



2018 US Working Capital Survey

2018 US Working

US companies improve working capital performance. Deterioration in receivables and inventory management masked by significant slowing of payments to suppliers

In 2017, the 1000 largest US-headquartered public companies¹ enjoyed their best working capital performance since 2008, as companies braced for rising interest rates, accelerating merger and acquisition (M&A) activity, and more expensive raw materials.

The year saw a marked improvement in days payable outstanding (DPO), as many organizations successfully extended payment terms, often creating a ripple effect as waiting suppliers delayed payments to their own supply base. The increased use of supply chain finance and other leveraging instruments also suggests that many companies have succeeded in pushing out terms extensions on smaller suppliers (who were not represented in the data set).

Days sales outstanding (DSO) deteriorated in consequence, but not at a corresponding rate, indicating that organizations are tightening up their collections processes. Cash on hand increased by 17% year-on-year, a sharp increase from the 4% in 2015-2016.

But not all of the financial news was good. While some of that additional cash is the fruit of working capital improvement programs, much of the rest is debt. Many companies continued to pile on debt in 2017, despite rising interest rates. Debt as a percentage of revenue has increased steadily over the last few years from 35% of revenue for the period 2008-2013 to 51% today, a 10-year high.

M&A activity was one important reason companies took on more debt. 2017 proved to be a record year in M&A, surpassing even the previous high seen in 2015.

As the cost of debt mounted, so too did other expenditures. Dividends continued their year-on-year increase with another 5%, the latest step in a 114% rise since the financial crisis. In 2017, CAPEX again increased (5.5% year-on-year; 67% cumulatively since 2009), following a dip in 2016, an early indication that organizations are starting to invest again in themselves and the long term.

¹ Excluding the financial sector

Capital Survey

Despite the increased focus many organizations are placing on working capital, particularly within the area of payables, huge opportunities remain. Companies once again left more than \$1 trillion in working capital on the table, passing up the opportunity to reduce their cash conversation cycle (CCC). Every seven-day reduction yields a 1% improvement in margin. For a company with an earnings before interest, taxes, depreciation and amortization (EBITDA) of 5%, that equates to roughly a 20% increase in profit.² Perhaps, even more problematic, many also chose to add more leverage despite the consensus forecast that interest rates will continue to rise. But whatever the level of denial in 2017, more companies will feel pressured to optimize their internal cash flows in 2018.

Key highlights

Overall, the Hackett 1000 ended 2017 with a stronger working capital position than they had at the beginning of the year. This marked the second year of an improving trend, and excluding oil and gas (oil price volatility over the past five years has distorted the measure), marked the sixth year of falling CCC in the US and a 10-year low for overall CCC.

Working capital performance

Companies may have lost ground in DSO, and seen their days inventory outstanding (DIO) refuse to budge, but they made gains anyway thanks to the progress with DPO.

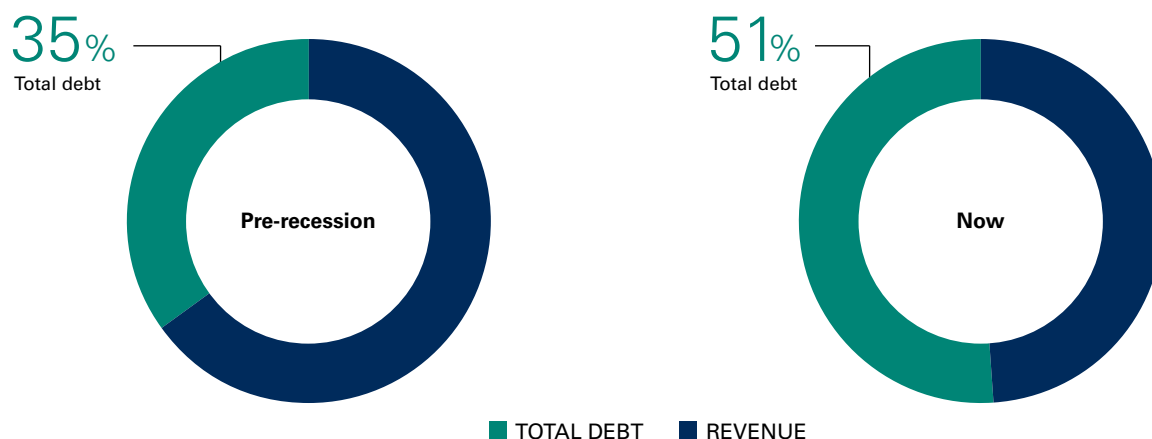
More specifically:

- DPO improved by 6% as payment terms of many benchmark leaders were sometimes pushed out to 90 days and beyond.
- DSO increased by 4%. For the fourth year in a row, DSO degraded as organizations pushed payment term extensions on their supply base.
- DIO stayed essentially flat, up by just 0.6%. However, excluding oil and gas inventory performance, for example, deteriorated by 1.3 days (2.5%).

Payables

The sustained rise of DPO was the main working capital story in 2017. Organizations continued to push the working capital burden back to their

Debt levels have increased substantially in proportion to revenue since the recession

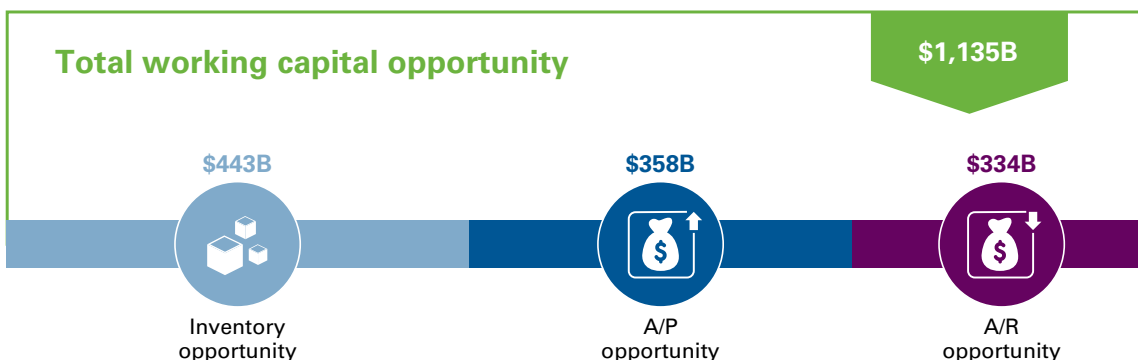


Charts show the total debt for all the companies included in the 2018 Working Capital Survey, as a percentage of their total revenue. Data shown is from FY2008 and FY2017

² The Hackett Group research paper, "Working Capital Efficiency: Its Impact on Profitability and Operational Performance."



The working capital opportunity assessment – FY2017



supply base. Terms were stretched up to 90 days and beyond. At the same time, the increased utilization of supply chain financing solutions allowed organizations to maximize DPO performance while injecting liquidity into their supply base. Overall, DPO performance is at its highest level in the past 10 years. A few industries drove much of this increase, particularly automotive original equipment manufacturers and their tier 1 suppliers, chemicals, retail, machinery, apparel, and computer hardware. Other industries that have less leverage over their core suppliers, such as airlines, engineering, and hospitality, had less success in extending their terms.

Outlook on payables performance: We expect to see more of the same in 2018, barring an unexpected shock to the market. Companies are well advised that supply chain finance is only part of the solution. To reap full advantage of the structure, the underlying processes must also be optimized.

Receivables

DSO has deteriorated now for three years in a row (two years, excluding oil and gas). Performance held steady between 2009-2015, with some minor fluctuation, but started to deteriorate rapidly in the last two years as customers with more leverage began to focus on payment term extensions and DPO optimization. As terms extensions have spread, suppliers have focused on improving on-time payment performance to mitigate the impact. Tightened contracts, billing, collections, dispute management and cash application have been used to reduce DSO corrosion. In 2017, many organizations experienced further deterioration, in

part because of the impact of the sharp rise in M&A activity. This was particularly true when it came to maintaining rapidly changing customer master data, as well as systemic realignment between customer and supplier when the ownership structure changed.

Outlook on receivables performance: As payment terms extend, organizations will continue to experience pressure on DSO. The fact that DPO improved by 6%, while DSO only deteriorated by 4%, indicates that large players have been increasingly successful in pushing terms extensions onto smaller suppliers and may also be benefiting from supply chain finance. In 2018, we expect that companies will continue to focus on optimizing processes to encourage correct billing, on-time payment and timely dispute resolution. In addition, The Hackett Group expects to see greater digitalization and increased use of robotic process automation.

Inventories: DIO rose by 0.6% in 2017, continuing – at least on a slight grade – inventory’s decade-long upward climb. Economic uncertainty and the inability to predict demand in the early years were the major causes, followed by external factors and a lack of focus. Over the past few years, overall performance has remained stable in the aggregate, however, if we remove oil and gas, we actually see an increase of 1.3 days in DIO (2.5%). The jump can be attributed in large part to increasing raw material costs in 2017, driven in part by raw material price increases (oil, steel and aluminum). Inventories can often be a more complex area to drive working capital optimization due to competing cross-functional objectives (cash/cost/service) and the ability to easily identify core improvement drivers from

within. While some companies are ahead of the curve in inventory optimization, it appeared that in 2017 this was not yet a major area of focus for many organizations, and indeed many have yet to feel sufficient motivation to remove the excess buffers and contingencies that built up in their supply chains as a defensive response to the 2015 Long Beach port strike. This delayed response is not surprising. Generally, no one function can drive change without the participation and collaboration of the others, and the process re-engineering and optimization requirements needed to release cash internally can sometimes be politically overwhelming if the exact causes of excess inventories have not been determined.

Outlook on inventory performance: Organizations have not yet managed to reduce buffers that built up partly due to supply chain uncertainty, and in part because of expected upticks in consumer demand. Those organizations that have already realized DPO optimization will be looking to inventories as the next big cash generation opportunity. Longer term, increased visibility in the supply chain through digitalization and the advance of blockchain technologies may drive further opportunities for inventory optimization.

Working capital in 2018 and beyond – what’s next?

Last year, inventories constituted the biggest working capital opportunity, followed by payables and receivables. This year the tables have turned, at least slightly. Inventory still remains the biggest opportunity, as top performers continue to operate well, while the majority lag behind in performance and focus. However, the second-biggest opportunity now is payables (\$358 billion), with a 20% increase year-on-year. The fact that the DPO opportunity has increased, even as performance has steadily improved, indicates that top performers are continuing to expand this gap, getting ahead of a changing business landscape and demonstrating that this opportunity can be captured.

We expect other companies to start to work on their own process in response to the pressures of

their customers and market. Customer and peer terms extensions, the increasing cost of cash, and a changing marketplace means that in 2018 many will continue to focus on DPO improvement and DSO mitigation. Cost take-outs and process standardization will top many agendas – the norm in a hot M&A market – but working capital will continue to increase in importance on the corporate agenda. We expect that with further interest rate rises on the horizon, and as external debt becomes increasingly more expensive to finance, organizations will start to focus more on releasing cash locked into their own operations and reducing working capital needs to limit the requirements for additional external financing. Organizations that have already reached the limits of improvement in the areas of payables and receivables or whose ability to influence suppliers is limited (such as those with consolidated and strategic supply bases) will continue to explore inventory reduction initiatives as the next source of sustainable cash generation.

Rising oil prices and trade regulations could well continue to drive raw material price increases going forward. The impacts of newly announced tariffs in the US and retaliatory tariffs overseas will soon be visible, and companies affected by the moves may well feel the need to try to optimize their inventory or redesign their working capital strategies to offset inventory value increases with DPO/DSO improvement. Similarly, US exporters of certain goods and products may need to offer longer payment terms or other incentives to mitigate any impact on their international customer base.

The reliance on debt has been particularly visible in recent years, but the additive impacts of interest rate rises and global political uncertainty may now begin to cause many to re-evaluate their financial strategies. Between the many recent attacks on global trade norms, populist pressures in the eurozone and nativist pressures in the US, the level of political uncertainty in 2018 is high. Now, smart organizations will be trying to reduce their reliance on debt and optimize their cash positions.

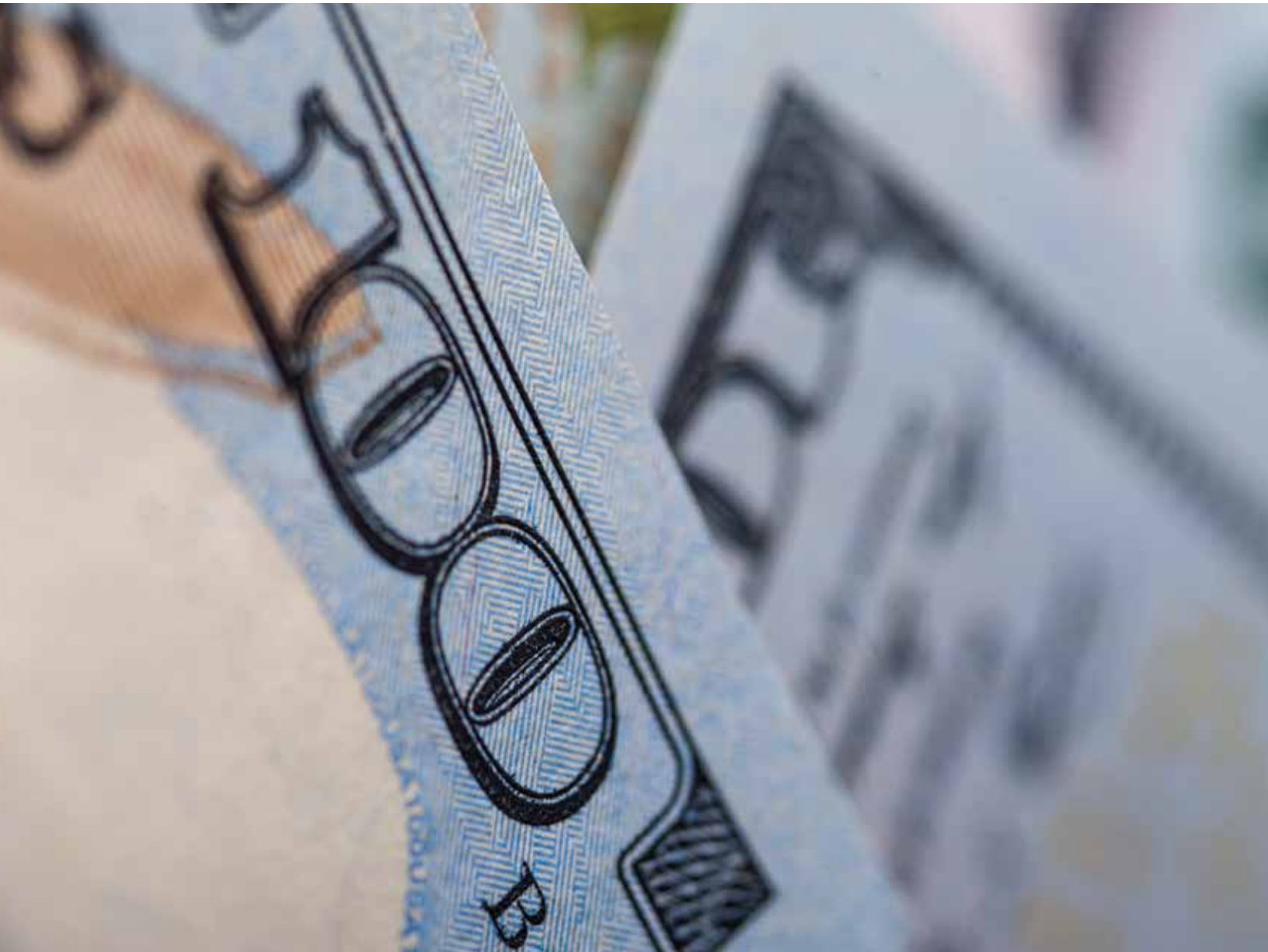
Conclusion

The struggle to build more disciplined working capital practices often seems an endless battle, like maintaining one's health. In ordinary times, this year's strong performance could all be undone by business cycle pressures next year.

However, this old game of seesaw may be ending for good. New structural opportunities to stretch performance boundaries in a more permanent way are on the horizon. In 2018 and beyond, we expect to see more organizations leverage supply chain finance in tandem with structured payment-term optimization programs. Novices, however, should proceed with caution, particularly in fragmented organizations (including firms that have gone through recent M&A activity), or those with inefficient end-to-end procure-to-pay processes.

Robotic process automation will also continue to advance as organizations look to optimize internal processes in a way that helps them conduct transactional operations more quickly, accurately, and from a working capital perspective, frugally. In the long term, we expect to see more organizations start to explore blockchain solutions. While a general rollout may still be several years away, these could ultimately have revolutionary implications for customer service and the cost structure's cash impacts for various back-office activities.

In 2017, a number of leading companies in the data set demonstrated that they are well ahead of the curve in working capital optimization. We expect that as the decade draws to a close, the laggards will be trying harder to catch up.



COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Aerospace & Defense												
ManTech International Corp.	35	-20%	44	66	-9%	73	0	-93%	0	31	5%	30
Northrop Grumman Corp.	40	15%	34	56	14%	49	15	-10%	16	31	1%	31
Huntington Ingalls Industries, Inc.	46	-13%	53	58	-3%	60	11	-19%	14	24	11%	21
TransDigm Group, Inc.	211	-2%	215	66	0%	66	182	-4%	190	37	-9%	41
Rockwell Collins, Inc.	240	-15%	281	76	0%	76	263	-7%	282	100	30%	77
KLX, Inc.	440	-9%	483	66	4%	64	429	-10%	476	55	-4%	57
Median Performance	112	2%	110	67	1%	67	83	7%	78	38	6%	36

Air Freight & Couriers												
Atlas Air Worldwide Holdings, Inc.	18	5%	17	33	0%	33	NM	NM	NM	15	-6%	16
Hub Group, Inc.	20	5%	19	53	9%	48	NM	NM	NM	33	12%	30
Expeditors International of Washington, Inc.	21	8%	19	75	5%	71	NM	NM	NM	54	3%	52
C.H. Robinson Worldwide, Inc.	22	17%	19	52	9%	48	NM	NM	NM	29	4%	28
United Parcel Service, Inc.	23	-6%	25	49	5%	46	3	8%	3	28	16%	24
Median Performance	21	8%	19	52	9%	48	0	NM	0	29	4%	28

Airlines												
Sky West, Inc.	-23	-58%	-15	5	-11%	5	20	2%	19	47	21%	39
JetBlue Airways Corp.	-9	-64%	-6	13	35%	9	4	3%	4	26	37%	19
Delta Air Lines, Inc.	-9	-121%	-4	21	11%	19	17	39%	12	47	33%	35
Alaska Air Group, Inc.	11	-18%	14	16	-16%	19	4	-21%	5	8	-15%	10
Southwest Airlines Co.	13	11%	12	11	17%	10	12	13%	10	10	21%	8
Allegiant Travel Co.	16	45%	11	17	58%	11	7	-15%	8	8	1%	7
Median Performance	0	144%	0	14	24%	11	9	1%	9	24	15%	21

Automotive Parts & Aftermarket												
Tower International, Inc.	-10	-14%	-8	44	29%	34	17	6%	16	71	20%	59
Cooper-Standard Holdings, Inc.	4	9%	4	50	3%	48	22	11%	20	68	5%	64
Tenneco, Inc.	17	-22%	21	51	-6%	54	40	9%	37	74	7%	69
Gentex Corp.	93	4%	89	47	2%	46	79	5%	75	33	4%	32
Cooper Tire & Rubber Co.	97	13%	86	57	9%	52	89	5%	85	48	-6%	51
LKQ Corp.	137	7%	128	39	5%	37	148	8%	137	49	10%	45
Median Performance	34	32%	26	54	7%	50	45	13%	40	69	12%	62

Beverages												
Molson Coors Brewing Co.	-37	22%	-48	24	-51%	50	37	-55%	82	99	-45%	180
PepsiCo, Inc.	-18	-19%	-15	34	3%	33	41	6%	38	93	7%	87
Coca-Cola Bottling Co. Consolidated	13	-26%	17	38	-1%	39	26	-11%	29	51	2%	50
Dr Pepper Snapple Group, Inc.	17	-8%	19	36	8%	34	32	8%	30	51	15%	44
The Coca-Cola Co.	49	46%	34	38	12%	34	80	22%	66	69	5%	66
Monster Beverage Corp.	54	-8%	58	49	-29%	69	79	42%	55	74	12%	66
Median Performance	15	-16%	18	37	3%	36	39	-17%	47	72	9%	66

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Biotechnology												
Incyte Corp.	-322	38%	-523	63	29%	49	41	24%	33	426	-30%	605
Gilead Sciences, Inc.	52	-46%	97	54	-1%	54	91	-49%	179	92	-32%	136
Vertex Pharmaceuticals, Inc.	110	33%	83	46	6%	43	191	1%	190	126	-16%	150
Amgen, Inc.	302	-20%	375	52	2%	51	478	-2%	487	228	40%	163
Celgene Corp.	324	-7%	349	55	1%	54	617	5%	586	348	20%	291
Regeneron Pharmaceuticals, Inc.	626	41%	443	123	1%	121	668	37%	486	164	0%	164
Median Performance	141	-13%	162	55	1%	54	191	-1%	192	126	-16%	150

Building Products												
A. O. Smith Corp.	20	564%	3	73	3%	70	63	3%	61	116	-10%	128
TopBuild Corp.	25	36%	19	59	12%	53	34	5%	32	67	2%	66
Builders FirstSource, Inc.	39	-3%	40	33	1%	33	42	0%	42	36	4%	35
Ply Gem Holdings, Inc.	71	13%	63	44	11%	40	47	10%	42	20	4%	20
Watsco, Inc.	99	1%	98	40	-2%	41	85	8%	78	26	21%	21
Griffon Corp.	120	3%	117	81	6%	77	101	10%	92	62	20%	52
Median Performance	55	0%	55	44	8%	41	53	-1%	54	40	-4%	41

Chemicals												
Advansix, Inc.	16	601%	2	46	30%	36	40	-13%	46	70	-11%	79
Pacific Ethanol, Inc.	24	-13%	27	18	-7%	19	15	-10%	17	9	4%	9
Renewable Energy Group, Inc.	29	-28%	41	15	-48%	29	29	-6%	31	15	-24%	20
Monsanto Co.	194	-2%	198	54	3%	52	206	-3%	211	66	0%	65
Sensient Technologies Corp.	207	13%	184	52	2%	51	203	18%	172	48	22%	39
FMC Corp.	322	13%	284	259	6%	243	223	85%	120	161	101%	80
Median Performance	74	-5%	78	57	3%	55	82	9%	75	55	14%	48

Commercial & Professional Services												
eBay, Inc.	-49	5%	-52	26	10%	24	NM	NM	NM	75	-1%	76
KAR Auction Services, Inc.	-49	3%	-50	77	-3%	79	NM	NM	NM	125	-3%	130
Worldpay, Inc.	-32	-266%	-9	89	-7%	96	NM	NM	NM	121	16%	105
PAREXEL International Corp.	111	0%	112	133	6%	125	NM	NM	NM	22	63%	14
Houghton Mifflin Harcourt Co.	115	-2%	117	52	-9%	57	104	-7%	112	41	-21%	52
Gartner, Inc.	116	45%	80	130	35%	96	NM	NM	NM	14	-14%	16
Median Performance	38	9%	35	64	8%	59	0	NM	0	24	5%	23

Computer Hardware & Peripherals												
Dell Technologies, Inc.	-63	-45%	-43	52	-7%	56	20	-7%	21	134	12%	120
Hewlett-Packard Enterprise Co.	-40	-27%	-31	39	2%	38	48	31%	37	127	20%	106
HP, Inc.	-34	-10%	-31	31	-1%	31	50	19%	42	115	10%	104
Fortinet, Inc.	93	-39%	152	85	-5%	90	85	-36%	132	77	9%	70
NETGEAR, Inc.	156	10%	142	106	23%	86	91	-11%	102	41	-11%	46
Arista Networks, Inc.	243	-15%	287	56	-31%	82	220	-21%	280	34	-55%	75
Median Performance	49	0%	49	53	-11%	60	49	5%	47	63	-4%	65

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Construction Materials												
USG Corp.	22	1%	22	27	20%	22	38	-4%	40	43	7%	40
U.S. Concrete, Inc.	35	-8%	38	59	-10%	65	17	0%	17	40	-8%	44
Owens Corning	47	-11%	52	46	6%	44	69	5%	66	69	20%	57
Vulcan Materials Co.	67	-7%	72	41	1%	40	54	-1%	55	28	21%	23
Forterra, Inc.	80	-19%	99	43	-10%	48	68	-31%	99	31	-34%	48
Martin Marietta Materials, Inc.	100	11%	91	44	2%	43	81	12%	73	25	0%	25
Median Performance	65	0%	65	43	0%	43	54	-1%	55	31	-22%	40

Consumer Durables												
Sleep Number Corp.	-7	-382%	2	5	-11%	5	65	3%	63	76	16%	66
Whirlpool Corp.	7	-17%	8	46	-4%	48	64	11%	58	103	6%	97
Tempur Sealy International, Inc.	28	-11%	32	42	6%	40	43	6%	41	57	17%	49
Matthews International Corp.	120	3%	117	77	6%	73	71	2%	69	28	11%	25
Mohawk Industries, Inc.	124	10%	113	56	5%	53	118	10%	107	50	5%	48
Fossil Group, Inc.	148	1%	146	48	7%	45	155	7%	145	55	27%	44
Median Performance	58	-3%	60	48	4%	46	70	2%	69	56	17%	48

Containers & Packaging												
Crown Holdings, Inc.	-17	-95%	-9	35	13%	30	72	5%	69	124	14%	108
Ball Corp.	-7	-148%	16	45	-4%	47	64	-9%	71	116	14%	102
Owens-Illinois, Inc.	15	-28%	21	35	12%	32	73	2%	72	94	13%	83
Bemis Co., Inc.	57	-9%	63	40	-4%	42	73	9%	67	56	22%	46
Packaging Corp. of America	76	-4%	79	47	8%	44	61	-5%	64	32	13%	29
AptarGroup, Inc.	117	5%	112	75	11%	68	77	6%	72	35	24%	28
Median Performance	46	11%	41	45	7%	42	63	-1%	64	56	4%	54

Electrical Products												
SunPower Corp.	41	-11%	46	46	26%	36	83	-18%	101	88	-4%	92
Spectrum Brands Holdings, Inc.	44	-19%	55	38	10%	35	97	5%	92	91	26%	72
Acuity Brands, Inc.	47	13%	42	60	-6%	64	62	2%	60	74	-9%	82
Hubbell, Inc.	104	7%	98	57	-3%	59	97	13%	85	50	6%	47
Generac Holdings, Inc.	111	-14%	129	61	0%	61	130	-8%	141	80	9%	73
Integer Holdings Corp.	113	2%	112	61	12%	54	84	-5%	88	31	1%	30
Median Performance	70	14%	61	60	-1%	60	79	14%	69	74	9%	68

Electronic Equipment, Instruments & Components												
Jabil, Inc.	-2	-235%	1	27	-1%	27	64	15%	55	93	14%	81
Tech Data Corp.	16	-4%	17	57	35%	42	32	4%	31	73	30%	56
TTM Technologies, Inc.	41	-5%	43	66	7%	62	52	3%	50	77	11%	69
Keysight Technologies, Inc.	175	19%	147	63	15%	55	176	14%	154	63	3%	61
Coherent, Inc.	210	-3%	215	65	-8%	71	177	-3%	184	32	-17%	39
IPG Photonics Corp.	248	-4%	259	61	9%	57	211	-8%	229	24	-11%	27
Median Performance	77	-8%	85	64	9%	59	68	-6%	72	65	8%	60

BEST WORST companies in working capital management by 2017 CCC

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Energy Services & Equipment												
Rowan Cos. Plc	4	-69%	12	56	-2%	57	NM	NM	NM	52	17%	44
FTS International, Inc.	24	-9%	27	58	11%	53	16	-9%	18	50	15%	43
Patterson-UTI Energy, Inc.	37	11286%	0	90	52%	59	15	30%	11	68	-4%	71
Oceaneering International, Inc.	122	1%	121	91	15%	79	52	-12%	59	21	27%	16
Baker Hughes, a GE Co.	145	38%	105	109	109%	52	135	6%	128	99	32%	75
National Oilwell Varco, Inc.	285	-6%	303	126	-9%	138	192	2%	188	33	40%	23
Median Performance	75	-22%	96	82	10%	75	40	-21%	50	40	-8%	43

Engineering & Construction												
Fluor Corp.	28	-7%	30	57	-8%	62	NM	NM	NM	30	-8%	32
KBR, Inc.	44	13%	39	78	-9%	86	NM	NM	1	34	-29%	48
Granite Construction, Inc.	45	0%	45	69	0%	69	9	-7%	9	33	-2%	34
Aegion Corp.	81	-4%	85	83	-1%	84	23	-10%	25	25	0%	25
Dycom Industries, Inc.	83	-7%	89	90	-6%	96	13	-2%	13	20	0%	20
Tutor Perini Corp.	127	18%	107	210	11%	189	NM	NM	NM	83	1%	82
Median Performance	58	11%	52	84	0%	84	2	14%	2	32	0%	32

Food												
Mondelez International, Inc.	-39	-22%	-32	38	3%	37	62	5%	59	139	9%	128
The Kraft Heinz Co.	-27	-24%	-22	13	21%	11	68	3%	66	107	10%	98
Kellogg Co.	-23	-264%	-6	35	14%	31	67	13%	59	125	30%	96
Fresh Del Monte Produce, Inc.	68	2%	67	32	1%	32	54	4%	52	18	6%	17
Ingredion, Inc.	76	-4%	79	47	-1%	48	72	2%	71	43	10%	40
B&G Foods, Inc.	149	11%	134	31	-1%	31	156	10%	141	38	-2%	39
Median Performance	46	-9%	50	29	3%	29	59	5%	56	33	3%	32

Food & Staples Retail												
Village Super Market, Inc.	-11	-4%	-11	NM	NM	NM	13	1%	13	24	2%	23
Walmart, Inc.	2	-71%	6	4	-7%	4	44	-2%	45	46	8%	43
Target Corp.	2	-80%	10	2	4%	2	62	0%	62	62	15%	54
Big Lots, Inc.	61	13%	54	NM	NM	NM	102	1%	101	41	-13%	47
Sears Holdings Corp.	68	-1%	69	7	-2%	8	79	-6%	84	18	-20%	23
GNC Holdings, Inc.	100	-9%	109	19	2%	19	116	-12%	131	35	-14%	41
Median Performance	18	-9%	20	7	-3%	7	40	-1%	40	29	2%	28

General & Specialty Retail												
AutoZone, Inc.	-12	53%	-26	9	-5%	10	294	5%	280	315	0%	316
O'Reilly Automotive, Inc.	-7	-17%	-6	9	5%	8	258	4%	248	274	4%	263
Murphy USA, Inc.	2	184%	1	6	11%	6	5	7%	5	10	-1%	10
Rent-A-Center, Inc.	176	-7%	188	9	15%	8	186	-8%	202	19	-12%	22
Conn's, Inc.	228	20%	190	153	-4%	160	112	48%	76	38	-19%	47
Tiffany & Co.	572	-5%	599	20	-2%	21	606	-1%	609	54	77%	31
Median Performance	68	-3%	70	6	-9%	7	95	2%	93	40	-3%	41

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Healthcare Services												
Five Star Senior Living, Inc.	-39	-7%	-37	10	0%	10	NM	NM	NM	49	6%	47
AmerisourceBergen Corp.	-10	12%	-11	25	8%	23	28	3%	27	62	2%	61
Brookdale Senior Living, Inc.	0	-87%	2	10	-5%	10	NM	NM	NM	10	20%	8
Surgery Partners, Inc.	58	0%	58	78	8%	73	16	27%	13	37	34%	28
Envision Healthcare Corp.	63	-51%	129	66	-52%	135	1	-61%	3	3	-64%	9
Henry Schein, Inc.	75	9%	69	43	9%	40	80	7%	74	47	6%	45
Median Performance	39	9%	36	47	0%	47	4	-19%	5	20	1%	19

Homebuilding												
NVR, Inc.	71	11%	64	1	-2%	1	92	8%	85	22	-2%	22
Hovnanian Enterprises, Inc.	155	-10%	173	NM	NM	NM	177	-10%	197	23	-9%	25
D.R. Horton, Inc.	287	-5%	301	1	-8%	1	307	-5%	322	21	-6%	22
Century Communities, Inc.	434	11%	390	3	59%	2	439	11%	395	8	8%	7
TRI Pointe Group, Inc.	518	-8%	565	12	116%	5	518	-10%	573	12	-12%	14
Toll Brothers, Inc.	564	-10%	626	NM	NM	NM	586	-10%	651	22	-11%	25
Median Performance	346	-9%	381	2	12%	2	355	-9%	392	21	-7%	23

Hotels, Restaurants & Recreation												
Extended Stay America, Inc.	-111	4%	-116	6	3%	6	NM	NM	NM	117	-3%	121
Boyd Gaming Corp.	-20	-28%	-15	6	22%	5	5	-9%	6	31	19%	26
Pinnacle Entertainment, Inc.	-10	-5%	-10	8	17%	7	3	-7%	3	21	7%	19
Vail Resorts, Inc.	39	16%	34	36	7%	34	24	0%	24	20	-14%	23
Scientific Games Corp.	98	1%	96	81	3%	79	76	-5%	80	60	-4%	62
ILG, Inc.	213	82%	117	41	-18%	50	190	89%	100	18	-46%	33
Median Performance	6	25%	5	14	3%	13	6	-6%	7	18	-5%	19

Household & Personal Care												
Procter & Gamble Co.	-37	-12%	-33	26	5%	24	58	-2%	59	121	4%	116
Coty, Inc.	-17	17%	-21	70	22%	57	135	9%	124	223	10%	203
Kimberly-Clark Corp.	8	-8%	9	43	7%	40	59	5%	57	94	7%	88
International Flavors & Fragrances, Inc.	133	-1%	135	71	11%	64	130	-2%	132	68	10%	61
Nu Skin Enterprises, Inc.	153	-9%	168	5	3%	5	184	-5%	194	37	14%	32
Estee Lauder Cos., Inc.	162	4%	155	43	6%	41	272	3%	264	154	3%	150
Median Performance	73	1%	72	42	5%	40	114	6%	107	78	7%	73

Industrial Conglomerates												
Honeywell International, Inc.	50	-10%	55	80	6%	76	71	4%	68	101	14%	89
SPX Corp.	63	-4%	65	68	10%	62	49	-2%	50	54	16%	47
Icahn Enterprises LP	63	-9%	69	34	-7%	36	79	-2%	80	50	5%	48
General Electric Co.	106	-6%	113	74	1%	73	104	-7%	111	72	0%	72
3M Co.	110	15%	96	57	6%	53	102	13%	90	49	3%	48
Textron, Inc.	135	-5%	143	35	24%	28	141	-12%	160	41	-10%	46
Median Performance	75	-9%	83	64	-5%	67	83	3%	81	52	9%	48

BEST WORST companies in working capital management by 2017 CCC

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Information Technology Services												
Global Payments, Inc.	-229	-13%	-204	28	-7%	30	NM	NM	NM	257	10%	233
Cerner Corp.	-65	29%	-92	73	5%	70	11	1%	11	149	-13%	172
TriNet Group, Inc.	-6	-94%	-3	NM	NM	NM	NM	NM	NM	6	94%	3
Workday, Inc.	74	9%	68	90	-5%	95	NM	NM	NM	16	-42%	27
EPAM Systems, Inc.	86	6%	81	89	7%	83	NM	NM	NM	2	39%	2
Splunk, Inc.	94	26%	74	113	23%	92	NM	NM	NM	19	8%	17
Median Performance	42	14%	37	66	-4%	68	0	NM	0	24	-22%	30

Internet & Catalog Retail												
Amazon.com, Inc.	-49	-4%	-47	18	17%	16	58	12%	52	125	9%	114
Wayfair, Inc.	-40	21%	-50	3	42%	2	3	8%	3	46	-17%	55
Overstock.com, Inc.	-12	23%	-15	6	10%	6	4	-24%	5	22	-16%	26
PCM, Inc.	34	65%	20	70	22%	58	20	32%	15	57	8%	53
Qurate Retail, Inc.	73	37%	53	61	35%	45	69	49%	46	56	49%	38
Lands' End, Inc.	92	4%	89	13	21%	11	150	-4%	156	70	-10%	78
Median Performance	27	39%	20	16	18%	13	47	-2%	48	57	5%	54

Internet Software & Services												
Intuit, Inc.	-92	23%	-119	7	-14%	8	NM	NM	NM	100	-22%	128
Autodesk, Inc.	-83	-29%	-64	78	-4%	82	NM	NM	NM	161	10%	146
Facebook, Inc.	-63	33%	-94	52	-1%	53	NM	NM	NM	116	-21%	147
Synopsys, Inc.	46	-13%	52	60	-8%	66	NM	NM	NM	15	7%	14
salesforce.com, inc.	123	8%	114	136	-2%	139	NM	NM	NM	13	-47%	25
National Instruments Corp.	262	-9%	287	70	3%	68	263	-10%	293	71	-4%	74
Median Performance	19	164%	7	60	5%	57	0	NM	0	48	-2%	49

Machinery												
Navistar International Corp.	-7	-326%	3	17	34%	12	46	-13%	53	69	11%	62
PACCAR, Inc.	1	255%	-1	18	14%	16	22	11%	20	39	6%	37
Allison Transmission Holdings, Inc.	34	-11%	38	36	-9%	39	53	4%	51	55	6%	52
Astec Industries, Inc.	167	3%	163	35	4%	34	156	2%	154	24	-1%	24
Graco, Inc.	170	4%	163	60	1%	60	137	7%	128	28	10%	25
Carpenter Technology Corp.	191	9%	175	59	16%	51	186	12%	166	54	28%	42
Median Performance	92	2%	90	59	5%	56	82	3%	80	54	19%	45

Marine Shipping												
Kirby Corp.	97	24%	78	75	22%	61	75	23%	61	53	19%	44
Median Performance	97	24%	78	75	22%	61	75	23%	61	53	19%	44

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Media – Advertising & Publishing												
Groupon, Inc.	-183	-16%	-158	13	46%	9	6	-5%	7	202	16%	173
Omnicom Group, Inc.	-119	-22%	-97	220	7%	204	NM	NM	NM	338	12%	302
The New York Times Co.	-34	-137%	-14	40	-13%	46	NM	NM	NM	74	23%	61
Meredith Corp.	34	47%	23	62	2%	61	14	8%	13	42	-18%	50
New Media Investment Group, Inc.	43	9%	39	41	3%	40	9	-3%	9	8	-26%	11
News Corp.	60	11%	54	61	14%	54	17	4%	16	18	11%	16
Median Performance	21	30%	16	53	-1%	54	6	-16%	7	42	-18%	50

Media – Broadcasting/Movies/Entertainment/TV												
Liberty Media Corp.	-102	19%	-127	17	4%	17	NM	NM	NM	119	-17%	143
Netflix, Inc.	-99	4%	-103	NM	NM	NM	NM	NM	NM	99	-4%	103
Sirius XM Holdings, Inc.	-96	-6%	-90	14	0%	14	3	-7%	3	113	5%	108
CBS Corp.	152	10%	137	99	7%	92	79	21%	65	26	30%	20
MGM Holdings, Inc.	173	534%	27	106	-27%	146	251	NM	NM	185	56%	119
AMC Networks, Inc.	448	8%	414	101	9%	93	448	12%	402	101	25%	81
Median Performance	14	-8%	15	37	2%	36	4	-28%	5	39	5%	37

Medical Specialties & Services												
Express Scripts Holding Co.	-22	-26%	-17	26	0%	26	9	9%	8	56	10%	51
Stericycle, Inc.	28	-24%	37	64	-2%	65	NM	NM	NM	36	26%	28
Quest Diagnostics, Inc.	33	10%	30	44	-3%	45	8	14%	7	18	-16%	22
Stryker Corp.	249	10%	228	64	2%	63	230	10%	209	46	1%	45
Integra LifeSciences Holdings Corp.	296	-4%	308	77	42%	55	319	9%	292	101	159%	39
Zimmer Biomet Holdings, Inc.	453	23%	368	70	-9%	76	455	27%	358	72	8%	67
Median Performance	127	16%	109	65	6%	61	115	12%	102	46	6%	43

Metals & Mining												
Alcoa Corp.	7	-41%	13	25	-4%	26	58	8%	54	76	12%	67
CONSOL Energy, Inc.	13	-15%	16	34	21%	29	20	2%	20	41	27%	33
SunCoke Energy, Inc.	17	10%	16	19	4%	18	40	7%	37	41	4%	40
Reliance Steel & Aluminum Co.	113	-2%	115	41	0%	41	91	-2%	93	18	-1%	18
Freeport-McMoRan, Inc.	120	22%	98	29	2%	28	141	15%	123	50	-6%	53
Allegheny Technologies, Inc.	151	1%	150	56	7%	53	148	9%	136	53	37%	39
Median Performance	59	-5%	62	34	-1%	34	68	1%	68	36	-1%	36

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companies in working capital management by 2017 CCC

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Motor Vehicles												
General Motors Co.	-25	-35%	-19	20	-4%	21	37	2%	36	82	9%	76
Ford Motor Co.	-13	-22%	-11	25	-8%	27	30	11%	27	68	5%	65
Tesla, Inc.	10	-76%	43	16	-39%	26	105	-38%	168	111	-27%	152
Harley-Davidson, Inc.	55	24%	44	21	23%	17	58	14%	51	25	2%	24
REV Group, Inc.	84	8%	78	39	14%	34	86	20%	72	41	45%	29
Median Performance	10	-76%	43	21	-18%	26	58	14%	51	68	5%	65

Office Equipment, Services & Supplies												
Deluxe Corp.	-9	27%	-12	28	-8%	30	25	-2%	26	62	-9%	68
Pitney Bowes, Inc.	4	159%	-6	54	10%	49	21	-16%	25	72	-11%	80
Waste Management, Inc.	7	-53%	15	45	0%	46	4	0%	4	43	22%	35
Tetra Tech, Inc.	77	3%	75	105	4%	101	NM	NM	NM	28	5%	26
Evoqua Water Technologies Corp.	94	17%	80	91	21%	75	57	0%	57	54	5%	52
ACCO Brands Corp.	110	-7%	119	88	-4%	92	74	-3%	76	52	6%	49
Median Performance	31	-16%	36	62	8%	57	26	2%	25	46	14%	40

Oil & Gas												
Murphy Oil Corp.	-293	11%	-329	43	-39%	70	72	-7%	77	408	-14%	475
Noble Energy, Inc.	-280	-82%	-154	19	63%	11	23	0%	23	321	71%	188
Continental Resources, Inc.	-255	-63%	-156	132	-3%	137	63	-30%	90	450	18%	383
Enterprise Products Partners LP	65	-17%	78	54	3%	52	25	-31%	36	14	40%	10
Par Pacific Holdings, Inc.	66	19%	56	18	-9%	20	56	15%	49	9	-37%	13
Oasis Petroleum, Inc.	94	-6%	100	89	-2%	91	15	1%	15	10	59%	6
Median Performance	2	-78%	8	43	-5%	45	21	-14%	25	61	3%	59

Personnel Services												
Insperty, Inc.	36	9%	33	37	10%	33	NM	NM	NM	1	38%	1
Robert Half International, Inc.	36	9%	33	51	4%	49	NM	NM	NM	15	-7%	16
Volt Information Sciences, Inc.	40	-7%	43	53	0%	53	NM	NM	NM	13	28%	11
AMN Healthcare Services, Inc.	52	2%	51	72	-4%	75	NM	NM	NM	20	-18%	24
Kforce, Inc.	52	7%	49	61	6%	57	NM	NM	NM	8	2%	8
ASGN, Inc.	58	3%	56	60	3%	58	NM	NM	NM	1	2%	1
Median Performance	44	10%	40	60	4%	57	0	NM	0	13	15%	12

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Pharmaceuticals												
Bristol-Myers Squibb Co.	3	-94%	52	86	-3%	88	89	-15%	105	172	22%	141
AbbVie, Inc.	75	6%	71	66	-3%	68	110	-3%	114	101	-9%	111
Johnson & Johnson	92	9%	84	64	8%	59	164	-1%	166	137	-3%	141
Eli Lilly & Co.	320	21%	264	73	5%	69	361	16%	313	114	-3%	118
Zoetis, Inc.	333	-10%	371	69	1%	68	324	-12%	367	59	-9%	65
United Therapeutics Corp.	549	-37%	865	63	28%	49	527	-41%	888	41	-43%	72
Median Performance	154	12%	137	66	-3%	68	234	4%	224	114	-3%	118

Pulp, Paper & Forest Products												
Boise Cascade Co.	43	-2%	44	20	9%	19	46	-2%	47	22	7%	21
Louisiana-Pacific Corp.	45	-3%	46	17	5%	16	50	1%	50	22	14%	19
Clearwater Paper Corp.	55	-15%	65	30	-3%	31	68	2%	67	43	30%	33
Verso Corp.	65	-18%	80	31	15%	27	63	-9%	69	29	76%	16
KapStone Paper & Packaging Corp.	67	-3%	69	49	5%	47	49	-8%	53	31	-1%	31
Domtar Corp.	83	1%	82	50	14%	44	67	-2%	68	34	13%	30
Median Performance	60	-8%	65	31	-2%	32	57	-6%	60	30	17%	25

Railroads & Trucking												
Norfolk Southern Corp.	-28	-106%	-14	33	-5%	35	14	-16%	16	75	16%	65
CSX Corp.	3	-61%	8	31	0%	31	22	-6%	23	50	8%	46
J.B. Hunt Transport Services, Inc.	12	-30%	16	47	13%	41	1	-1%	1	36	38%	26
Old Dominion Freight Line, Inc.	31	33%	23	43	10%	39	NM	NM	NM	12	-25%	16
Werner Enterprises, Inc.	42	5%	40	55	8%	51	3	-8%	3	16	11%	15
Knight-Swift Transportation Holdings, Inc.	63	64%	38	87	87%	47	NM	NM	NM	24	196%	8
Median Performance	22	6%	21	45	11%	40	2	-25%	2	33	15%	28

Recreational Products												
Activision Blizzard, Inc.	-30	-190%	-10	48	18%	40	13	-10%	14	91	39%	65
Thor Industries, Inc.	31	-28%	43	23	-22%	29	27	-29%	38	19	-23%	25
Winnebago Industries, Inc.	47	-20%	59	29	19%	25	40	-24%	53	22	17%	19
Mattel, Inc.	88	31%	67	84	13%	75	79	-8%	86	75	-19%	93
Hasbro, Inc.	112	5%	107	99	3%	96	69	10%	63	56	7%	52
Acushnet Holdings Corp.	181	15%	157	45	8%	41	183	15%	158	47	9%	43
Median Performance	69	2%	67	42	9%	38	72	-2%	73	47	3%	45

Semiconductors & Equipment												
Advanced Micro Devices, Inc.	21	-36%	33	27	3%	27	80	-8%	87	86	7%	81
Amkor Technology, Inc.	29	30%	22	60	14%	53	42	13%	37	73	8%	67
Teradyne, Inc.	56	-8%	61	47	16%	40	48	-31%	70	39	-21%	49
MKS Instruments, Inc.	152	-14%	178	57	-18%	70	126	-13%	144	31	-16%	36
Applied Materials, Inc.	154	0%	153	59	-24%	77	140	11%	127	45	-10%	50
KLA-Tencor Corp.	240	-14%	280	60	-20%	75	226	-7%	243	45	23%	37
Median Performance	113	-8%	122	48	-7%	52	115	-5%	120	47	-13%	54

BEST **WORST** companies in working capital management by 2017 CCC

COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Telecommunications												
AT&T, Inc.	-67	-17%	-57	38	0%	37	10	8%	10	115	10%	105
Frontier Communications Corp.	-29	30%	-41	29	-16%	35	NM	NM	NM	58	-24%	76
CenturyLink, Inc.	-11	-59%	-7	52	24%	42	6	-9%	6	69	25%	55
IDT Corp.	4	28%	3	16	31%	12	NM	NM	NM	12	32%	9
WideOpenWest, Inc.	10	-31%	14	25	-3%	26	NM	NM	NM	15	33%	11
Verizon Communications, Inc.	25	182%	9	68	34%	51	7	-14%	9	50	-1%	50
Median Performance	-2	-344%	1	38	0%	37	6	-9%	6	58	5%	55

Telecommunications Equipment												
Apple, Inc.	-94	-19%	-79	29	6%	27	13	109%	6	136	21%	112
Avaya Holdings Corp.	1	-87%	6	60	4%	58	30	-29%	43	89	-5%	94
EchoStar Corp.	32	330%	-14	46	14%	41	40	28%	32	54	-37%	86
CommScope Holding Co., Inc.	73	-6%	78	72	2%	71	60	-3%	62	59	9%	54
Ciena Corp.	83	12%	74	81	0%	81	67	17%	57	65	2%	64
Trimble, Inc.	98	4%	95	57	4%	55	89	11%	80	48	19%	40
Median Performance	65	38%	47	58	21%	48	63	7%	60	62	-17%	75

Textiles, Apparel & Footwear												
Steven Madden Ltd.	26	-18%	31	9	-37%	15	42	-17%	50	25	-25%	34
Wolverine World Wide, Inc.	72	-17%	87	42	10%	38	73	-15%	85	43	15%	37
Guess?, Inc.	86	3%	84	46	8%	42	106	9%	97	66	18%	55
SKECHERS USA, Inc.	125	7%	117	36	6%	33	143	8%	133	54	9%	49
Under Armour, Inc.	129	6%	123	45	-5%	47	164	20%	137	80	31%	61
Hanesbrands, Inc.	148	-7%	158	51	3%	49	180	-3%	186	83	8%	77
Median Performance	105	2%	102	40	4%	38	126	-1%	128	59	10%	53

Tobacco												
Vector Group Ltd.	27	-11%	31	6	47%	4	27	-11%	30	6	56%	4
Altria Group, Inc.	95	16%	82	3	-7%	3	111	11%	99	19	-10%	21
Philip Morris International, Inc.	296	-17%	355	48	0%	48	333	-12%	377	85	22%	70
Median Performance	95	16%	82	6	47%	4	111	11%	99	19	-10%	21

Travel Arrangements & Reservations												
Expedia Group, Inc.	-491	-11%	-440	68	21%	56	NM	NM	NM	559	13%	496
Liberty Expedia Holdings, Inc.	-429	62%	-1118	66	-79%	311	NM	NM	28	495	-66%	1456
Liberty TripAdvisor Holdings, Inc.	-128	-58%	-81	54	18%	46	NM	NM	NM	182	44%	127
Booking Holdings, Inc.	-93	-63%	-57	35	20%	29	NM	NM	NM	128	48%	86
TripAdvisor, Inc.	13	153%	-25	54	16%	47	NM	NM	NM	41	-44%	72
Median Performance	-128	-58%	-81	54	16%	47	0	NM	0	182	44%	127

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COMPANY	CCC			DSO			DIO			DPO		
	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016	2017	1YR% CHANGE	2016
Utilities												
NextEra Energy, Inc.	-51	25%	-68	50	16%	43	65	-1%	66	166	-6%	176
Avangrid, Inc.	-34	-24%	-28	64	-9%	71	22	-44%	40	121	-12%	138
Edison International	-33	-51%	-22	28	-17%	33	12	-3%	12	72	8%	67
Westar Energy, Inc.	71	4%	68	41	0%	41	98	-5%	103	68	-10%	76
ONE Gas, Inc.	86	-7%	93	71	-5%	74	101	-7%	108	85	-5%	90
Dominion Energy, Inc.	130	5%	123	48	-1%	49	199	-8%	216	118	-17%	142
Median Performance	22	-16%	26	48	3%	47	38	-3%	39	66	6%	63

Wholesale Distributors												
Matson, Inc.	-5	9%	-5	35	-3%	36	NM	NM	NM	39	-3%	41
CrossAmerica Partners LP	1	-74%	4	5	-41%	8	3	2%	3	7	-9%	7
Sunoco LP	3	95%	1	15	4%	14	15	-16%	17	26	-12%	30
MSC Industrial Direct Co., Inc.	141	8%	131	60	19%	50	110	2%	108	29	7%	27
Fastenal Co.	216	-1%	217	51	10%	46	191	-1%	192	26	22%	21
Wesco Aircraft Holdings, Inc.	286	19%	241	65	6%	62	283	18%	240	63	3%	61
Median Performance	61	2%	60	47	4%	45	59	3%	57	41	3%	40

Wireless Telecommunications												
T-Mobile US, Inc.	-61	-13%	-54	38	1%	38	32	32%	25	132	13%	117
United States Cellular Corp.	40	58%	26	75	22%	62	28	2%	27	63	-1%	64
Median Performance	-10	27%	-14	57	14%	50	30	16%	26	97	8%	90

SCORECARD METHODOLOGY

The Hackett Group's Working Capital Survey calculates working capital performance based on the latest publicly available annual financial statements of the 1,000 largest nonfinancial companies with headquarters in the US. To be included in the survey the companies must file their FY2017 financials before the survey closes. The survey takes an industry-based approach to ranking companies according to the four key working capital metrics: days sales outstanding (DSO), days inventory outstanding (DIO), days payables outstanding (DPO) and cash conversion cycle (CCC). For each industry the companies are ranked according to overall CCC, the top three and bottom three performers are listed in the scorecard.

Companies are classified according to the FactSet industry classification system, using data sourced from FactSet. For purposes of the survey and presenting results, we have grouped certain industries together.

The survey calculates working capital performance based on the latest publicly available data, and this is sourced from FactSet/FactSet Fundamentals.

Days Sales Outstanding (DSO) = Accounts Receivable/(One day revenue)

- Year-end trade receivables net of allowance for doubtful accounts, divided by one day of average revenue
- A decrease in DSO represents an improvement, an increase a deterioration

Days Inventory Outstanding (DIO) = Inventory/(One Day Cost of Goods Sold (COGS))

- Year-end inventory balance divided by average days COGS
- A decrease in DIO represents an improvement, an increase a deterioration

Days Payables Outstanding (DPO) = Accounts Payable/(One Day COGS)

- Year-end trade accounts payable balance divided by average days COGS
- An increase in DPO represents an improvement, a decrease a deterioration

Cash Conversion Cycle (CCC) = (DSO + DIO - DPO)

- Year-end DSO + DIO - DPO performance (in days as calculated above)
- The lower the number of days, the better

“The benefits we achieved from our working capital project were very good. It is clear that key receivables processes are working much better now across the whole business and maintaining these standards is high on management agendas. I have seen a real behavioral change. The consulting team ‘lives and breathes’ working capital and has lots of experience and credibility in improvement projects. Our organization picked up on this, which enabled quick ‘buy-in’ to their ideas.”

— Paul Verhagen, CFO Fugro NV

To receive a complimentary cash flow assessment, call **1 866 442 2538** or register your details online to take the first step toward releasing more cash from your operations today. To download our Working Capital Survey and its summary of findings, please register your details at www.thehackettgroup.com/workingcapital.

About The Hackett Group

The Hackett Group (NASDAQ: HCKT) is an intellectual property-based strategic consultancy and leading enterprise benchmarking and best practices digital transformation firm to global companies, offering digital transformation including robotic process automation and enterprise cloud application implementation. Services include business transformation, enterprise analytics, working capital management and global business services. The Hackett Group also provides dedicated expertise in business strategy, operations, finance, human capital management, strategic sourcing, procurement and information technology, including its award-winning Oracle and SAP practices.

The Hackett Group has completed more than 15,000 benchmarking studies with major corporations and government agencies, including 97% of the Dow Jones Industrials, 89% of the Fortune 100, 87% of the DAX 30 and 59% of the FTSE 100. These studies drive its Best Practice Intelligence Center™ which includes the firm's benchmarking metrics, best practices repository and best practice configuration guides and process flows, which enable The Hackett Group's clients and partners to achieve world-class performance.

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