

J.P.Morgan

# Navigating risk and opportunity: Japan working capital index report 2022-23





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# 01

## Introduction

2022 has been a year of recovery for Japanese corporates, with a global pickup in demand due to dovish monetary policies and accelerated vaccinations across the globe. However, Japan's recovery slowed towards the second half of the fiscal year with unexpected headwinds from geopolitical tensions, a late resurgence of COVID in the country and tough COVID restrictions in China, Japan's biggest trade partner. Uncertainties caused by these factors have further widened the return on capital employed (ROCE) gap between Japanese corporates and global counterparts, from 3.3 percent in 2021 to 4.5 percent in 2022.

While Japan has lagged the global pandemic recovery so far, its situation and domestic demand outlook are improving as COVID measures are being gradually lifted and the government continues to take steps toward re-opening its economy and borders. Another tailwind for the Japanese economy remains the weaker yen (JPY), a result of the increased policy divergence between the US Federal Reserve and the Bank of Japan, positioning Japanese exports favorably. While Japan's outlook is improving, global macro uncertainties continue, including the ongoing Ukraine-Russia war, China's COVID restrictions, a potential US recession in 2023 and JPY volatility. For Japanese corporates, it is critical to effectively manage internal resources, (i.e. working capital and liquidity), to effectively manage near-term challenges and invest in growth while narrowing the ROCE gap with global counterparts.

Through insights derived from an analysis of working capital metrics, this report will help corporates benchmark their working capital performance and prepare themselves better for the future.

In this issue, we will:

- Analyze ROCE trends and benchmark Nikkei 225 with S&P 1500
- Examine the performance of Working Capital Index, Cash Index and Cash Conversion Cycles (CCC) of Nikkei 225 companies in fiscal year 2022
- Provide industry insights into fiscal year 2022 performance
- Identify the key themes across industries that will create long-term working capital impact

# 02

## Calculation methodology

There are three sets of data points analyzed in this report:

I. **Japan Working Capital Index** tracks the average net working capital/sales values across Nikkei 225 companies and is calculated as follows:

$$\text{Average Net Working Capital (NWC) = } \frac{\sum_{K=1}^n \text{Net Working Capital}_k / \text{Sales}_k}{n}$$

II. **Japan Cash Index** tracks the average cash/sales values across Nikkei companies and is calculated as follows:

$$\text{Average Cash = } \frac{\sum_{K=1}^n \text{Cash}_k / \text{Sales}_k}{n}$$

where:

Net Working Capital = Trade Receivables + Inventory - Trade Payables;

n = total number of companies

k = integer number in the range [1, n]

We have established base levels of 100 for both the Japan Working Capital Index and the Japan Cash Index, using 2011 as the base year.

III. The **Cash Conversion Cycle (CCC)** is the number of days it takes to convert inventory purchases into cash flows from sales. The CCC is a metric that helps quantify the working capital efficiency of a company and is derived from three different components:

- **Days Payable Outstanding (DPO)** or the number of days from the time a company procures raw materials to payment to suppliers
- **Days Inventory Outstanding (DIO)** or the number of days the company holds its inventory before selling it
- **Days Sales Outstanding (DSO)** or the number of days taken to collect cash from customers



Companies can improve working capital by effectively managing the individual components of their CCC by reducing inventory levels (decreasing DIO), extending payment terms with suppliers (increasing DPO), and speeding up collections from customers (shortening DSO). As a general rule, the lower the CCC, the better the working capital efficiency.

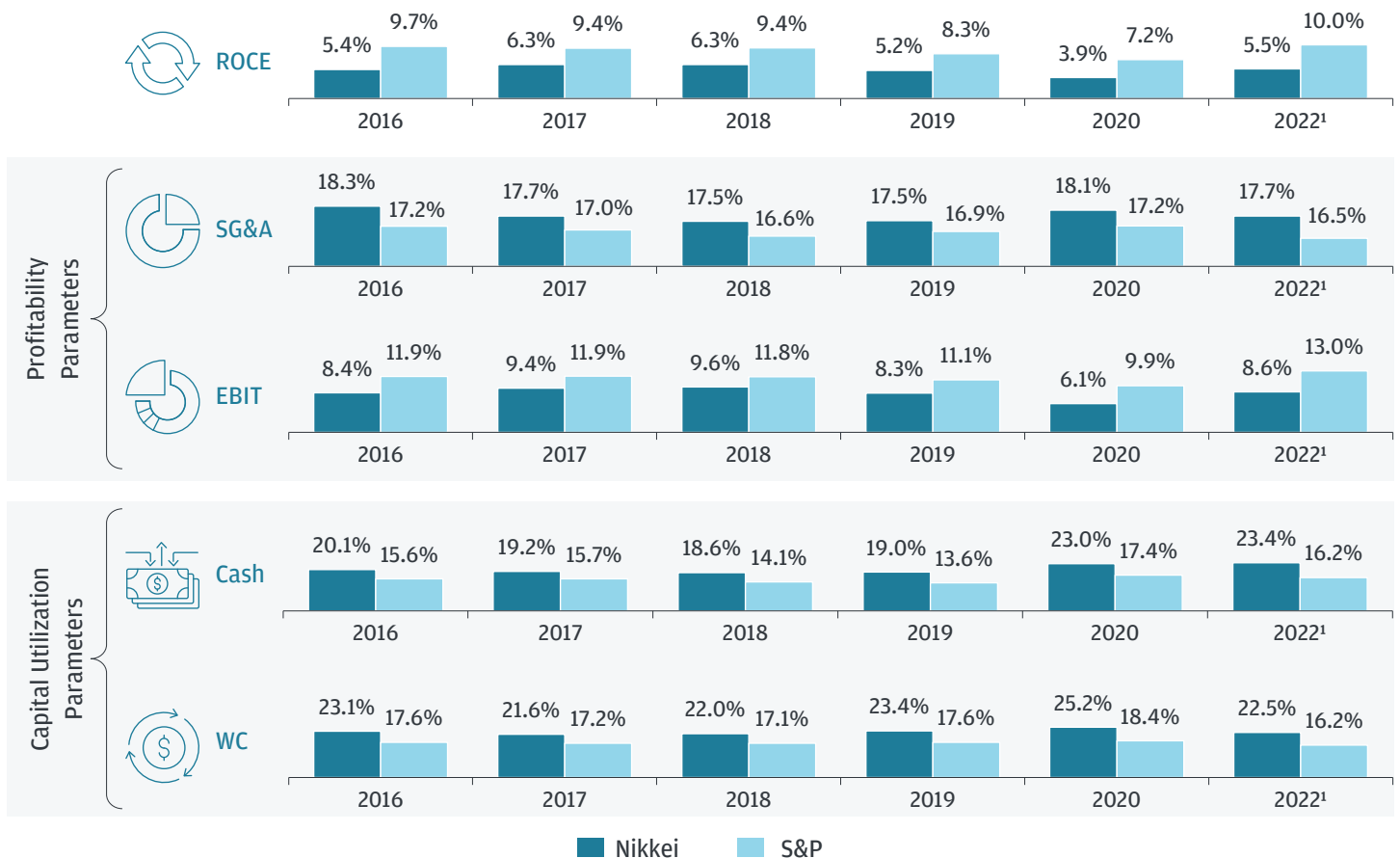
IV. All calculations for 2022 are based on Japanese corporates' fiscal year end (April 2021 - March 2022) while calculations for all years before fiscal year (FY)2022 are based on calendar year's financials (January - December).

Note:  
To avoid the distortion of data, financial services and real estate firms in the S&P 1500 were excluded from the calculations due to their distinct business models and unique working capital metrics in comparison to other industries. Companies with high volatility in working capital and those with incomplete data were also removed, bringing the total number of companies used for this analysis to over 900.  
All numbered data have been gathered from Capital IQ for the purpose of calculations.

# 03

## Key insights

### I. Japanese corporates see widening of gap in ROCE compared to global counterparts



Source: Analysis is based on public financials of companies. Financial information is sourced from Capital IQ

Note:  
 For comparison purposes, S&P 1500 metrics have been calculated based on industry weights of Nikkei 225  
 ROCE is calculated as  $EBIT \times (1 - \text{tax}) / \text{Average total capital}$ ; total capital is sum of Equity and Debt  
 SG&A stands for Selling, General & Administrative expenses as percentage of sales  
 EBIT stands for Earnings before Interest and Taxes and is calculated as a percentage of sales  
 Working Capital / Sales is calculated as average Working Capital of current calendar year and previous calendar year divided by sales of current calendar year; Working Capital is calculated as Trade Receivables + Inventory - Trade Payables  
 Cash / Sales is calculated as average cash and cash equivalent of current calendar year and previous calendar year divided by sales of current calendar year

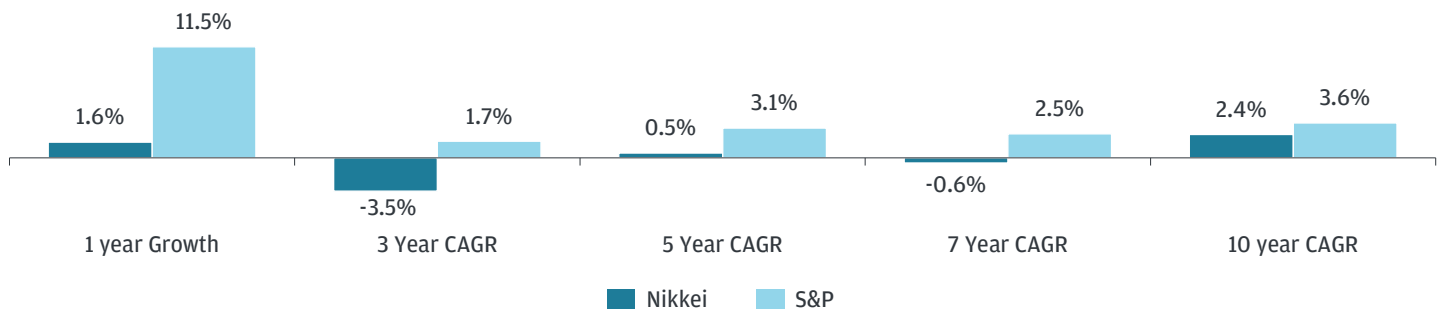
<sup>1</sup> Values are as of December for all years until 2020, for 2022 the values for Nikkei 225 companies are as of March 2022, fiscal year end for most of the Japanese corporates and for S&P companies are as of December 2021

We observe a widening of the gap between the ROCE levels of a typical Nikkei 225 company and an average S&P 1500 company. Although the ROCE of Nikkei 225 companies has improved to pre-pandemic levels due to a pickup in demand, ROCE for an average S&P 1500 company has grown significantly higher.

We also observe higher direct expenses (lower gross margins) and indirect expenses (higher selling, general and administrative (SG&A) expenses) as compared to S&P 1500 companies, reducing overall profitability for Japanese companies. The difference between earnings before interest and taxes (EBIT) margins of an average S&P 1500 and a Nikkei 225 company has increased in 2022 to 4.4% from 3.8% in 2020.

Another big factor contributing to an overall widening of the ROCE gap is a deterioration of capital utilization. While the working capital/sales levels gap has marginally narrowed by 0.5% in 2022, it is still significantly higher for an average Nikkei 225 company at 22.5% as compared to just 16.2% for an average S&P 1500 company. Figures look even worse for cash levels where we see a divergence of trends between Nikkei 225 and S&P 1500 constituents. While cash/sales levels at S&P 1500 companies dropped by 1.2%, cash levels increased for Nikkei 225 companies by 0.4%, widening the gap substantially to 7.2% as of 2022.

### Historically Nikkei 225 has lagged in capex growth when compared to S&P 1500



Source: Analysis is based on public financials of companies. Financial information is sourced from Capital IQ

Empirical data also suggests that Japanese companies have historically been conservative in spending on capital expenditure as compared to their global counterparts with capex growing only 0.5% over the past 5 years for Nikkei 225 companies vis-à-vis compound annual growth rate (CAGR) of 3.1% for an average S&P 1500 company. This gap suggests an ample opportunity for Japanese corporates to improve their capital utilization and free up cash to invest more towards capital expenditure that can help companies realize faster growth.

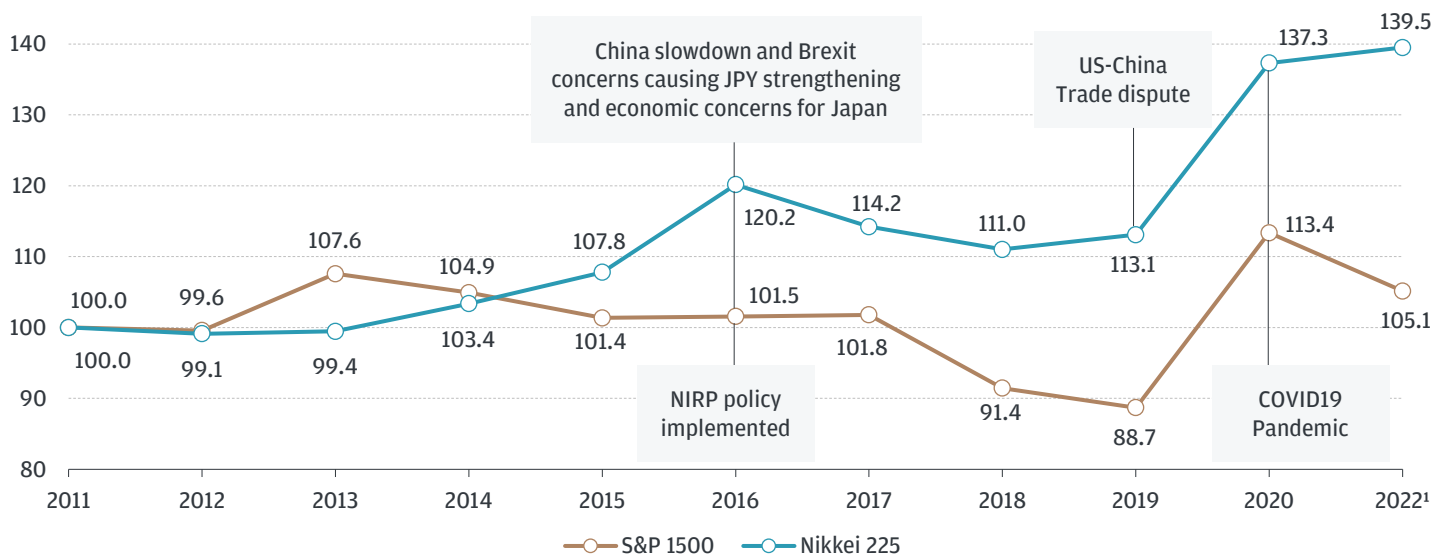
#### Takeaway:

Japanese corporates have a significant ROCE gap to cover as compared to S&P 1500 companies. While domestic demand is expected to recover, this is accompanied by macro uncertainties. Working capital and liquidity management needs to be the focus for treasurers to ensure their businesses not only endure the uncertainty in the near future but can also invest towards growth.

## II. Japanese corporates see greater liquidity cushion

### Average cash performance parameters across the S&P 1500 companies 2011-2022 (in average number of days)

#### Cash Levels



Source: Analysis is based on public financials of companies. Financial information is sourced from Capital IQ. Please refer to “ Calculation methodology” section for more details on the methodology. The trends mentioned are based on J.P. Morgan research, press releases and public filings of the companies.

#### Note:

The orange line represents numbers on the chart calculated as average cash / sales for all Nikkei 225 companies rebased to 100 as of 2011 and the blue line represents numbers on the chart calculated as average cash / sales for all S&P 1500 companies rebased to 100 as of 2011. For comparison purposes, S&P 1500 metrics have been calculated based on industry weights of Nikkei 225 constituents; calculations exclude real estate, financial institutions, non-banking financial institutions (NBFIs) and any outliers.

The cash index has risen by 2.2 points for Nikkei 225 companies, which is in complete contrast to those in the S&P 1500 for which cash levels have dropped by 8.3 points, as companies invested in growth by deploying cash after a long period of cash preservation and global demand picked up over the past year.

In line with S&P 1500 companies, Nikkei 225 companies also increased their spending on capital expenditures, share buybacks, dividends, and merger and acquisition (M&A) activities, but have been somewhat more conservative.

Other key reasons for increasing corporate cash levels include the Bank of Japan’s strong fiscal support and dovish monetary policies to boost demand and inflation along with a weakening yen.

#### Takeaway:

Liquidity will be top of mind for treasurers in these current uncertain times. Japanese corporates are better positioned with a greater liquidity cushion than US counterparts. To manage business volatility as well as support any strategic business priorities, however, it is important that companies have centralized visibility and access to global cash balances.

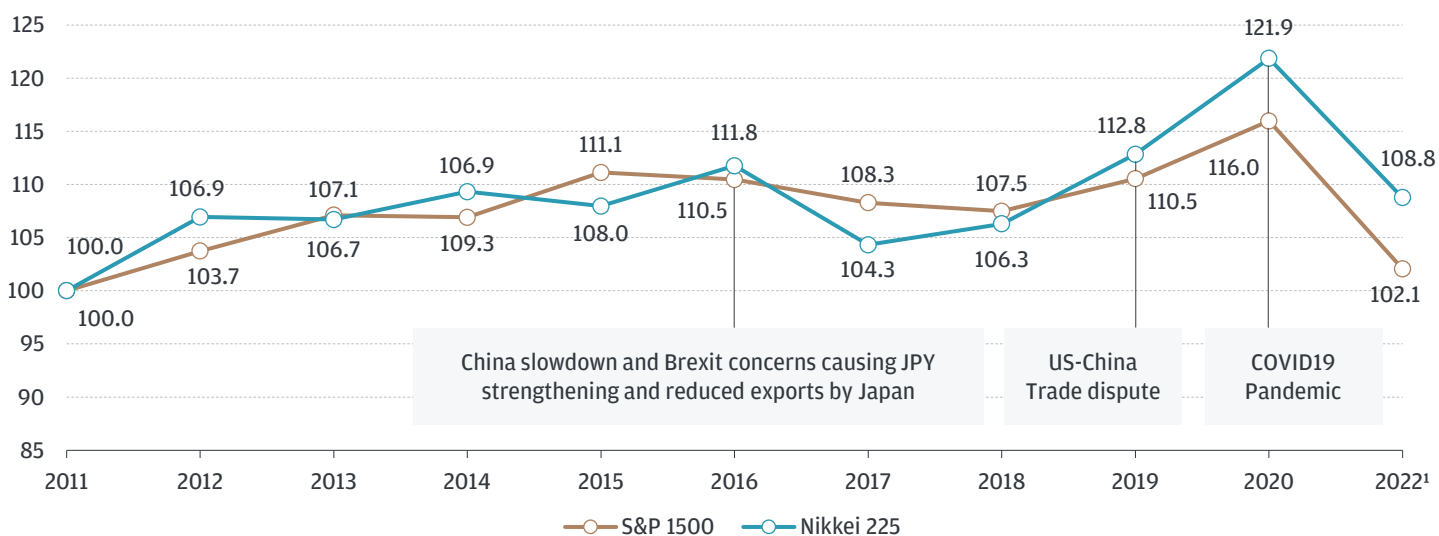
<sup>1</sup> Values are as of December for all years through until 2020, for 2022 the values for Nikkei 225 companies are as of March 2022, fiscal year end for most of the Japanese corporates and for S&P companies are as of December 2021.



### III. Working capital levels reverses direction

#### Average working capital performance parameters 2011-2022 (in average number of days)

##### Working Capital Levels



Source: Analysis is based on public financials of companies. Financial information is sourced from Capital IQ. Please refer to “ Calculation methodology” section for more details on the methodology. The trends mentioned are based on J.P. Morgan research, press releases and public filings of the companies.

Note:  
The orange line represents numbers on the chart calculated as average working capital / sales for all Nikkei 225 companies rebased to 100 as of 2011 and the blue line represents numbers on the chart calculated as average working capital/ sales for all S&P 1500 companies rebased to 100 as of 2011. For comparison purposes, S&P 1500 metrics have been calculated based on industry weights of Nikkei 225 constituents; calculations exclude real estate, financial institutions, NBFIs and any outliers; working capital is calculated as receivables + inventory - payables.

Working capital levels at Nikkei 225 companies have improved drastically, in line with S&P 1500 counterparts, due to a significant pickup in global demand from substantial government and central banks’ supportive fiscal and monetary policies. The uplift in demand has generated higher sales resulting in faster movement of inventories. Inventory levels have been further reduced due to supply-side disruptions, such as raw material shortages and logistic bottlenecks.

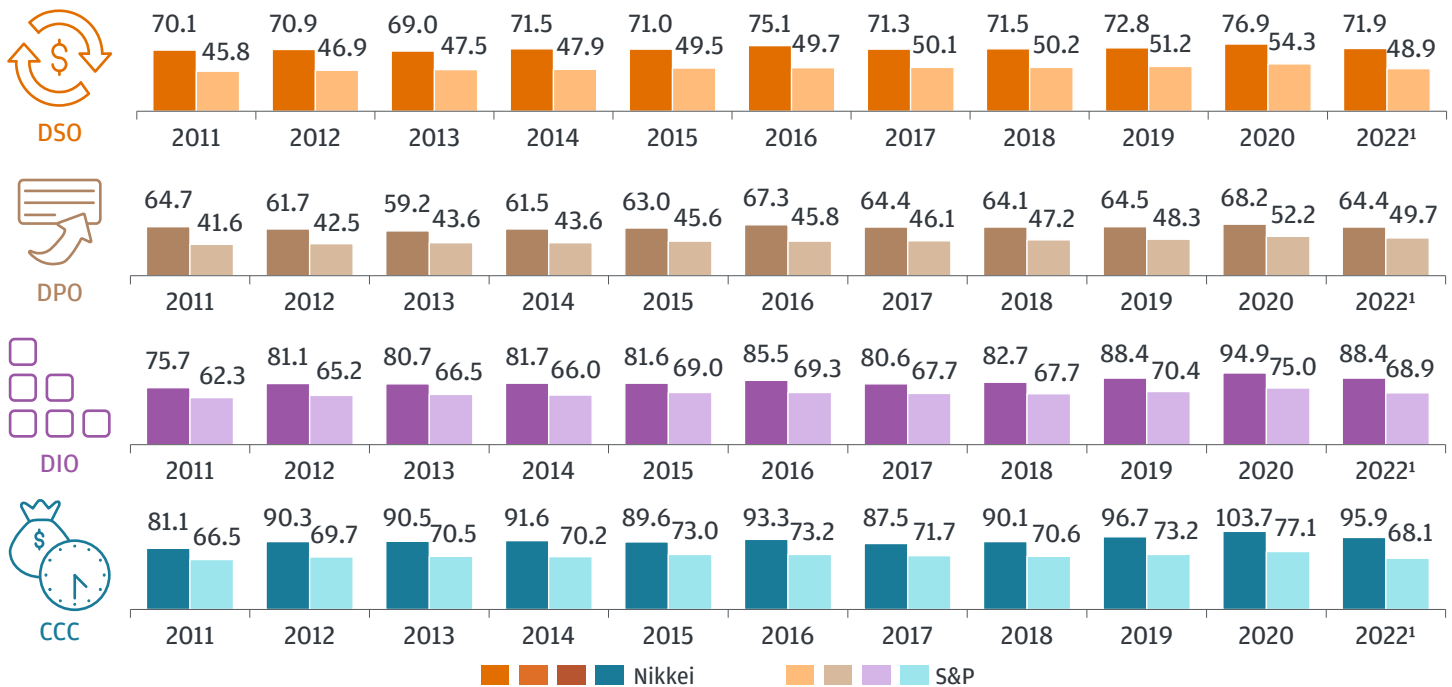
The large gap between supply and demand has also helped companies with faster collection times, resulting in reduced working capital requirements. As this gap starts to narrow, companies may witness an increase in working capital going forward.

#### Takeaway:

Macroeconomic headwinds globally can have spillovers for Japan and put pressure on supply chains. Companies need to focus on managing working capital efficiently so they can release trapped cash and help fund strategic priorities.

<sup>1</sup> Values are as of December for all years until 2020, for 2022 the values for Nikkei 225 companies are as of March 2022, fiscal year end for most of the Japanese corporates and for S&P 1500 companies are as of December 2021.

## IV. Positive signs for the Cash Conversion Cycle after three years



Source: Analysis is based on public financials of companies. Financial information is sourced from Capital IQ. DSO is calculated as average trade receivables of past 2 financial years \* 365 / last financial year revenue; DPO is calculated as average trade payables of past 2 financial years \* 365 / last financial year Cost of Goods sold; DIO is calculated as average trade payables of past 2 financial years \* 365 / last financial year Cost of Goods sold; CCC is calculated as DSO + DIO - DPO. Please refer to "Calculation methodology" section for definitions. The trends mentioned are based on J.P. Morgan research, press releases and public filings of the companies.

Note:  
Modified J.P. Morgan Working Capital Index S&P 1500 companies data used assigns weights of Nikkei 225 Industries to S&P 1500 Industries for comparison.

Despite the impact of lockdowns in China and a late resurgence of COVID, Japanese corporates witnessed an improvement in overall CCC by 7.8 days due to global demand pick-up.

DSO declined by 5 days driven by a recovery in demand and faster collections as companies could bargain for better terms for their customers. Increased adoption of digital sales channels, timely billing and wider adoption of a Direct-To-Customer sales strategy also contributed to the improvement in DSO days.

After the rise in DPO in 2020, which had jumped during the pandemic as companies extended payments as a liquidity conservation measure, DPO levels in FY2022 saw a decline of 3.8 days. This decline was accounted for by a normalization of payment terms, as pick-up in economic activity led to the unwinding of some pandemic-induced liquidity conservation policies.

DIO levels exhibited a drop by 6.5 days for Nikkei 225 companies, driven by higher-than-expected consumer demand coupled with supply chain disruptions. The CCC gap between Nikkei 225 and S&P 1500 companies has largely remained flat, with a slight improvement of 1.2 days on an average basis.

### Takeaway:

Supply chain disruption, quantitative tightening across the globe and high inflation have resulted in volatility in the overall economy. Japanese companies need to closely review their end-to-end supply chains to be able to withstand supply shocks and supply-chain instabilities that are heightening the pressure on working capital.

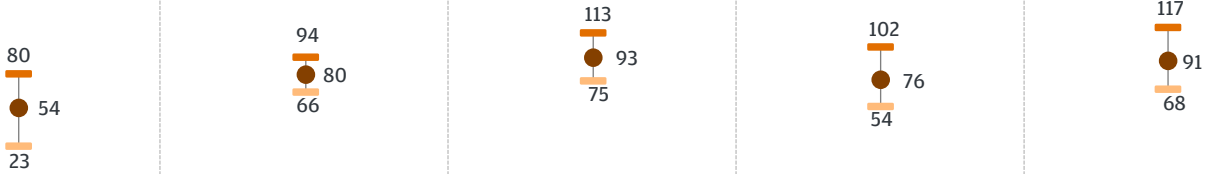
<sup>1</sup> Values are as of December until 2020, for 2022 the values for Nikkei 225 companies are as of March 2022, fiscal year end for most of the Japanese corporates and for S&P 1500 companies are as of December 2021.

# 04

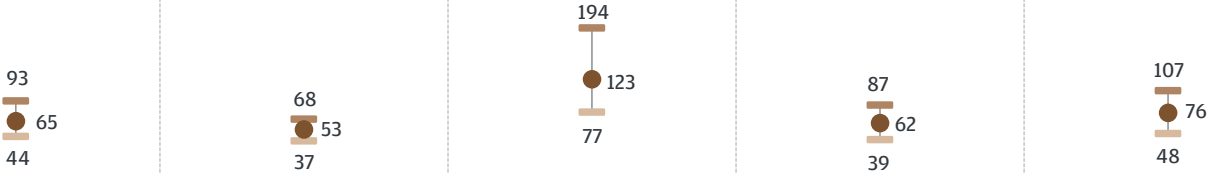
## Sector insights across the Cash Conversion Cycle

Leaders vs laggards: Snapshot of average working capital performances across industries

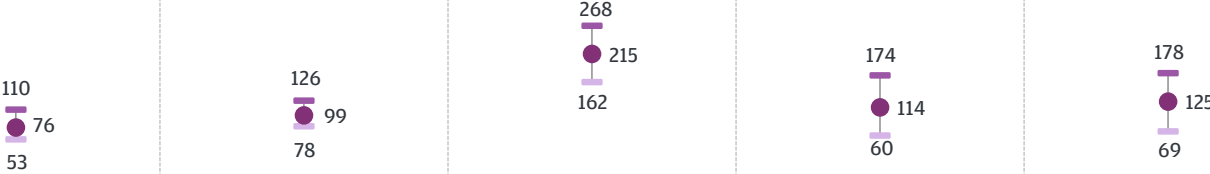
### Days Sales Outstanding (Days)



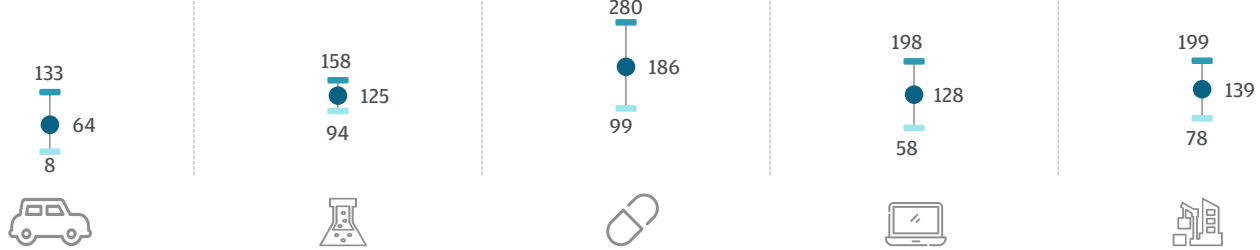
### Days Payable Outstanding (Days)



### Days Inventory Outstanding (Days)



### Cash Conversion Cycle (Days)



Auto and auto parts (13)

Chemicals (16)

Pharmaceuticals (8)

Technology hardware (21)

Industrial machinery (14)

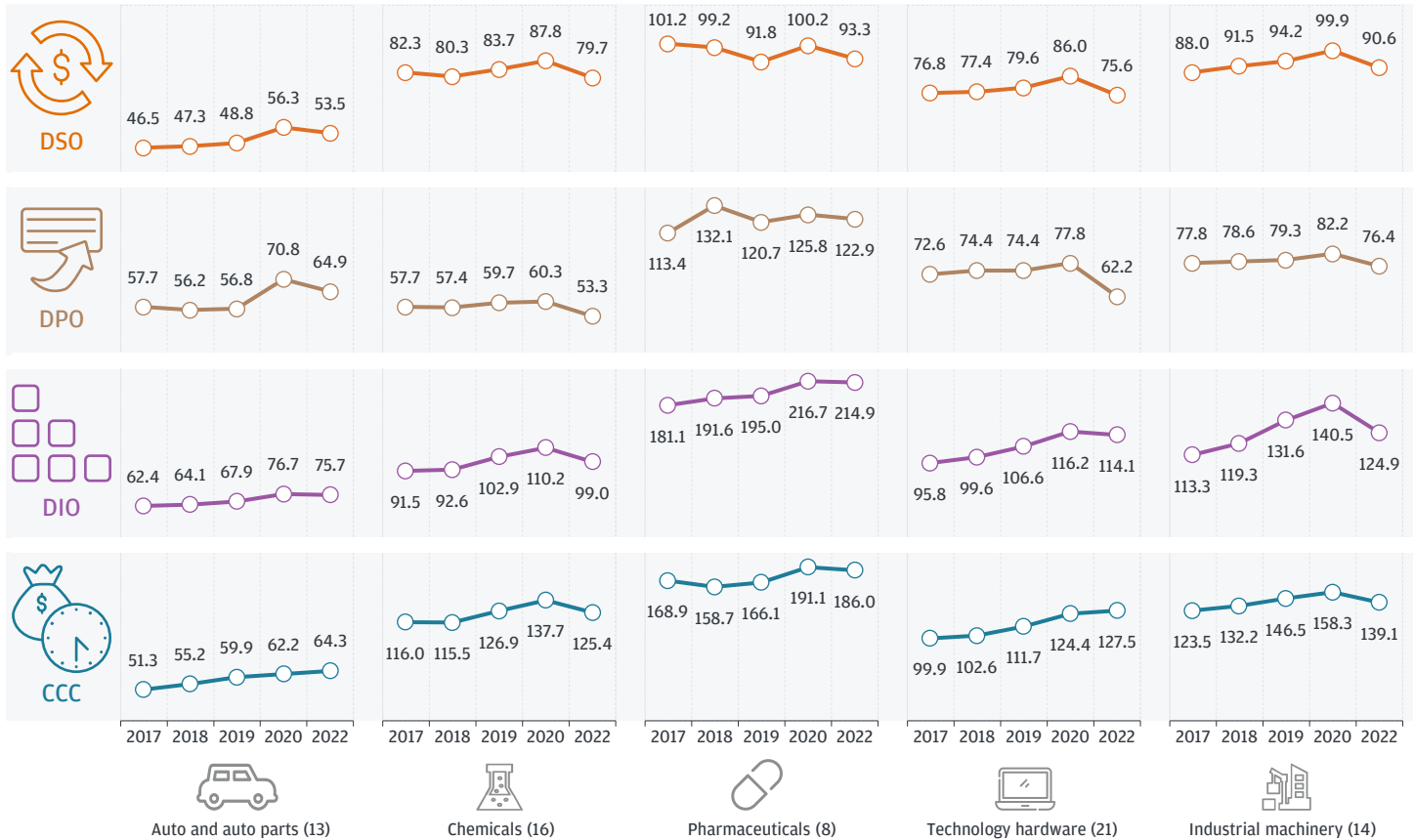
— Average of bottom performers      — Average of top performers      ●●● Total average

Source: Analysis is based on public financials of companies within Nikkei 225 Index representing each of the industry mentioned in the analysis. Financial information is sourced from Capital IQ

We observed a wide gap between the top and bottom performers in terms of CCC across the key industries within the Nikkei Index, suggesting that a significant amount of working capital remains trapped. Based on our calculations, assuming every organization improved its working capital and moved into the next performance quartile<sup>1</sup> of its respective industries across the DSO, the DPO and the DIO metrics, an **estimated \$146.7 billion** in liquidity trapped in working capital could be released as free cash flow.

<sup>1</sup> For every working capital parameter we have split the companies within each industry into four performance quartiles (with the first quartile representing the performance of the top 25 percent companies within the industry and the fourth quartile corresponding to the bottom 25 percent). The free cash flow release calculation assumes that a company moves from its existing performance quartile to the next best performance quartile and quartile one companies remain at current levels.

## Working capital trends across industries



Source: Analysis is based on public financials of companies within Nikkei 225 Index representing each of the industry mentioned in the analysis. Financial information is sourced from Capital IQ. The trends mentioned are based on J.P. Morgan research, press releases and public filings of the companies.

Note:  
Modified J.P. Morgan Working Capital Index S&P 1500 companies data used assigns weights of Nikkei 225 Industries to S&P 1500 Industries for comparison. Values are as of December for all years until 2020, for 2022 the values for Nikkei 225 companies are as of March 2022, fiscal year end for most of the Japanese corporates and for S&P 1500 companies are as of December 2021.

We assessed the CCC trends of five industries in the Nikkei 225 Index

**Auto & auto parts** We observed a slight increase in CCC for auto and auto parts companies despite the pickup in demand over the past year. With a steady easing of restrictions, corporates could collect faster from customers as demand outpaced supply. On the other hand, DPO declined significantly by 5.9 days, more than compensating for the decline in DSO as companies paid suppliers faster to ease liquidity pressures in their supply chain and to source critical raw materials, (e.g. semiconductors which were in shortage during the year).



Interestingly, DIO levels remained largely flat, coming down by only 1 day despite high demand as companies started stockpiling raw materials and shifted away from the just-in-time model to manage any disruptions. An increase in inventory valuations due to high raw materials costs and a weakening yen also contributed to a rise in DIO.

## Chemicals



The chemicals industry experienced a significant improvement in its CCC due to a rapid decline in inventory days and improvement in collection times. DIO declined by 11.2 days due to strong demand as the global economy outlook improved. The chemicals industry benefited from a demand rebound in industrial sectors such as autos and airlines, as well as a jump in chemical prices. DSO levels also came down by 8.1 points, closer to pre-pandemic levels. On an aggregate basis, CCC improved by 12.3 days for the industry.

## Pharmaceuticals



The pharmaceutical industry saw an improvement in overall working capital levels in the last financial year. The cash conversion cycle showed an improvement of around 5.1 days as compared to last year. The improvement in CCC was largely driven by an improvement in DSO days as levels came back closer to pre-pandemic times. Inventory levels however did not decline in proportion, as companies stockpiled critical raw materials due to logistics bottlenecks and supply chain disruptions.

## Technology hardware



Akin to the auto and auto parts industry, the technology hardware industry witnessed a slight increase in CCC of 3.1 days. This was driven by a sharp decline of 15.6 days in DPO that offset a substantial decline of 10.4 days in DSO driven by faster collections from customers as a result of high pent-up demand. The technology hardware industry faced a decline in DIO levels of only 2.1 days due to the currency's devaluation and because of strategic hoarding of key parts and materials, leading to higher inventory valuations.

## Industrial machinery:



The industrial machinery sector witnessed a sharp improvement in its CCC from a sharp decline in DSO and DIO levels. Japan, being one of the global leaders in manufacturing machinery, gained significantly from the pickup in capital expenditures and saw inventory levels for the industry decline by 15.6 days while DSO improved by 9.3 days. Overall CCC improved by 19.2 days.

### Takeaway:

Companies with less efficient working capital management should look at industry best practices and benchmark performance on a continuous basis to identify and release trapped capital when planning for business recovery.

# 05

## Driving forces for future growth



ESG Agenda



Supply Chain Diversification



Tech driven business models



direct to customer



Oil & Gas

Diversifying into clean energy



Materials

Focus on CCS and Recycling



Automotive

Expanding Hydrogen Fuel-Cell & EV Production



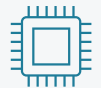
Automotive

Nearshore + Vertical Integration



Apparel and Accessories

Nearshore production; Predictive data driven supply chain management



Technology Hardware

Stock buffers of critical supplies



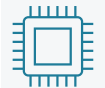
Automotive

Focus on Connected Cars and in car services



Apparel and Accessories

Incorporating Augmented Reality and V-Commerce



Technology Hardware

Expanding with ecosystem of connected devices



Apparel and Accessories

Expanding reach directly to customers



Quick Service Restaurants

Integrated loyalty programs



Automotive

Online vehicle purchasing

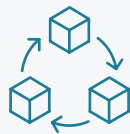
Source: The trends mentioned are based on J.P. Morgan research, press releases and public filings of the companies.

Challenges in recent times have forced corporates to look for innovative ways to adapt and operate as never before. We observed key cross-industry themes emerge that are taking shape and fundamentally altering how companies operate, raise capital, and deliver goods and services.

The themes are:



Environmental, social and governance agenda



Supply chain diversification



Technology-driven business models



Direct-to-customer strategy

With long-term and permanent impact on how companies operate and make decisions, this is also expected to greatly influence the supply chain ecosystems and how corporates interact in that ecosystem.



## Environmental, Social and Governance

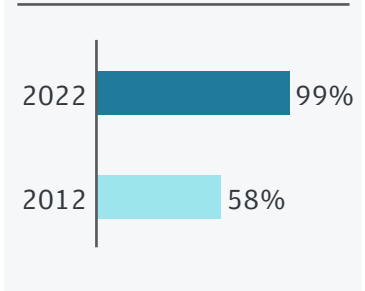
The **ESG Agenda** has been the demand of the decade, propelling long-term commitments from corporates and governments. The Japanese government has identified 14 areas with high growth potential across industries that will help in achieving its 2050 carbon neutrality target. Some examples include:

- **Oil & gas diversifying into clean energy:** Japan’s offshore wind energy potential is one of the largest worldwide and is expected to significantly increase in the future, decreasing Japan’s dependency on fossil fuels.
  - Idemitsu signed a partnership with Skye Renewables to jointly develop commercial and industrial (C&I) solar projects across Southeast Asia.
- **Automotive:** Hydrogen energy being Japan’s strong hold, Japan has one of the highest patent applications in the field of hydrogen fuel cells globally. It also has a large market share of fuel cell vehicles worldwide.
  - Apart from launching electric vehicles (EV) and hydrogen fuel-cell powered cars, Toyota partners with ENEOS to explore a hydrogen-powered Woven City.

Source: Capital IQ, Company annual reports and filings, Idemitsu press release, July, 2022, Toyota press release, March, 2022

<sup>1</sup> Keywords: Sustainability, Corporate Governance Practices, Climate Change, ESG

Percent of companies talking about the related terms<sup>1</sup> in public filings



## Supply chain diversification

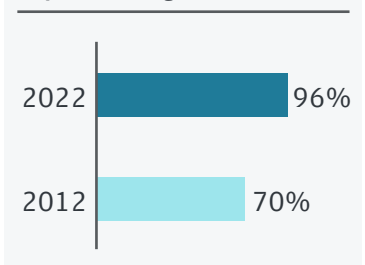
Trade tensions, the COVID pandemic and the Ukraine-Russia war have exposed vulnerabilities in the global supply chains and forced corporates to revisit their supply chain management strategy. Japanese corporates also faced supply chain challenges owing to the notably high concentration of production bases in China. The Japanese government has been taking measures to recover supply chain resilience since early 2020. In 2020, the Ministry of Economy, Trade, and Industry of Japan (METI) initiated two subsidy programs to assist Japanese companies to relocate production back to Japan and countries in Southeast Asia. As a result, there has been an increasing trend amongst Japanese corporates to diversify their supply chains geographically, near-shoring and revisiting procurement strategies from ‘Just-in-time’ to ‘Just-in-case’ strategies. Key developments observed in industries are:

- **Automotive:** Inventory and material shortages have led to corporates creating buffer stocks of essential components, near-shoring, and diversifying their supplier base.
  - Mazda Motor Corp seeks to include higher domestic inventories and diversification of production outside China whilst forming contracts with suppliers in the long term<sup>2</sup>.
- **Technology hardware:** Corporate inventory levels in the Japanese technology hardware sector have been increasing due to strategic stockpiling of parts where there are concerns for procurement. Corporates have also been deploying supply chain diversification strategies to protect themselves from any future disruptions.
  - Sony has been steadily transferring production across multiple facilities and decentralizing the production of key components.

Source: Capital IQ, Company annual reports, filings

<sup>2</sup> Reuters article, August, 2022; Sony, Q1-FY2022 Investor presentation speech transcript; <sup>3</sup> Keywords: Supply Chain, Logistics

Percent of companies talking about supply chain diversification related terms<sup>3</sup> in public filings





## Technology-driven business models

Technology is evolving quickly, replacing old business models, and opening new opportunities for corporates to generate additional revenue streams. Supported by the innovation in payments, technologies such as AI, IoT, Blockchain and Virtual Reality are changing how companies interact and deliver services to consumers.

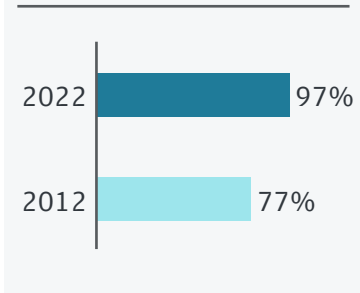
- **Automotive:** Automakers are investing in connected car technology to engage with consumers directly and generate additional revenue from in-car services. Connected cars could provide a variety of payments opportunities, including the ability to pay for gas, parking, or coffee through an in-car wallet.
  - Suzuki Motor plans to make all its minicars connected vehicles by 2025<sup>1</sup>.
- **Apparel and accessories:** Companies are automating operations like warehousing with the help of robots and AI. They're also utilizing AI, 3D Scanning, and computer generated imaging to come up with custom fits for consumers.
  - Uniqlo deployed radio-frequency identification (RFID) tech to monitor inventory in warehouses and stores, extending the usage at smart checkouts, utilizing this data to replenish stock efficiently.

Source: Capital IQ, Company annual reports, filings

<sup>2</sup> Nikkei Asia Article, December, 2021, Fast retailing: Becoming a digital consumer retail company

<sup>3</sup> Keywords: Metaverse, Blockchain, IoT (Internet of Things), AI (Artificial Intelligence)

Percent of companies talking about tech driven business models<sup>3</sup> in public filings



## Direct-to-customer strategy

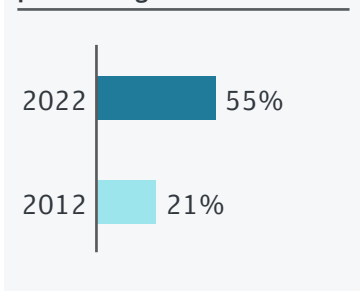
Corporates have in recent times pivoted to omnichannel strategies that incorporate the roles of in-store shopping, ecommerce, and marketplaces. The trend is not new but was significantly boosted during the pandemic as companies struggled to reach customers via traditional channels during Covid restrictions. Japanese corporates have also embraced direct-to-customer (D2C) strategies in pursuit of growth and to increase customer loyalty.

- **Apparel and accessories:** Apparel companies have begun to focus on omnichannel shopping in recent years, lowering the barrier between online and brick and mortar shopping experiences. Furthermore, an increasing number of services are being offered that provide convenience and personalization to the end consumers.
  - Shiseido is focused on having a digitally-driven business model as part of its medium-term strategy. It also has beauty consulting as part of its digital initiative which has features like augmented reality and web counselling directly to its consumers.
- **Automotive:** Online ordering of used vehicles in Japan provides complete digital purchasing services to consumers from quotation to contracting via dealers. The decline in yen is also drawing more overseas buyers to Japan's used-car market.
  - Toyota launched its Toyota Used Vehicle Store to provide online ordering service to its customers.

Source: Capital IQ, Company annual reports, filings, Shiseido press release, June, 2021, Toyota press release, September, 2020

<sup>1</sup> Keywords: E-commerce (Electronic Commerce), Marketplace

Percent of companies talking about D2C strategy<sup>1</sup> in public filings





All these fundamental changes will materially impact corporates' working capital as companies adjust their supply chains to create supplier diversification or entirely new businesses that capitalize on emerging trends. Supply chains will become more complex as companies deal with new suppliers in new locations or in some cases operate in completely new ecosystems of suppliers and customers.

**Takeaway:**

As businesses are adapting to fundamental shifts influenced by external and internal forces, supply chains are becoming more complex. Treasury will have a critical role to play in managing this complexity as they are responsible for identifying and projecting the liquidity and funding needs of the business. Digitization and data are going to be crucial levers for treasurers to leverage as they look for the most optimized outcomes for the businesses both in terms of working capital optimization and improvement in supply chain resiliency.

# 06

## Building a liquidity action plan

As companies try to adapt to new market dynamics, execute new strategies, and implement best practices in an already stressed environment, they require a comprehensive action plan to manage their liquidity. This plan should include, but is not limited to the following focus areas:

- Securing access to liquidity
- Managing working capital
- Dealing with supply chain disruptions

Companies should look to touch topics like cyber security, fraud prevention, consumer evolution and more importantly utilize tools like AI and big data analytics to forecast their liquidity requirements in a more scientific way.

To stay on top, corporate treasurers need to sharpen their cash forecasting capabilities, establish real-time visibility into cash positions and revisit assumptions and calculations. Developing the right technology infrastructure can significantly improve data collection, reporting, analysis and forecast accuracy and ensure that treasury can be agile during evolving business conditions.

Utilizing data analytics to analyze historical working capital and cash trends, data patterns and volatility can provide insight into the operating cash requirements of a company, allowing efficient utilization of liquidity sources. J.P. Morgan has developed proprietary analysis to help corporates with estimating operating cash requirement based on historical data.

It is important for companies to do scenario planning, especially in volatile economic environments. Companies should analyze the impact of FX, interest rates and commodity price volatility on cash flows, which can help prepare for worst case scenarios.

In times of crisis like the COVID-19 pandemic, companies can utilize stress testing and crisis planning to effectively manage the availability of funds across varied scenarios. The following three-step framework can serve as a high-level guide for companies to consider as they navigate future crises.

1 Analyze key liquidity drivers		2 Draw liquidity stress scenarios			3 Build treasury Action plan	
Liquidity Drivers		3 Month Stress	6 Month Stress	12 Month Stress	Action Plan	
Operating Income	Sales Impact	✓	✓	✓	Reduce	<ul style="list-style-type: none"> <li>• Discretionary spend -travel, entertainment, marketing etc.</li> <li>• Fixed cost reduction areas like IT, real estate</li> </ul>
	Discretionary Spend	✓	✓	✓		
	Fixed Expenses			✓		
Working Capital	Internal Cash	✓	✓	✓	Release	<ul style="list-style-type: none"> <li>• Mobilize Internal Cash (Interco loans)</li> <li>• Release Working Capital with payment terms optimization &amp; trade solutions</li> </ul>
	Customer Receivables	✓	✓	✓		
	Supplier Payments	✓	✓	✓		
External Funding	Working Capital Loan	✓	✓	✓	Secure	<ul style="list-style-type: none"> <li>• Create back-up funding plans as commercial paper market dries out</li> <li>• Term out maturities in low-rate environment</li> </ul>
	Committed Bank Line		✓	✓		
	Debt Issuance		✓	✓		
	Capital Raise			✓		
Shareholder Action	Dividend Distribution		✓	✓	Defer	<ul style="list-style-type: none"> <li>• Dividend payments aligned to liquidity situation</li> <li>• Defer share buy-backs according to liquidity</li> <li>• Defer capex wherever possible</li> </ul>
	Share Buyback			✓		
Investments	Capex	✓	✓	✓	Identify	<ul style="list-style-type: none"> <li>• Identify assets / businesses that can be liquidated for emergency liquidity</li> </ul>
	Asset / Business Sale			✓		

# Conclusion

The global economy today is facing multiple headwinds with its outlook deteriorating markedly throughout calendar year 2022 amidst high inflation, aggressive monetary tightening, and uncertainties from both the war in Ukraine and the lingering pandemic. The Japanese economy however looks more resilient as the global outlook darkens. While there will be spillover effects from a global slowdown on Japanese corporates, there has been pick up in domestic demand as COVID restrictions have been lifted. The Bank of Japan is expected to continue its loose monetary policies, further supporting domestic consumers and businesses with a cheap supply of money. While still uncertain, an opening of China restrictions can provide a further boost to Japan's economy and businesses as China is still one of the biggest trade partners for the country. This puts Nikkei 225 companies in a favorable position as compared to S&P 1500 companies, where Nikkei 225 companies can still manage to continue investing in strategic priorities and growth that can narrow down the ROCE gap with S&P 1500 counterparts. Analysis on Nikkei companies shows trapped liquidity of ~\$147 billion in working capital, which if released can provide a cheap source of funding for these investments. However, Japanese corporates will have to balance growth opportunities with managing the risks associated with external macro uncertainties.

While the complexities of growth vary from sector to sector, we have observed some key cross-industry risks and opportunities that corporate treasurers should manage to provide tactical support to businesses in pursuit of growth driven by recovery.

## Risks



### US, EU Recession

Looming macro-economic outlook hurting exports



### Currency volatility

Currency devaluation leading to higher costs and inventory valuation



### Supply Chain Disruptions

Developing agile and resilient supply chains



### Geopolitical Tensions

Managing supply-chain and costs risks

## Opportunities



### ESG

Adopting ESG principles and invest towards ESG targets



### Domestic Demand Recovery

Sailing towards growth on the back of pent-up demand recovery



### Ease of China COVID Restrictions

Re-visiting strategic partnerships and continuity planning



### New Age Business Models

Actively adaption of changing order and consumer demands

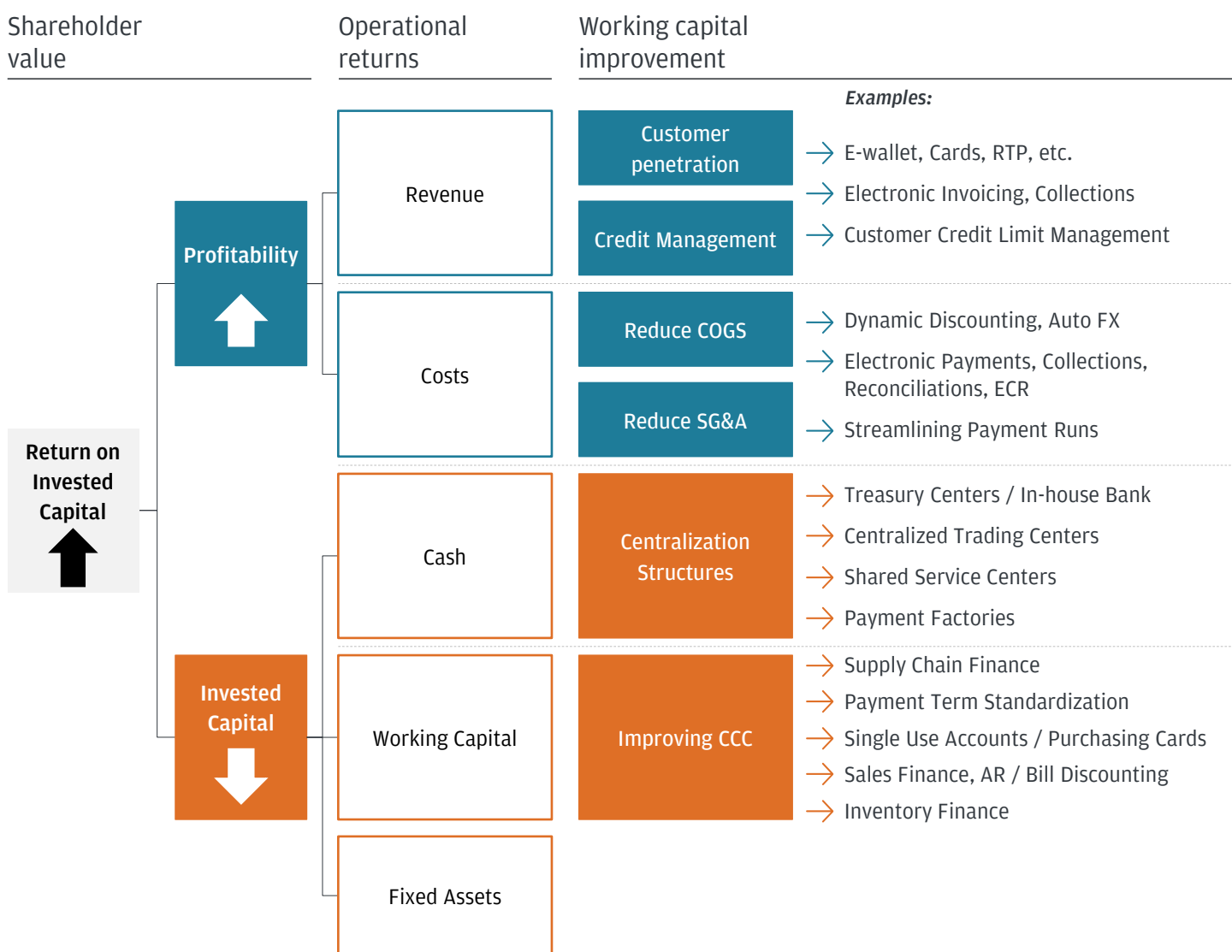
Given multiple strategic opportunities staked against short-term risks and disrupted supply-chains, efficient working capital management plays a vital role to release significant liquidity to achieve goals and meet their needs for risk management and long-term value creation.

Treasury can play an important role as a strategic advisor in supporting corporate strategic objectives in these uncertain times. As treasurers start to look ahead, they need to prioritize liquidity, working capital and risk needs of the business such as managing trapped cash, reducing FX risks, and optimizing working capital. This can free up trapped liquidity and bring in operational efficiencies offering much needed capital to fund the business objectives and manage risks.

Japanese corporates can be more proactive in adopting global best practices to establish global visibility, control, and centralization. Setting up treasury and operating models such as regional treasury centers, shared service centers and in-house banks, may serve as the key to realize an optimal treasury state. Solutions like sustainable supply chain finance and dynamic discounting can be useful to enhance supplier relationships and provide additional liquidity to suppliers as well as contribute to the company’s ESG and supply chain resiliency goals. Equally, as corporates are faced with continued supply chain disruption, forcing them to switch from ‘just in time’ to ‘just in case’ planning, treasurers can utilize solutions such as inventory finance to alleviate the drain on cash, whilst ensuring inventory is off the balance sheet until such time that is required.

Global companies with diverse geographic locations and customer bases are currently facing increased FX volatility risks, adding to the challenge of maintaining liquidity and working capital efficiency. Such an organization can utilize the notional multicurrency pools to offset both long and short balances held across entities and currencies, thereby providing additional liquidity to meet working capital needs that may not otherwise be accessible.

While treasurers will take varied paths for business growth in 2022, we expect cash and working capital optimization to remain a key priority. With significant optimization potential within working capital management, there is good opportunity for Japanese companies to identify more cost-efficient funding. This funding can either provide an adequate liquidity cushion for businesses preparing to navigate through times of turbulence, or support growth for companies achieving strong recovery and looking to further develop and expand their domestic and international businesses, which creates more value to shareholders.



# 08

## At a glance

The gap in ROCE levels between S&P 1500 and Nikkei 225 companies has widened this year from 3.3 percent to 4.5 percent, a deterioration of 1.2 percent.

# \$146.7 BILLION

Estimated working capital that can be released across the Nikkei 225 companies

ROCE gap between S&P 1500 and Nikkei 225 has increased by

**1.2%**  
ROCE

**13.1 points**

Decline in WC index

**157.7 days**

Difference between leaders and laggards

**2.2 points**

Increase in cash index



CCC  
Gap in CCC has increased by

**1.2 days**

26.6      27.8  
2020   ▲   2022

Difference between Nikkei 225 and S&P 1500



Cash  
Gap in cash has increased by

**1.6%**

5.6%      7.2%  
2020   ▲   2022

Difference between Nikkei 225 and S&P 1500

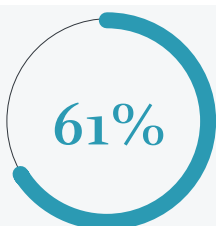


EBIT  
Gap in EBIT has increased by

**0.6%**

3.8%      4.4%  
2020   ▲   2022

Difference between S&P 1500 and Nikkei 225



of companies in the Nikkei 225 saw an improvement in CCC of which:

- 74% showed shortening of DSO
- 67% showed shortening of DIO

Overall, **7.8 days** fall in CCC and **5 days** improvement in DSO

# 09

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