Cash for growth or growth for cash?

2018 working capital performance assessment for Vietnam

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Foreword

Why working capital efficiency matters?

"Cash is the King" is a phrase often quoted in the business parlance but it is seldom given the importance it deserves. To survive and grow, businesses need to maintain adequate cash flows, or, in other words, manage working capital effectively. Its importance is not only restricted to meeting the short term liabilities, but also for investing in new avenues (additional capacity, market, product, customer growth, etc.). Additionally, from an M&A perspective, working capital performance is one of the more important components of calculating enterprise value or purchase price in the case of a sell side transaction. Organisations are leaving significant money on the table by not optimising their working capital efficiently. **To sum up, "Revenue is Vanity, Profit is Sanity but CASH FLOW is the reality".**

Welcome to the inaugural edition of our detailed performance assessment of working capital for the largest companies in Vietnam. We hope you find our local perspectives relevant and insightful. Our study encapsulates analysis of the past four years for the largest 400 companies, by revenue, across 14 sectors listed on the Ho Chi Minh City Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX).

What is the story?

While analysing the financial performance of the companies for the last four years, we noticed a few worrying trends:

1. ROCE down, margins flat

We have seen a deterioration in Return on Capital Employed (ROCE) of the companies. Whilst margin growth was flat, the leverage has increased.

2. Stretched cash conversion cycle (C2C)

C2C has increased by six days over the past four years with the additional capital requirement being financed through borrowings instead of implementing operational improvements to release cash internally. Days Sales Outstanding (DSO) and Days Inventory Outstanding (DIO) have both worsened over the four years, forcing companies to elongate payables to compensate for the deterioration on the asset side.

3. Energy & Utilities best performer, Technology struggling

Industries with the significant improvements in working capital performance were Energy & Utilities and Oil & Gas while a substantial deterioration was observed in Technology and Consumer Products sectors.

4. Working capital performance of Vietnamese companies lags behind most regional and global peers

Vietnam's cash to cash cycle was two or more times higher compared to regions like the US, Europe etc. that has been caused primarily by Engineering & Construction, Healthcare & Pharma, Metal & Mining and Consumer Products sectors.

What are the key takeaways?

1. Working Capital outperformers are the most profitable

Companies who manage their working capital better exhibit the best financial metrics. The top working capital performers operated at 12 days of C2C and 17% ROCE as at FY17.

2. It is possible to reduce C2C without compromising sales growth

Our study illustrates that fast growing companies (growing at CAGR of ~20%) have simultaneously managed to reduce their C2C cycle by 5% on an annualised basis over the past four years.

3. ~USD 10 billion cash trapped in net working capital, potential to release up to USD 4 billion

If the organisations part of the study were to optimise their working capital performances to the top quartile level within the sector, as much as 40% of the locked up cash in net working capital can be released.

4. No additional debt required till FY20 if organizations optimise their working capital

If past trends continue, the companies would require an incremental ~USD 2.5 billion as cash for working capital and Capex needs cumulatively over next three years, which can be met from cash release by implementing working capital optimisation initiatives.

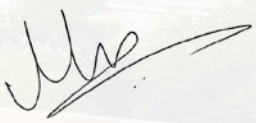
How does your company rate?

Find out how your organisation compares with your peers in our working capital self diagnostics centre and with breakdowns by sector, growth rates and individual working capital elements.

"Efficiency and effectiveness of managing working capital is the most important metric that defines successful businesses"

Johnathan Ooi
Partner, Working Capital Management
PwC Vietnam

"Vietnamese companies are losing out on tapping the cheapest source of liquidity, cash generation from internal operations"



Mohammad Mudasser
Practice lead, Working Capital Management
PwC Vietnam

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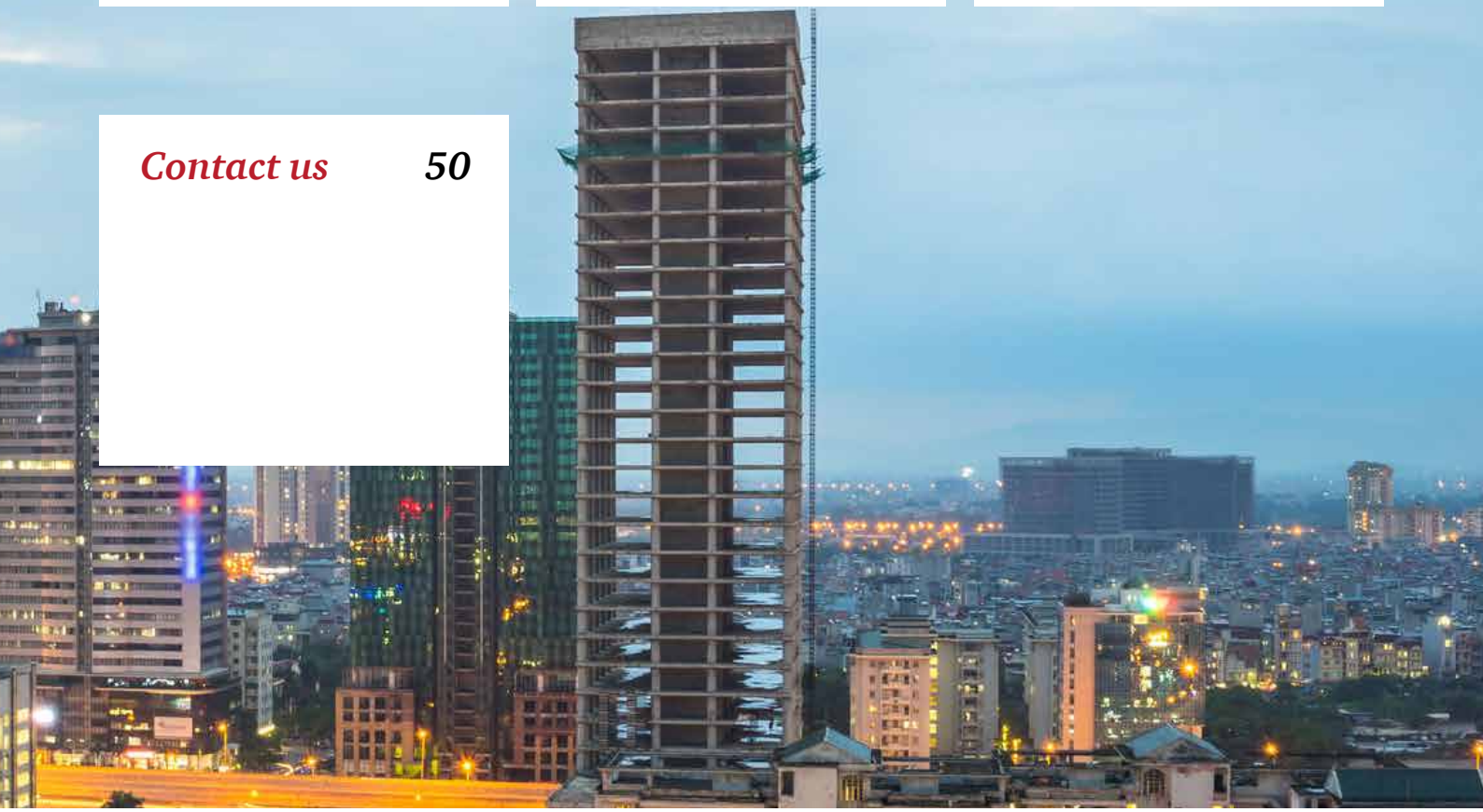
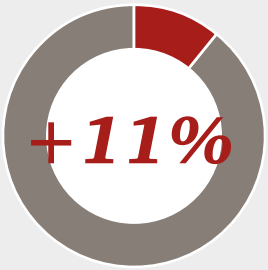


Key findings

Flat margins due to ***expenses outgrowing revenues*** for FY13-17

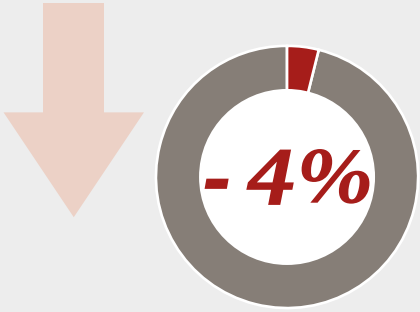
Revenues' CAGR

Operating, financing expenses' CAGR

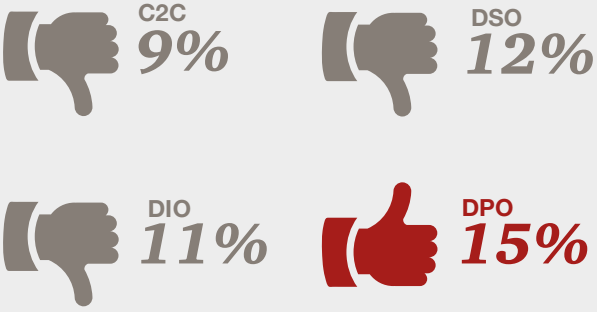


ROCE dropped

4% on an absolute basis, from 14.1% (FY13) to 13.6% (FY17)



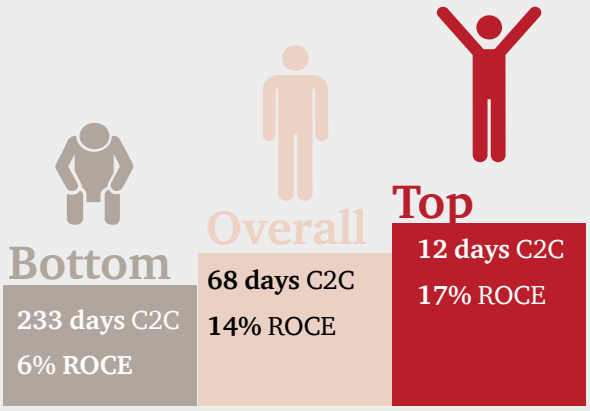
Working capital performance ***deteriorated*** in the last four years, owing to ***increased Receivables*** and ***Inventory cycles***



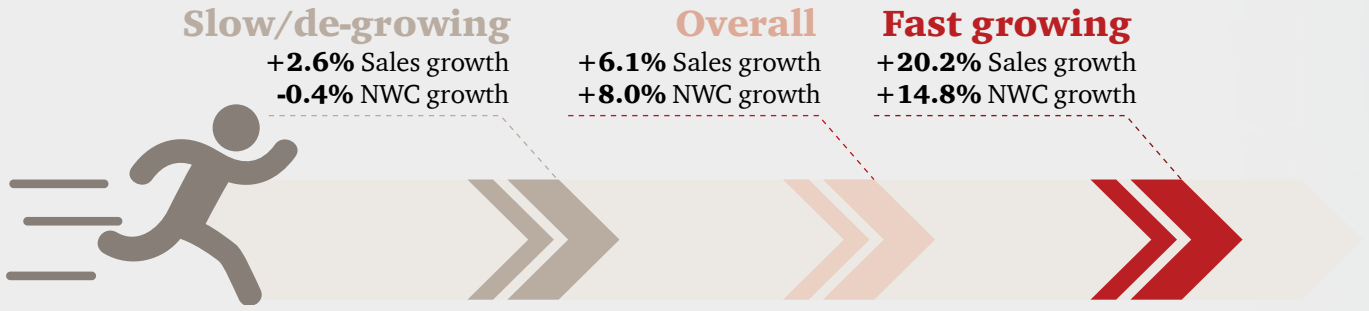
USD 9.7 billion

net working capital employed as at FY17

There is a ***wide variance*** in the financial performance between ***top*** and ***bottom working capital performers***



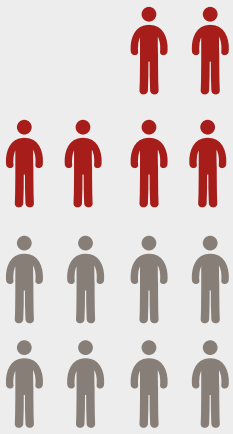
Top line growth ***does not require proportionate*** working capital investments



+/- % is CAGR for FY13-17; NWC stands for Net working capital

6 out of 14 sectors

have improved their working capital performance over the last four years



Vietnamese companies lag behind not only ***mature western geographies,*** but also ***other Asian peers*** in working capital performance

Vietnam average

68 days
C2C

Global average

44 days
C2C

USD 2 to 4 billion cash release opportunity

can be realised by optimising the working capital performance of the analysed companies

To Median C2C

USD1.7 billion

To Weighted Average C2C

USD2.1 billion

To Upper Quartile C2C

USD3.9 billion

Overall performance

Strong economic growth over the last few years, supported by conducive monetary policy and foreign investments

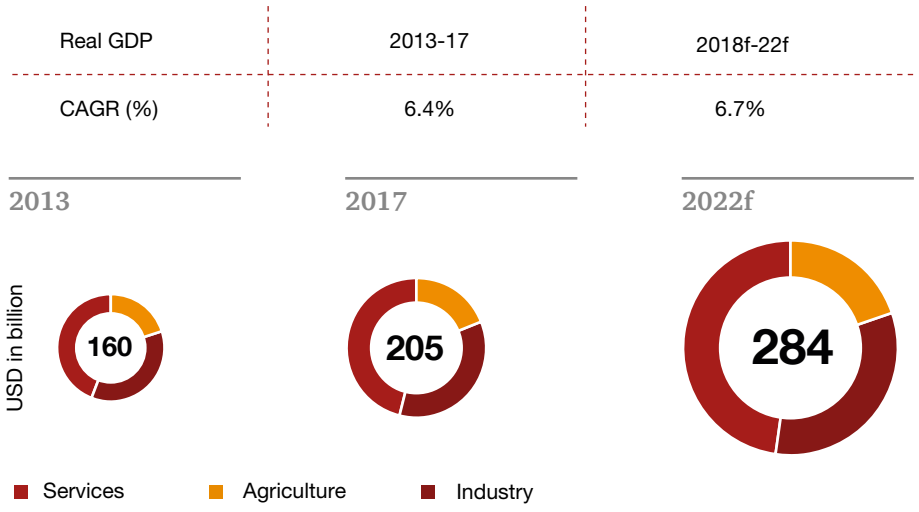
Vietnam's economy (in terms of real GDP) grew by 30% in the last four years, or 6.4% on an annualised basis (2010 constant currency), to over USD 200 billion (2017) from USD 160 billion (2013). The economy is projected to grow at 6.7% per annum over the next four years cementing Vietnam as one of the fastest growing economies in Asia and the world.

In addition, as at March 2018, Vietnam attracted a cumulative FDI of USD 321 billion with focus on manufacturing and real estate sectors. The top nations that contributed to the inflow were Japan and South Korea (more than 50% combined), followed by Singapore and China.

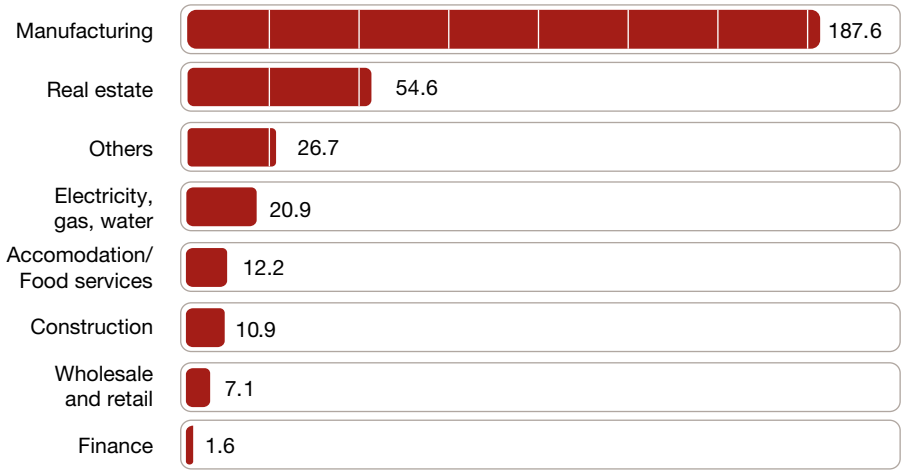
Lending rates have also come down by 340 basis points over the past four years resulting in an increasing industrial production index over the period. The central bank's continued focus is on supporting overall economic growth through a neutral monetary policy and soft lending rates.

High FDI and soft lending rates ***have been key drivers of Vietnam's economic growth***

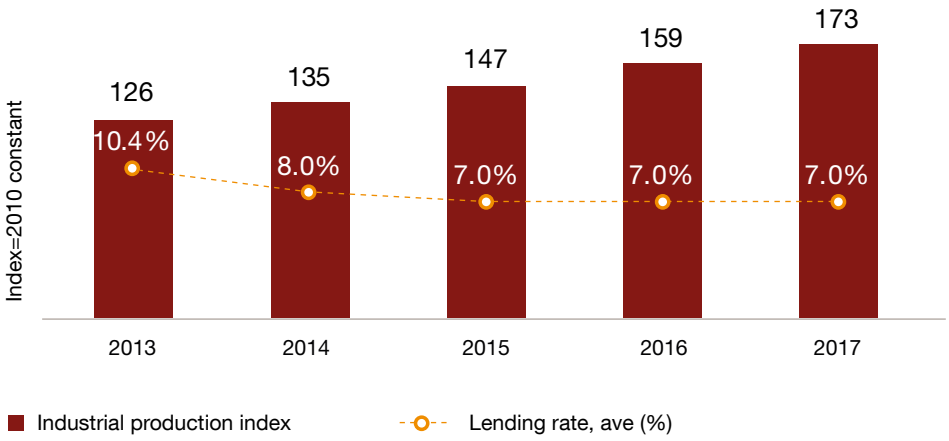
GDP breakdown by economic areas



Cumulative FDI by sectors (USD in billion)



Industrial production index and lending rate



Source: BMI Vietnam country risk report Q3 2018, FIA

Note: The lending rate, ave is the average bank rate to meet short- and medium-term financing needs of the private sectors over the defined period

Revenues of top Vietnamese organisations grew in-line with the GDP growth. However, margin expansion was subdued with EBITDA margins coming down in the last three years

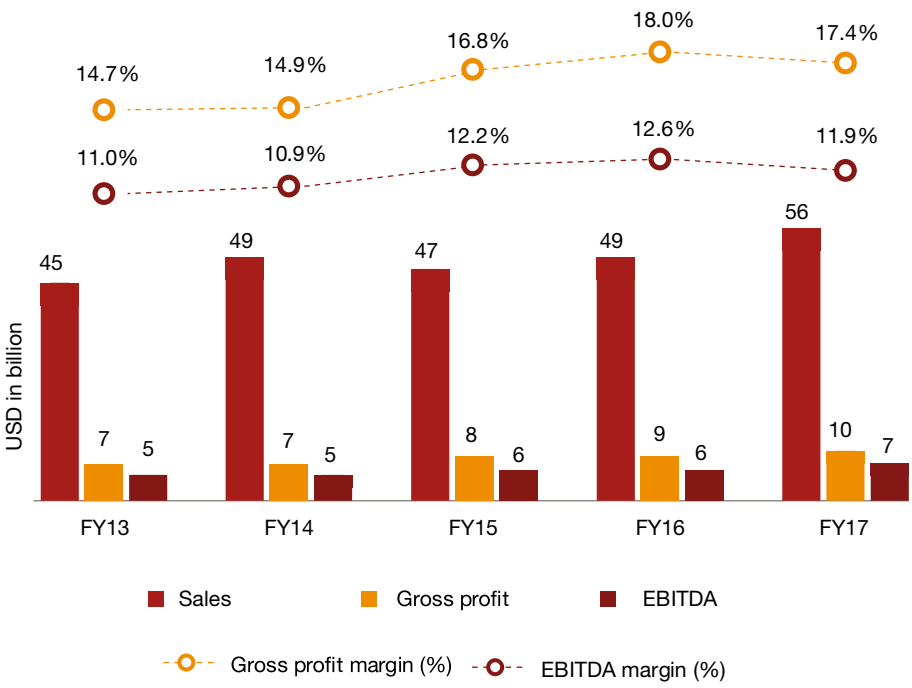
Companies have not been able to effect and sustain operational improvements, and this resulted in a sub-par profitability growth despite a strong sales growth over the last four years, at 6.1% per annum.

In the last three years, SG&A and interest expenses have increased at 7-13% per annum, causing EBITDA margins to remain flat. The margins also took a dent in FY17 primarily because of a negative growth in the mining industry and growing cost of compliances.

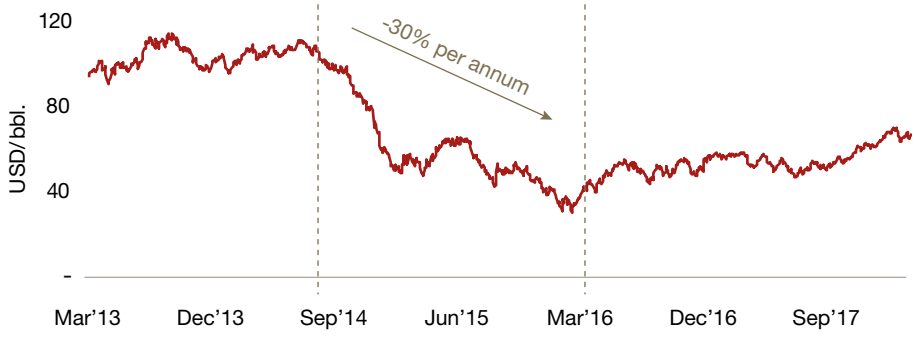
On the other hand, low crude oil prices had a positive impact on cost of revenue of companies and hence neutralised any further margin contraction. However, with lot of organisations having to import raw materials & oil derivatives and with crude oil prices increasing in the recent past, a further pressure on the margins in the present and near future can be expected.

Margin pressure ***due to increased expenses and hardening crude oil prices***

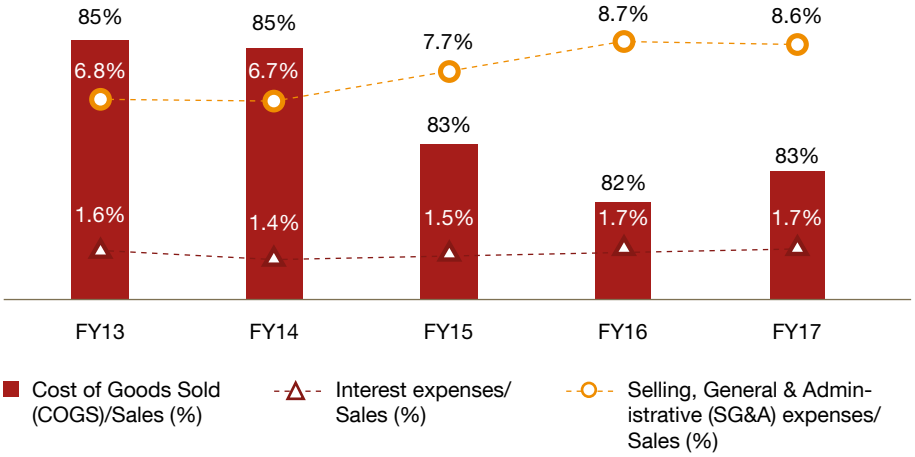
Historical P&L performance



Crude oil price



Operating and financing expenses/Sales ratios



Source: CapIQ and PwC analysis, Bloomberg

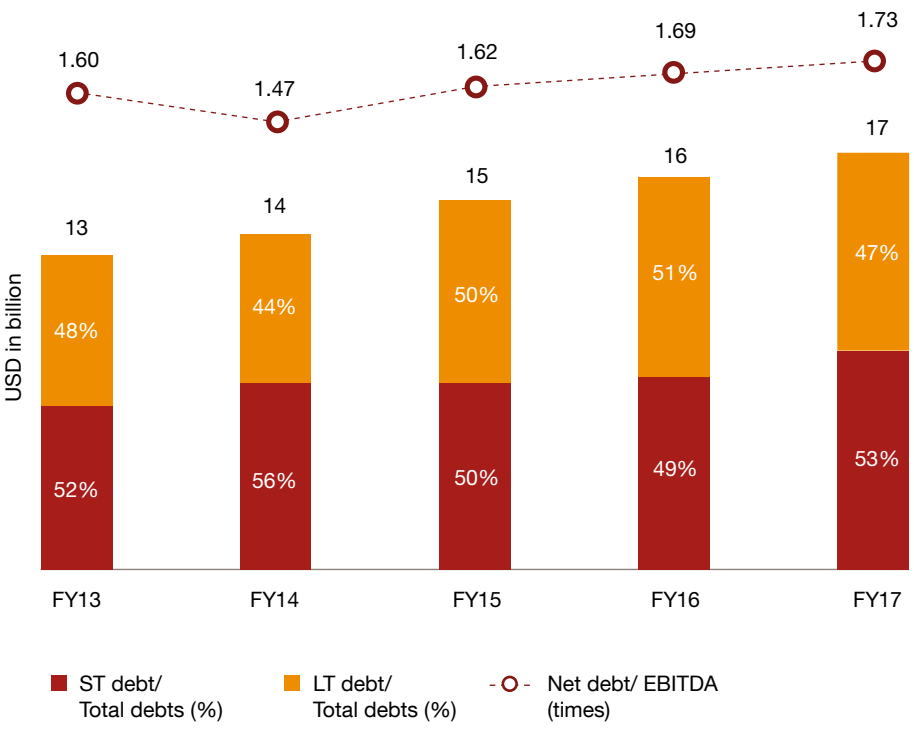
Higher capital employed, primarily sourced through debts, did not result in proportionate increase in operating profits

An improving ROCE signifies higher profits for the same amount of capital employed. In contrast, a deteriorating ROCE trend for Vietnamese businesses signifies that the companies were not able to translate increased net assets into proportional improved profits.

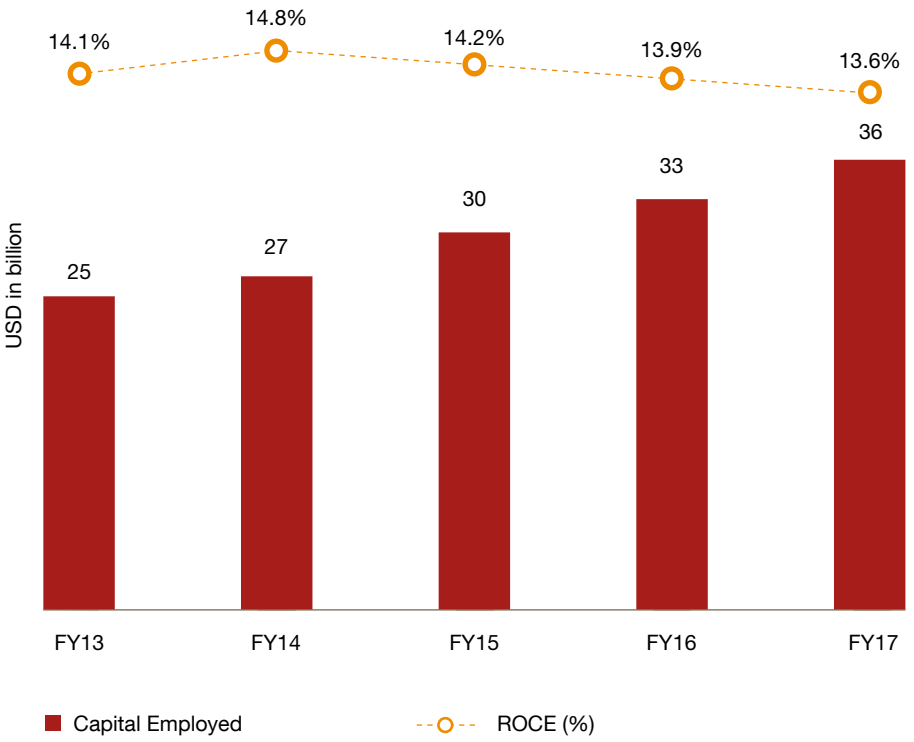
There has been an increasing use of debts to fund operations as reflected in the Net debt/EBITDA ratio, which has increased over the past four years. Whilst Short term debt is mostly used to fund working capital, Long term debt is used for Capital expenditure. If and when the lending rates rise and the liquidity dries up, many of the companies might find profitable growth challenging.

4% ROCE reduction ***on an absolute basis indicating inefficient use of higher capital deployment***

Short-term (ST), Long-term (LT) debts and Net debt/EBITDA



Capital employed and ROCE



Source: CapIQ and PwC analysis

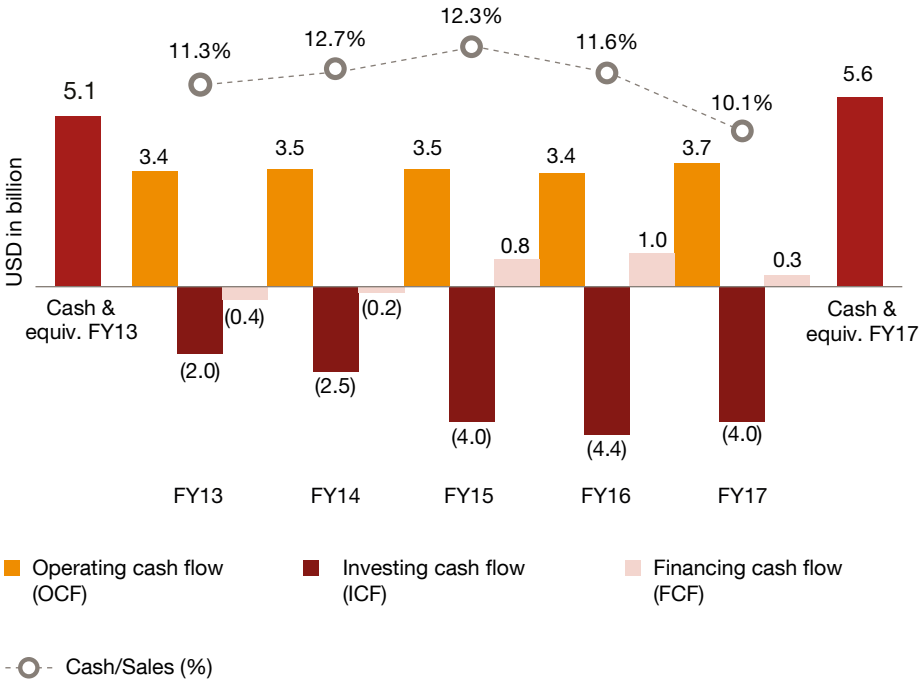
Investing needs, required for funding capital expenditure, significantly outpaced cash generated from operations

The cash and cash equivalents as a percentage of sales dropped by 11% on an absolute basis over the last four years. Businesses invested in fixed assets, which was exhibited by an over 100% increase in cash flow into capex investing activities for the same period.

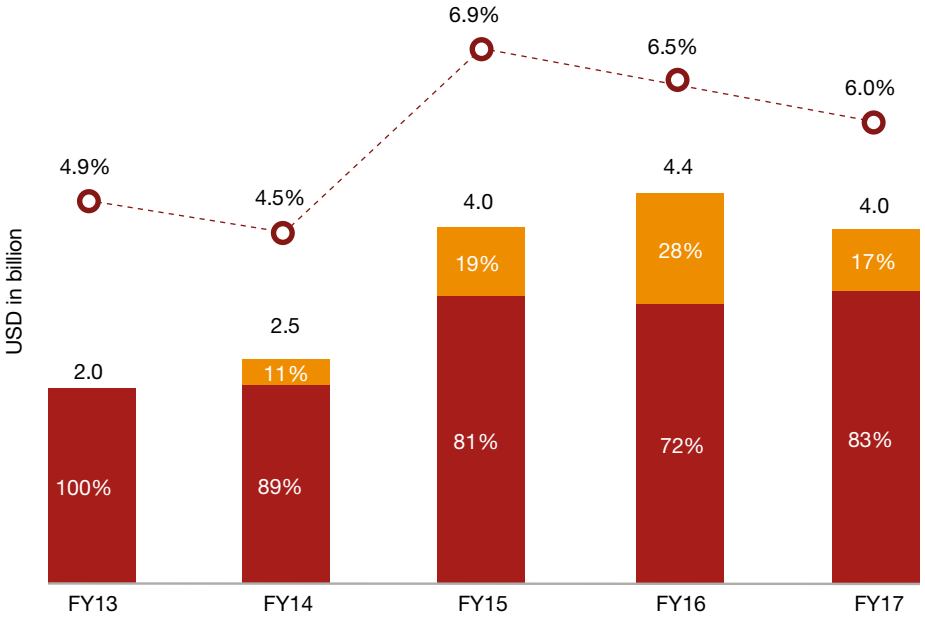
The cash flow from operations has not been sufficient to fund the working capital and expansion plans, which needed to be financed by borrowings, leading to a stress on the balance sheets of corporations.

Two fold increase in Cash requirement ***for investing activities in the past four years***

Cash flow by activities and Cash/Sales



Cash flow into investing breakdown and Capex/Sales



Source: CapIQ and PwC analysis

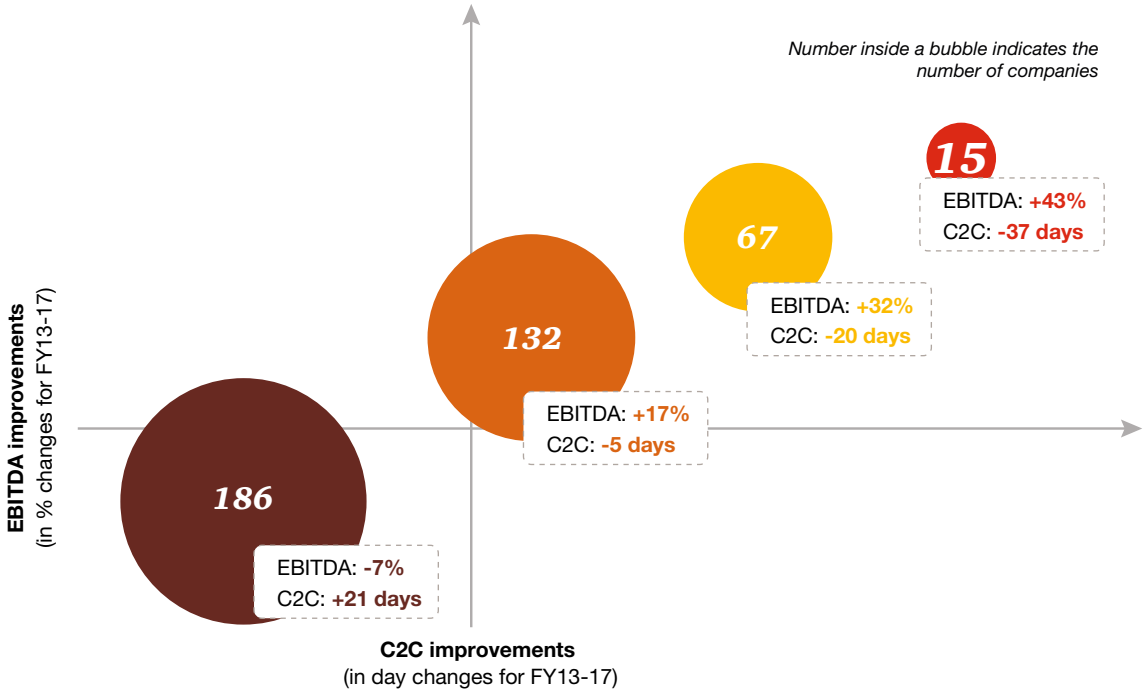
**Non-capex is cash paid for the acquisition of a company/stake in subsidiary, investment in marketable and equity securities and extension/repayments of loans by a company in the course of its lending business activity*

Managing working capital efficiently and sustainably has proven to be difficult for Vietnamese businesses

Only 4% of the companies analysed managed to improve their working capital performance in each of the last four years; in return, they exhibited superior financial performance. By contrast, over 40% companies showed a continuous deterioration in the performance of their working capital.

15 out of the 400 companies ***were able to shorten their C2C cycles consecutively over the last four years***

Improvements of EBITDA and C2C



Source: CapIQ and PwC analysis

- Companies who have shown improvement in working capital performance in one or less of the last four years
- Companies who have shown improvement in working capital performance in two of the last four years
- Companies who have shown improvement in working capital performance in three of the last four years
- Companies who have shown improvement in working capital performance for each of the last four years

The cash conversion cycle increased by six days in the past four years

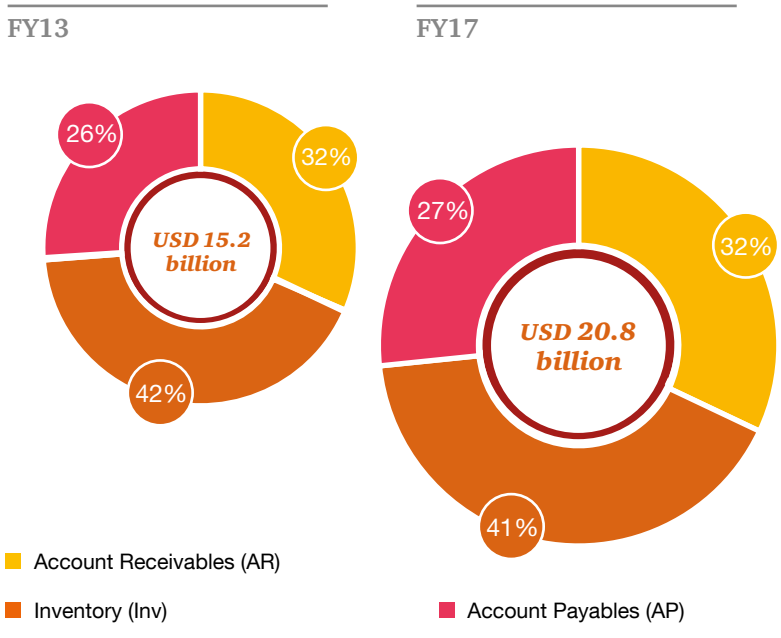
As at FY17, there was >USD 20 billion of total working capital requirement of organisations, of which more than 40% was employed in Inventory (Inv.), with the rest distributed between Payables (AP) and Receivables (AR). Net working capital requirement was ~USD 10 billion as at the end of last year. The working capital performance (C2C) deteriorated by six days for over FY13-17, primarily by an increased Inventory holding.

Even for FY16-17, net working capital increased by USD 0.8 billion due to higher Inventory, whereas Receivables growth was offset by stretching Payables. However, there was an improvement in C2C of around three days due to slower growth of working capital elements compared to sales in the past year.

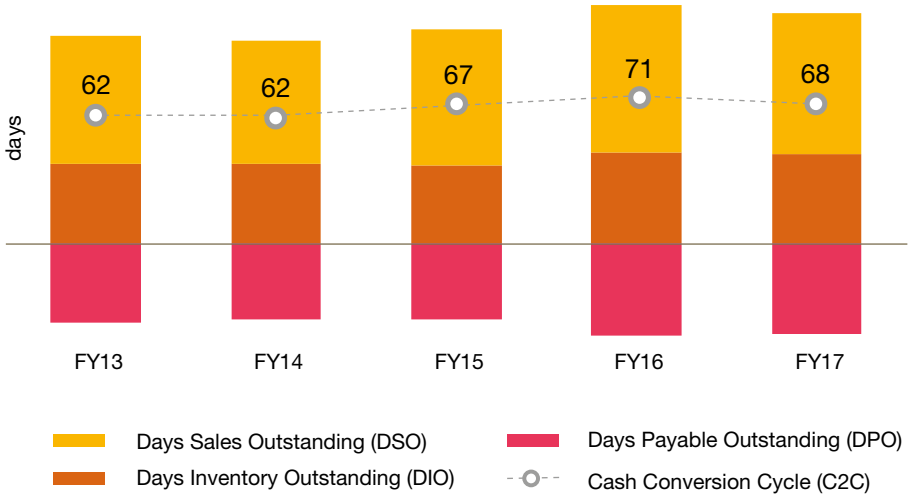
Source: CapIQ and PwC analysis

Working capital by elements

USD in billion	FY13	FY17	CAGR(%)
Total Working Capital	15.2	20.8	8.1%
Net Working Capital	7.2	9.7	8.0%



Working capital metrics



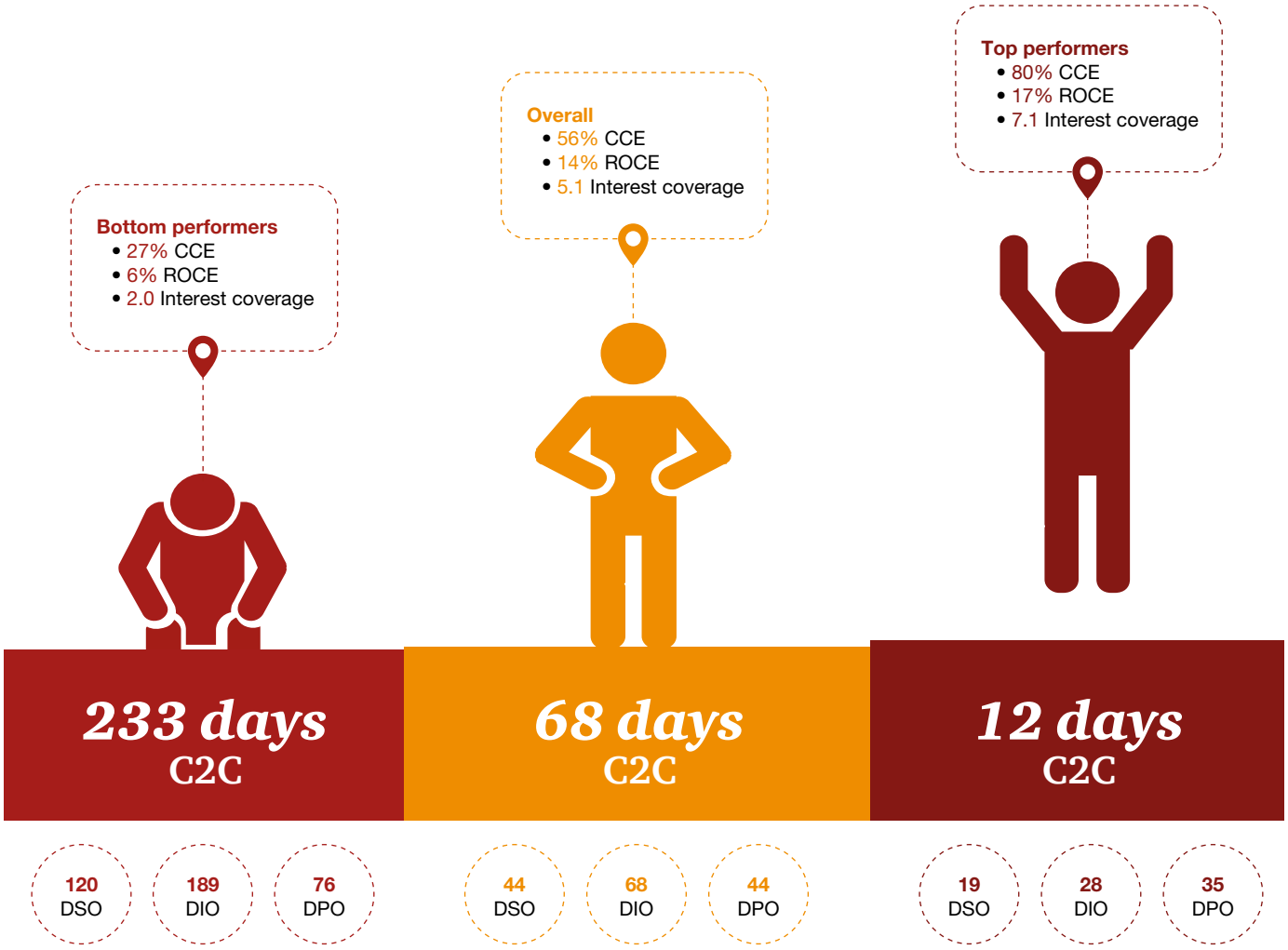
Note: Total working capital is a sum of AR, AP and Inv.; Net working capital is AR + Inv. – AP; DSO is calculated based on Sales, while DIO and DPO are calculated based on Cost of Rev

Companies which operate in the upper quartile of working capital performance have the best financial metrics

ROCE is 3x higher
for top performers compared to bottom performers

Top performers had a 12 day C2C, which is around 20 times lower than the C2C of bottom performers as at FY17.

Hence, these leaders also required less working capital in generating sales, while achieving better solvency and liquidity ratios (at least two to three times higher). They were also less dependent on outside borrowings to fund day to day operations.



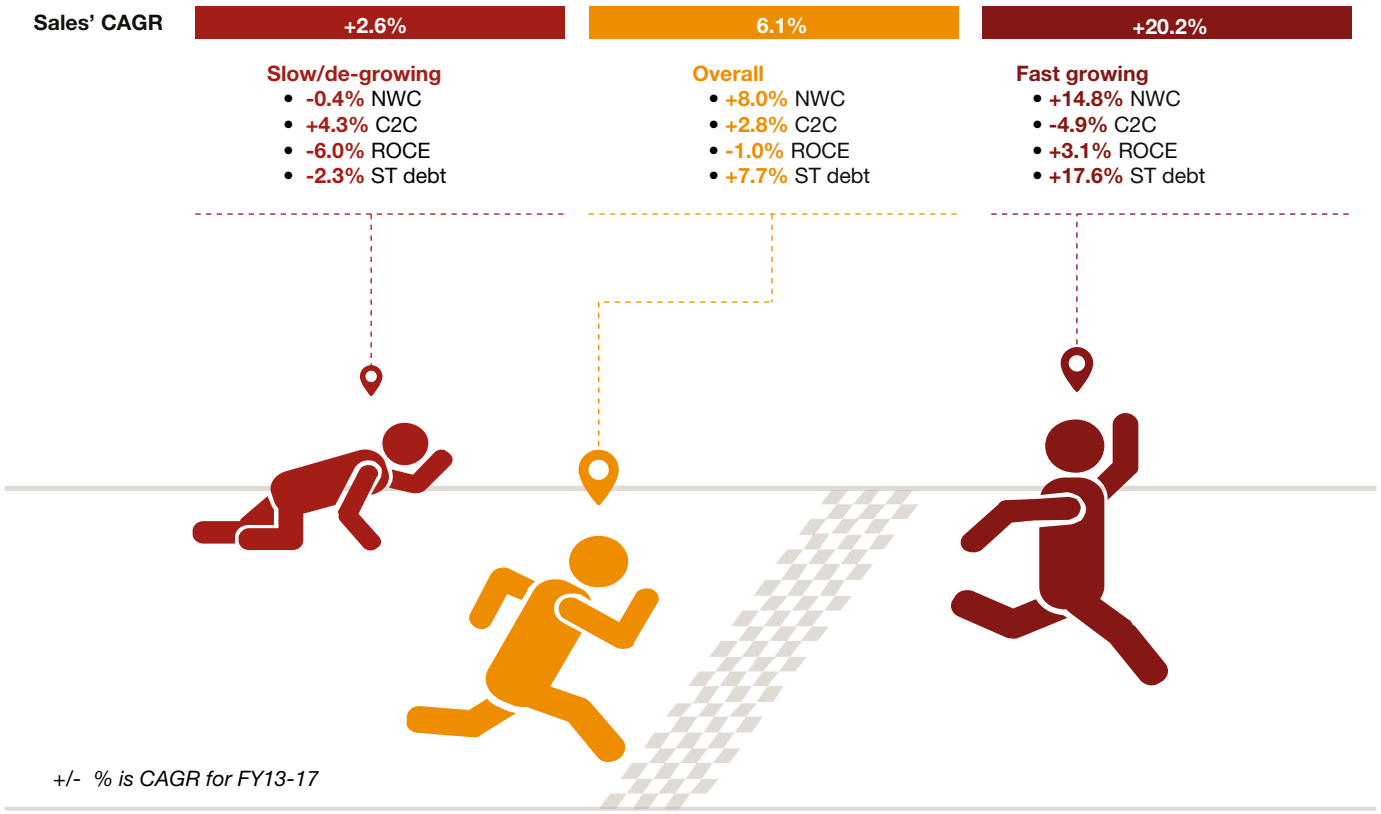
Note: The companies are ranked based on their average C2Cs for FY13-17. "Top/Bottom performers" are companies with their C2Cs lower/higher than C2Cs of the companies with the Upper/Lower quartile working capital performance for the same period

There can be sustainable working capital improvements without compromising on sales growth

5% lesser working capital growth ***than revenues growth per annum for fast growing companies***

Out of the 400 companies analysed, 176 grew at a rate that was higher than the CAGR for overall sales (6.1% per annum for FY13-17) and 95 have grown less than that, whereas 129 companies had negative growths over the last four years. Overall, the fastest growing companies were expanding their revenues at 20% per annum while reducing their C2C cycles at 5% year on year for the same period. Hence their ST debts increased slower than sales.

A decreasing ROCE suggests that slow/de-growing companies have not only lagged behind in being part of the overall economic growth, but also increased cash requirements to fund operations.



Note: Companies are classified as "Fast growing" if they had Sales' CAGR greater than 6.1% per annum (Overall Sales' CAGR FY13-17)

In-depth Analyses

Capital linked growth sectors operate at much higher working capital levels

Working capital metrics by sectors

	Weight by Sales	DSO		DIO		DPO		C2C	
		FY17	FY13-17 (%)	FY17	FY13-17 (%)	FY17	FY13-17 (%)	FY17	FY13-17 (%)
Overall		44	-12%	68	-11%	44	+15%	68	-9%
Transportation & Logistics	20.6%	38	-7%	10	+3%	27	+5%	21	-5%
Consumer Products	17.9%	41	-28%	98	-39%	31	+12%	108	-44%
Oil & Gas	12.3%	45	+21%	16	+14%	53	-6%	8	+58%
Retail	11.1%	15	+14%	34	+30%	25	-20%	24	+31%
Metal & Mining	8.8%	40	-36%	95	-19%	27	-17%	109	-41%
Industrial & Chemicals	8.1%	53	-39%	69	+5%	34	+25%	88	-5%
Engineering & Construction	6.2%	102	+9%	130	+15%	75	-2%	156	+17%
Building Materials	5.2%	40	+8%	82	+8%	41	-21%	81	+0%
Heavy Industry	2.9%	67	-40%	106	+9%	31	-46%	141	-33%
Energy & Utilities	2.8%	49	+22%	16	+65%	38	+11%	28	+63%
Healthcare & Pharma	1.3%	58	-20%	139	-18%	51	+2%	147	-25%
Technology	0.7%	141	-93%	77	+13%	74	+12%	144	-50%
Hospitality & Leisure	0.4%	17	+10%	23	+17%	18	-8%	22	+19%
Others	1.8%	53	-8%	70	+27%	32	-17%	92	+15%

Sectors with the most improved/deteriorated C2C for FY13-17 are highlighted in Orange/Grey colour
Note: +/-% illustrates absolute improvement/deterioration in working capital metrics

6 out of the 14 sectors

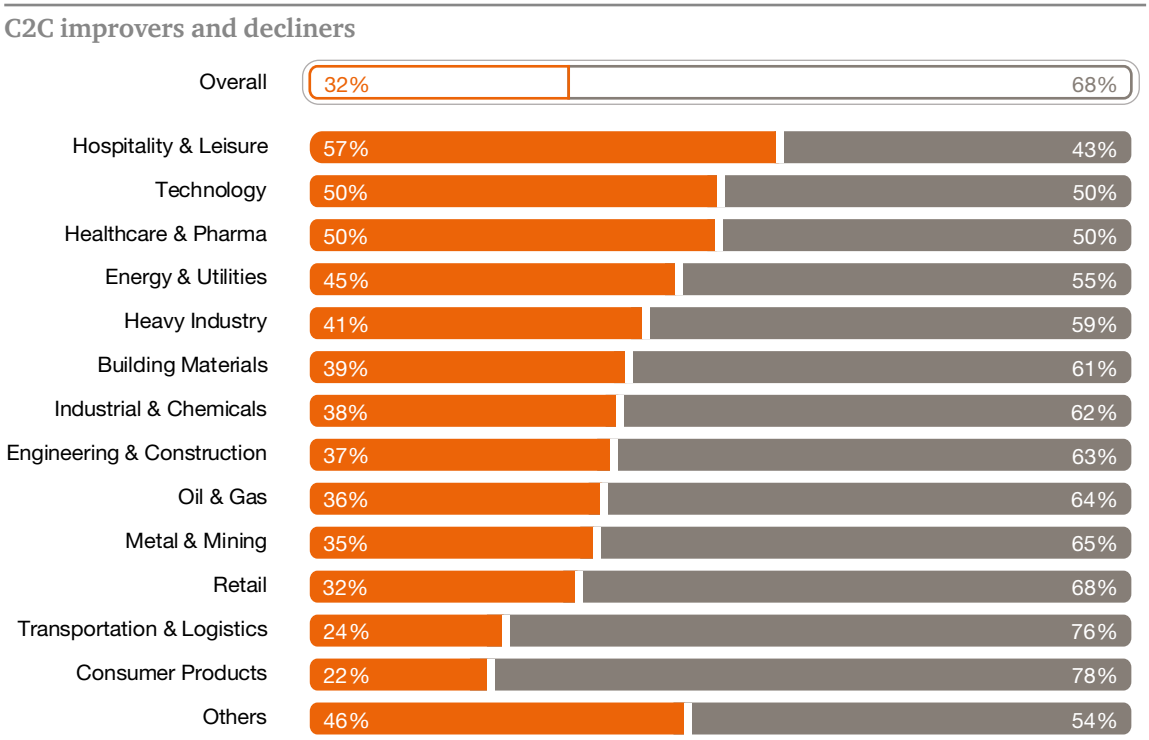
managed to improve working capital performance over the last four years

As at FY17, Engineering & Construction, Healthcare & Pharma and Technology sectors had the longest C2C (over 140 days), while Oil & Gas, Transportation & Logistics and Hospitality & Leisure were sectors with the shortest C2C (below 30 days).

Out of the 14 sectors, only six managed to reduce their C2C in the past four years. In addition, the sectors exhibiting the most improvements were Energy & Utilities, Oil & Gas and Retail with their C2C shortening by more than 15% on an annualised basis. Sectors with most deteriorating C2C were Consumer Products, Metal & Mining and Technology, each by 10% annually for the same period.

There is a variance within the working capital performance group, a case in point being Oil & Gas which exhibited a deteriorating DPO while Energy & Utilities showing an improvement for the same category.

More than two-thirds of the companies analysed exhibited deterioration on an absolute C2C basis



Note: The companies are classified based on their FY17 C2Cs. "C2C improvers/decliners" are companies with their C2Cs in FY17 lower/higher in comparison to their C2Cs in FY13; the stacked bar chart illustrates companies breakdown by improved/deteriorated C2C for each sector

Only three sectors have more than 50% companies with shortened C2C

Out of the 400 companies analysed, around 130 companies shortened their C2Cs for FY13-17. Sectors with the majority of improvers were Hospitality & Leisure, Technology, Healthcare & Pharma with 50-60% of companies studied having reduced their C2Cs. As a result, the overall outcome were highly influenced by the working capital performance of major companies within each of the studied sectors.

On the other hand, sectors such as Retail, Transportation & Logistics, Consumer Products have majority companies as decliners despite being not as pronounced at a sector level. More than 65% of the companies within these sectors elongated their working capital cycle in the past four years since FY13.

Vietnam's working capital performance lagged behind that of most global regions…

C2C benchmarking

	Vietnam FY17	Asia	Europe	USA, Canada	Middle East	Latin America	Austral -asia	Africa
Overall	68	53	42	35	74	35	29	40
Engineering & Construction	156	93	62	105	142	110	28	59
Healthcare & Pharma	147	94	91	58	174	49	160	105
Technology	144	64	55	36	83	206	42	35
Metal & Mining	109	54	42	67	144	64	29	44
Consumer Products	108	53	34	29	56	25	47	57
Industrial & Chemicals	88	77	70	70	101	55	39	59
Energy & Utilities	28	30	35	30	19	24	27	27
Retail	24	30	18	26	35	24	10	26
Hospitality & Leisure	22	30	3	28	22	5	22	9
Transportation & Logistics	21	36	25	32	59	-21	25	46

Orange/Grey shading shows the lowest/highest C2C by sectors across studied regions

Note: Oil & Gas, Others, Heavy Industry and Building Materials are excluded from above table because these sectors are not analysed in the PwC's "Pressure in the system 2017/18" report

10-30 days C2C ***underperformance compared to other regions***

Source: Pressure in the system 2017/18 by PwC global and PwC analysis

The working capital performance of Vietnamese companies was greatly inferior to that of most global regions.

Vietnam's C2C lagged behind by 20-40 days in comparison to the more mature economies and also was 15 days higher than the Asian average and as at FY17. In the case of Engineering & Construction and Healthcare & Pharma, the gap came to over 60 days.

However, sectors such as Hospitality & Leisure and Transportation & Logistics had performances which were eight to 15 days better than other regions, respectively.

…especially in managing inventory and payables cycles for multiple sectors

DSO/ DIO/ DPO benchmarking

Best among regions | 2nd best among regions | Median among regions | 2nd worst among regions | Worst among regions

	DSO		DIO		DPO	
	Vietnam FY17	Performance	Vietnam FY17	Performance	Vietnam FY17	Performance
Overall	44		68		44	
Engineering & Construction	102		130		75	
Healthcare & Pharma	58		139		51	
Technology	141		77		74	
Metal & Mining	40		95		27	
Consumer Products	41		98		31	
Industrial & Chemicals	53		69		34	
Energy & Utilities	49		16		38	
Retail	15		34		25	
Hospitality & Leisure	17		23		18	
Transportation & Logistics	38		10		27	

Note: Best among regions means Vietnam companies have either the lowest DSO/DIO or the highest DPO in comparison to their counterparts in the other regions

As at FY17, Retail and Industrial & Chemicals had a close to median DSO for Vietnam amongst studied regions. However, Engineering & Construction and Transportation & Logistics were the sectors with the highest and lowest DSO, respectively, compared to their regional counterparts.

On the other hand, Engineering & Construction and Consumer Products lagged behind in comparison to other regions by 10-40 days in DIO, with the exceptions being Energy & Utilities and Retail, which had among the lowest DIOs as at FY17.

Source: Pressure in the system 2017/18 by PwC global and PwC analysis

For payables, sectors such as Transportation & Logistics and Energy & Utilities had a significantly shorter DPO in comparison to the other studied geographies. In contrast, Engineering & Construction and Technology managed to stretch their payables having their DPOs that were among the highest compared to their competitors in the researched regions.

Sector related prejudices, differences in disbursement practices and supply chain capabilities may have resulted in the lagging performance of Vietnamese companies

Though there are some structural reasons associated with employing higher working capital, there are also a lot of controllable factors which can be mitigated to improve working capital performance for Vietnamese businesses.

Sector-related biases (uncontrollable)

Capital intensive industries need higher working capital but that is where the majority of the opportunities for cash release lie. On the other hand, for Healthcare & Pharma sector, most organisations have regulatory compliances imposed by the government with limited manoeuvrability around processes, policies and procedures. In addition, the Hospitality sector also collects cash before providing services and therefore works on a shorter C2C.

Differential growth rates of sectors (uncontrollable)

With the opening up of Vietnam's economy and the country being a consumption led one, the levels of consumption now exceed the current capacities of domestic manufacturers. This has led to significant foreign money coming into the country, specifically in capital intensive industries like Manufacturing, Logistics & Transportation, Chemicals, Construction and Retail. However, cashing out on >10-15% growing top-lines is challenging and often non-implementable since the existing processes and systems are no longer sustainable.

Payment practices (controllable)

Payment practices (terms, behaviour, payment usage, legal frameworks and effectiveness of cash collection) vary widely across and within regions and countries. Payment terms, for instance, are generally longer in Asia than they are in the US and in certain other European countries. With regards to payment modes, there is still an affinity towards cash payments in Vietnam. Although the use of cards and bank transfers has been growing in Vietnam and other Asian countries, their usage levels are significantly lower than in many developed countries.

Significant disparities in levels of delays and defaults in payment (and subsequently in provisioning and write-off policies) also exist between countries. However, while payment modes play a role, these differences can be explained by local behaviour as well as by variations in the degree of effectiveness of credit management policies and legal enforcement procedures.

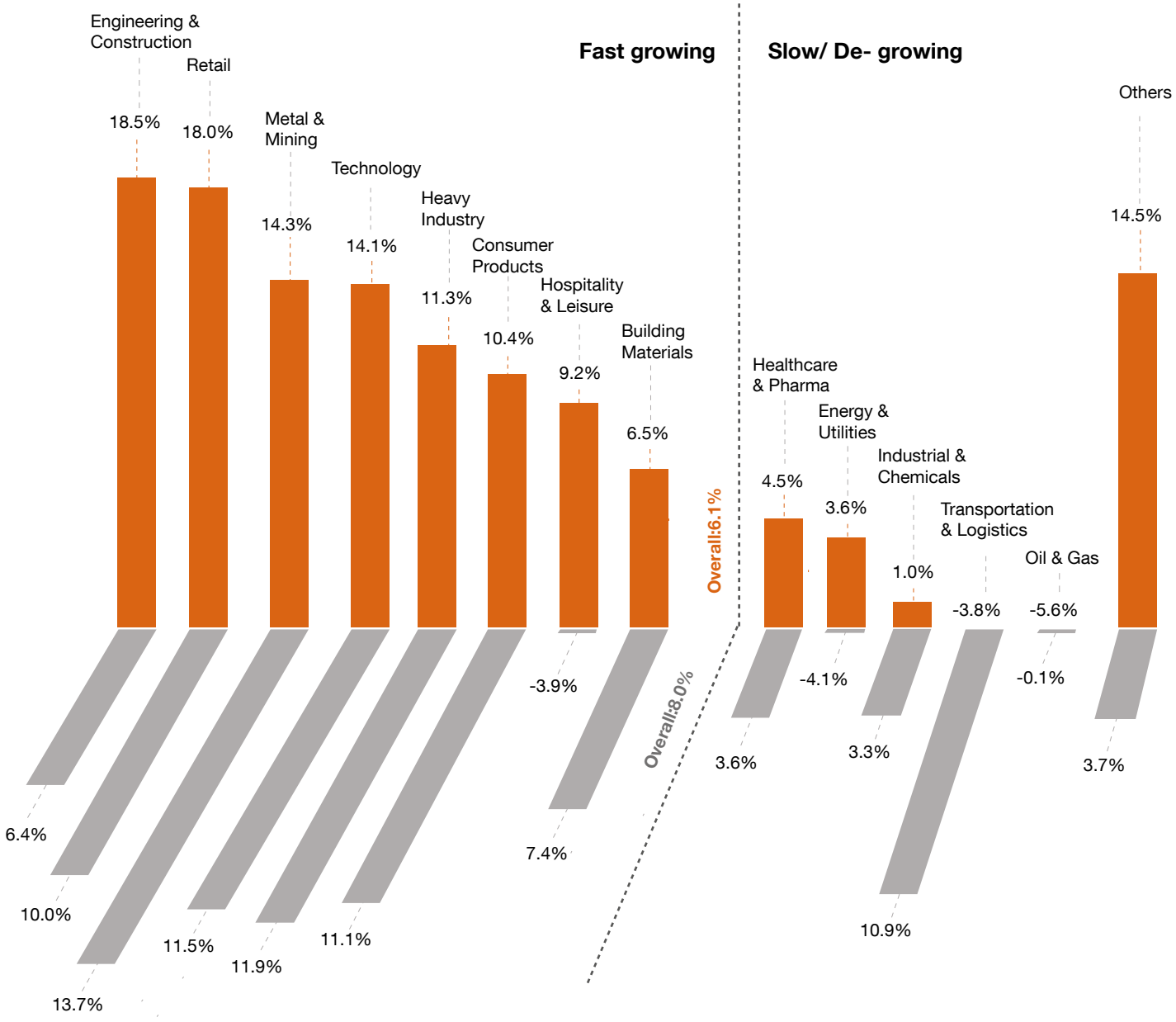
Logistics and distribution infrastructure (controllable)

Vietnam logistics costs accounted for over 20% of country's GDP in FY17 according to "Vietnam Logistics Market 2017" by Biinform, reflecting high leakages in transportation, logistics, warehousing and distribution. To put into perspective, US logistics' share is 8% of GDP while Malaysia's is 11%. This is partly due to the lack of aggregate level investment in road infrastructures, ports and integrated logistics system. Additionally, 90% of logistics companies in Vietnam have been operating for over 20 years and still utilise pre-internet and pre-Wi-Fi era systems. With exponential growth in some sectors, logistics, distributions and transportation has not been able to keep up the pace with domestic demand. Hence, sectors like Engineering and Construction, Pharma and Industrials are forced to keep higher buffer stock, leading to higher inventory levels.

Based on our experiences, growth on the demand side without sustainable development plan on the service supply side causes the cost per unit (CPU) of logistic business to surge by 4% to 12% every year. Yet, most are unable to pin down from where exactly the new expenses are derived from. C2C is, hence, stretched beyond comfortable levels for a majority of the sectors, reducing company's cash available for investment.

Many sectors have been able to grow their top line without needing to expand their working capital in the same proportion…

Growths of Sales and Net Working Capital



Note: the bar chart illustrates the CAGR(%) for FY13-17

Sectors showing** highest revenue growth **have managed to control** their Working Capital **growth

From our sample size, Engineering & Construction, Retail and Metal & Mining have been the fastest growing sectors at around 10-20% per annum for the past four years. However, their need for working capital increased only at 5-15% per annum for the same period. Hence, growth need not always be accompanied by working capital growth, though continuous growth would need capex investments in added capacities.

There were exceptions such as Hospitality & Leisure and Energy & Utilities, where top-line growth did not need an equivalent investment in working capital.

…though there were sectors which leveraged working capital elements as means to increase their revenue

Note: +/- % are CAGR for FY13-17

○ Sales growth ■ Receivables growth ■ Inventory growth ■ Payables growth

Working capital elements ***were utilised by*** *Consumer, Retail* ***and*** *Building materials* ***sectors in different ways to expand their top-line***

The Consumer Products sector seemed to increase their receivables for higher market penetration and grabbing market share from competition while Hospitality & Leisure expanded their top-line at the same time as reducing their receivables, perhaps because of higher unearned revenues through increased pre-bookings and internet penetration.

In addition, there were sectors which increased their sales through increased product availability and higher stocked up levels. For example, the growth of sales in the Retail sector came at the cost of similar inventory growth, whereas sectors like Engineering & Construction managed to control their inventory growth while maintaining top-line expansion.

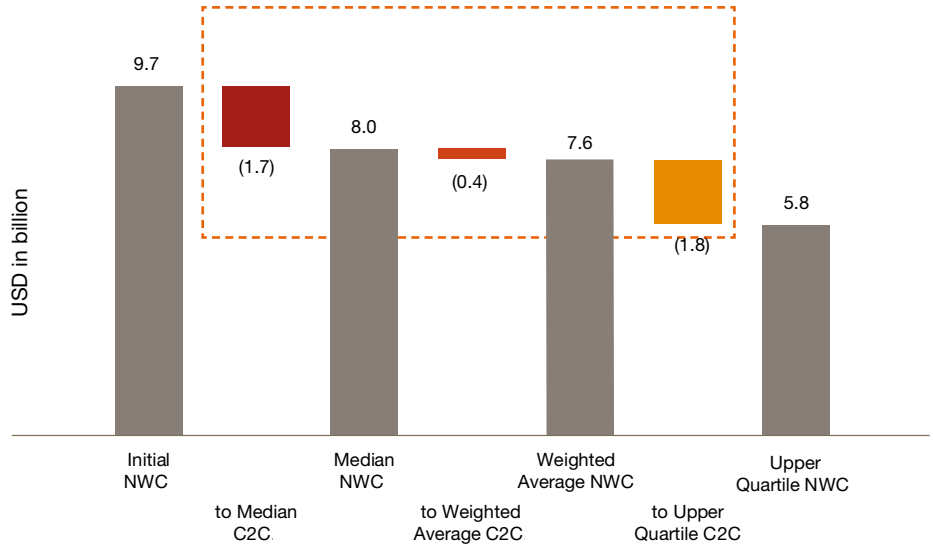
On the other hand, Heavy Industry and Metal & Mining traded off their Payables for top-line growth by giving suppliers lenient terms, while Energy & Utilities were unable to expand revenue despite following the same strategy.

Cash release opportunity and working capital self-diagnostic centre

There is a substantial opportunity for cash release from working capital for businesses in Vietnam

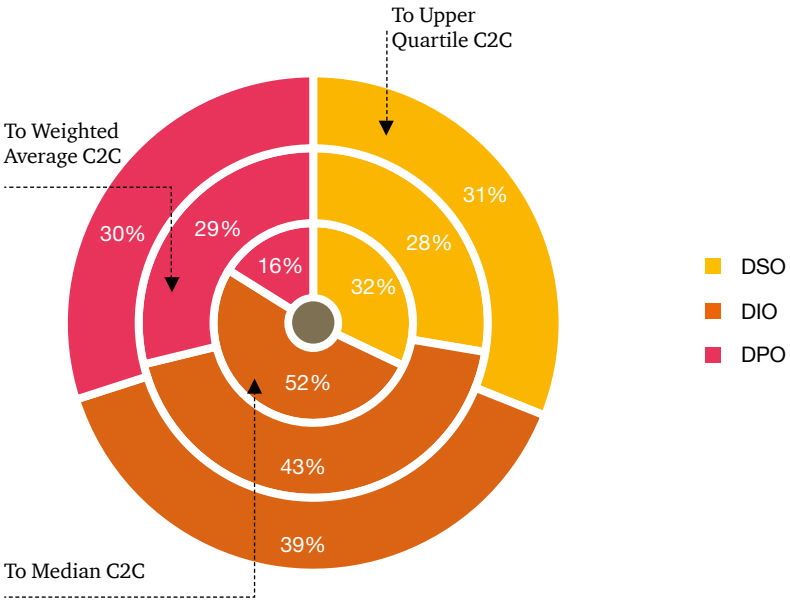
Potentially, up to 30% of net working capital employed can be released if all companies can improve their working capital performance to the top quartile performing companies within their respective sectors. The area with the most improvement opportunity is Inventory (Inv.) (~44% total opportunity on average), followed by Account Receivables (AR) and Account Payables (AP) respectively.

Cash release opportunity



Note: The cash release opportunity is estimated as cash equivalent to days of sales realised if each of the 400 companies could reduce their C2Cs to the Median/Weighted Average/Upper Quartile level for each sector

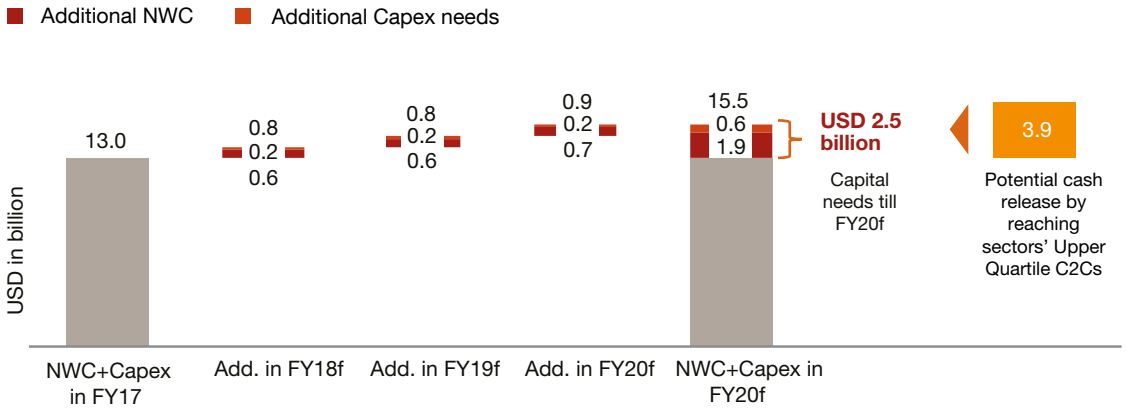
Opportunity breakdown by Working Capital elements



Up to ~ USD 4 billion
can be released by reaching the sectoral upper quartile C2C performance

The cash release from optimising working capital can cover additional working capital and capex needs till FY20 and beyond

Additional Net working capital (NWC) and Capex needs



Note: Working Capital and Capex needs are assumed to expand at 6.1% per annum, the historical growth rate of revenues for the FY13-17 period

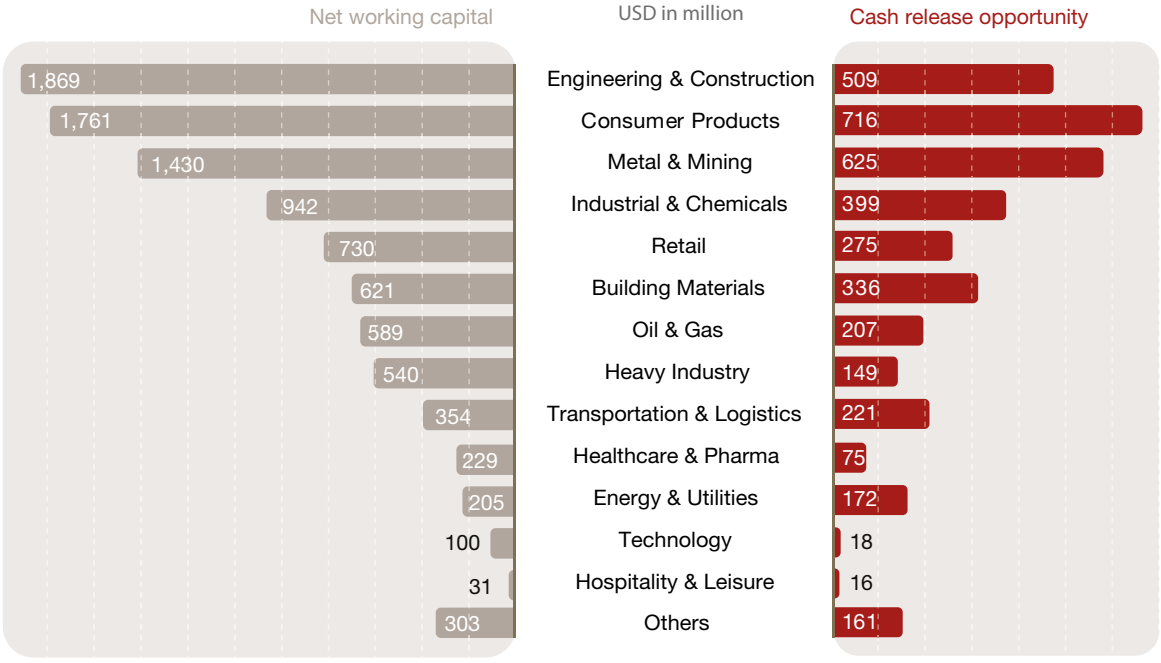
No need for borrowing for the next 3 years ***owing to additional liquidity from enhanced working capital performance***

The additional capital need of top 400 companies, without the use of additional, external financing, can be met by optimising the working capital performance. A potential ~USD 3.9 billion cash release from working capital of these companies would easily cover their combined requirements for NWC and Capex needs (totalling USD 2.5 billion) for the next three years from FY17 and also provide them with USD 1.4 billion extra cash to further improve their balance sheets.

During their annual planning and budgeting meetings, most companies focus only on sales and revenue growth to meet targets, ignoring the impact of this growth on working capital. As a result, their cash gets tied up and is not available for operational purposes. Even though companies may experience robust sales growth and EBITDA, if they are unable to generate cash from the operations, sooner rather than later, they will face existential crisis.

The cash release potential varies by sector; sectors employing higher working capital have the largest opportunity

Net working capital and Cash release opportunity by sectors (to upper quartile C2C*)



Note: (to upper quartile C2C) means the maximum potential cash release from Net working capital if we can reduce the company's C2C to the Upper quartile C2C (sector's best performance) of any specific sector*

More than 50% of opportunity ***can be realised from Engineering & Construction, Consumer Products and Metals & Mining sectors***

Engineering & Construction, Consumer Products and Metal & Mining with the most cash trapped in net working capital have the greatest prospect for cash release, accounting for almost 50% of the total opportunity. On an average, cash ranging from 20-40% of the Net Working Capital can be released from reducing C2C to the Upper Quartile C2C for each studied sector.

Though there are exceptions such as Energy & Utilities and Transportation & Logistics whose the cash release opportunity may be able to realise up to two-thirds of the Net Working Capital value for FY17.

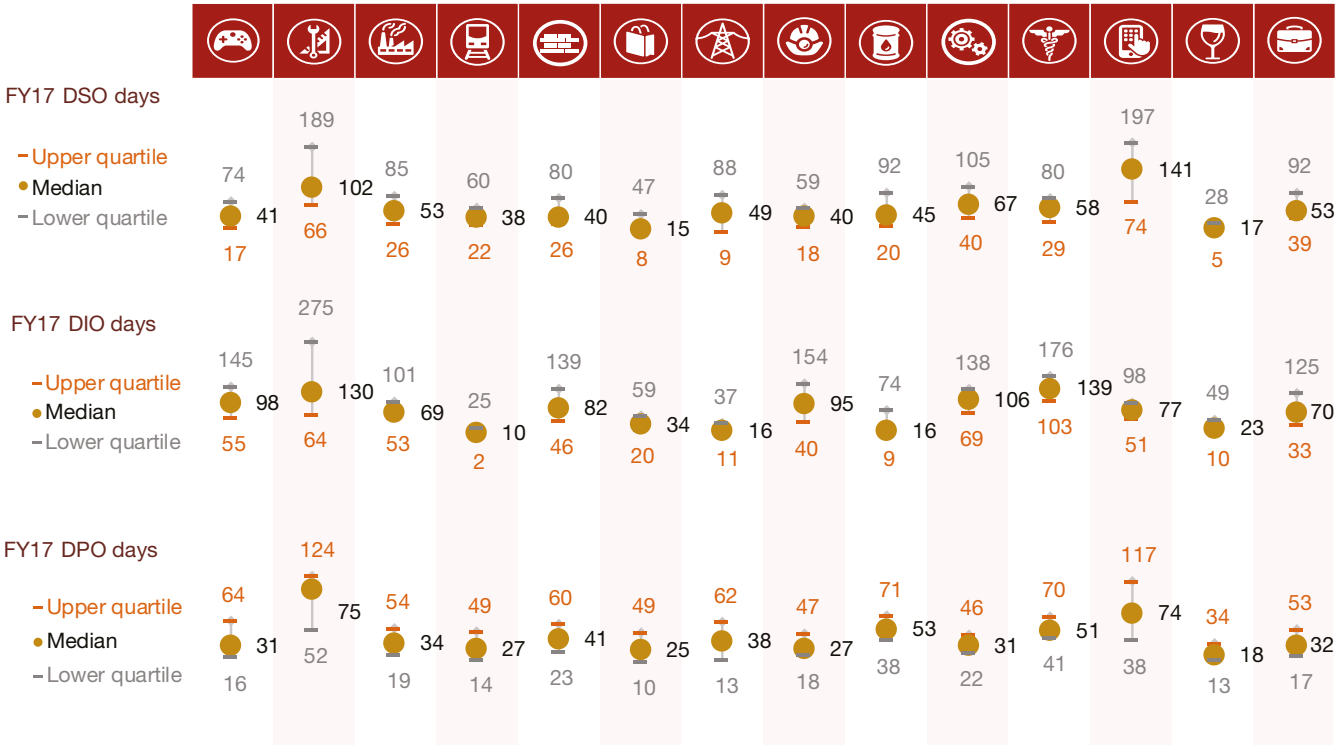
Working capital self-diagnostic centre – C2C

How does your company rate in working capital performance?

FY17 C2C days Sectors (no. of companies)	Upper Quartile	Median	Lower quartile
Consumer Products (68)	9 days	108 days	203 days
Engineering & Construction (50)	7 days	156 days	411 days
Industrial & Chemicals (49)	25 days	88 days	167 days
Transportation & Logistics (40)	-24 days	21 days	71 days
Building Materials (38)	12 days	81 days	196 days
Retail (25)	-21 days	24 days	96 days
Energy & Utilities (22)	-43 days	28 days	112 days
Metal & Mining (20)	11 days	109 days	195 days
Oil & Gas (17)	-41 days	8 days	128 days
Heavy Industry (14)	63 days	141 days	221 days
Healthcare & Pharma (14)	62 days	147 days	215 days
Technology (12)	8 days	144 days	257 days
Hospitality & Leisure (9)	-19 days	22 days	65 days
Others (22)	19 days	92 days	200 days

Working capital self-diagnostic centre – DSO,DIO and DPO

Which working capital element caused the inferior working capital performance?



- Consumer Products (68)
- Engineering & Construction (50)
- Industrial & Chemicals (49)
- Transportation & Logistics (40)
- Building Materials (38)
- Retail (25)
- Energy & Utilities (22)
- Metal & Mining (20)
- Oil & Gas (17)
- Heavy Industry (14)
- Healthcare & Pharma (14)
- Technology (12)
- Hospitality & Leisure (9)
- Others (22)

Below the charts are sectors and number of companies studied for each sector

Concluding thoughts

As interest rates go up, in the near-to-medium term future, every dollar tied up as working capital will be costlier for the organisations

Organisations must recognise that sales growth needs to be backed up by margin growth and improvement in operating cash flow. In the mad rush for top-line growth, many global companies have gone broke.

In the face of rapid economic growth and low lending rates over the past few years, the credit crunch was not felt and capital was not difficult to come by.

But will this continue? How long can organisations afford to grow at the expense of balance sheet deterioration? Companies need to manage their liquidity positions carefully to ensure they have enough cash flow to stay in business.

Management's focus on cash and its ownership and the effective management of working capital, can vary significantly. This partly reflects variations in commercial and industrial strategies deployed, with some businesses choosing to grow sales, increase investment and enhance service rather than improve their working capital performance; and it is also due to differences in the maturity of businesses and organisational processes.

To conclude, the following questions should be discussed and deliberated by important decision-makers at the board level:

- How can C-levels executives (CXOs) elevate working capital efficiency to a priority and make it become part of organisational culture?
- How will the organisations empower the finance function in helping to decentralise working capital processes?
- How will the organisations endow operational decision-makers and help business units negotiate and collaborate with supply-chain partners to improve working capital efficiency?
- What are the cash release and cost-cutting levers for working capital, and what initiatives should organisations undertake?
- What types of cash release and cost-cutting initiatives would be most feasible to implement and which would be successful?
- How are my peers performing in terms of optimising their supply chain and inventory, receivables, payables, SG&A, COGS and other working-capital elements?

Working capital management needs to be a strategic priority for companies

Working Capital affects not only the balance sheet to release cash by..

- Optimising Account Receivables through improved management of revenue debtors
- Enhancing inventory through efficient supply chain management
- Improving payables through efficient supplier management and procurement
- Managing efficiently Cash and Treasury

...but also affects the P&L positively by...

- Increasing revenue through improved stock-service balance
- Reducing Cost of sales through effective procurement /payables management
- Decreasing Selling, General and Administrative expenses through reduced supply chain costs, warehousing costs, logistics costs, etc.
- Reducing interest expenses

...which enables the pursuit of strategic goals

- Reducing cost of borrowing
- Increasing shareholder value
- Reducing debt and interest expenses
- Improving credit rating
- Providing greater flexibility for funding projects
- Properly supporting revenue enhancement /cost optimisation initiatives
- Enhancing funds for growth – organic or acquisitions
- Increasing purchase price during sell side transactions
- Creating value after a buy side transaction
- Optimising portfolio for multiple investments

?

Questions the board should be asking the CXOs

Has the company already attempted to improve working capital?

Yes

- How **sustainable** are the working capital changes that have been made?
- Do you have the right balance between **short term tactical** and **long term operational, structural changes**?
- Is there an **organisational will** to make changes happen?
- Do **management incentives** include elements targeting cash and working capital?

No

- Do you make a clear **distinction between trade** working capital and **total** working capital?
- Are **cash** and **working capital metrics reported** and **reviewed** at board level?
- Are the **key decisions** taken by your business **balance cash** and **profit levers**?
- Are **potential cash shortfalls** restricting trading activities?

How can PwC support you in optimising your working capital?

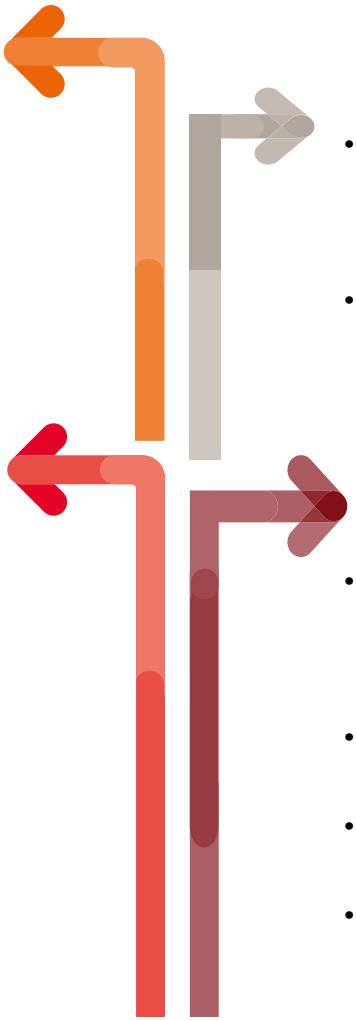
PwC assists organisations in articulating, formulating and executing tasks required for an efficient working capital management (illustrative interventions below)

Cash & Treasury

- Avoid excess conversion charges, other related finance expenses and unhedged forex currency fluctuations
- Monitor all expenditure incurred with proper supporting and correct general ledgers

Account Receivables

- Acquire more understanding of the impact of customer contracts have on working capital and conduct trade-off assessments between cost and cash
- Create effective billing processes to minimise delayed or incorrect invoices
- Focus on proactive cash collection with actively keep track of aging, with sufficient flagging mechanisms
- Follow a segmented collection strategy



Account Payables

- Improve process efficiencies leading to timely payments enhancing the working capital performance and supplier relationships
- Prevent the proliferation of payment terms and misalignment of standard terms based on industries and geographical locations

Inventories

- Involve the supply chain as a strategic function for the organisation to remove excess cushion built up in inventory
- Enhance visibility and alignment of future demand across the company
- Maintain replenishment parameters across the organisation
- Implement a detailed approach towards slow moving and obsolete inventory managements

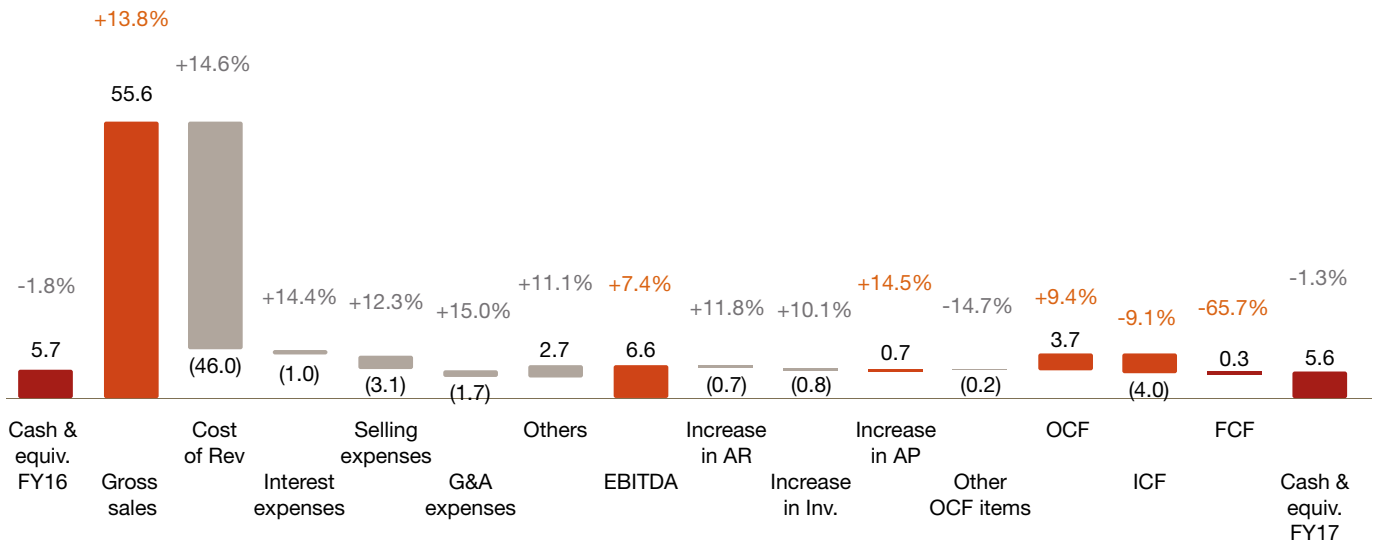
Companies need to actively manage their working capital elements in order to remain competitive. PwC can assist in aligning and..

- Partnering with operational decision makers to improve working capital management
- Ensuring that operational decision makers understand the importance of sustained working capital improvement
- Utilising the expertise of the finance and operations functions, as well as information and data/systems to support improvement of working capital processes by decision makers
- Providing business units with robust, credible information systems/tools to effectively negotiate and collaborate with third parties to decrease working capital within the organisation as well as across the supply chain

Annexure

Year on year working capital performance, FY17 vs FY16

Cash flow walkthrough



Note: Orange/Grey means positive/negative changes for FY16-17 period; +/- % illustrates absolute changes

Source: CapIQ and PwC analysis

A lower cash position was recorded as at FY17 in comparison to FY16 because operating expenses increased at a faster pace than revenue, while outflow for investment exceeded inflows from operating and financing activities. Operating expenses increased at a faster pace than revenue (15% vs. 14%), which included Interest expenses as well as General & Administrative expenses. Despite there being an ICF reduction and OCF improvement in comparison to FY16, most cash flows from operating and financing activities were utilised for investment.

In addition, an improvement for payables was offset by a deterioration of receivables and inventory for the same period. Hence, the cash and cash equivalents declined by 1.3% from FY16 to FY17, continuing a downward trend since FY15.

Working capital metrics by sectors

	Weight by Sales	DSO		DIO		DPO		C2C	
		FY17	FY16-17(%)	FY17	FY16-17(%)	FY17	FY16-17(%)	FY17	FY16-17(%)
Overall		44	+2%	68	+4%	44	+0%	68	+5%
Transportation & Logistics	20.6%	38	-2%	10	-2%	27	+3%	21	+0%
Consumer Products	17.9%	41	-2%	98	-1%	31	+12%	108	+1%
Oil & Gas	12.3%	45	-6%	16	+32%	53	+9%	8	+53%
Retail	11.1%	15	-10%	34	+36%	25	-11%	24	+39%
Metal & Mining	8.8%	40	+2%	95	-17%	27	+6%	109	-12%
Industrial & Chemicals	8.1%	53	-5%	69	-4%	34	+9%	88	-3%
Engineering & Construction	6.2%	102	+22%	130	+6%	75	+1%	156	+19%
Building Materials	5.2%	40	-2%	82	-9%	41	+18%	81	-2%
Heavy Industry	2.9%	67	-19%	106	-18%	31	+0%	141	-23%
Energy & Utilities	2.8%	49	+34%	16	+9%	38	+1%	28	+49%
Healthcare & Pharma	1.3%	58	-7%	139	-4%	51	-4%	147	-8%
Technology	0.7%	141	-37%	77	-50%	74	+52%	144	-36%
Hospitality & Leisure	0.4%	17	-12%	23	+2%	18	+29%	22	+11%
Others	1.8%	53	-13%	70	-8%	32	+45%	92	-1%

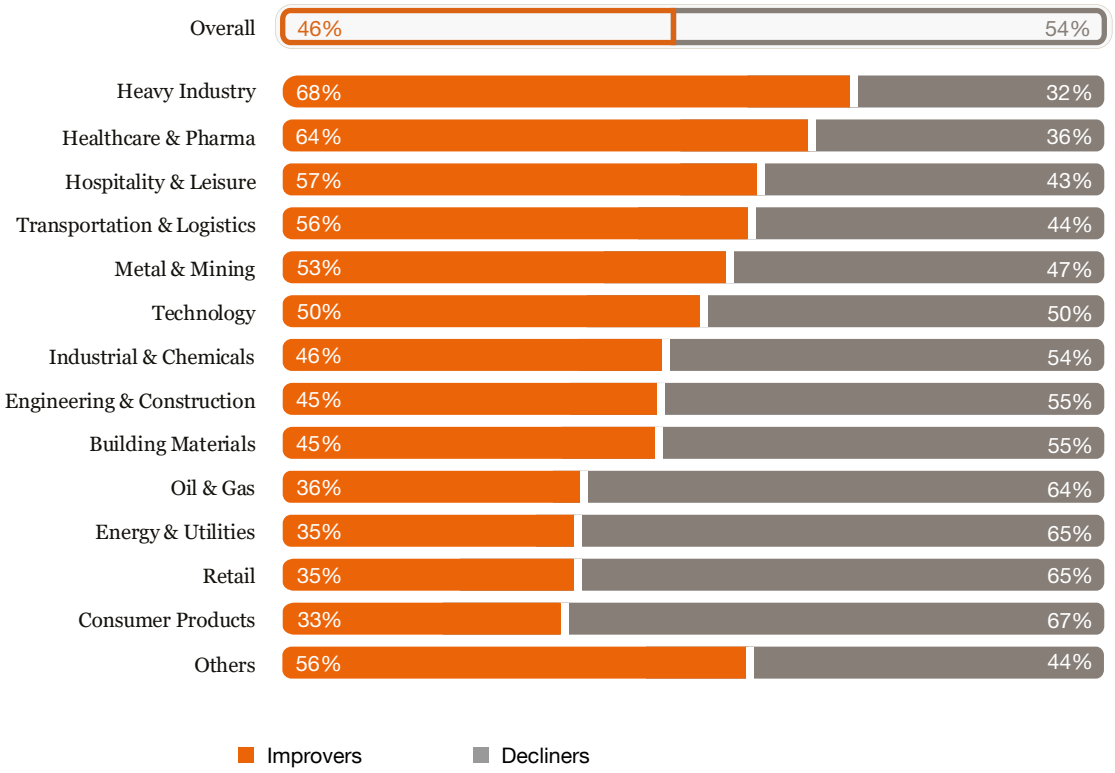
Sectors with the most improved/deteriorated C2C for FY16-17 are highlighted in Orange/Grey colour

Note: +/-% illustrates absolute improvement/deterioration in working capital metrics

Out of the 14 sectors, seven managed to reduce their cash conversion cycle for FY16-17. Y-o-Y working capital performance improved with major improvements coming from sectors having the lowest C2C cycle like Oil & Gas, Energy & Utilities and Retail at around 50% on average, whereas the most deterioration was observed in Technology, Heavy Industry and Metal & Mining at 40% on an average for the same period.

There is a variance within the working capital performance group, of which Metal & Mining actually improved their DSO slightly in comparison to Heavy Industry and Technology from FY16 to FY17.

C2C improvers and decliners



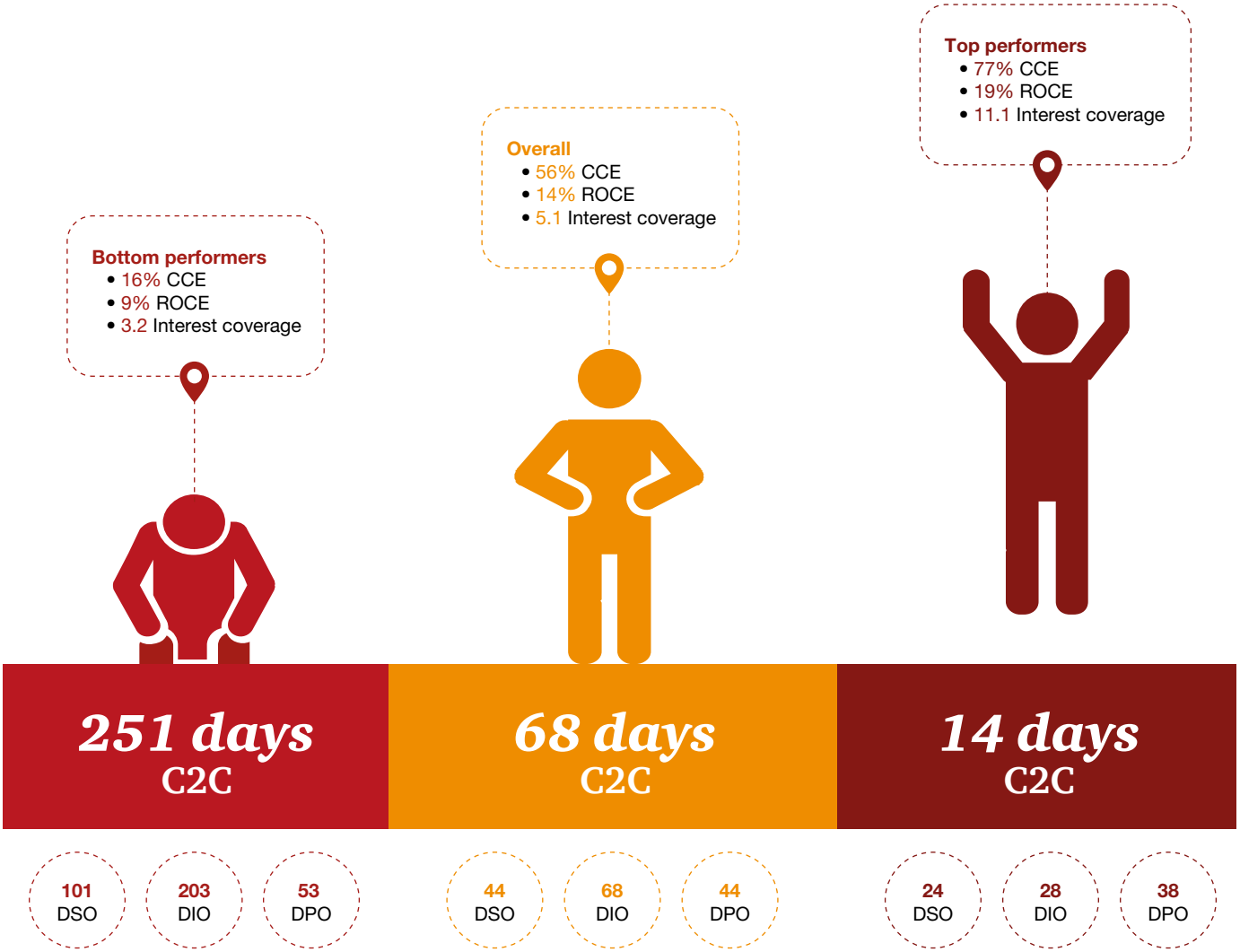
Note: The companies are classified based on their FY17 C2Cs. "C2C improvers/decliners" are companies with their C2Cs in FY17 lower/higher in comparison to their C2Cs in FY16; the stacked bar chart illustrates companies breakdown by improved/ deteriorated C2C for each studied sector

Y-o-Y C2C performance did not reflect the true performance of companies within a sector with less than 50% companies actually improving their working capital performance.

Out of the 14 sectors, only five managed to have more than 50% of companies improving their C2C for FY16-17. Sectors with the majority of improvers were Heavy Industry, Healthcare & Pharma, Hospitality & Leisure, Transportation & Logistics and Metal & Mining, with 50-70% companies studied having reduced their C2Cs.

On the other hand, sectors such as Oil & Gas, Energy & Utilities, Retail as well as Consumer Products had the most decliners with over 60% of the companies elongating their working capital cycle since FY16.

Top and bottom C2C performers



Note: The companies are ranked based on their C2Cs for FY16-17. "Top/Bottom performers" are companies with their C2Cs lower/higher than C2Cs of the companies with the best/worst in class (Upper/Lower quartile) working capital performance for the same period

Y-o-Y working capital performance also shows the linkage between working capital efficiency and operational/financial out performance. The top performers had a significantly lower C2C (14 days) in comparison to C2C of the bottom performers (251 days). These leaders also had DSO and DIO that were respectively five to ten times lower than their counterparts, respectively, as at FY17.

Hence, these companies used less working capital to generate their revenue, while achieving considerably higher ROCE (19% vs. 9%) and cash conversion efficiency (77% vs. 16 %).

Working capital management – Key drivers

Tactical, operational and structural changes to major operating areas of working capital can be undertaken with a potential to release cash of up to 5% of the turnover

Account Receivables Drivers

- Spot cargoes and negotiations
- Customer contracts standardisation
- Customer order, billing and payment timeline
- Customer invoice accuracy
- Trade schemes/early payments discounts
- Customer credit management and benchmarking within the industry
- Overdue aging and reasons of overdue
- Continuous credit risk management
- Collections management (Days Sales Outstanding vs Days to Pay)
- Dispute management (Reason analysis and controllable/uncontrollable classification)
- Metrics, Targets and Incentives with respect to AR management

Example improvements

- Reducing multitude of price lists/books in operation at the same time
- Linking between Contracts, Purchase Order (PO), Sale order and system including triggers for payments
- Providing sufficient information/data sources used in monitoring credit risk
- Shortening end to end payment timeline by reducing internal delays
- Segmenting of AR portfolio based on cash flow release impacts

Inventory Drivers

- Stock coverage
- Consumption calculations, inventory parameters
- Critical and non-critical definitions
  - Δ Site collaboration: Stock locations, interchangeability of items, similar specifications, network structure
  - Δ Ordering process: Re-ordering parameters, leads times, batch sizes, delivery locations
- Supplier co-operation
- Repair/maintenance cycles
- Capitalisation policy of inventory spares
- Procurement practices for spares
- Automated replenishment settings
- Standardisation of plant / equipment specifications

Example improvements

- Improving requisition to pay process to flag unnecessary stock ordering
- Linking between inventory management and procurement/finance systems including analytics that actively updates ordering parameters based on usage
- Implementing vendor managed inventory, for example vending technology on-site
- Increasing of items sharing between site locations

Account Payables Drivers

- Vendor payment terms
- Governance for contract terms and purchase orders variations
- Length of payment terms
- Early payment discounts
- Vendor master compliance to contract, purchase orders and invoices
- Variations across the requisition to pay cycle
- Invoice timing and consolidation of supplier invoices
- Payment frequency (e.g. daily, weekly, fortnightly)
- Payment triggers, for example:
  - Δ Days from invoice received date, invoice due date, goods received date
  - Δ Invoice reconciliation thresholds and timing

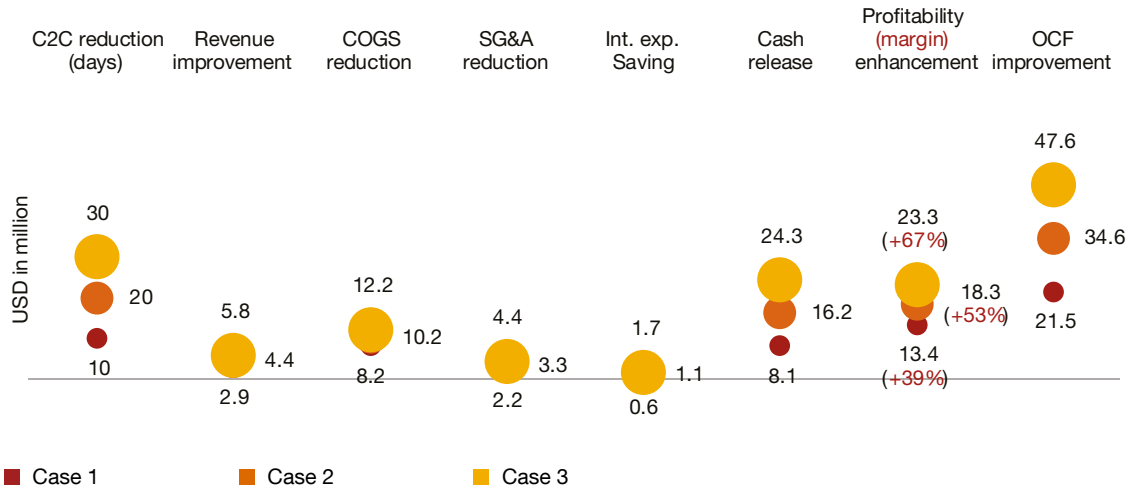
Example improvements

- Strengthening PO controls
- Expanding the use of catalogues, reducing "spot" buying
- Reducing frequency of payment runs
- Identifying and aligning early payments to contract terms
- Accelerating three-way match of invoices
- Extending payment terms with suppliers

Working capital management – Impact of working capital optimisation

A ten day reduction in C2C can not only improve purchase price by ~USD 8 million for a ~USD 300 million enterprise, but also has a positive impact on other purchase price levers (Illustrative)

Benefits of optimising working capital performance* (Illustrative)



**Typical values delivered by PwC capital working capital engagement team*

Note: The 3 cases, from case 1 to case 3, illustrate the cash release opportunity from working capital/ purchase price enhancement for an M&A by reducing C2C by 10/20/30 days respectively

Impact on Purchase price

Enterprise value

\+ **Cash**

\- **Debt/debt like**

\+ (Closing working capital

\- Target working capital)

Increase **cash balance** or
Reduce **the debt**

Improve profitability,
Enterprise value

Maximize Purchase price

Key assumptions :

Revenue ~ USD 300 million, Net working capital ~ 25% of the revenue, Current C2C ~ 90 days, COGS ~ 70% of the revenue, SG&A ~ 15% of the revenue, Borrowing rate ~ 7% per annum.

1. Revenue increases by 1-2% due to reductions of lost sales, stock outs and better realization; COGS drops by 5-10% due to improved 'procure to pay' process; SG&A expenses decrease by 5-10% due to expenses reduction related to warehousing, return logistic

2. Cash release for 10/20/30 days C2C reduction = 10/20/30 days x Net working capital/Current C2C

   Example: Cash release for achieving C2C 80 days is 10 x 70/90 = USD 8.1 million

3. Interest expenses saving = Borrowing rate x Cash release opportunity per case

   Example: Interest expenses saving for achieving C2C 80 days
   = 7% x 8.1 = USD 0.6 million

Working capital management – Supply chain financing

Supply chain financing can also be an attractive way for companies to improve their payable positions whilst also benefitting earnings

The key concept behind Supply Chain Financing (often referred to as SCF/ Supplier Finance / Reverse Factoring) is to provide suppliers with access to advantageous financing facilities by leveraging the buyer's stronger credit rating at the same time as the businesses to reduce costs.

Supplier

- Reduction of Trade Receivables and increase in cash position
- Faster access to cash at advantageous rates
- Strong cooperation with the buying company creates a competitive advantage
- Shorter cash conversion cycle from delivery to cash

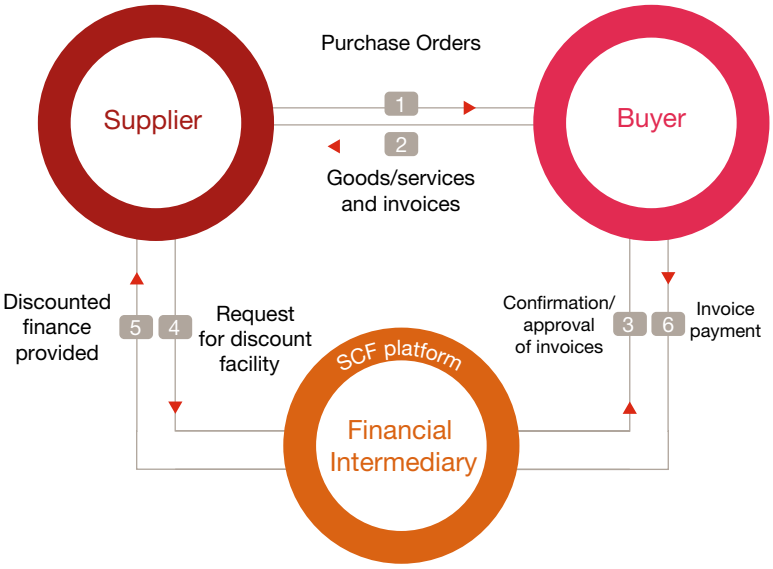
Buyer

- Longer payment terms thereby unlocking working capital
- Reduction of administrative costs attributable to improved process capability in Invoice Receipting, Approving, Electronic Invoicing and overall Procurement
- Improved supplier relationships and control over the supply chain

Financial Intermediary

- New interest and fee generation business
- Competency in assessing credit risk of the buyer based on other business relationships

Supply Chain Finance is a "win-win-win" solution as it benefits the Buyer, Supplier and Financial Intermediary simultaneously



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Why Supplier Finance?

- Buyer/supplier working capital optimisation
- Supplier liquidity needs
- Supplier relationship improvement
- Supply chain stability improvement
- Other benefits
  1. Additional revenues, cost reductions
  2. EBITDA improvement
  3. Cash surplus utilisation
  4. Corporate finance optimisation (incl. Asset financing)

Methodology and appendices

Sample size

Top 400 companies by revenue, listed on HOSE and HNX at the end of FY17. Outliers have been excluded from our analysis

Outliers' criteria

Companies with negative sales for any year, negative figures for both EBITDA and Operating cash flow (OCF) for the same period or with unavailable data metrics are not included. Also, sectors like banks, financial services, private equity & investment funds and Real estate companies are excluded from our scope due to their different approach towards Working Capital and other factors

Data range/volume

Consolidated financial statements (Income statement, Balance sheet, Cash flow statement) for FY13-17 period

Data sources

Capital IQ (CapIQ) terminal for data collection, with reference to certain company audited financial reports for validation, along with industry/macro economic reports from Business Monitor International (BMI), Foreign Investment Agency (FIA) and others

Scope of work

- A quantitative review and benchmarking of total working capital performance, to include Trade receivables and Unbilled revenue (AR), Trade payables (AP) and Inventory (Inv.) along with other financial performance metrics
- We have taken a top down approach for this study, starting with the overall economy, then moving on to the sectoral analysis and company performances studied thereafter
- For analysis of cash release opportunities, we estimated how many day sales can be released by reducing companies C2C to their sectors' Median/Weighted Average/Upper Quartile C2C respectively, of which a 100 days cap was imposed for any over 100 days of C2C differences. Hence, this is a conservative assessment of the total working capital optimisation opportunity
- For Capex needs and working capital management, we have taken a forward looking view for the accumulated net working capital and Capex needs for the next three years with respect to the potential cash release from Net Working Capital assuming constant growth of revenue

Limitations

- The study is based on publicly available information and all figures are financial year-end figures
- Due to disproportionate efforts to improve working capital performance towards year-end, the real underlying working capital requirement within reporting periods might be higher
- Off-balance sheet financing, the effect of asset securitisation and other elements that may or may not have effects on working capital (deposits, advances etc.) have not been taken into account for the purpose of this study

Sector classification

PwC sectors	No. of companies	Sector description
Consumer Products	*68*	*Packaged Foods and Meats, Apparel, Accessories and Luxury Goods, Office Services and Supplies, Household Products, Paper Products, Home Furnishings, Textiles, Tobacco, Housewares and Specialties, Brewers, Household Appliances, Healthcare Supplies, Food Products, Distillers and Vintners, Paper and Forest Products, Beverages*
Engineering & Construction	*50*	*Construction and Engineering, Highways and Railway tracks*
Industrial & Chemicals	*49*	*Industrial Conglomerates, Tyres and Rubber, Commodity Chemicals, Chemicals, Forest Products, Fertilisers and Agricultural Chemicals, Paper Packaging, Metal and Glass Containers, Containers and Packaging*
Transportation & Logistics	*40*	*Airlines, Oil and Gas Storage and Transportation, Marine Ports and Services, Airport Services, Marine, Air Freight and Logistics, Trucking, Transportation Infrastructure*
Building Materials	*38*	*Construction Materials, Building Products*
Retail	*25*	*Computer and Electronics Retail, Technology Distributors, Distributors, Automotive Retail, Trading Companies and Distributors, Specialty Retail*
Energy & Utilities	*22*	*Electric Utilities, Renewable Electricity, Coal and Consumable Fuels, Water Utilities, Independent Power and Renewable Electricity Producers*
Metal & Mining	*20*	*Steel, Diversified Metals and Mining, Aluminium, Metals and Mining*
Oil & Gas	*17*	*Gas Utilities, Oil and Gas Equipment and Services, Oil and Gas Refining and Marketing, Oil, Gas and Consumable Fuels, Energy Equipment and Services*
Healthcare & Pharma	*14*	*Pharmaceuticals*
Heavy Industry	*14*	*Industrial Machinery, Construction Machinery and Heavy Trucks, Electrical Components and Equipment, Machinery, Automobile Manufacturers, Auto Components*
Technology	*12*	*Internet Software and Services, Communications Equipment, Consumer Electronics, Application Software, IT Consulting and Other Services, Electrical Equipment*
Hospitality & Leisure	*9*	*Hotels, Resorts and Cruise Lines, Leisure Facilities, Casinos and Gaming, Hotels, Restaurants and Leisure*
Others	*22*	*Agricultural Products, Commercial Printing, Diversified Support Services, Publishing, Education Services, Human Resource and Employment Services, Media, Commercial Services and Supplies, Professional Services*
Total	**400**	

Key metrics with definitions

Metric	Explanation	Basis of calculation
C2C (Cash Conversion Cycle)	*C2C is a measure of the average number of days a company takes to convert resource inputs into cash flows*	*DIO+DSO – DPO*
Capex (Capital Expenditure)/Sales	*Capex/Sales is a measure of how much a company invests in fixed assets with respect to its total revenue*	*Capex/Sales*
CCE (Cash conversion efficiency)	*CCE is a measure of a company's efficiency in converting operating profit (EBITDA) to cash flow (OCF)*	*OCF/ EBITDA*
DIO (Days Inventory Outstanding)	*DIO is a measure of the average number of days a company takes to convert its inventory into sales. Generally, the lower the measure, the better*	*(Inventory before provision / COGS) * 365*
DPO (Days Payable Outstanding)	*DPO is a measure of the average number of days a company takes to pay its trade creditors. Generally, the higher the measure, the better*	*(Trade payables / COGS) * 365*
DSO (Days Sales Outstanding)	*DSO is a measure of the average number of days a company takes to collect payment after a sale has been made. Generally, the lower the measure, the better*	*(Trade receivables / Sales)* 365(for Engineering & Construction – DSO = [Trade receivables +Unbilled revenue] / Sales * 365)*
EBITDA (Earning before Interest, Tax, Depreciation and Amortisation) margin	*EBITDA margin is a measure of the company's operating profitability as a percentage of its total revenue*	*EBITDA/Sales*
Gross margin	*Gross margin is a measure of the retaining revenue after incurring the direct costs associated with producing the goods/services as percentage of its total revenue*	*(Sales-COGS)/Sales*
Interest coverage	*Interest coverage is a measure of how easily a company can pay their interest expenses on outstanding debt*	*EBIT/Interest expenses*
Net Debt	*Net Debt is a measure of the overall debt situation of a company by netting the value of the liabilities and debts of a company along with its cash and other similar liquid assets*	*(Short-term debt + Long-term Debt) – Cash and Cash Equivalents*
Net Debt/EBITDA	*Net debt/EBITDA is a measure of how long would it takes a company to repay its debts using only operating profit*	*Net Debt/EBITDA*
NWC (Net Working Capital)	*Net working capital is a measure of the amount of cash tied up in the balance sheet in the form of Inventory, Trade receivables and lessening Trade payables*	*Trade receivables + Inventory before provision – Trade payables*
NWC/Sales	*NWC/Sales is a measure of working capital requirements relative to the size of the company*	*NWC/Sales*
ROCE (Return on Capital Employed)	*ROCE is a measure of company's profit (EBIT) as a proportion of company's capital employed*	*EBIT / (Total Asset – Current liabilities)*
SG&A/Sales	*SG&A/Sales is a measure of how well a company in managing selling, general & administrative expenses with respect to its revenues*	*SG&A/Sales*
TWC (Total Working Capital)	*Total working capital is a measure of the amount of cash tied up in the balance sheet in the form of Inventory, Trade receivables and Trade payables*	*Trade receivables + Inventory before provision + Trade payables*

Glossary of terms

Key words	Clarification	Key words	Clarification
AP	*Account Payables (Trade Payables)*	*HNX*	*Hanoi Stock Exchange*
AR	*Account Receivables (Trade Receivables)*	*HOSE*	*Ho Chi Minh City Stock Exchange*
BMI	*Business Monitor International research*	*ICF*	*Investing Cash Flow*
C2C	*Cash Conversion Cycle*	*Int. exp.*	*Interest expenses*
CAGR	*Compounded Annual Growth Rate*	*Inv.*	*Inventory (Inventory before Provision)*
Capex	*Capital expenditure*	*NWC*	*Net Working Capital*
CCE	*Cash Conversion Efficiency*	*OCF*	*Operating Cash Flow*
CFO/COO	*Chief Financial/Operational Officer*	*PO*	*Purchase Order*
COGS/Cost of Rev.	*Cost of Goods Sold*	*P&L*	*Profit & Loss statement*
CPU	*Cost Per Unit*	*PwC*	*PricewaterhouseCoopers Vietnam*
DIO	*Days Inventory Outstanding*	*ROCE*	*Return on Capital Employed*
DPO	*Days Payable Outstanding*	*SCF*	*Supply chain finance/financing*
DSO	*Days Sales Outstanding*	*SG&A exp./SG&A*	*Selling, General & Adminsitrative expenses*
EBITDA	*Earning before Interest, Tax, Depreciation and Amortisation*	*SME*	*Small Medium Enterprise*
Equiv.	*Equivalent*	*ST/LT*	*Short-term/Long-term*
f	*Forecast period*	*USD in billion/million*	*in billion/ million USD*
FCF	*Financing Cash Flow*	*USD/bbl*	*USD per British Barrels*
FDI	*Foreign Direct Investment*	*WC position/performance*	*Working capital position/performance*
FY	*Fiscal Year*	*WCM*	*Working Capital Management*
G&A expenses	*General & Administrative expenses*	*YoY/Y-o-Y*	*Year on year*
GDP	*Gross Domestic Product*	*EBIT*	*Earning before Interest and Tax*

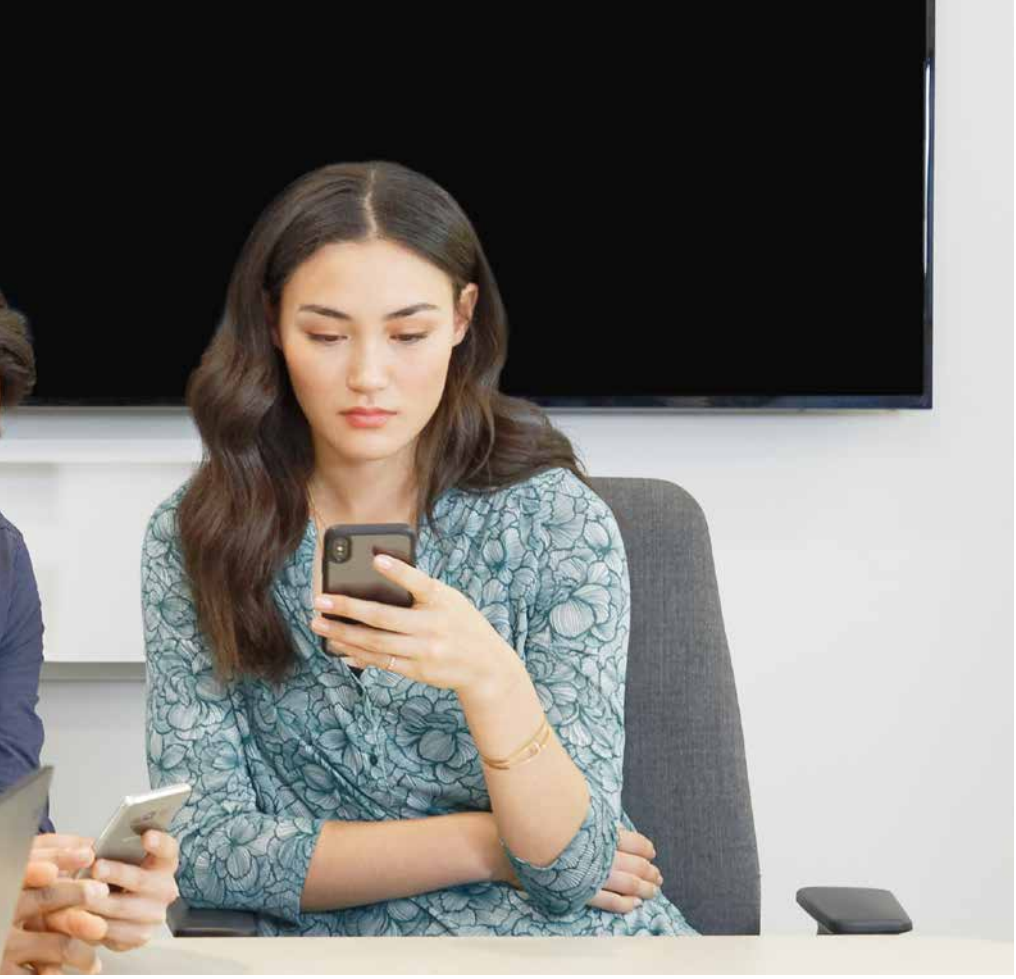
Contact us

Working Capital Management

Johnathan Ooi
Partner, Working Capital Management
PwC Vietnam
+84 28 3824 0126
johnathan.sl.ooi@pwc.com

Mohammad Mudasser
Practice lead, Working Capital Management
PwC Vietnam
+84 28 3823 0796 Ext. 3322
mohammad.mudasser@pwc.com

Chau Anh Huynh Phan
Deputy Manager, Working Capital Management
PwC Vietnam
+84 28 3823 0796 Ext. 1645 / +84 966 951 701
huynh.phan.chau.anh@pwc.com



2018 working capital performance assessment for Vietnam

Chi Nhan Luu (Colin) – Lead Author
Associate, Working Capital Management
PwC Vietnam
+84 28 3823 0796 /+84 33 772 4548
luu.chi.nhan@pwc.com

Trung Kien Ha – Co-author
Associate, Working Capital Management
PwC Vietnam
+84 28 3823 0796 / +84 911 966 796
ha.trung.kien@pwc.com

www.pwc.com/vn