



# Putting Working Capital to Work

## *Seven Myths about Working Capital Improvement*

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August 20<sup>th</sup>, 2009

2.30pm Hong Kong/Singapore time



## Disclaimer

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## Shams Butt – Panelist

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Managing Director  
Financial Strategy Group, Citi

Shams heads the Financial Strategy Group for Europe, Middle East and Africa. He originally joined Citi in 1988 and held a variety of roles in the Trading and Capital Markets businesses in the region. He served as the Treasurer for Citibank Pakistan and was an early participant in the local currency fixed income and derivatives markets in Emerging Europe.

As Chief Risk Officer at Citi Alternative Investments he was engaged in product development and risk mitigation across the spectrum of alternative asset products, including leveraged debt, real estate investments, private equity, and hedge funds. From 2003 to 2004, he was head of Business Risk at DB Advisors, an investment advisor in the United States.

Shams holds an MBA from George Washington University.

## Gourang Shah – Panelist

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Gourang Shah is a Senior Treasury Consultant with Citi providing consulting service to clients on best in class Treasury solutions. Prior to joining Citi, he was based in the U.S. as Vice President and Assistant Treasurer of Tyco Electronics managing their global treasury operations.

He has worked for more than 15 years in Corporate Treasury, Mergers and Acquisition, Financial Planning and Analysis, and Product Development roles with US multinational companies. He has MBA from University of Michigan, Ann Arbor.

Senior Treasury Consultant, Citi

## Greg Trotter – Panelist

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Asia Head Trade Finance  
and Supply Chain  
Treasury and Trade Solutions,  
Global Transaction Services, Citi

Greg is the Trade Finance and Supply Chain Head for Asia, responsible for the business across 15 Asian countries. The business encompasses the full spectrum of traditional trade finance and open account supply chain products offered by Citi.

Prior to moving to Hong Kong in 2006, Greg was the Global Transaction Services Head for Vietnam and the HCMC Branch Manager for Citibank N.A. Greg spent four years in Vietnam, both in Hanoi and HoChi Minh City. During this time his responsibilities included cash management, trade, risk, customer coverage and product sales / management.

Before moving to Vietnam, Greg worked in Zurich for six years in both Trade Finance and GRB Relationship Management as a relationship manager and a parent account manager.

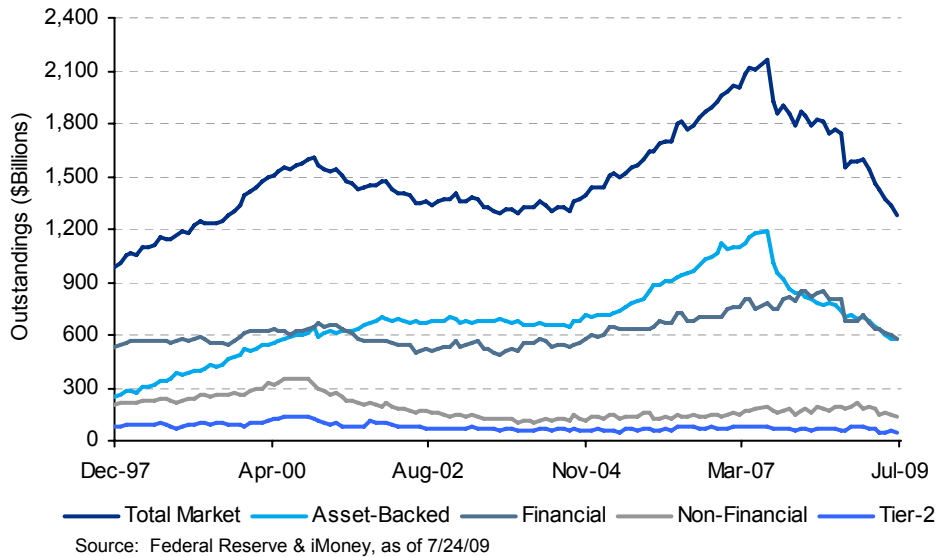
# Today's Discussion Topics

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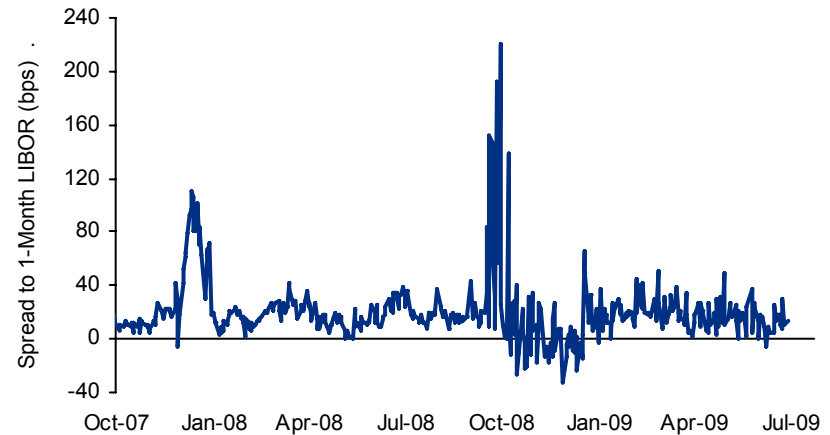
- The Corporate Finance context for improving working capital management
- Historic concerns on effectiveness of working capital initiatives
- Approaches companies can use to improve working capital practices

# Current Environment – Cost and Availability of Funding

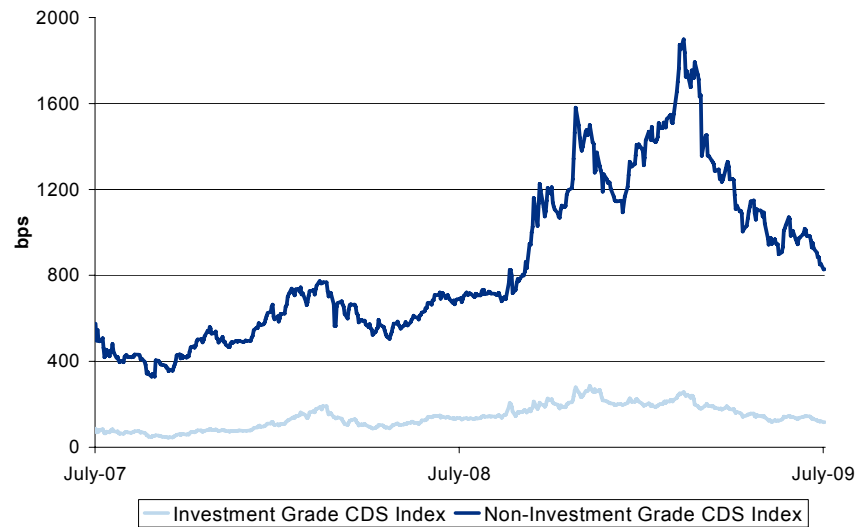
## US Commercial Paper Outstandings



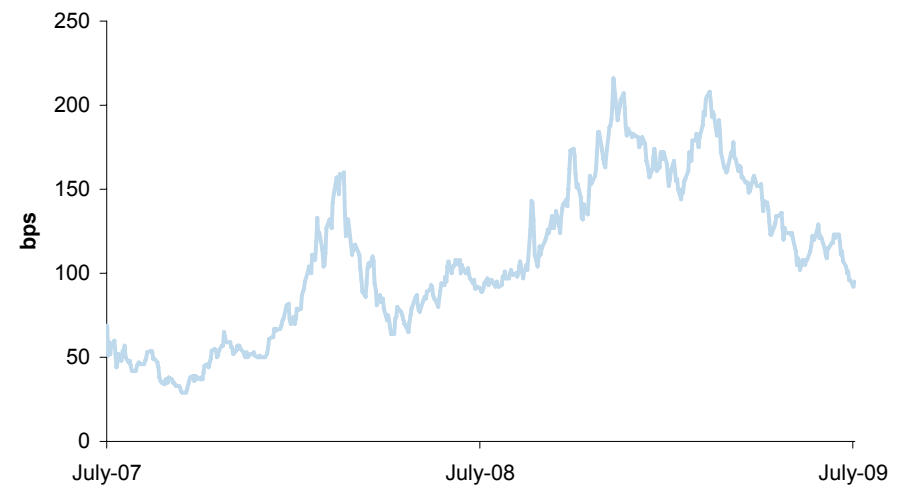
## US ABCP Pricing (All-in)



## Cost of Credit – US CDS Spreads

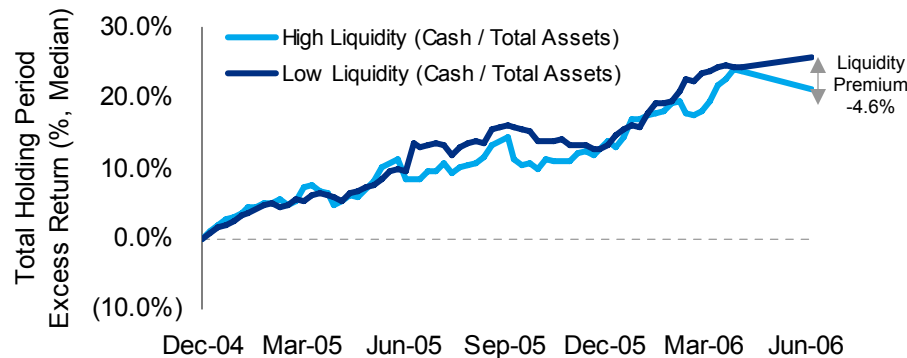
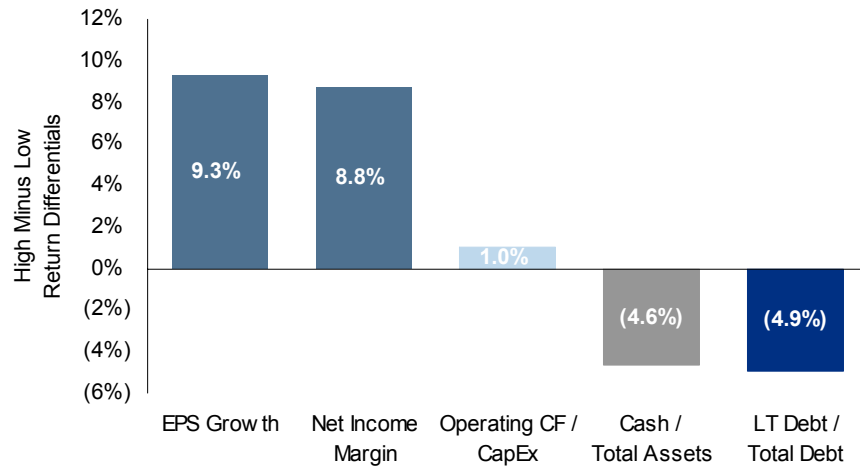


## Cost of Credit – European CDS Spreads

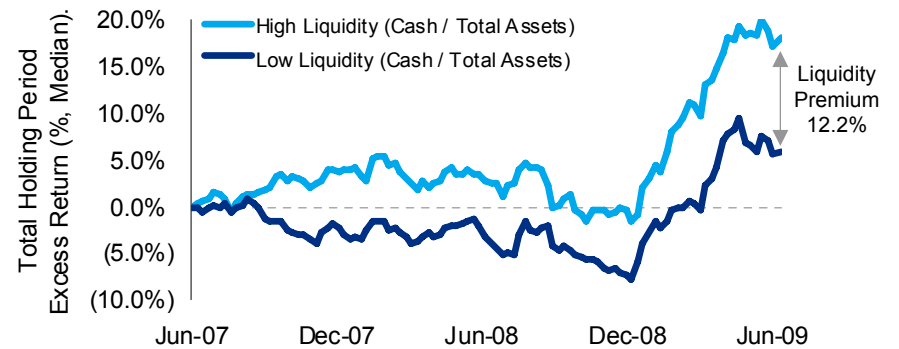
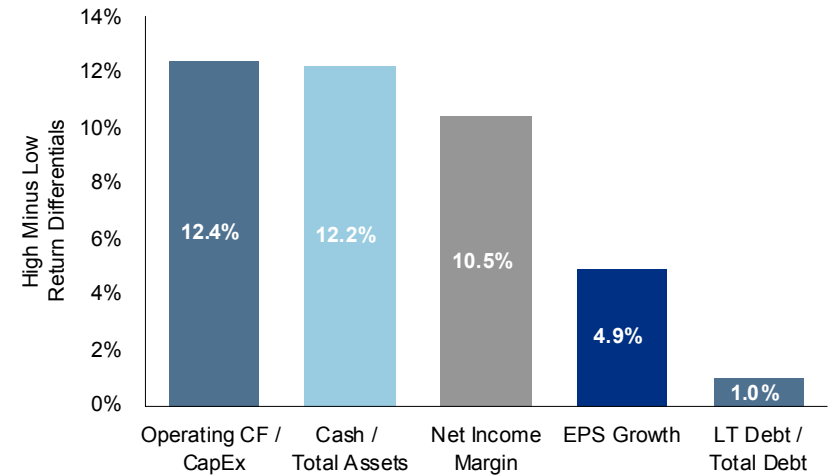


# Financial Flexibility Supports And Increases Equity Value

**Pre-Crisis Excess Returns on Stocks**  
December 2004 – June 2006



**Post-Crisis Excess Returns on Stocks**  
June 2007 – June 2009



Note: Market data updated as of 6/30/2009 for sample of S&P/Citi PMI Global Index companies excluding financials. Index is composed of 1200 companies in the S&P/Citi Global PMI Index, excluding financial companies. Graphs reflect excess returns versus a beta adjusted MSCI index.

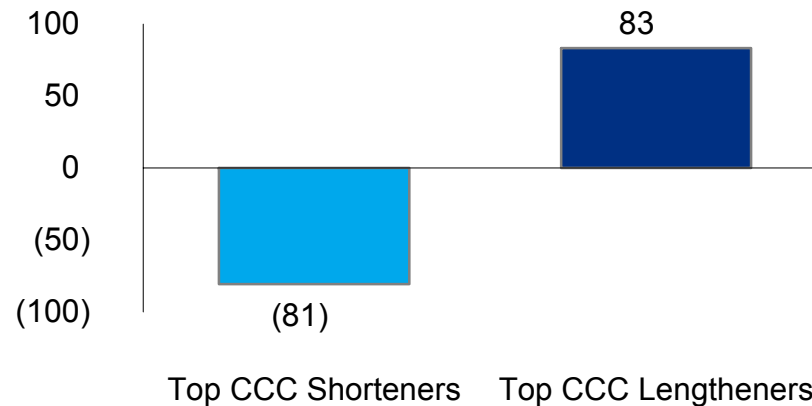
# Managing Working Capital Is Key... But Concerns Persist

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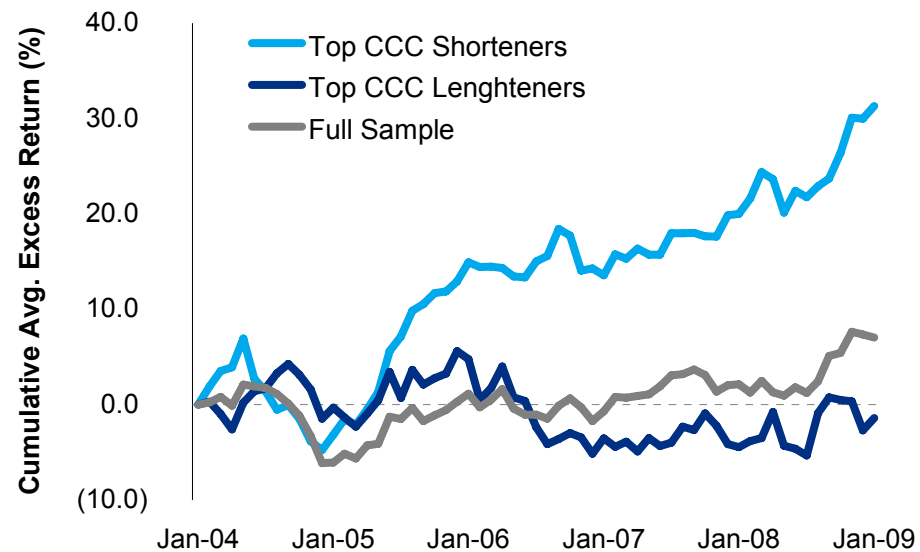
- Although the importance of improving working capital management is accepted – especially in the current environment – some concerns persist about broader impacts on the business:
  1. **Investors don't care**
  2. **It hurts top line growth**
  3. **The impact on the bottom-line is limited**
  4. **It is not relevant for healthy companies with strong access to financing**
  5. **Working capital trends affect everyone equally within an industry, so there are few competitive benefits**
  6. **It hurts long-term relationships in the supply chain, with suppliers and customers or distributors**
  7. **It can be left to individual business units and does not need a centralized, senior focus**

# Working Capital Improvement Possible & Valued By Investors

## Change in Cash Conversion Cycle 2004-2009 (Days): Top 10 Shorteners vs. Top 10 Lengtheners



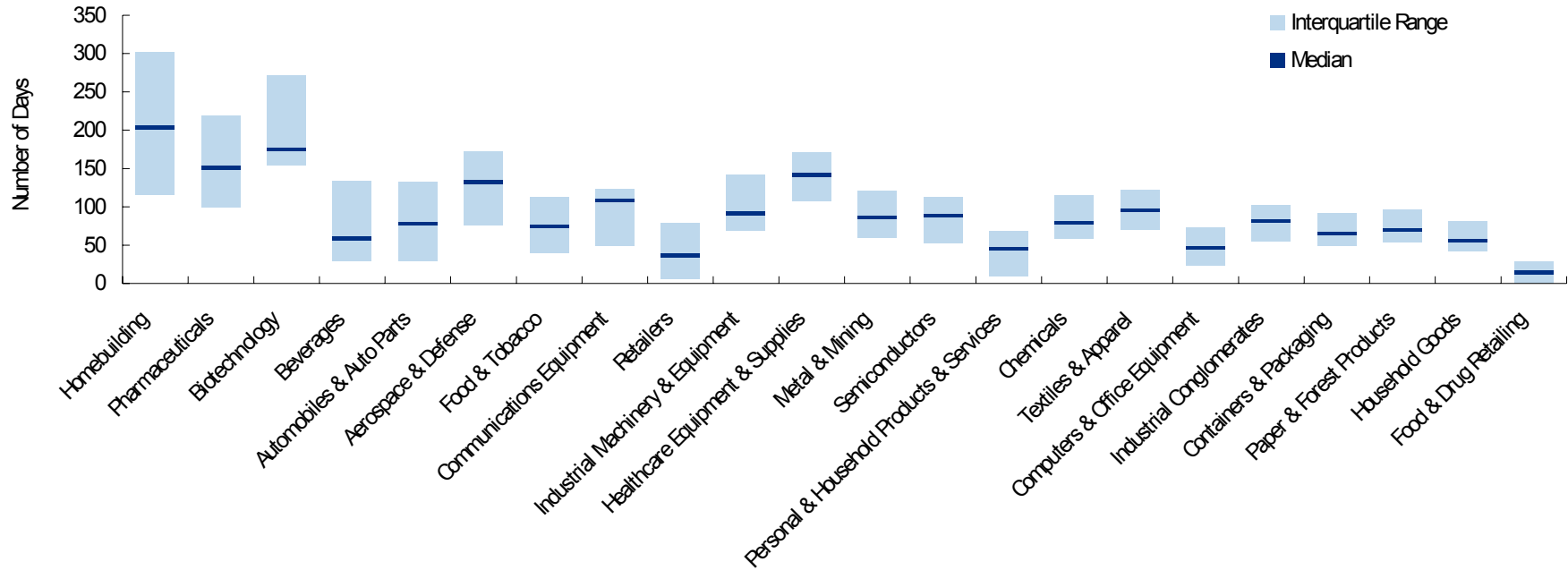
## Excess Returns for Top CCC Shorteners vs. Top CCC Lengtheners Citi/S&P PMI Global Index



Source: FactSet.

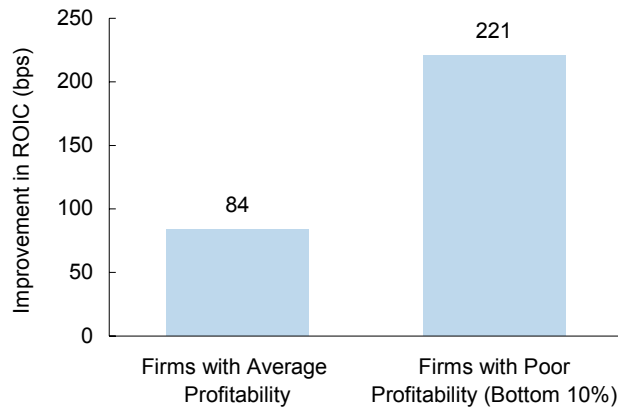
# Substantial Improvement Potential Persists Across Industries

Range of Cash Conversion Cycles, in Days, 2008

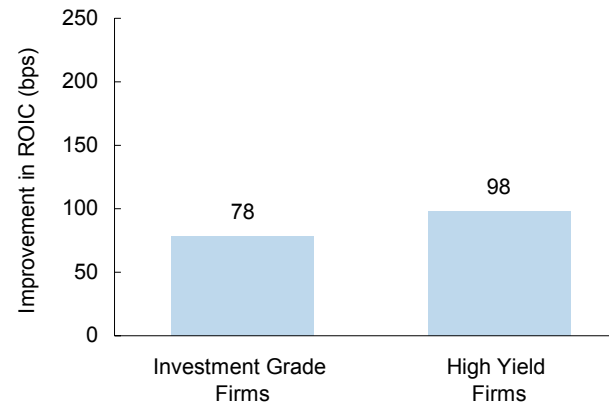


Impact on ROIC of Quartile Improvement in Cash Conversion Cycle (bps)

By Net Income Margin



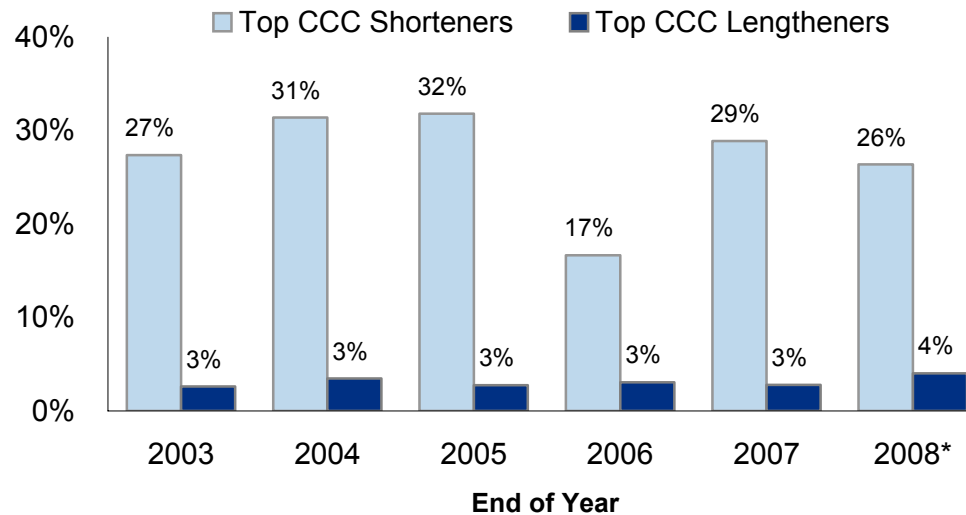
By Credit Quality



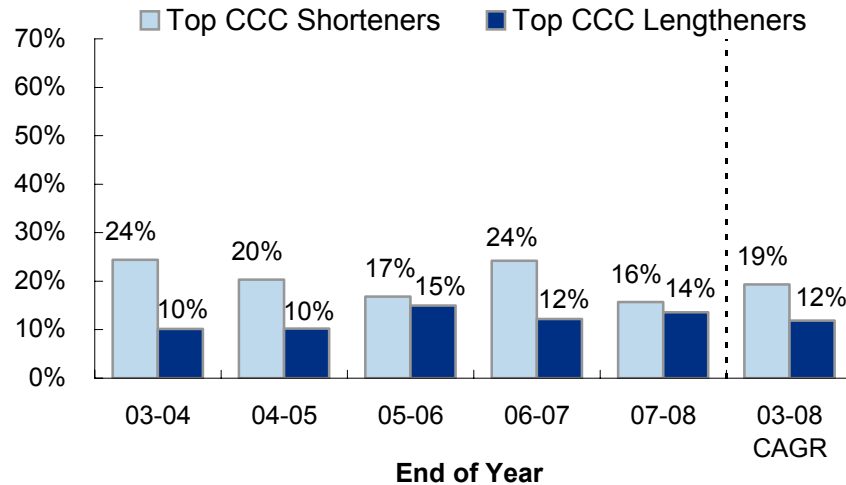
Source: Factset, Citi

# Shortening Cash Conversion Frees Up Capital For Growth

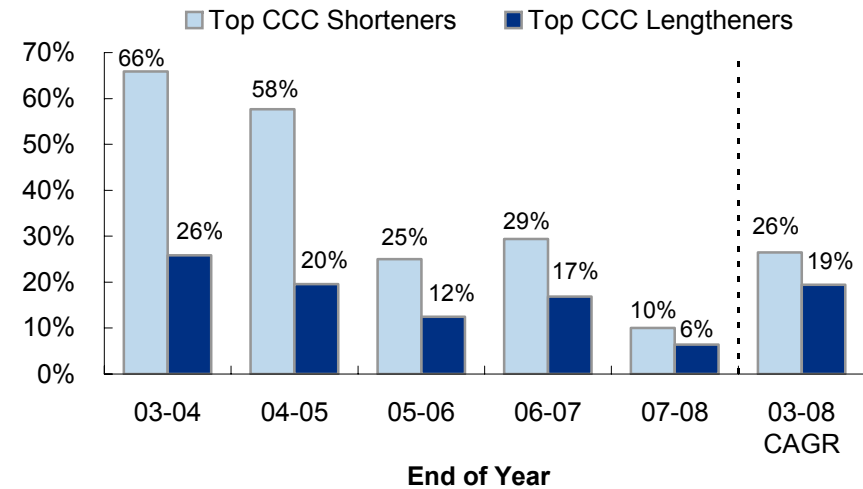
% of Top CCC Shorteners / Lengtheners Increasing CapEx by > 50% in Following Year



Superior Sales Growth for Top CCC Shorteners



Superior Net Income Growth for Top CCC Shorteners



Source: Citi, FactSet. \* Represents increase in CapEx in same year.

# Dispelling The Myths

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## 1. Investors do care

- Top CCC shorteners have been rewarded to the tune of a 30% excess return. Companies with high liquidity and organic funding capacity relative to peers enjoy significant equity valuation premiums

## 2. It is possible to grow top line and improve working capital

- Top CCC shorteners saw sales grow by 700bps more than top CCC lengtheners

## 3. The impact on the bottom-line is significant

- The typical company can improve ROIC by 84bps by improving working capital efficiency by a quartile relative to its industry

## 4. It is relevant even for healthy companies with strong access to financing

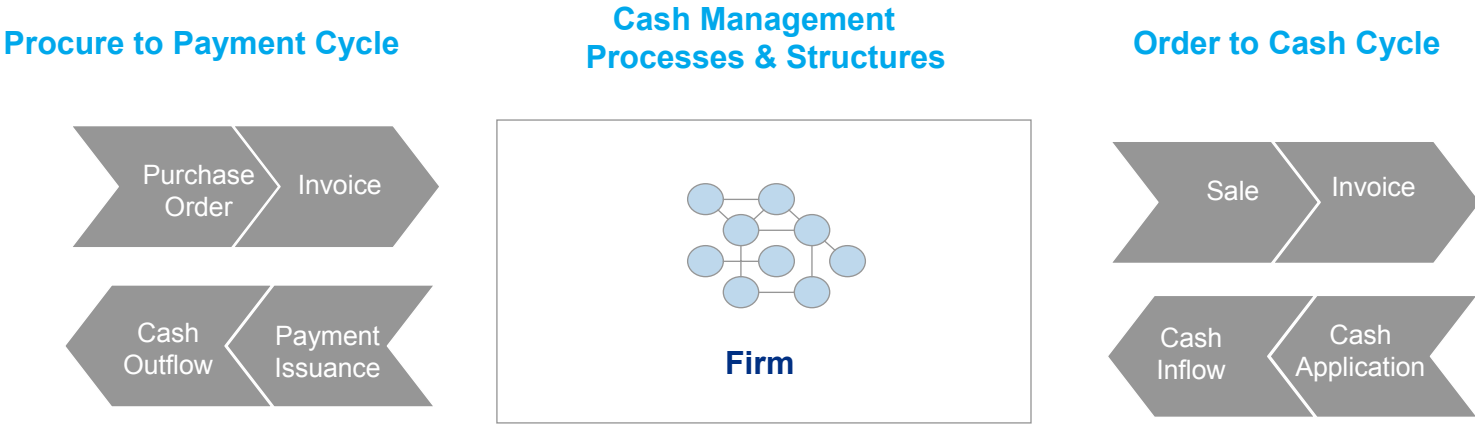
- The typical investment grade company stands to gain 78bps on ROIC by improving working capital efficiency by a quartile relative to its industry

## 5. Working capital trends differ markedly across close peers and improvements offer many competitive benefits

- There is a sizeable disparity in cash conversion cycles within each industry. The median difference across industries in cash cycle between the 1st and 3rd quartile is 62 days, with the most tightly distributed industry having a dispersion of 29 days. In fact, both the top CCC shorteners and lengtheners were evenly distributed across industries.

# Improving Working Capital Management: Holistic Approaches

Holistic approaches across the firm towards streamlining cash processes, rationalizing banking practices, and deploying supply chain financing programs provide tremendous benefits in improving working capital



**LEVERS**

**Streamline Accounts Payable  
Supply Chain Processes**

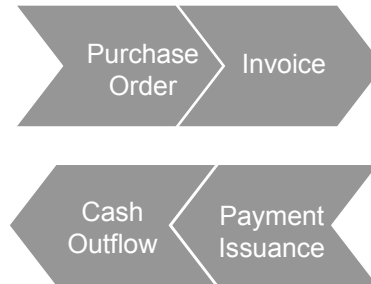
**Streamline Cash Management  
Processes and Structures**

**Streamline Accounts Receivable  
Supply Chain Processes**

Enhance Working Capital  
Release Liquidity  
Improve Performance

# Procure to Payment Cycle

Centralizing and automating procurement processes and using supplier financing programs releases liquidity and reduces costs



## Payment Processes

### Tactics

- Centralize and coordinate payment cycles
- Process electronically
- Analyze and enforce spend policy compliance

## Supplier Financing

- Improve DPO
- Reduce COGS
- Centralize reporting & processes
- Provide liquidity to suppliers

### Benefits

#### ▲ P&L & Cash Flow

- Capture early pay discounts, card rebates
- Minimize invoicing errors
- Reduce processing costs
- Reduce FX spreads
- Reduce external funding costs

#### ▲ Balance sheet

- Reduce frictional cash buffers
- Reduce reliance on capital markets
- Improve WC ratios

#### ▲ Business Strategy

- Improve cash conversion cycle and financial performance, strengthen overall supply chain

# Example: Enhancing DPO

Enhancing the cash conversion cycle by 29% from an extension to DPO, results in about a 1.2% EPS accretion, for our sample company

## Change in Cash Cycle ► Change in Working Capital

	Current	PF Adjusted
Receivables	3350	3350
Inventory	2800	2800
Payables	1167	2333
<b>Working Capital</b>	<b>4983</b>	<b>3817</b>
<b>% Change in WC from Current</b>		<b>(23%)</b>
DSO	60	60
DIO	72	72
DPO	30	60
<b>Cash Cycle</b>	<b>102</b>	<b>72</b>
<b>% Change in CC from Current</b>		<b>(29%)</b>

Δ in CC: 30 days

## Effect on EPS & Capital Reduction

### PF Adjustment to Net Income

<b>Current Net Income</b>	1600
Reduced Funding Needs	1167
Funding Costs	5.00%
Tax Rate	35%
<b>Decrease in Interest Expense</b>	19
<b>Adjusted Net Income</b>	1619
<b>EPS Accretion</b>	1.2%

### Capital Reduction

Reduced Funding Needs	1167
WACC	10.00%
<b>Annual Capital Reduction</b>	117

Notes: Calculations use current Sales = \$20,100 and Cost of Goods Sold = \$14,000 figures for sample company and assumes they remain constant in the PF Adjusted case.

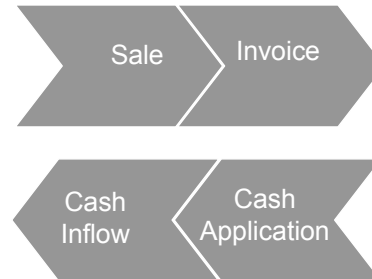
Daily Sales Outstanding (DSO) = Net Average Receivables/Sale\*360,  
 Daily Inventory Outstanding (DIO) = Net Inventory/Cost of Goods Sold\*360, Daily Payables Outstanding (DPO) = Net Average Payables/Cost of Goods Sold\*360. Cash Cycle = DSO + DIO – DPO.

All figures in \$MM unless otherwise noted.

Notes: Funding Costs is based on current estimates for A2/P2 commercial paper.

# Order to Cash Cycle

Automating receivables processes and utilizing receivable financing programs improves liquidity and can be used for revenue growth and risk mitigation strategies



## Receivables Processes

### Tactics

- Collect electronically
- Minimize collection float
- Accelerate cash application
- Improve predictability of cash inflows

## Receivables Financing

- Reduce DSO
- Centralize processes & reporting
- Generate incremental sales by enhancing buyers' terms
- Manage customer credit risk

### Benefits

#### ▲ P&L & Cash Flow

- Accelerate cash flow
- Minimize invoicing errors
- Reduce processing costs
- Reduce FX spreads
- Reduce external funding costs

#### ▲ Balance sheet

- Improve cash balances for utilization
- Reduce reliance on capital markets
- Improve WC ratios

#### ▲ Business Strategy

- Reduce cash conversion cycle, improve financial performance, and support growth initiatives and supply chain partners

# Example: Enhancing DSO

Accelerating cash conversion cycle by 49% from a reduction to DSO creates a 5% EPS accretion for our sample company

## Change in Cash Cycle ► Change in Working Capital

	Current	PF Adjusted
Receivables	3350	558
Inventory	2800	2800
Payables	1167	1167
<b>Working Capital</b>	<b>4983</b>	<b>2192</b>
<b>% Change in WC from Current</b>		<b>(56%)</b>
DSO	60	10
DIO	72	72
DPO	30	30
<b>Cash Cycle</b>	<b>102</b>	<b>52</b>
<b>% Change in CC from Current</b>		<b>(49%)</b>

Δ in CC: 50 days

Notes: Calculations use current Sales = \$20,100 and Cost of Goods Sold = \$14,000 figures for sample company and assumes they remain constant in the PF Adjusted case.

Daily Sales Outstanding (DSO) = Net Average Receivables/Sale\*360, Daily Inventory Outstanding (DIO) = Net Inventory/Cost of Goods Sold\*360, Daily Payables Outstanding (DPO) = Net Average Payables/Cost of Goods Sold\*360.  
Cash Cycle = DSO + DIO – DPO.

All figures in \$MM unless otherwise noted.

## Effect on EPS & Capital Reduction

### PF Adjustment to Net Income

<b>Current Net Income</b>	1600
Reduced Funding Needs	2792
Funding Costs	5.00%
Tax Rate	35%
<b>Decrease in Interest Expense</b>	76
<b>Adjusted Net Income</b>	1676
<b>EPS Accretion</b>	5%

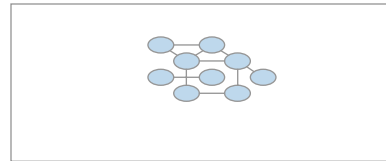
### Capital Reduction

Reduced Funding Needs	2792
WACC	10.00%
<b>Annual Capital Reduction</b>	279

Notes: Funding Costs is based on current estimates for A2/P2 commercial paper.

# Cash Management Processes & Structures

Rationalizing internal cash management processes and banking structures provides access to pools of liquidity otherwise trapped at subsidiaries



## Visibility



- Real-time actionable visibility on cash positions and flows

## Benefits

- ▲ Accurate cash forecasting and positioning of funding or excesses
- ▲ Improved governance & risk mitigation

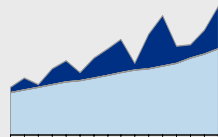
## Mobilization



- Automated centralization of cash “with the sun” or “against the sun”
- Customized to regulations and tax rules

- ▲ Mobilization of available cash for benefit of enterprise
- ▲ Centralized access, control and deployment

## Optimization

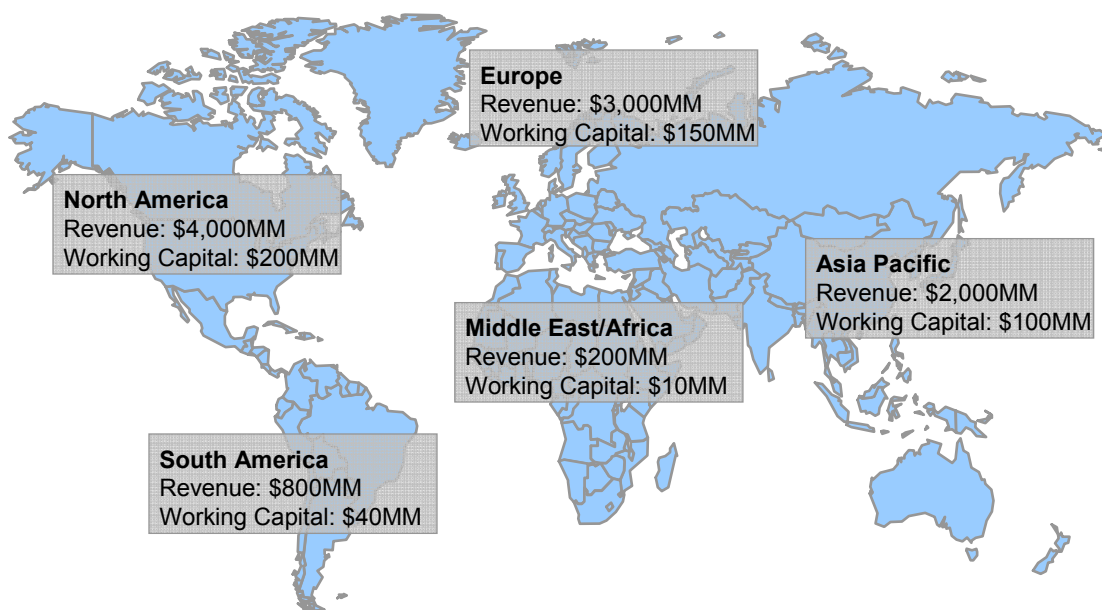


- Automated offset of cash surpluses and shortfalls across subsidiaries
- Automated and active cash investment on excess cash

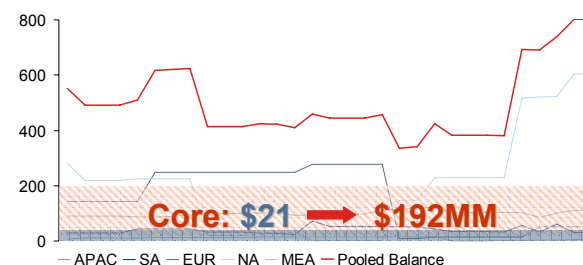
- ▲ Internalization of funding
- ▲ Enhancement of cash yields within risk appetite and liquidity needs

# Example: Global Cash Centralization

Centralizing and pooling global cash reduces volatility, allowing our sample company to reduce cash required for working capital by over 30%



## Pooling → Increase Stable (Core) Cash



### Variance

Unpooled CoV	43.2%	➤ (63)% reduction in variance
Pooled CoV	26.5%	

CoV: Coefficient of Variation = stdev/mean

## Pooling → Change in Cash

	Pre-Pool	Post-Pool
NA	200	108
SA	40	39
Europe	150	88
Middle East/Africa	10	10
Asia Pacific	100	84
<b>Cash</b>	<b>500</b>	<b>329</b>
<b>% Change in Cash from Current</b>		<b>(34%)</b>

Δ in Cash

Calculations use current Sales = \$10B and NI = \$500MM figures for sample company and assumes they remain constant in the PF Adjusted case.

Poolable balances: N America: 100%; S America: 5%; Europe: 90%; Africa: 10%; Asia Pacific: 35%

All figures in \$MM unless otherwise noted.

## Effect on EPS & Capital Reduction

### PF Adjustment to Net Income

<b>Current Net Income</b>	500
Reduced Funding Needs	171
Funding Costs	5.00%
Tax Rate	35%
<b>Decrease in Interest Expense</b>	6
<b>Adjusted Net Income</b>	<b>506</b>
<b>EPS Accretion</b>	<b>1.1%</b>

### Capital Reduction

Reduced Funding Needs	171
WACC	10.00%
<b>Annual Capital Reduction</b>	<b>17</b>

Funding Costs is based on current estimates for A2/P2 commercial paper.

# Dispelling the Myths – Summary

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## 1. Investors do care

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## 2. It is possible to grow top line and improve working capital

- Top CCC shorteners saw sales grow by 700bps more than top CCC lengtheners

## 3. The impact on the bottom-line is significant

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## 4. It is relevant even for healthy companies with strong access to financing

- The typical investment grade company stands to gain 78bps on ROIC by improving working capital efficiency by a quartile relative to its industry

## 5. Working capital trends differ markedly across close peers and improvements offer many competitive benefits

- There is a sizeable disparity in cash conversion cycles within each industry. The median difference across industries in cash cycle between the 1st and 3rd quartile is 62 days, with the most tightly distributed industry having a dispersion of 29 days. In fact, both the top CCC shorteners and lengtheners were evenly distributed across industries

## 6. It helps long-term relationships in the supply chain

- Supply chain financing solutions for suppliers and buyers create win-win situations

## 7. A central corporate finance mindset drives better decision-making; centralization of cash management processes greatly facilitates improvement

- Working capital initiatives should be firm-wide. Treasury departments are often the best positioned to work across procurement, manufacturing, sales, collection and other departments. Additionally, treasury departments should streamline and centralize their own operations

# Conclusions

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- While Treasury departments have always been focused on closing mismatches between sources and uses of funds to sustain business operations globally, today's funding environment as well as the broader corporate finance implications call for holistic approaches across the firm
- Relationship banks can help accelerate cash conversion cycles and mitigate risks by providing the tools to streamline cash processes, rationalize banking structures, and deploy supply chain financing programs



**“ You can’t do today’s job with yesterday’s methods and be in business tomorrow.”**

## Q&A

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Citi works with its clients in greenhouse gas intensive industries to evaluate emerging risks from climate change and, where appropriate, to mitigate those risks.

**efficiency, renewable energy & mitigation**

