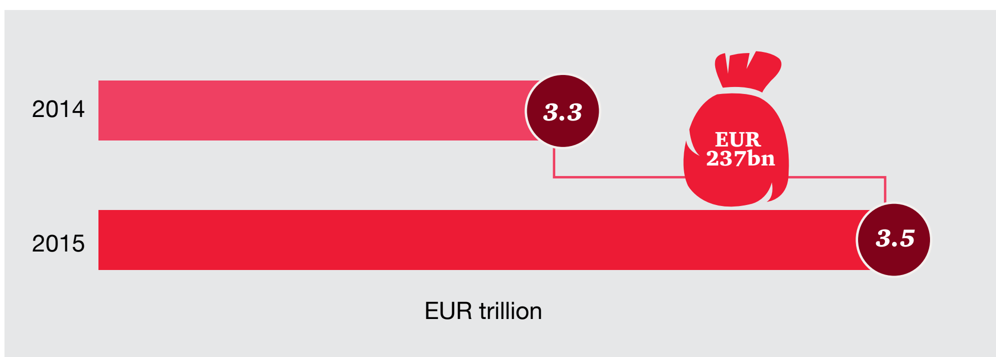
As bank lending rates remain low across many of the world's developed economies, this increasing pile of cash is starting to look extravagant to some investors. We expect to see more shareholders demanding excess cash to either be reinvested into their businesses or to be distributed in the form of dividends/ share repurchase programmes.We are seeing more and more evidence in the market that investors are seeking to do both.

However, the revenue trend in the last five years suggests that EUR 237 billion of additional working capital is required to enable next year's growth

Revenue

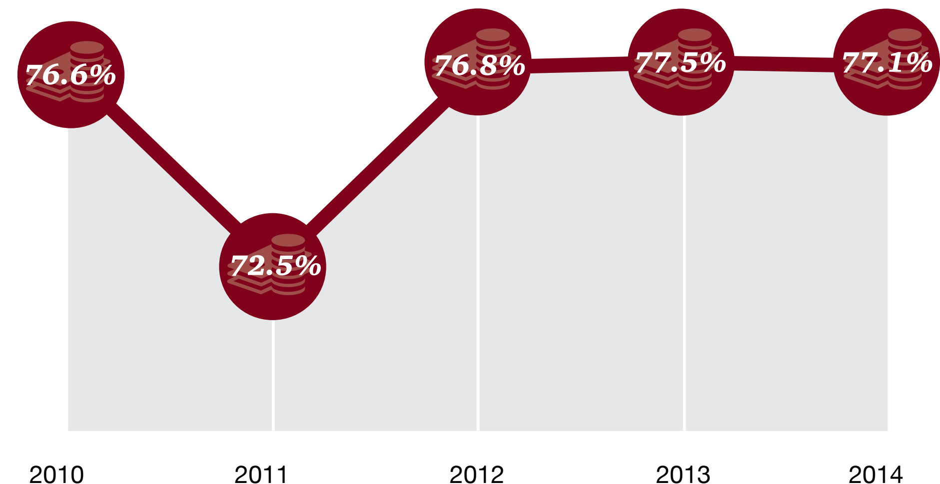


Net working capital



At the same time, companies' overall ability to generate new cash from operations has stagnated…

Cash conversion efficiency (CCE)

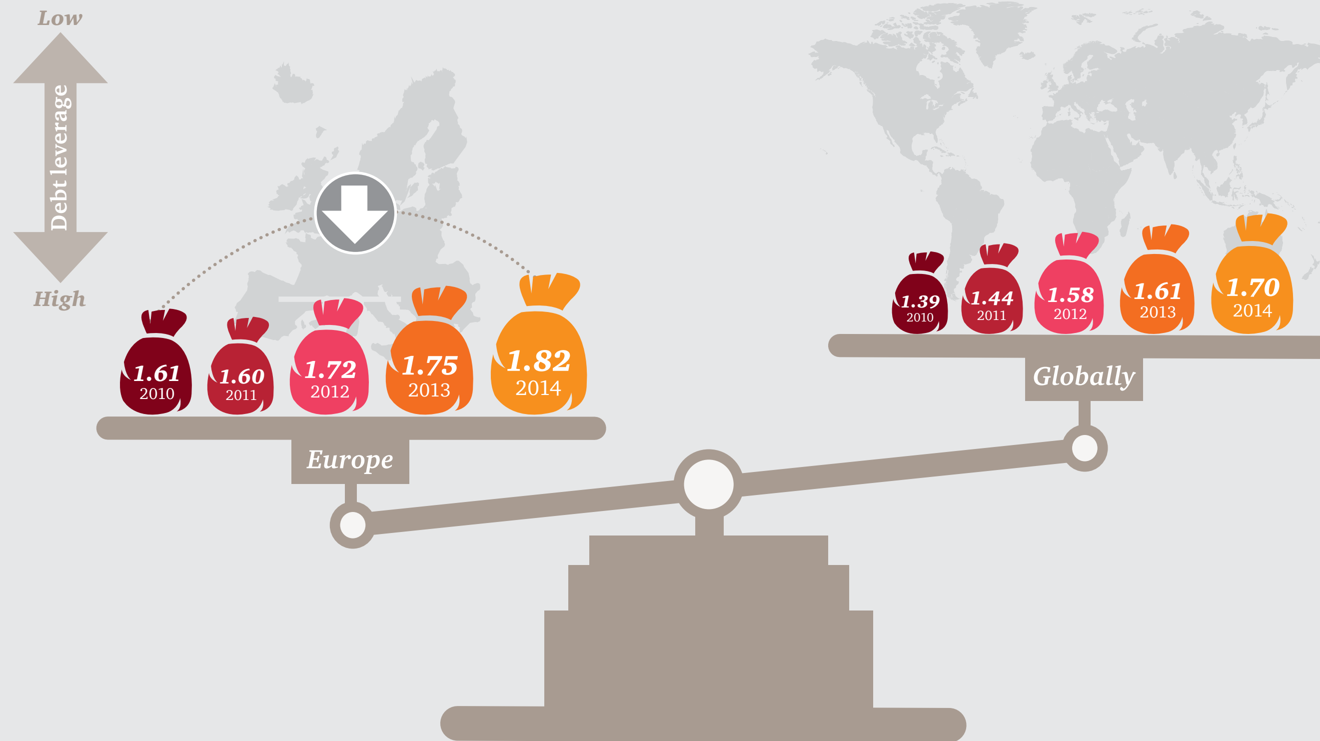


While cash levels are high at the moment, there is still a significant requirement for funds to support and enable future growth. Over the last three years the growth rate has slowed slightly compared to the previous two years, but it remains a healthy, inflation busting 5.1% per annum.

If this growth rate remains constant and companies maintain the same level of working capital performance they will need a further EUR 237 billion of working capital to fund their operations in 2015.

Despite the improvement in working capital, many companies have continued to struggle to convert more operating profit into cash. Cash conversion efficiency has improved by just 0.5% over the last five years, and in 2014 it even showed a slight year-on-year deterioration. This deterioration could be indicative of reductions in operating profit margins.

…while debt burdens rise to a five-year high (especially in Europe)…

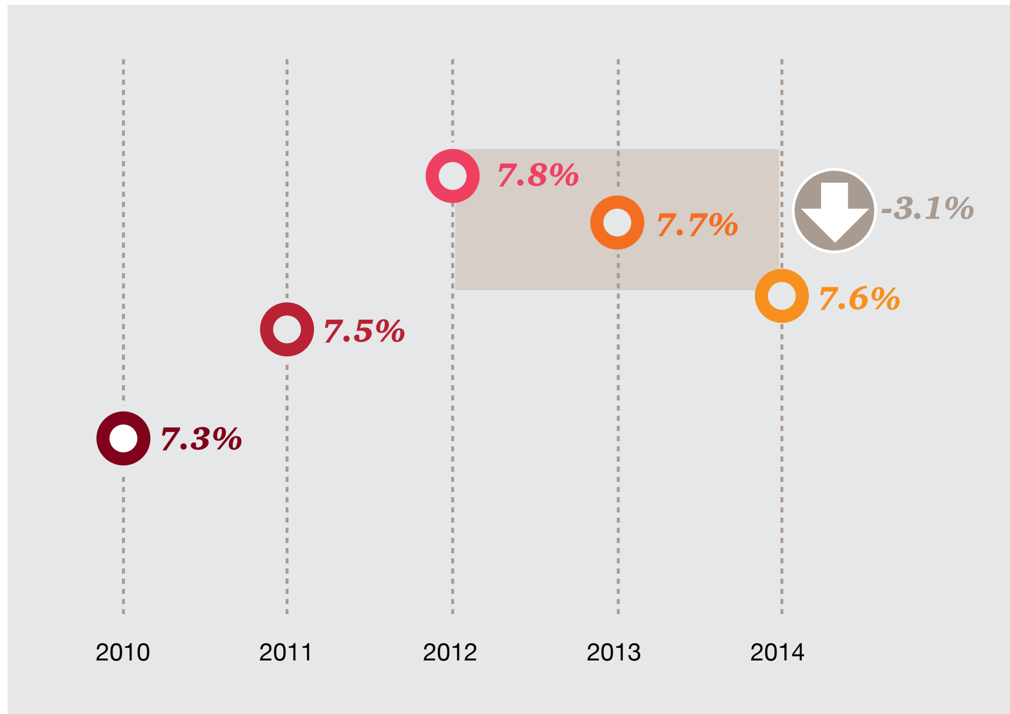


Globally, net debt relative to EBITDA has continued to rise at a compound annual growth rate of 5.1%. In 2010, net debt was 1.39 times the value of EBITDA, rising to 1.70 times in 2014.

For Europe, the rate of increase has been lower at 3.1% per annum, but the level of debt, at 1.82 times EBITDA, is already slightly higher than the global ratio. This is not surprising given the continued low interest rates in the region.

…investment rates are at a three year low…

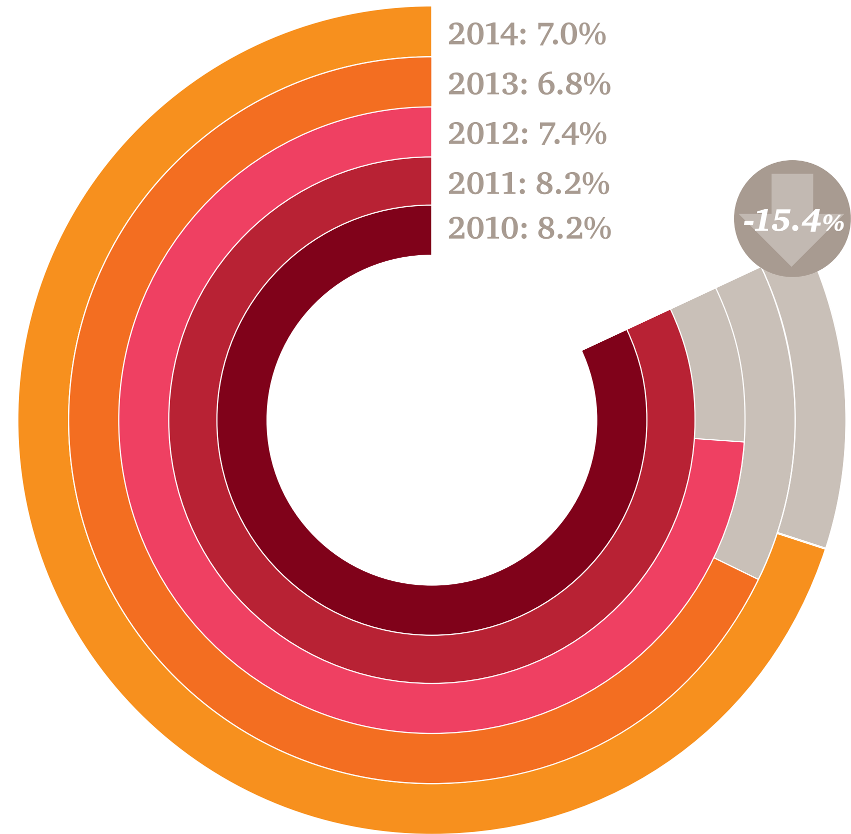
Investment rate (Capex/ Sales)



Investment rates have been volatile over the last five years. Whilst there was an encouraging growth in investment rate from 2010 to 2012, the rate has since declined. Investment rate now stands at 7.6%.

Although revenues and Capex followed a similar growth pattern, the change in sales over the past three years was more significant than the change in Capex, which explains the deterioration in the investment rate.

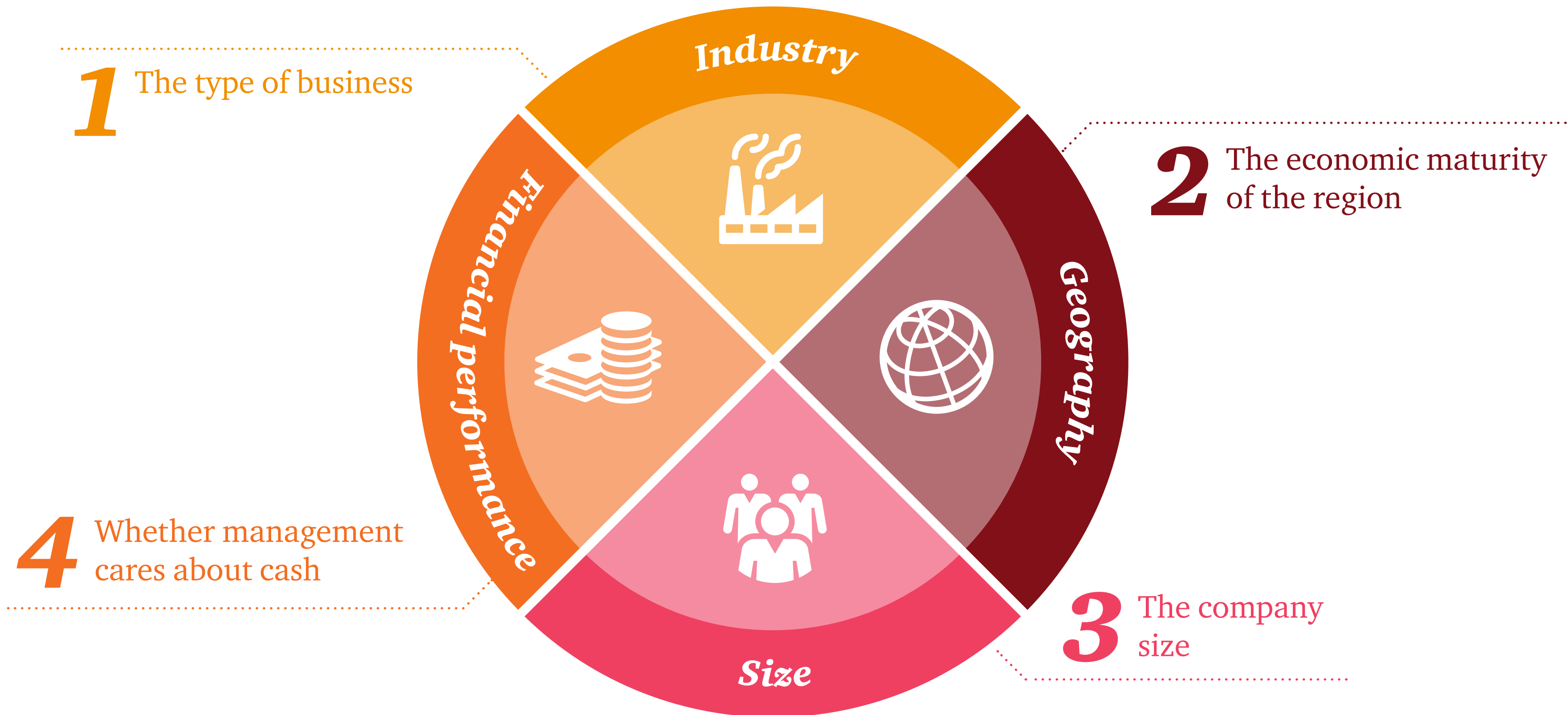
… and return on capital has deteriorated by 15.4% since 2011



Companies' return on capital reduced from 8.2% in 2010 to 7.0% in 2014. This deterioration of 15.4% is quite significant, and we expect a greater focus on cost savings going forward. This is a great illustration of the fact that profit is not the same as cash.

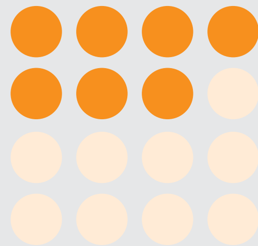
What is driving working capital?

There are four factors impacting a company's working capital requirements and relative performance



Industry analysis

There is a ***wide gap between top and bottom performers*** across all sectors

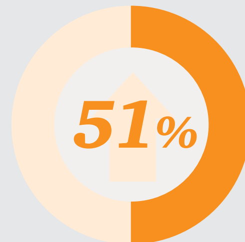


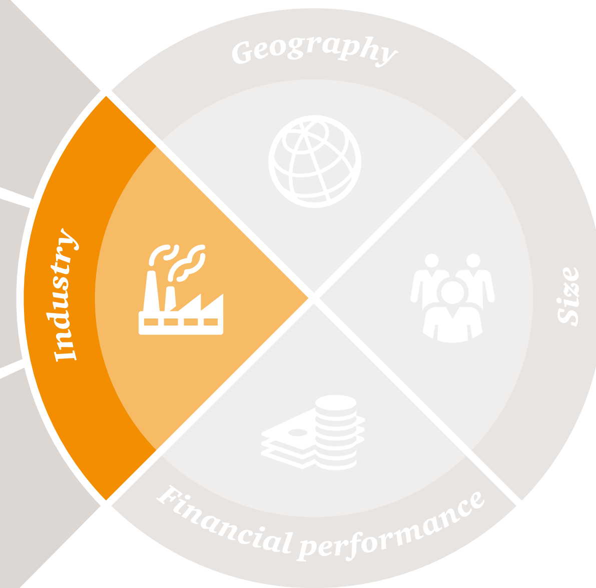
7/16

Only 7 out of 16 sectors improved working capital performance

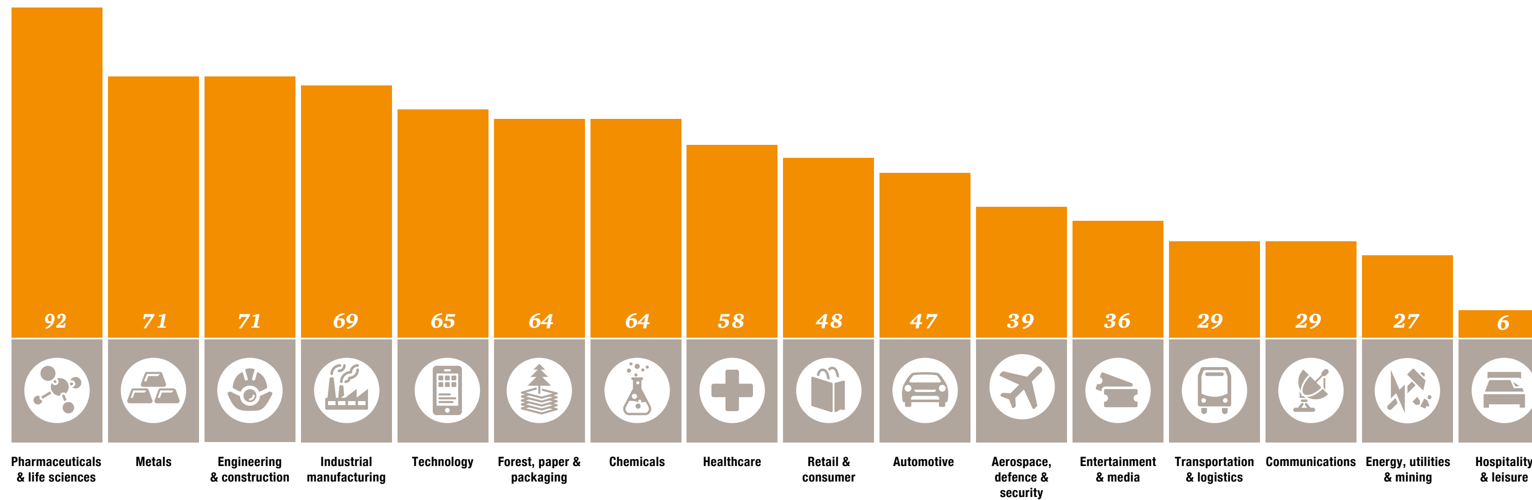
More than 50%

of companies improved their working capital in the last year



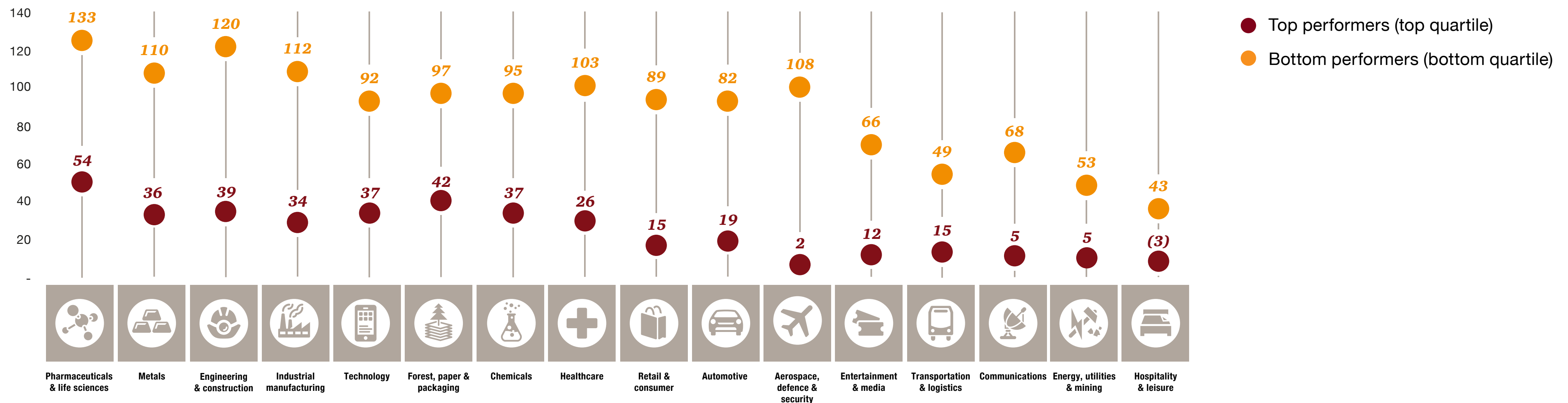


While working capital consumption is dependent on each industry…



"Pharmaceuticals", "Metals", "Engineering & construction" and "Industrial manufacturing" have the highest median working capital days

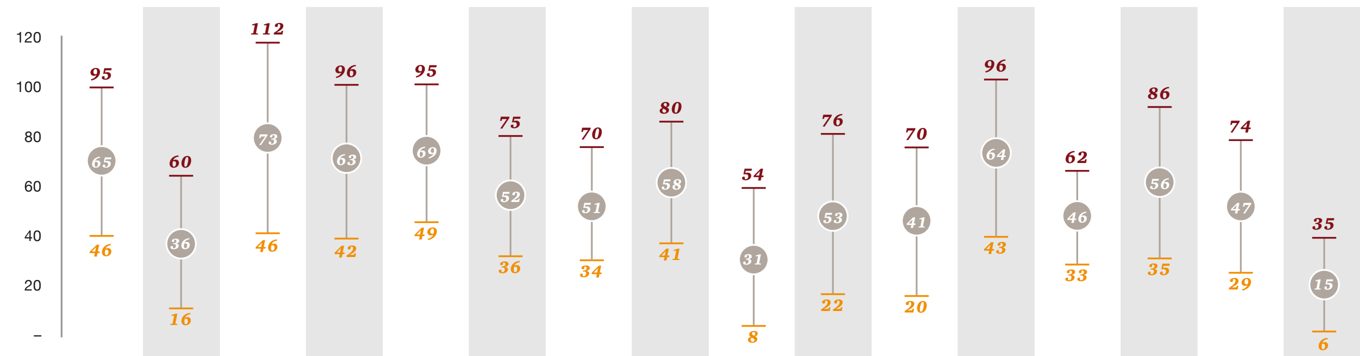
… all sectors show a significant spread in performance between top and bottom performers



“Engineering & construction” is the sector with the longest DSO

DSO

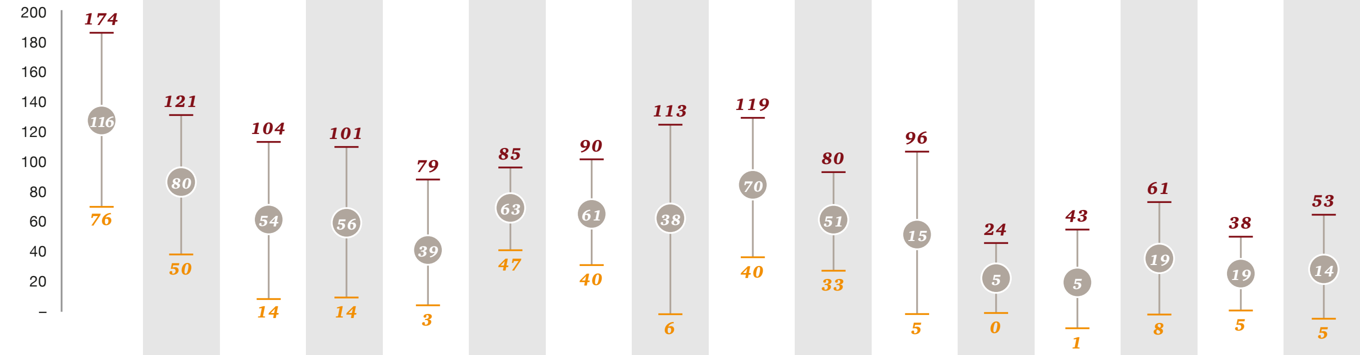
- Top performers
- Median
- Bottom performers



“Pharma & life sciences” is the sector with the longest DIO

DIO

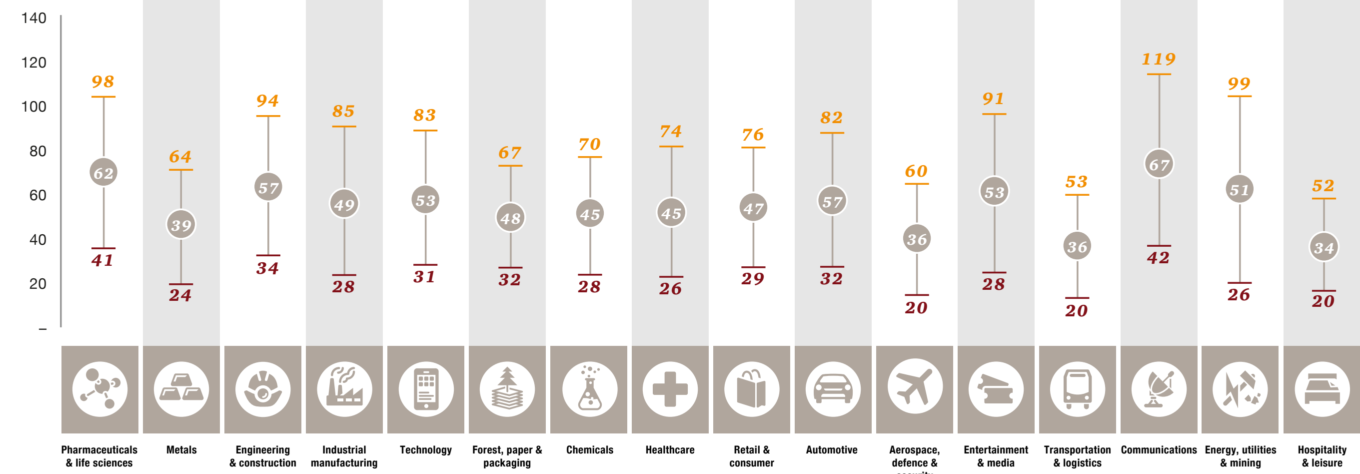
- Top performers
- Median
- Bottom performers



“Hospitality and leisure” is the sector with the shortest DPO

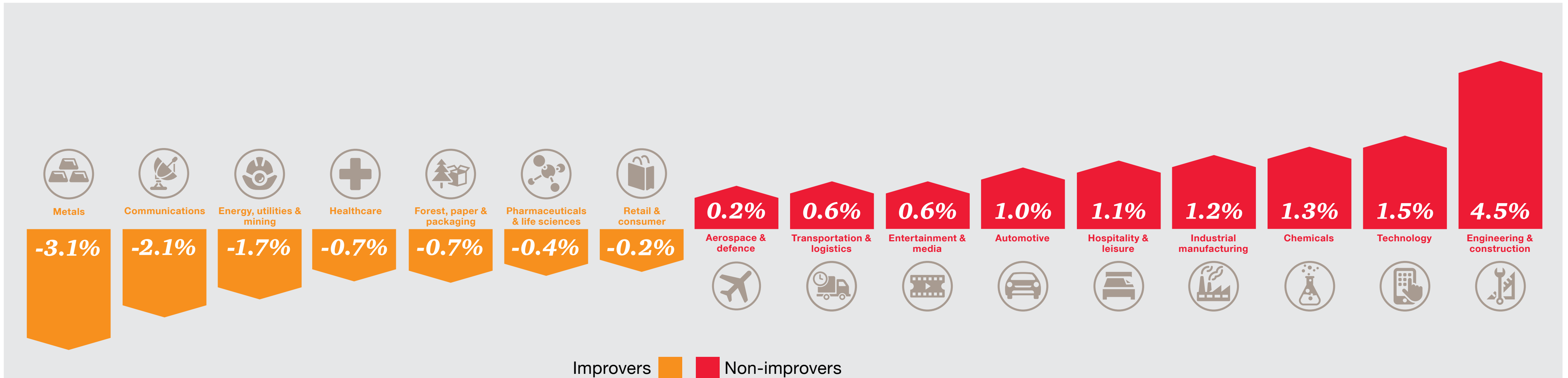
DPO

- Top performers
- Median
- Bottom performers



Only 7 out of 16 sectors managed to improve working capital since 2010

Working capital improvement 2010-2014 percentage points (pp)



Overall, only 44% of sectors have shown an improvement in working capital since 2010.

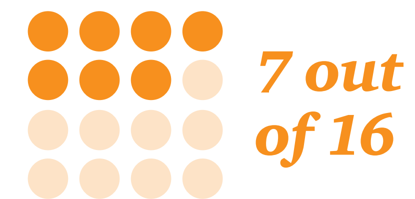
The big winners in terms of working capital performance are companies within the "Metals" and "Communications" sectors. Additionally, companies in the "Energy, utilities and mining" sector have achieved a marked improvement since 2010.

Of the companies that have failed to show an improvement over this period, those in the "Engineering and construction" sector have shown the most significant deterioration. However, this is an average. It is encouraging that, as 46.7% of companies in this sector still managed to improve their working capital performance, the big deterioration was driven by just over half of the population.

The split between companies that improved working capital performance and those that performed worse was relatively even across all sectors

Sector	Improvers	Non-improvers
Automotive	45.9%	54.1%
Technology	46.0%	54.0%
Transportation & logistics	46.3%	53.7%
Chemicals	46.2%	53.8%
Entertainment & media	48.1%	51.9%
Retail & consumer	49.9%	50.1%
Industrial manufacturing	50.2%	49.8%
Pharmaceuticals & life sciences	50.3%	49.7%
Metals	50.9%	49.1%
Communications	51.9%	48.1%
Hospitality & leisure	51.9%	48.1%
Aerospace, defence & security	52.5%	47.5%
Healthcare	52.8%	47.2%
Engineering & construction	53.0%	47.0%
Forest, paper & packaging	55.3%	44.7%
Energy, utilities & mining	57.5%	42.5%
Total	50.6%	49.4%

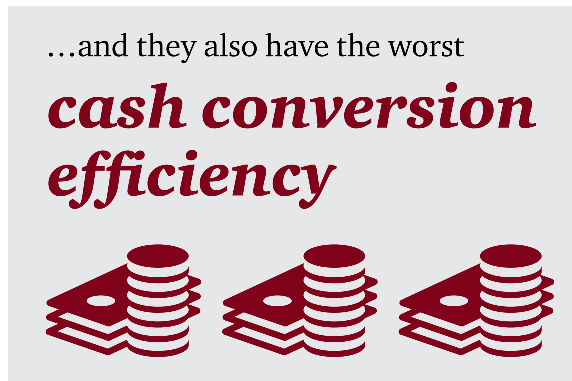
- 10 out of 16 sectors have seen more companies improving their working capital performance than deteriorating
- The "Automotive" and "Technology" sectors are the notable exceptions, as more than 54% of companies did not manage to improve their working capital performance



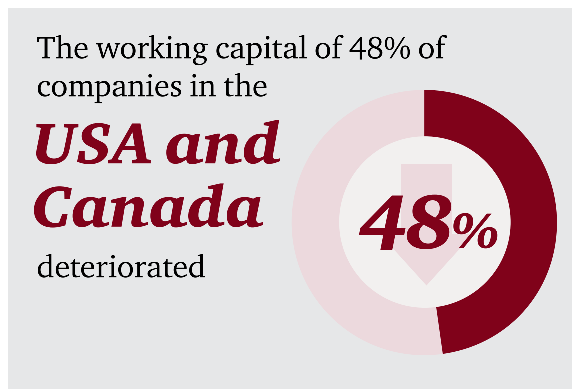
sectors make up 80% of the global cash opportunity

Geography analysis

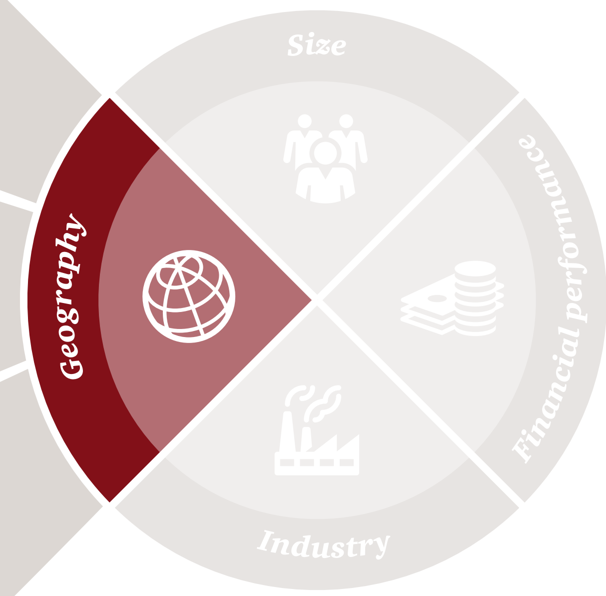
Asian
companies have some of the highest NWC %…



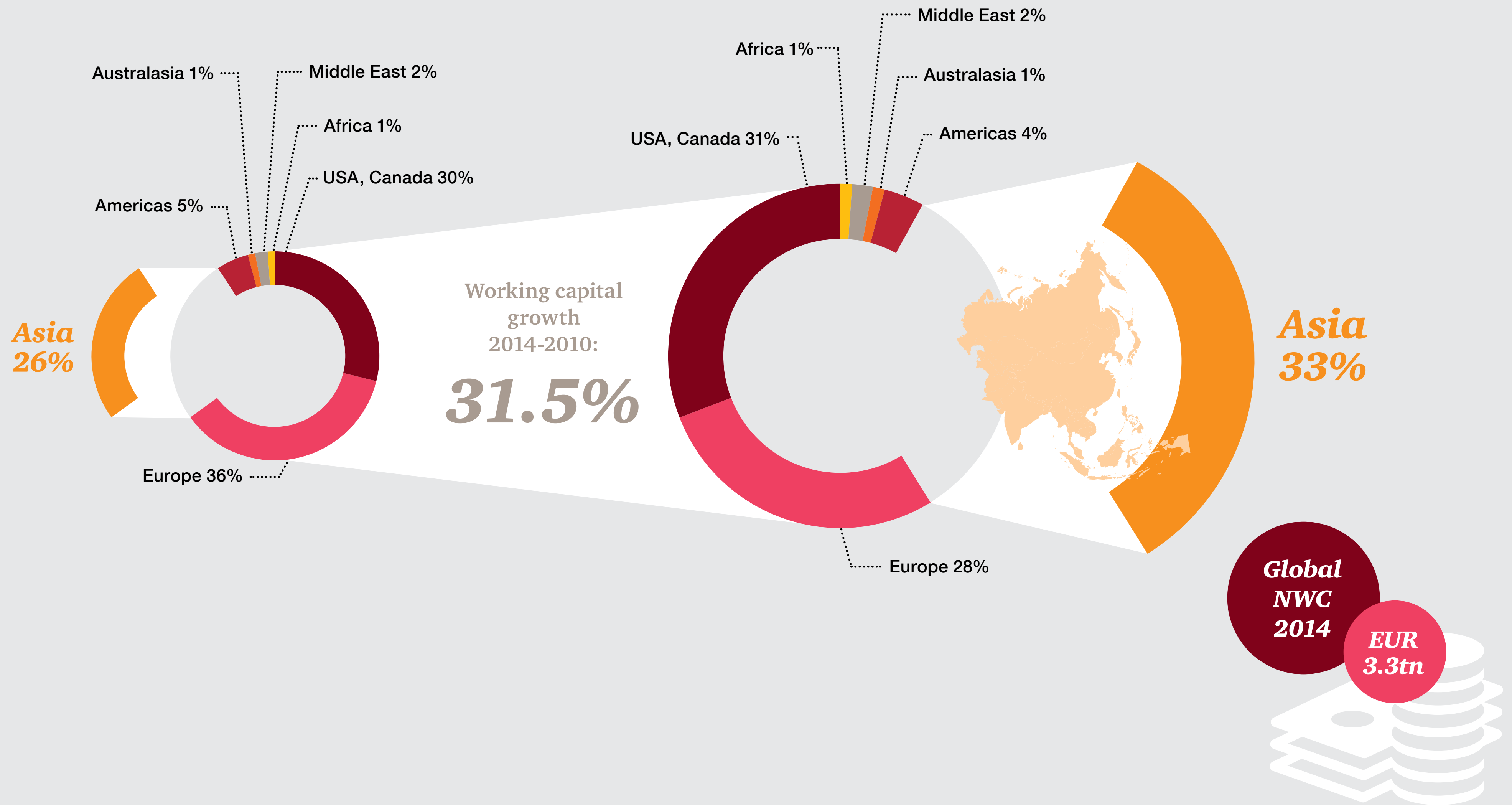
…and they also have the worst
cash conversion efficiency



The working capital of 48% of companies in the
USA and Canada
deteriorated



The increased complexity of many supply chains due to the shift of the economic centre of gravity towards the east has a dramatic impact on working capital growth levels

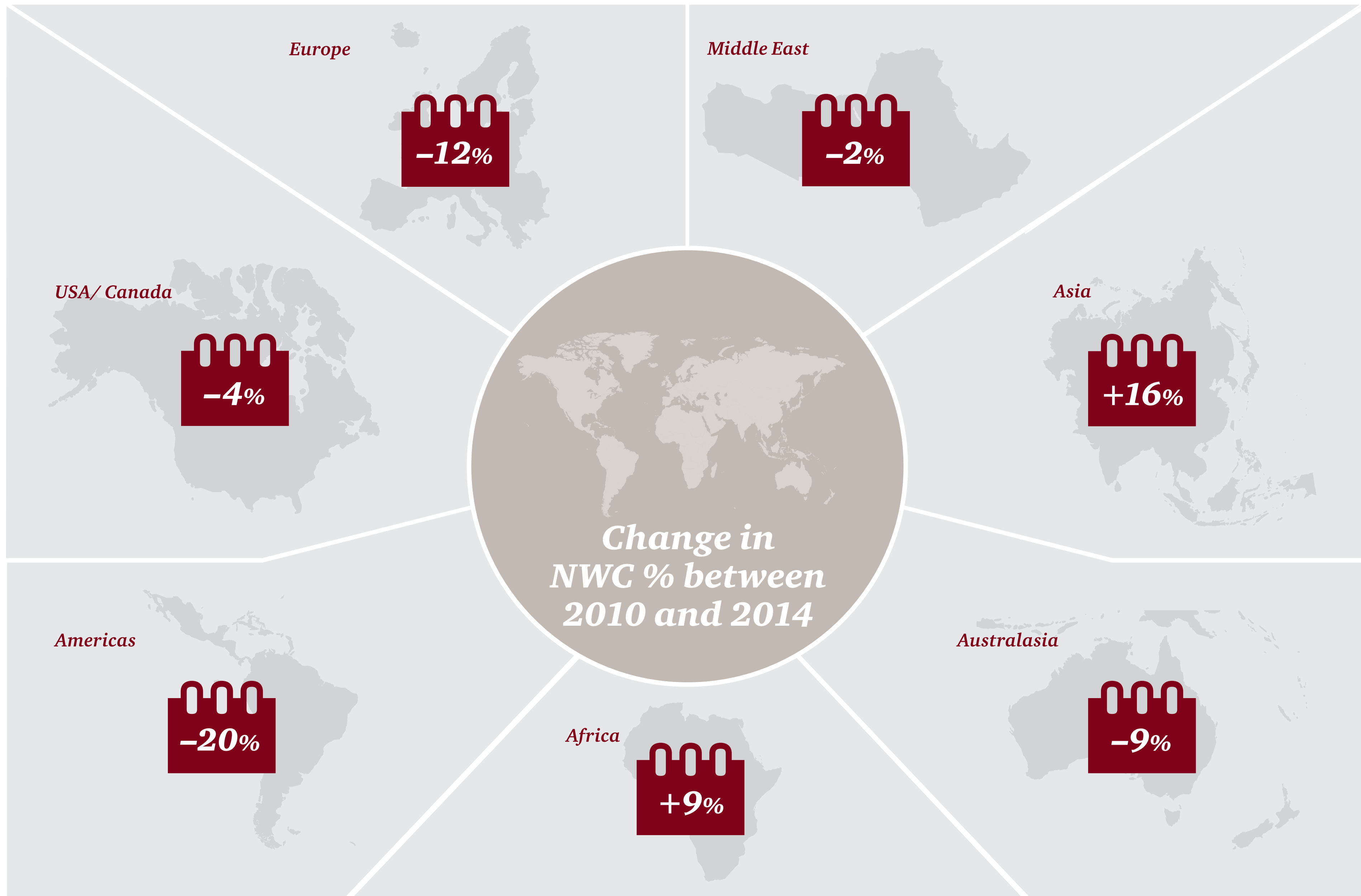


Asia lags behind most other regions in terms of working capital performance, as well as in their ability to generate cash from operations

	NWC %	EBITDA Margin	CCE
Africa	12.1%	15.8%	78.7%
Middle East	17.8%	23.0%	92.9%
Australasia	7.9%	19.2%	84.0%
Americas	11.0%	18.7%	77.8%
Asia	13.5%	11.9%	73.8%
Europe	10.8%	14.4%	78.1%
USA, Canada	9.3%	16.9%	77.1%

- Out of the top three regions – Asia, US/Canada and Europe – Asia has the highest NWC % and, as a consequence, also the lowest CCE (73.8%) and EBITDA Margin (11.9%)
- Middle East, despite having the absolute highest NWC profile, manages to lead the group in terms of both CCE and EBITDA Margin
- Amongst the top three economic macro-regions Asia has seen the largest deterioration in working capital in the last five years, from 11.6% in 2010 to 13.5% in 2014

At the same time, Asia had the sharpest deterioration in working capital over the five-year period...

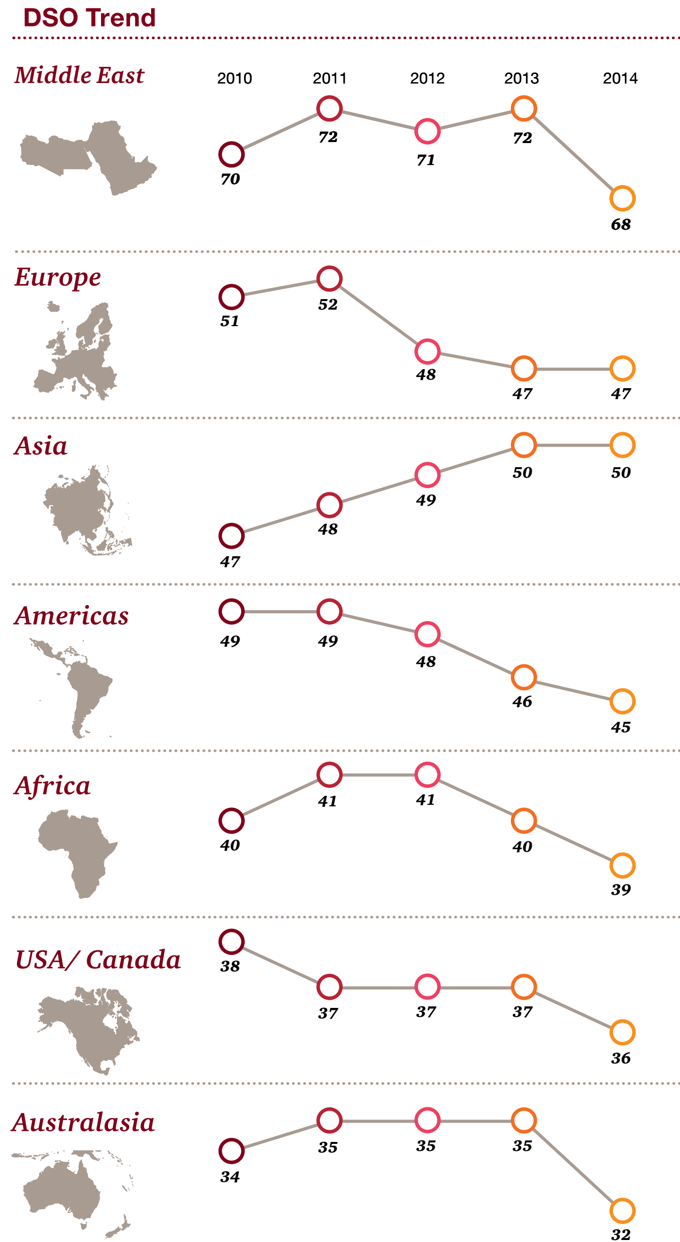


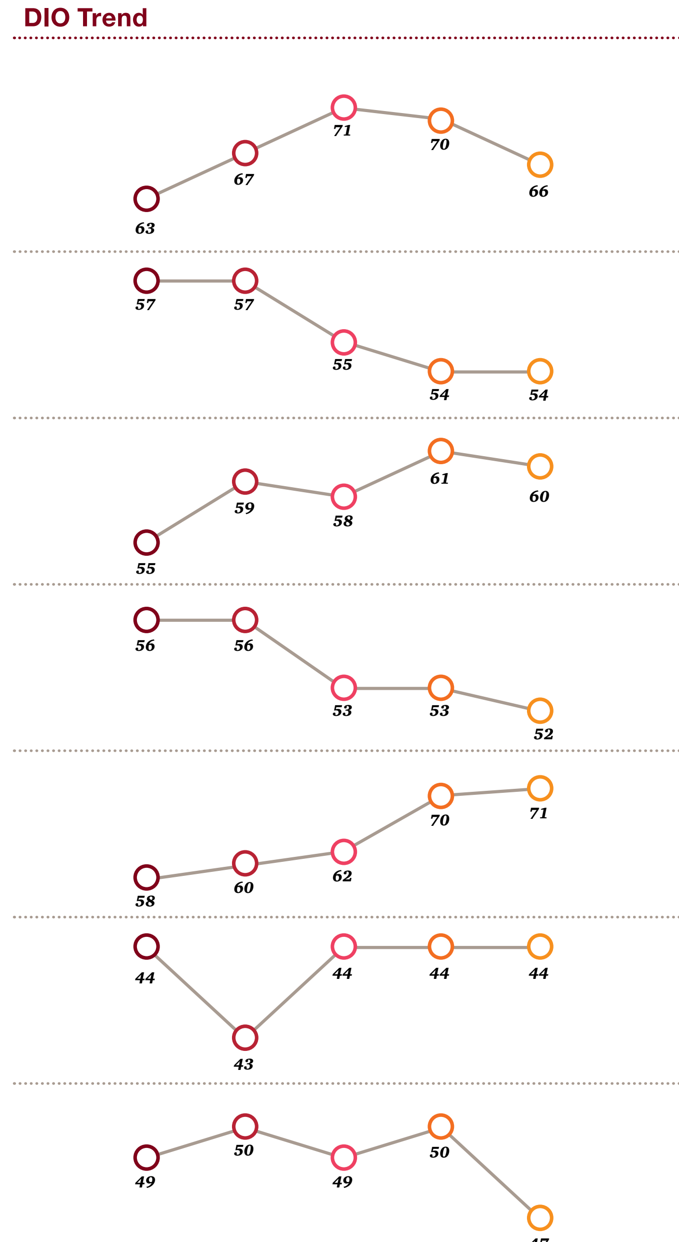
Executive summary
What is driving working capital?
1. Industry analysis
2. Geography analysis
3. Size analysis
4. Financial performance analysis
How we can support you
Appendices & Contacts

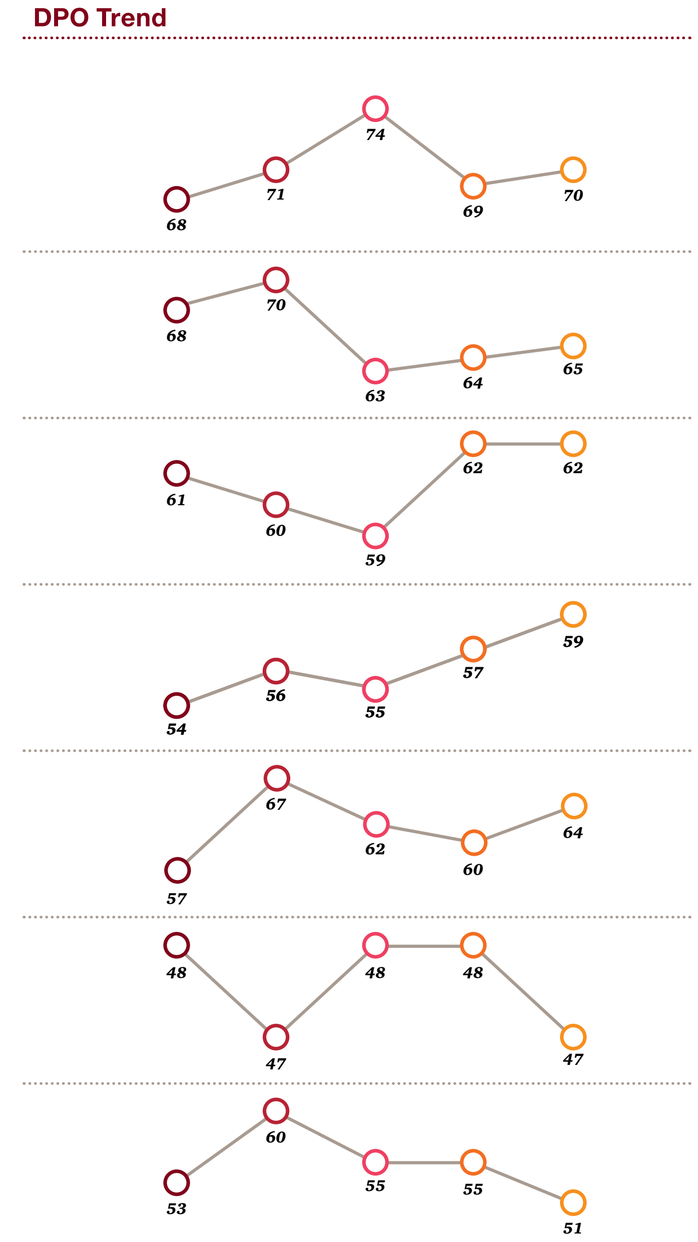
… and is the only macro region where DSO has deteriorated in the last five years

The majority of regions have continued a strong focus on improving inventories, with Africa the notable exception

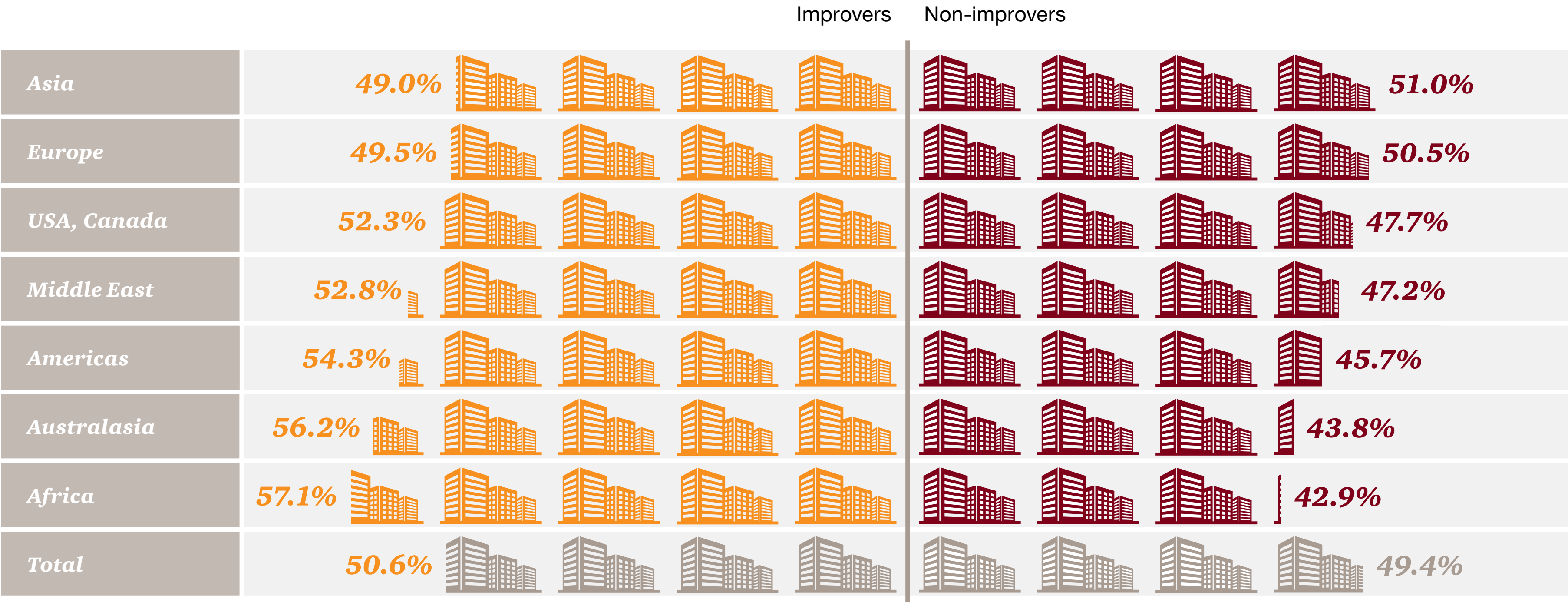
Western Economies (US/CA, Europe and AUS/NZ) are the only regions where DPO has deteriorated in the last five years







Just over half of global companies managed to improve their working capital in the last year



In Asia only 49% of companies managed to improve their working capital in 2014.

In Europe there was a 3.2% improvement (reduction) in working capital. However, only 49.5% of companies managed to reduce their working capital, which indicates that large corporations are driving the improvement.

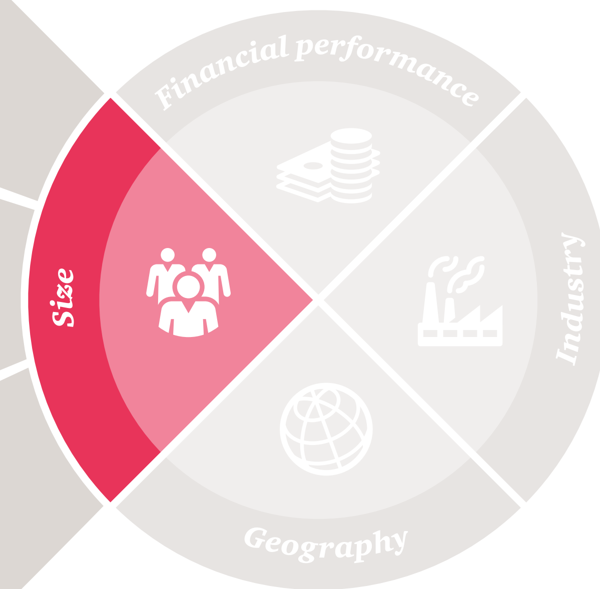
The regions where we have seen the highest proportion of companies improving working capital in the last year are Australasia and Africa.

Size analysis

SMEs have a
high NWC %
and it is deteriorating

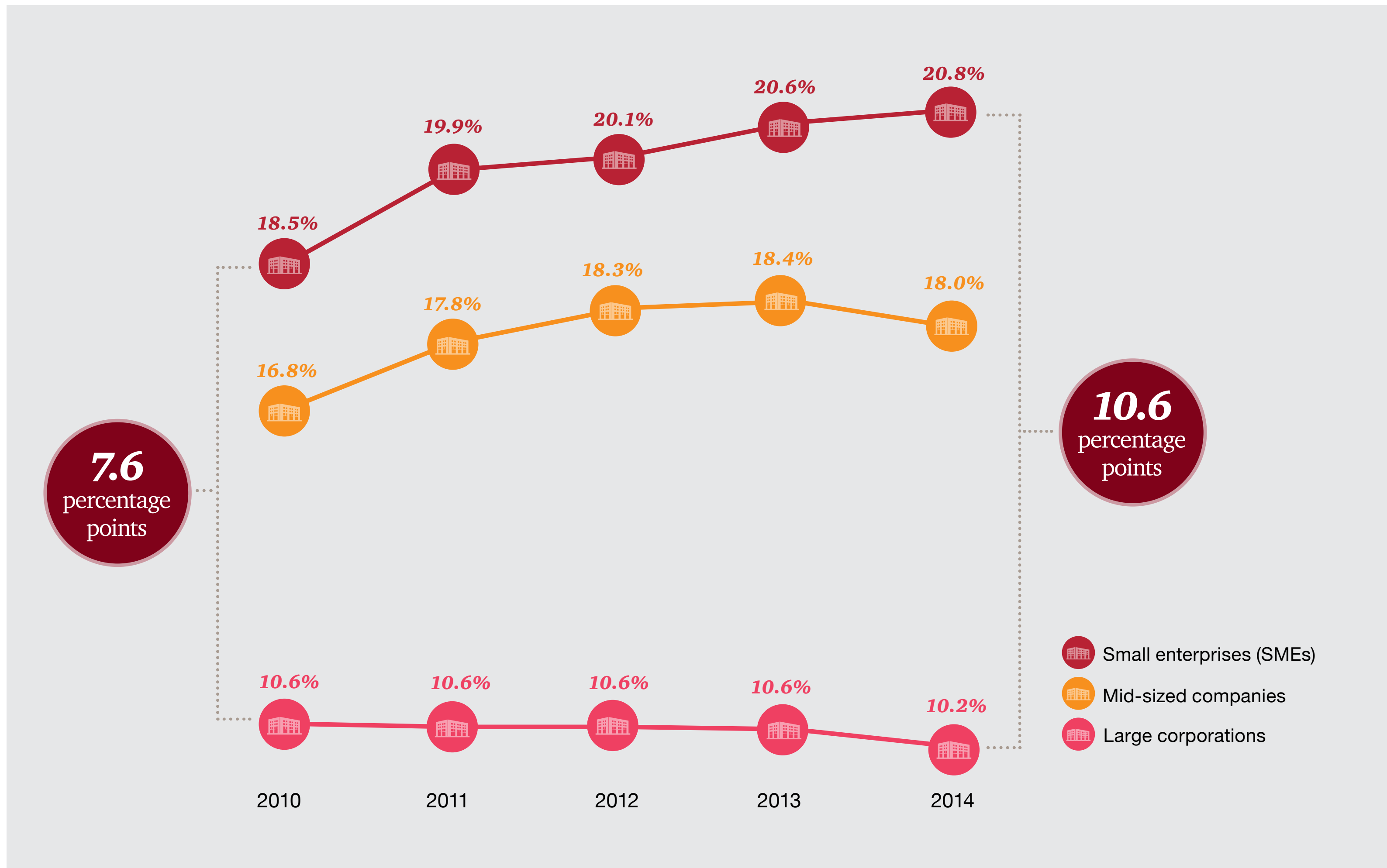
In addition, they have
lower cash conversion efficiency
to convert EBITDA into cash

However,
cash is more important to small enterprises
as cost of debt is higher and return on capital is lower



Executive summary
What is driving working capital?
1. Industry analysis
2. Geography analysis
3. Size analysis
4. Financial performance analysis
How we can support you
Appendices & Contacts

Small companies, also referred to as SMEs, have significantly higher NWC % than large corporations and the gap is widening

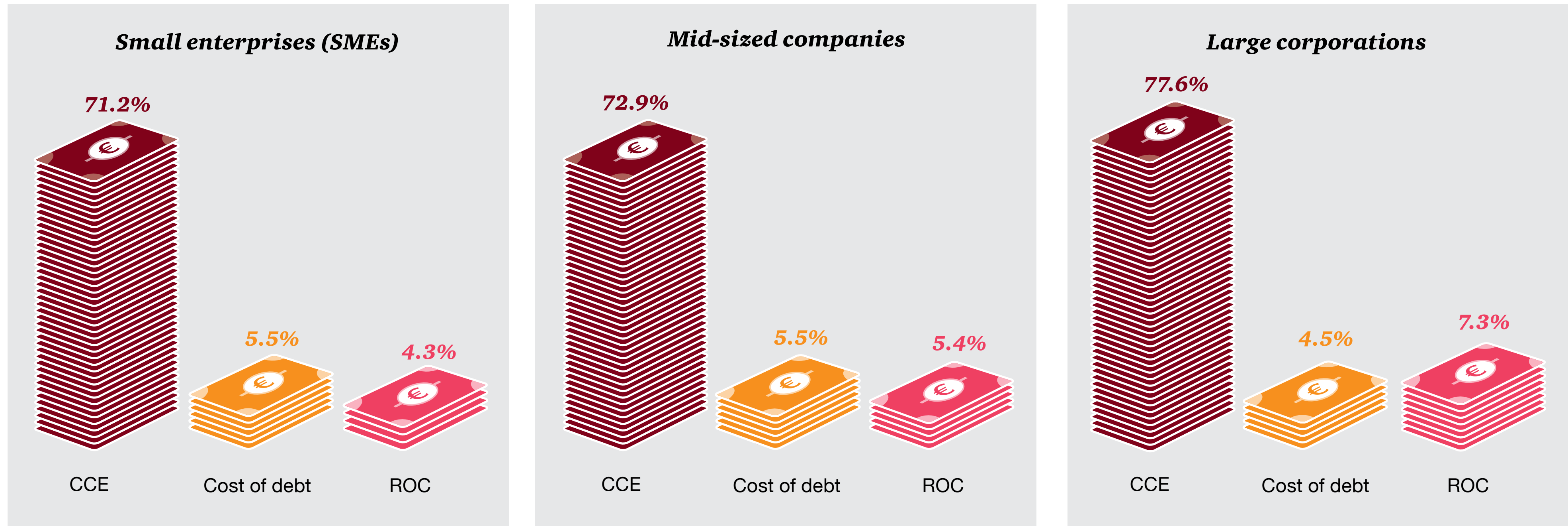


In 2010, the gap between working capital levels of large corporations and SMEs was only 7.6 percentage points. Over the following four years, this gap has widened to 10.6 percentage points.

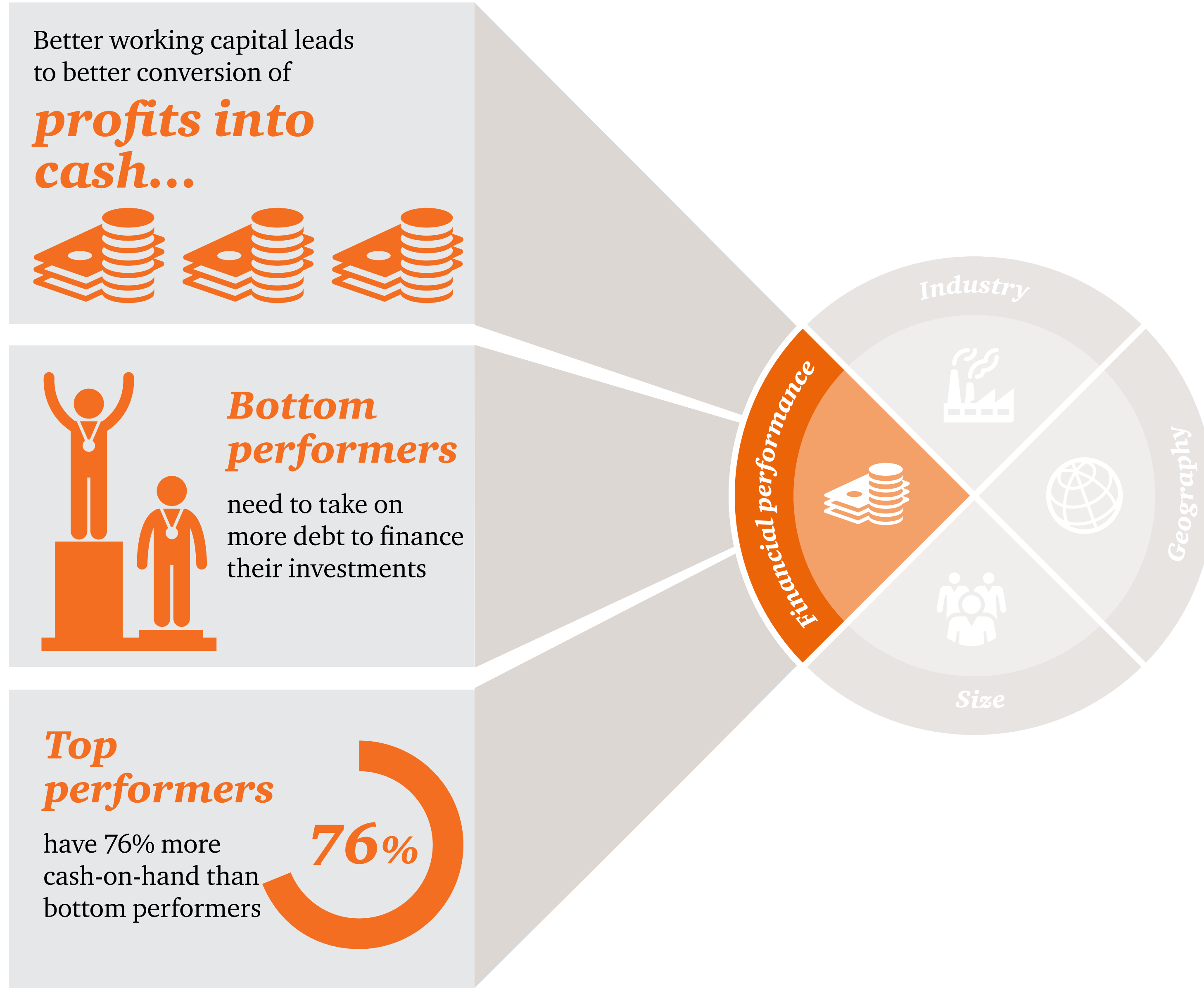
Also, whilst large corporations have improved their working capital performance, small enterprises have experienced a sharp deterioration.

In contrast, mid-sized companies have shown a year-on-year improvement in 2014, following a four-year deteriorating trend.

Additionally, SMEs need cash more than large corporates, as...
– their ability to generate cash from operations is lower
– their cost of debt is higher, making cash more expensive
– and their return on capital lags behind



Financial performance analysis



Executive summary

What is driving working capital?

1. Industry analysis

2. Geography analysis

3. Size analysis

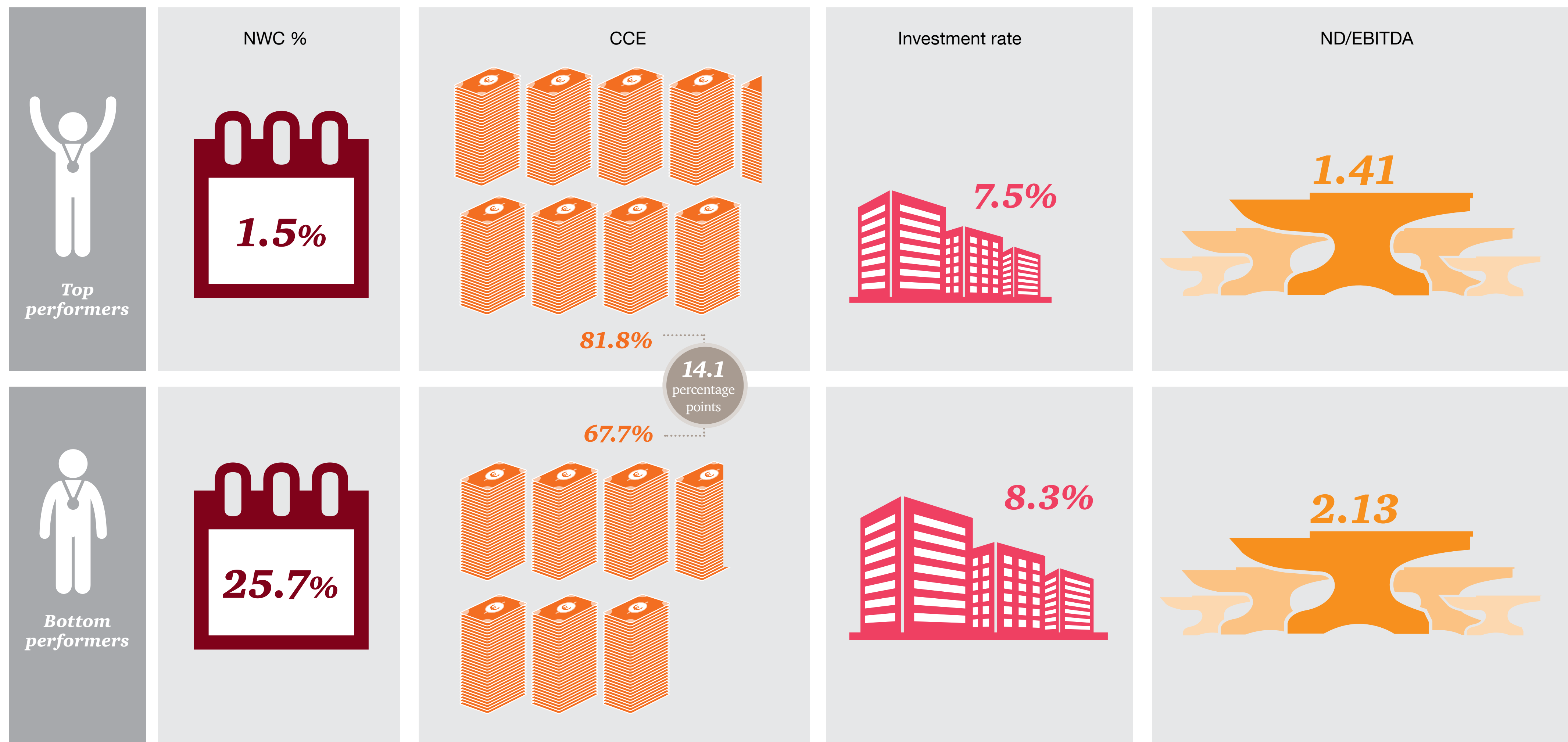
4. Financial performance analysis

How we can support you

Appendices & Contacts

Companies that are top performers (upper quartile) in working capital are also significantly better at generating cash, which is illustrated by a 14.1pp difference in CCE. If bottom performers (lower quartile) were to improve their CCE to top performers' levels they would be able to generate extra EUR 102bn in operating cash flow

Bottom performers have a higher investment rate than top performers. However, in order to finance their investments, bottom performers need to take on more debt, as evidenced by their lower CCE ratio and by their higher net-debt-to-EBITDA ratio



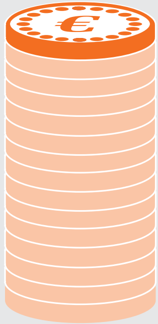
The industry leaders continue to focus on generating cash to maintain their lead

However, the perception that working capital is not a key priority when a company is awash with cash does not hold true, as top working capital performers also have on average 76% more cash-on-hand.

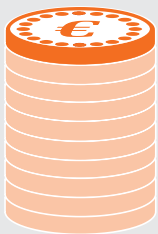
Top performers realise that they need cash to enable growth and stay ahead of the competition. Cash enables them to invest, acquire, pay dividends, refinance and reduce covenant risk.

Cash-on-hand

EUR 963tr

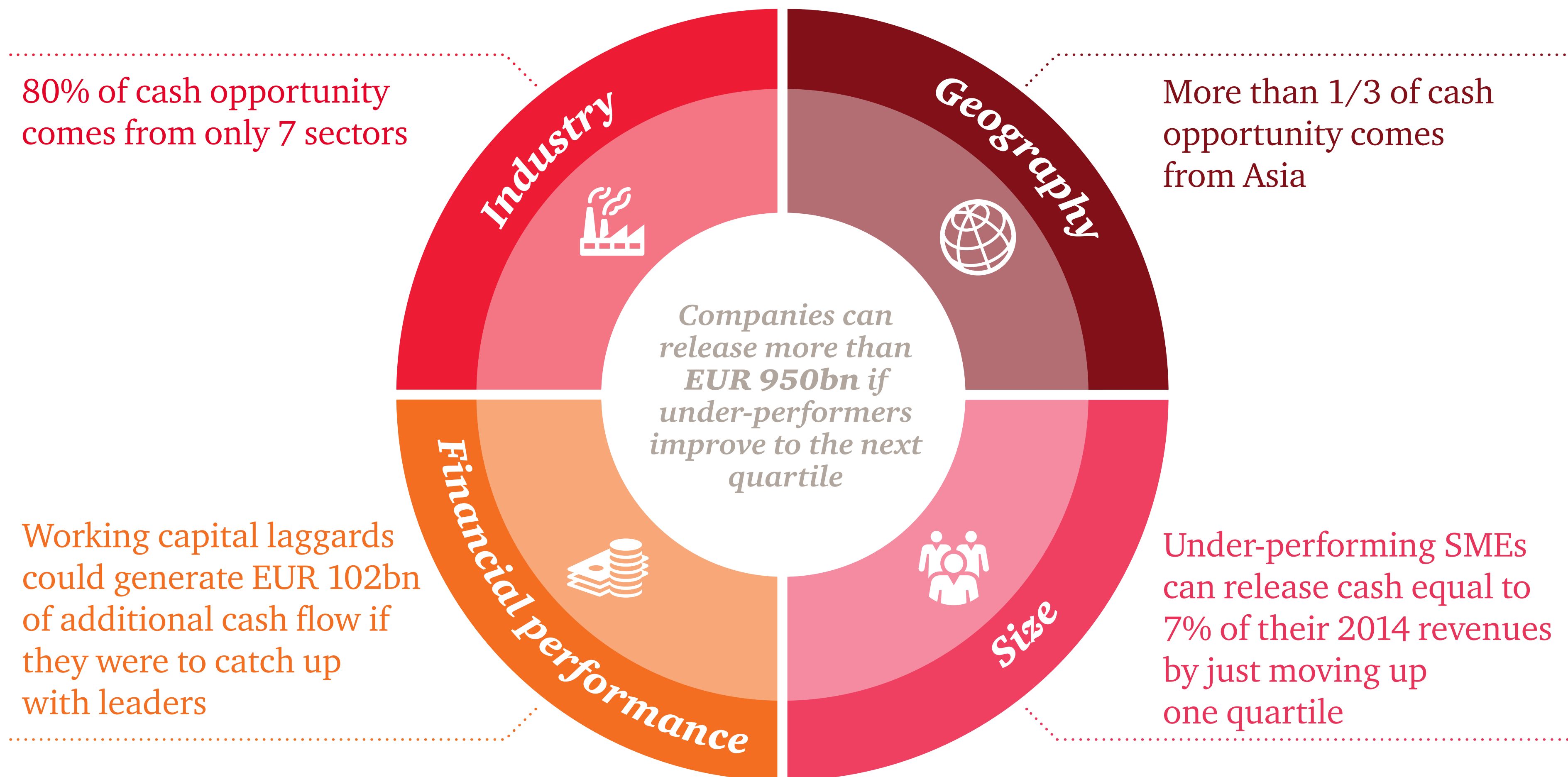


EUR 547tr

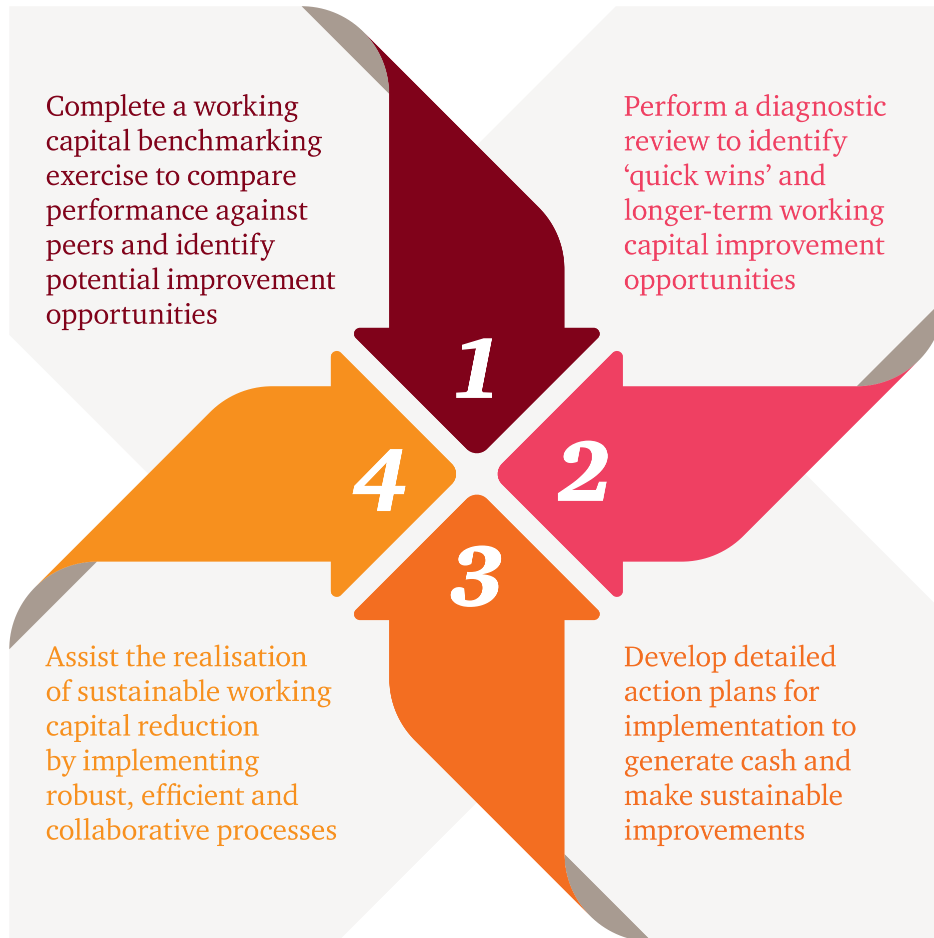


Summary

Overall EUR 950bn could be released from balance sheets through improved working capital performance



How we can support you



Addressing the key levers:

- Identification, harmonisation and improvement of commercial terms
- Process optimisation throughout the end-to-end working capital cycles
- Process compliance and monitoring
- Creating and embedding a ‘cash culture’ within the organisation, optimising the trade-offs between cash, cost and service

Glen Babcock
UK Partner

“our team has worked with 400+ businesses, delivering cash improvements equal to 5-10% of revenues”

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

Accounts receivable

- Credit risk policies
- Aligned and optimised customer terms
- Billing timeliness and quality
- Contract and milestone management
- Prioritised and proactive collection procedures
- Systems-based dispute resolution
- Dispute root cause elimination

Inventory

- Lean and agile supply chain strategies
- Global coordination
- Forecasting techniques
- Production planning
- Accurate tracking of inventory quantities
- Differentiated inventory levels for different goods
- Balanced cash, cost and service considerations

Accounts payable

- Consolidated spending
- Increased control with centre-led procurement
- Avoid leakage with purchasing channels
- Payment terms
- Supply chain finance
- Payment methods
- Eradicate early payments

Rob Kortman
Germany & Austria Partner

"we are dedicated practitioners with hands-on experience, which builds trust, generates buy-in and drives sustainable results"

Appendices

Basis of calculations and limitations

Basis of calculations

This study provides a view of global working capital performance and is based on the research of the largest ***10,215*** listed companies worldwide. The Financial Services, Real Estate and Insurance sectors are excluded.

Metric		*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
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 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 / Cost of Goods Sold x 365
DPO (Days Payables Outstanding)	*DPO is an indicator of how long a company takes to pay its trade creditors.*	Accounts Payable / Cost of Goods Sold x 365
CCE (Cash Conversion Efficiency)	*CCE is an indicator of how efficiently a company is able to convert profits into cash.*	Cash Flow from Operations / EBITDA
Investment Rate	*Investment Rate measures the amount of investment relative to the revenues of a company.*	Capital Expenditure / Sales
ROC (Return on Capital)	*ROC is an indicator of profits as a proportion of a company's capital.*	EBIT x (1 – tax) / Average Total Capital
EBITDA Margin (Earnings before interest, taxes, depreciation and amortisation)	*EBITDA Margin is an indicator of a company's profitability level as a proportion of its revenue.*	EBITDA / Sales
Cost of Debt	*Cost of Debt is the effective rate that a company pays on its debt.*	Interest Expense / Average Total Debt

Limitations

Companies have been assigned to countries based on the location of their headquarters. Although a significant part of their sales and purchases might be realised in that country, it does not necessarily reflect typical payment terms or behaviour in that country.

As the research is based on publicly available information, all figures are financial year-end figures. Due to the disproportionate efforts to improve working capital performance towards year-end the real underlying working capital requirement within reporting periods might be higher. Also, off-balance-sheet financing or the effect of asset securitisation have not been taken into account.

54% of identified opportunities come from four key sectors across Asia, US/Canada and Europe

Sector	Asia	USA, Canada	Europe	Americas	Middle East	Australasia	Africa	Sector total
Retail & consumer	59,707	74,572	40,400	13,742	938	3,746	1,905	***195,011***
Energy, utilities & mining	30,081	42,073	61,831	6,790	2,876	1,098	2,218	***146,968***
Industrial manufacturing	67,032	26,545	37,417	3,615	2,209	1,200	361	***138,379***
Engineering & construction	56,831	3,871	10,763	1,010	2,853	782	729	***76,840***
Technology	35,182	31,269	6,515	2,671	307	89	113	***76,146***
Automotive	24,484	9,668	27,439	178	130	290	138	***62,327***
Communications	10,725	17,819	10,930	2,738	2,385	659	1,199	***46,455***
Metals	19,125	7,012	12,272	2,012	682	1,126	1,486	***43,714***
Pharmaceuticals & life sciences	5,329	15,982	12,998	370	829	198	221	***35,927***
Chemicals	12,587	8,289	9,110	1,044	3,956	113	13	***35,111***
Aerospace, defence & security	3,862	8,779	11,257	989	352	348	–	***25,588***
Hospitality & leisure	9,488	6,904	2,991	405	347	137	85	***20,358***
Healthcare	2,820	8,056	4,897	377	277	345	24	***16,797***
Entertainment & media	2,762	7,738	2,341	596	74	126	17	***13,655***
Transportation & logistics	4,463	2,978	2,192	86	425	172	112	***10,427***
Forest, paper & packaging	4,366	2,280	1,345	959	149	99	370	***9,568***
Country total	***348,845***	***273,835***	***254,699***	***37,585***	***18,789***	***10,527***	***8,992***	***953,271***

Total cash opportunity from working capital

Sampled companies by sector and macro-region

Sector	Africa	Americas	Asia	Australasia	Europe	Middle East	USA, Canada	Total
Aerospace, defence & security	1	11	49	7	43	7	61	179
Automotive	4	7	226	5	51	6	52	351
Chemicals	4	17	319	5	65	21	75	506
Communications	11	17	137	8	73	26	96	368
Energy, utilities & mining	24	105	322	27	221	34	430	1,163
Engineering & construction	23	32	337	31	143	43	68	677
Entertainment & media	2	7	74	14	93	1	69	260
Forest, paper & packaging	4	18	112	7	50	4	58	253
Healthcare	2	14	62	12	65	8	142	305
Hospitality & leisure	4	7	114	7	53	9	93	287
Industrial manufacturing	20	50	692	39	351	27	292	1,471
Metals	20	36	267	38	75	9	95	540
Pharmaceuticals & life sciences	3	9	164	1	58	3	68	306
Retail & consumer	57	131	1,075	60	356	42	361	2,082
Technology	8	12	698	10	174	17	360	1,279
Transportation & logistics	2	4	81	10	34	10	47	188
Total	189	477	4,729	281	1,905	267	2,367	10,215

NWC/Sales by sector and macro-region

Sector	Africa	Americas	Asia	Australasia	Europe	Middle East	USA, Canada	Total
Aerospace, defence & security	-10.80%	9.60%	7.70%	1.00%	22.30%	16.40%	19.70%	**18.10%**
Automotive	14.90%	9.10%	8.70%	17.10%	6.60%	12.70%	3.60%	**6.40%**
Chemicals	8.10%	6.80%	14.40%	12.50%	18.70%	25.10%	18.50%	**17.10%**
Communications	4.00%	1.70%	-2.30%	10.10%	3.00%	5.10%	5.70%	**2.80%**
Energy, utilities & mining	10.60%	5.10%	5.80%	5.70%	8.10%	8.20%	5.60%	**6.60%**
Engineering & construction	13.40%	18.40%	29.60%	10.10%	12.10%	42.50%	15.00%	**21.50%**
Entertainment & media	9.80%	16.00%	15.70%	3.60%	-0.30%	35.80%	12.70%	**8.80%**
Forest, paper & packaging	15.90%	25.40%	27.90%	9.10%	13.70%	38.50%	12.30%	**15.80%**
Healthcare	6.40%	10.80%	16.40%	9.20%	19.60%	30.70%	-0.20%	**3.60%**
Hospitality & leisure	18.80%	6.00%	18.00%	2.70%	0.10%	6.10%	6.40%	**6.20%**
Industrial manufacturing	13.00%	19.60%	19.80%	11.60%	20.30%	26.40%	16.20%	**18.90%**
Metals	16.50%	17.80%	15.80%	8.80%	11.90%	33.70%	18.20%	**14.20%**
Pharmaceuticals & life sciences	30.60%	10.20%	23.70%	42.30%	24.70%	34.70%	16.30%	**20.30%**
Retail & consumer	11.80%	12.20%	11.50%	5.30%	7.00%	10.80%	9.10%	**9.30%**
Technology	17.30%	37.20%	15.70%	10.40%	17.20%	21.40%	11.30%	**13.80%**
Transportation & logistics	9.00%	3.00%	13.60%	9.10%	5.00%	14.00%	8.60%	**8.70%**
Total	**12.10%**	**11.00%**	**13.50%**	**7.90%**	**10.80%**	**17.80%**	**9.30%**	**11.00%**

DSO by sector and macro-region

Sector	Africa	Americas	Asia	Australasia	Europe	Middle East	USA, Canada	Total
Aerospace, defence & security	20	30	33	19	61	65	43	46
Automotive	34	27	50	16	23	42	23	30
Chemicals	36	41	45	53	49	59	48	48
Communications	34	51	45	53	63	63	41	50
Energy, utilities & mining	65	39	28	38	45	70	33	37
Engineering & construction	53	66	85	60	71	134	70	78
Entertainment & media	65	101	76	55	112	117	78	89
Forest, paper & packaging	44	63	70	43	48	116	41	49
Healthcare	38	51	99	45	64	111	29	38
Hospitality & leisure	18	43	23	50	28	31	25	26
Industrial manufacturing	52	50	71	49	70	69	52	64
Metals	23	36	40	23	27	63	29	32
Pharmaceuticals & life sciences	65	30	69	57	69	104	45	57
Retail & consumer	26	43	35	17	27	32	17	26
Technology	67	144	67	58	72	89	57	63
Transportation & logistics	39	59	46	44	42	73	42	44
Total	**39**	**45**	**50**	**32**	**47**	**68**	**36**	**44**

DIO by sector and macro-region

Sector	Africa	Americas	Asia	Australasia	Europe	Middle East	USA, Canada	Total
Aerospace, defence & security	0	48	38	11	89	50	74	***71***
Automotive	65	28	46	84	63	64	41	***51***
Chemicals	55	63	55	85	73	93	79	***68***
Communications	8	23	29	10	24	18	17	***22***
Energy, utilities & mining	58	26	31	19	29	30	24	***28***
Engineering & construction	33	61	130	41	51	99	22	***91***
Entertainment & media	51	30	41	5	19	77	20	***22***
Forest, paper & packaging	68	87	96	62	68	92	52	***66***
Healthcare	17	24	47	32	60	79	20	***26***
Hospitality & leisure	131	15	120	6	14	30	25	***35***
Industrial manufacturing	59	53	67	32	64	91	60	***63***
Metals	93	91	69	76	69	117	93	***74***
Pharmaceuticals & life sciences	151	100	106	231	165	174	75	***105***
Retail & consumer	95	72	64	53	79	71	65	***69***
Technology	42	34	48	15	43	35	33	***41***
Transportation & logistics	56	12	40	20	15	29	14	***22***
Total	***71***	***52***	***60***	***47***	***54***	***66***	***44***	***52***

DPO by sector and macro-region

Sector	Africa	Americas	Asia	Australasia	Europe	Middle East	USA, Canada	Total
Aerospace, defence & security	68	41	45	31	61	56	37	**45**
Automotive	40	21	67	21	60	58	52	**60**
Chemicals	63	83	46	97	47	47	52	**49**
Communications	55	110	150	44	126	123	63	**106**
Energy, utilities & mining	98	54	40	43	51	80	42	**46**
Engineering & construction	39	60	103	74	90	72	40	**90**
Entertainment & media	94	103	70	75	239	60	76	**123**
Forest, paper & packaging	49	48	57	75	65	63	47	**54**
Healthcare	41	40	93	48	49	77	59	**60**
Hospitality & leisure	62	48	49	84	51	40	27	**40**
Industrial manufacturing	64	23	66	42	58	52	49	**57**
Metals	47	53	50	58	48	39	44	**49**
Pharmaceuticals & life sciences	78	90	75	30	104	124	46	**66**
Retail & consumer	70	71	55	49	82	61	42	**57**
Technology	47	50	61	42	58	51	60	**60**
Transportation & logistics	63	74	36	34	44	61	28	**36**
Total	**64**	**59**	**62**	**51**	**65**	**70**	**47**	**57**

Contacts
Dedicated Working Capital Partners

For more information about this subject please contact:

Robert Smid

Robert Smid
UK Partner, Working Capital Practice Leader
T: +44 20 7804 3598
E: robert.smid@uk.pwc.com

Robert leads our working capital practice and brings over twenty years of working capital advisory experience. He has made an instrumental difference to the free cash flow and balance sheet structure of many companies.

Daniel Windaus

Daniel Windaus
UK Partner, Lead Author
T: +44 20 7804 5012
E: daniel.windaus@uk.pwc.com

Daniel is a partner in our working capital practice, with over sixteen years of working capital experience. He has advised company management and private equity investors on improving cash flow throughout Europe and North America.

Glen Babcock

Glen Babcock
UK Partner
T: +44 20 7804 5856
E: glen.babcock@uk.pwc.com

Glen is a partner in our working capital practice, leading our work across the regions of the UK. He has worked with companies across the UK, Europe and internationally about cash flow improvement and cost reduction.

Rob Kortman

Rob Kortman
Germany & Austria Partner
T: +49 1709 879253
E: rob.kortman@de.pwc.com

Rob is a partner in our European working capital practice. He has over seventeen years of extensive experience of delivering working capital management programmes to generate cash for large, corporate clients across Europe, Asia and the Americas.

Co-Authors of the study

Niall Cooter

Niall Cooter
Senior Manager
T: +44 7714 069861
E: niall.cooter@uk.pwc.com

Niall has twenty-nine years of experience advising clients on the design and implementation of world class working capital solutions. He has a broad range of industry experience in both the private and public sectors throughout the UK, Europe and the USA.

Saverio Mitrani

Saverio Mitrani
Manager
T: +44 7711 562120
E: saverio.mitrani@uk.pwc.com

Saverio is a manager in the firm's working capital practice and has spent his career delivering working capital and cash flow related projects across the UK and internationally. His expertise covers all the key areas of working capital, from order-to-cash to inventory management and procure-to-pay.

Working Capital Management Global Network

Australia
David Pratt
T: +612 8266 2776
E: david.pratt@au.pwc.com

CEE
Petr Smutny
T: +42 25 115 1215
E: petr.smutny@cz.pwc.com

Denmark
Bent Jorgensen
T: +45 3945 9259
E: bent.jorgensen@dk.pwc.com

Finland
Michael Hardy
T: +358 50 346 8530
E: michael.hardy@fi.pwc.com

France
Francois Guilbaud
T: +33 156 578 537
E: francois.guilbaud@fr.pwc.com

Germany & Austria
Rob Kortman
T: +49 1709 879253
E: rob.kortman@de.pwc.com

Hong Kong
Ted Osborn
T: +852 2289 2299
E: t.osborn@hk.pwc.com

Italy
Riccardo Bua Odetti
T: +39 026 672 0536
E: riccardo.bua.odetti@it.pwc.com

Malaysia
Ganesh Gunaratnam
T: +603 2173 0888
E: ganesh.gunaratnam@my.pwc.com

Middle East
Mihir Bhatt
T: +971 4304 3641
E: mihir.bhatt@ae.pwc.com

Norway
Per Wollebæk
T: +47 95 26 03 18
E: per.wollebaek@no.pwc.com

Singapore
Peter Greaves
T: +65 6236 3388
E: peter.greaves@sg.pwc.com

Spain
Josu Echeverria
T: +34 91 598 4866
E: josu.echeverria.larranga@es.pwc.com

Sweden
Jesper Lindbom
T: +46 70 9291154
E: jesper.lindbom@se.pwc.com

Switzerland
Reto Brunner
T: +41 58 792 1419
E: reto.brunner@ch.pwc.com

The Netherlands & Belgium
Danny Siemes
T: +31 88 792 42 64
E: danny.siemes@nl.pwc.com

Turkey
Gokdeniz Gur
T: +90 212 376 5332
E: gokdeniz.gur@tr.pwc.com

USA
Paul Gaynor
T: +1 925 699 5698
E: paul.m.gaynor@us.pwc.com

pwc.com/workingcapitalsurvey

PwC helps organisations and individuals create the value they're looking for. We're a network of firms in 157 countries with more than 195,000 people who are committed to delivering quality in assurance, tax and advisory services. Find out more and tell us what matters to you by visiting us at www.pwc.com.

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PwC does not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2015 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.

Design Services 29089 (07/15).