

J.P.Morgan

J.P. Morgan Latin America Working Capital Index 2021

Helping companies
benchmark for success

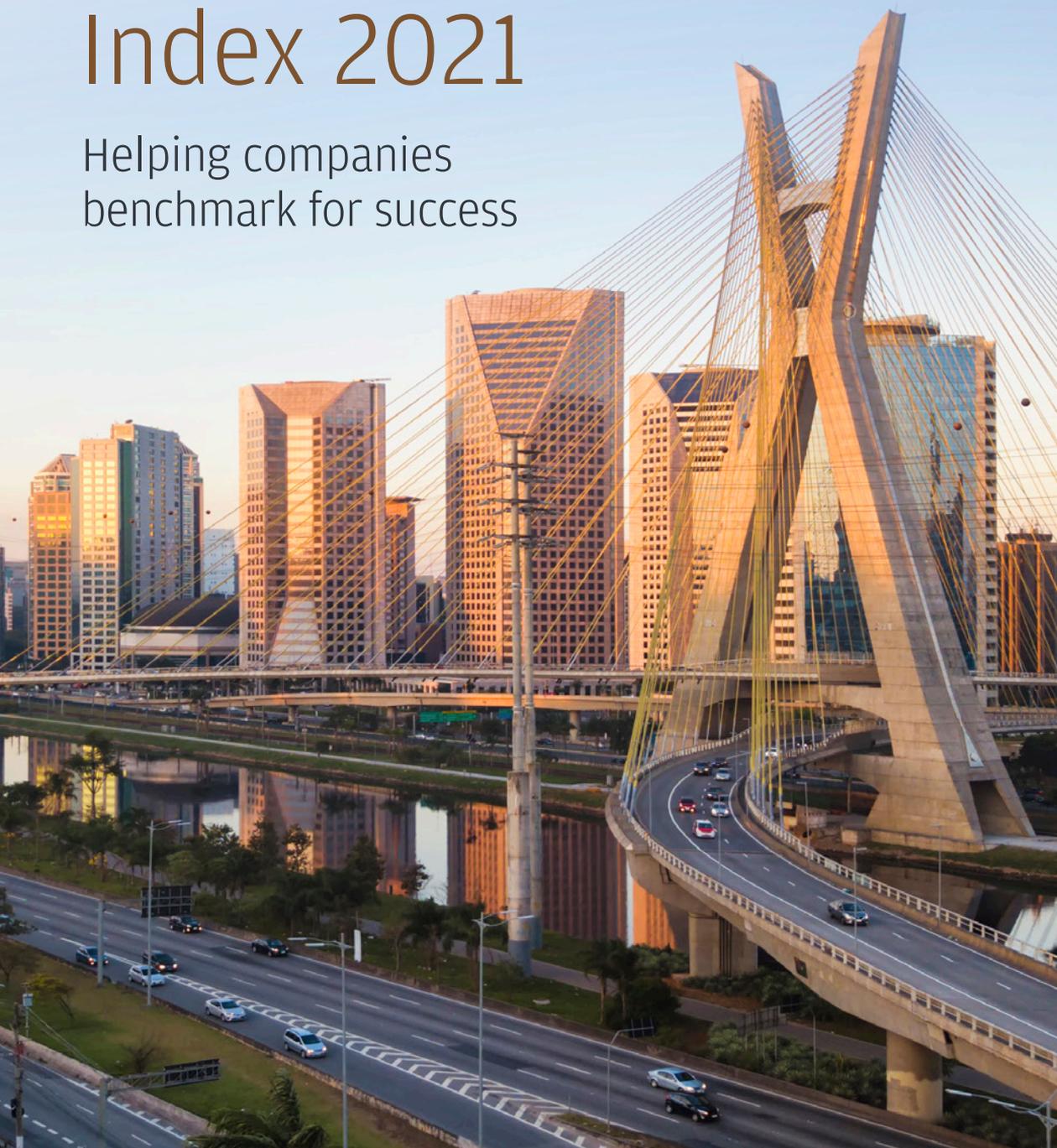




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1 Introduction

The pandemic left an indelible mark on the global economy with significant disruptions across emerging markets, especially Latin America. The global pandemic exposed the constraints on access to liquidity in times of crisis and prolonged uncertainty. For this reason, tapping internal sources of liquidity via working capital optimization is even more important in allowing companies to deploy cash to the right place at the right time. Those CFOs and Treasurers that implemented an efficient working capital management strategy were better equipped to weather the storm during 2020 and leverage their capital for strategic investments and/or acquisitions.

Despite vaccination programs being rolled out globally, many countries in the region are still experiencing new waves of infections, making it difficult to predict how much longer the pandemic will last, or when a full recovery will happen and how that might play out.

This J.P. Morgan report captures the working capital metrics of the Latin American companies in six countries—Argentina, Brazil, Chile, Colombia, Mexico and Peru. Companies should leverage this report to evaluate where they stand in comparison to their peers and implement efficient strategies that shorten Days Sales Outstanding (DSO) and Days Inventory Outstanding (DIO), while extending Days Payable Outstanding (DPO) with the goal of reducing the amount of cash on their balance sheets. This report aims to help finance practitioners track the working capital trends and guide their initiatives to enhance their working capital management as they prepare for recovery in 2021 and beyond.

In this report, we will cover:

- Key findings: working capital and cash levels
- Latin America's cash conversion cycle
- Country deep dive
- Industry deep dive
- Lessons from history

2 Calculation methodology

There are three sets of data points analyzed in this report that when combined provide a holistic view of the working capital trends in the period between 2012 and 2020. For our analysis we have only considered six countries in Latin America: Argentina, Brazil, Chile, Colombia, Mexico and Peru.

- I. The working capital index tracks the average net working capital/sales values across Latin American companies as compared with S&P 1500 companies and is calculated as follows:

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

- II. Monitoring cash levels goes hand-in-hand with managing working capital, as treasury practitioners are required to provide strategic inputs on budget and cash flow. In this context, we have also developed the cash index that tracks the average cash/sales values across the Latin American companies and compared with S&P 1500 companies. This is calculated as follows:

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

III. In addition, we analyzed the Cash Conversion Cycles (CCC), or the number of days it takes to convert inventory purchases into cash flows from sales across the Latin American companies. The CCC is a metric that helps quantify the working capital efficiency of a company and is essentially derived from three different components:

- Days Payable Outstanding (DPO) or the number of days from the time a company procures raw materials to paying their 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 their working capital by effectively managing the individual components of their CCC via 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.

Note:

To avoid the distortion of data, financial services and real estate firms in Latin America and 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 in Latin America to over 520 and in the S&P 1500 to over 900. All numbered data have been gathered from Capital IQ for the purpose of calculations. Please also note that there may exist some variance in financials reported from the previous year's report for the industry and country analysis. This can be attributed to additions and removals of new companies with available data, in addition to variances caused by financial restatements of companies as they adopt new accounting standards across their operational footprint.

3 Key findings

I. Working capital levels rose over 10% year over year



Source: Capital IQ

The working capital levels increased significantly in 2020 for both Latin America and the S&P 1500 as widespread lockdowns and asynchronous demand met supply chain disruptions in the wake of the global pandemic. As the global economy went into recession, corporates were left with high levels of excess inventories. The situation was exacerbated as companies stocked up inventories to mitigate further perceived supply chain disruptions.

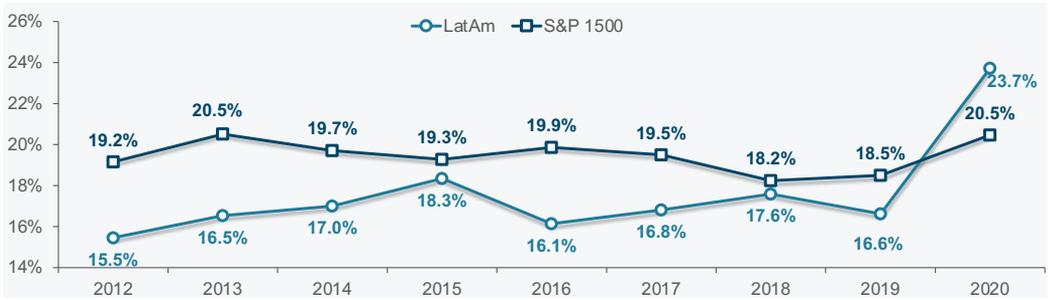
Business sentiment recovered towards the end of the year, with sales in some industries improving and receivables levels rising, all which contributed to an increase in working capital levels.

At the time of this writing, uncertainty remains for many Latin American countries as limited vaccine distribution and new variants of the virus threaten economic recoveries across the region. Each country in Latin America has its particularity, however we believe working capital levels over time will trend lower as consumer confidence rebounds and demand for goods and services returns.

Takeaway:

Even as the macro environment shows improvement, treasurers should continue to focus on enhancing their working capital management. Significant amounts of liquidity currently trapped in working capital, if released in a timely manner, can provide the much-needed capital to fund future growth.

II. Cash levels rose significantly on fortified liquidity buffers



Source: Capital IQ

Key insights

After 2015, Latin America began showing signs of recovery through efficient use of working capital and reduced cash buffers. However, in early 2020, similar to their global peers, corporate treasurers in Latin America drew down available revolving credit lines to secure liquidity at the onset of the pandemic and in the face of sustained uncertainty.

In 2020, most corporations also limited their capital expenditures, which increased cash flow and helped mitigate volatility within cash management operations.

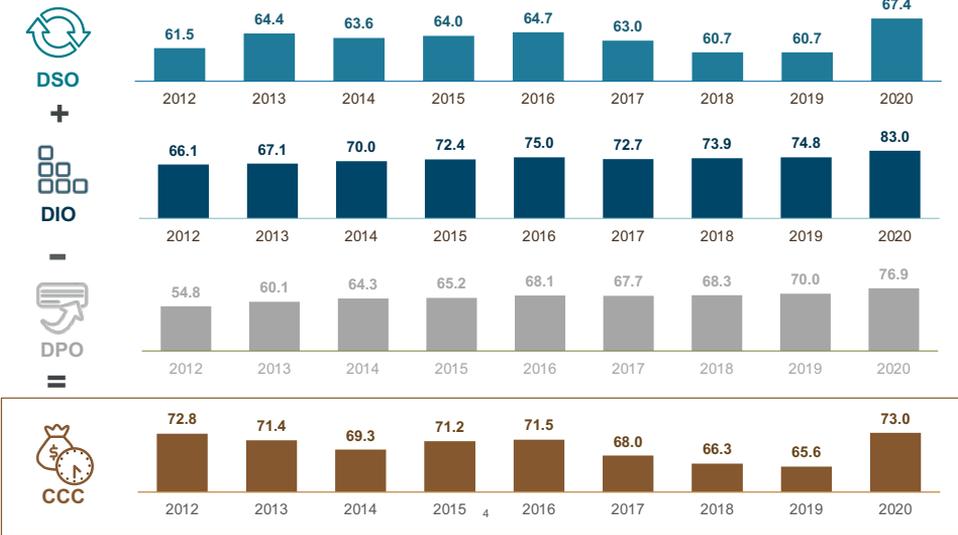
Last year, the cash index rose to levels not seen in eight years as corporates turned to fund-raising initiatives and cash preservation measures to shore up their liquidity buffers amid the pandemic. Over the last decade, we have seen cash levels converge between Latin American companies and the S&P 1500, but in 2020 we saw a dramatic increase of cash levels for Latin America as currency devaluations, credit ratings downgrade, and access to capital came to the forefront.

Takeaway:

As corporates prepare for a recovery in their businesses, treasurers should revisit their cash management strategies and shift focus from cash preservation to cash deployment to support the business growth.

4 Dissecting the cash conversion cycle

Average working capital performance parameters across Latin American companies 2012-2020 (in average number of days)



Source: Capital IQ

Key insights

If we analyze the CCC of Latin American corporates prior to the pandemic, there is an overall trend of improvement, as seen in the chart above. DPO improved by 15 days from 2012 to 2019, driving much of the CCC efficiency gains. In that same period, DSO worsened but ultimately settled around 61 days, as DIO steadily increased.

In the face of the pandemic, governments in Latin America and across the world made difficult and variate decisions for their respective countries which had dramatic impacts across industries and countries. Businesses were forced to adapt and, in some cases, change business models to reach their end consumer, while managing global supply chain disruptions and economic uncertainty.

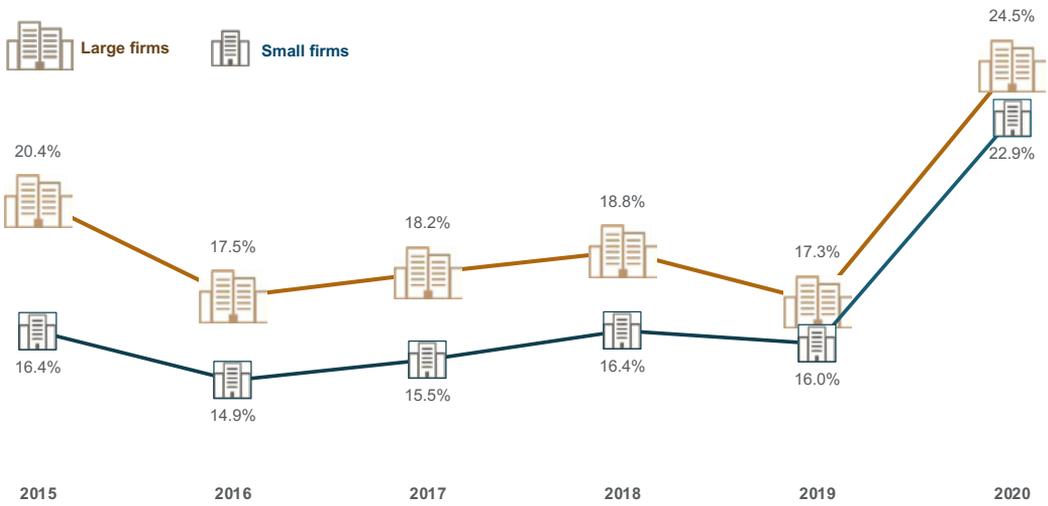
DSO sharply increased as customers delayed payments due to job security fears and overall economic ambiguity. Similarly, DPO increased in corresponding measure, as companies delayed payments and/or extended payment terms with their suppliers and/or vendors.

2020 also brought into focus the importance of environmental, social and governance and the role corporates will play in driving change and delivering value to all stakeholders, including consumers, suppliers, investors, governments, and broader society.

Takeaway:

As corporates prepare for recovery in their businesses, treasurers should revisit their cash management strategies and shift focus from cash preservation to cash deployment to support business expansion.

5 Narrowing gap in cash levels between small and big companies



Note: Historical ratios restated as of 2020. Values for big companies are derived by calculating the averages across the top 50 percent of companies (by revenue) of every industry. For small companies, the value is calculated using the averages of the bottom 50 percent of companies (by revenue) across each industry.

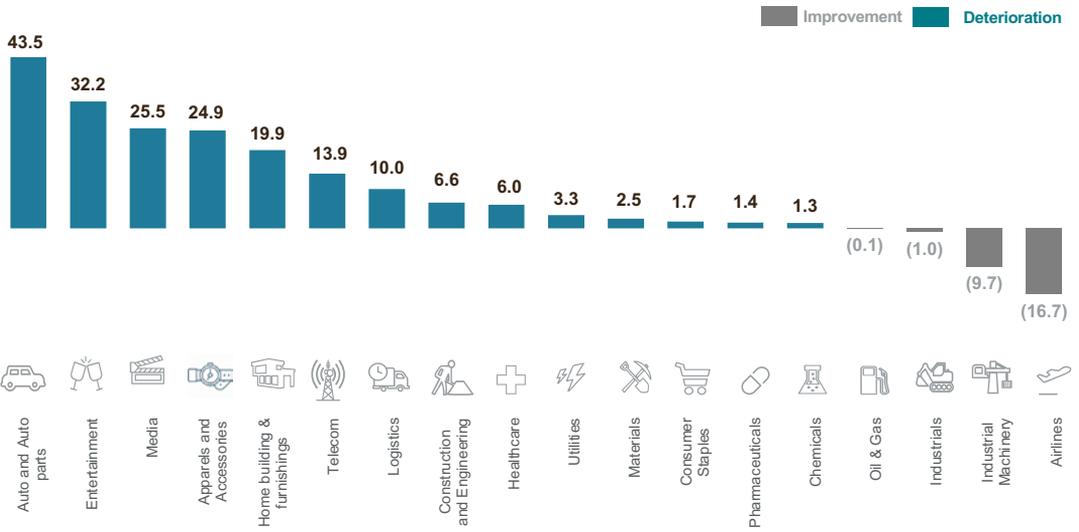
Generally, larger companies in Latin America maintain higher cash levels, which can be attributed to increased currency risk and sensitivity to the geopolitical macroeconomic backdrop. The global pandemic posed unique challenges in the ability to access funding, resulting in large and small companies both increasing their cash levels to withstand the prolonged uncertainty. These dramatic increases in cash levels for both groups is reflected in the diagram above, as cash levels for both small and large companies increased approximately 7 percent.

Takeaway:

Corporates should assess and create cash management strategies best suited for them, keeping the balance between managing the risks arising from the global pandemic and supporting business growth as the recovery continues to take shape.

6 Sector insights

Changes in cash conversion cycle by sector (days) 2019–2020



Source: Capital IQ

In terms of the CCC performance across corporations in Latin America, 14 of the 18 industries saw deterioration, or longer CCCs, mainly attributed to accumulated inventories.

Among the industries, the CCC of the auto and auto parts sector lengthened the most as reduced demand, supply chain shocks, and economic uncertainty led to negative impacts on the industry’s DSO and DIO working capital metrics.

Although it may appear from the chart that the Airlines industry in Latin America saw the greatest improvement in working capital year over year, this is only half the story. The airlines industry was severely impacted by the pandemic. A large portion of established airlines filed for bankruptcy, closed select operations and limited service to minimize the overall economic impact. Due to this, the DPO of the industry nearly doubled in length of days, showing an improvement in CCC.

Corporates in Latin America had to manage the changing dynamics of regulation, safety, and logistics for each market where they operate and do business. The persistent uncertainty throughout the year made forecasting more difficult and created new operational inefficiencies. In such an environment, visibility, control, and optimal liquidity management remain the critical tools in the treasurer’s arsenal going forward.

Takeaway:

The pandemic caused significant challenges in working capital management across the region and industries. Some treasurers resorted to tactical short-term measures like delaying their payments to suppliers. However, for the longer term, treasurers should reassess the levers driving their CCC and devise a more sustainable strategy to manage working capital.

7 Country focus: \$51 billion estimated in potential working capital

In this section, we examine the shifts in working capital levels, cash levels and the drivers of change for six countries in Latin America over a specified period in comparison with the S&P 1500. For each country we analyzed the amount of liquidity tied up in supply chains and provide key insights for the period of 2012 - 2020.

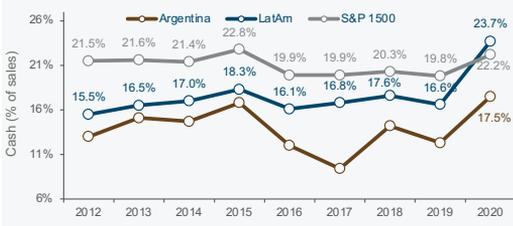
Assuming every organization improved its working capital and moved into the next performance quartile¹ in their respective industries across the DSO, the DPO and the DIO metrics, an estimated \$51 billion in working capital could have been released as of year-end 2020.

¹ 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 their current levels

Of the US\$51.0 billion of liquidity trapped in Latin America's working capital, there is potential to release US\$1.3 billion in Argentina.



Cash levels across Argentina, Latin America and S&P 1500



CCC trend across Argentina, Latin America and S&P 1500



Source: Capital IQ

Key insights

- Argentina has been grappling with a serious economic crisis for nearly a decade with prolonged inflation and capital controls complicating liquidity management.
- In 2020, the Argentine economy shrank for the third consecutive year, this time owing to the impact of the pandemic, which hit private consumption, investment and exports negatively, leading to an increase in cash levels.
- The country has defaulted on its external debt (debt held by foreigners) nine times over the course of its 200-year history as an independent nation and is currently working with the International Monetary Fund (IMF) to reach an extended fund facility agreement before March 2022/ On this date, Argentina faces an IMF debt payment of US\$4.3 billion and a Paris Club deadline requiring an agreement with the IMF to avoid a default.

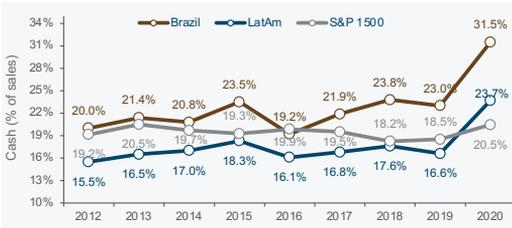


Brazil

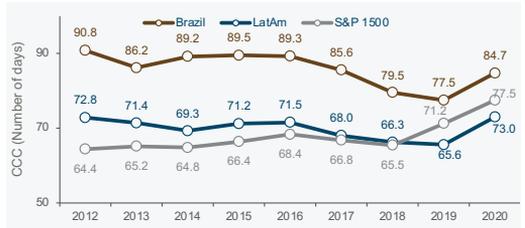
Of the US\$51.0 billion of liquidity trapped in Latin America’s working capital, there is potential to release US\$18.9 billion in Brazil.



Cash levels across Brazil, Latin America and S&P 1500



CCC trend across Brazil, Latin America and S&P 1500

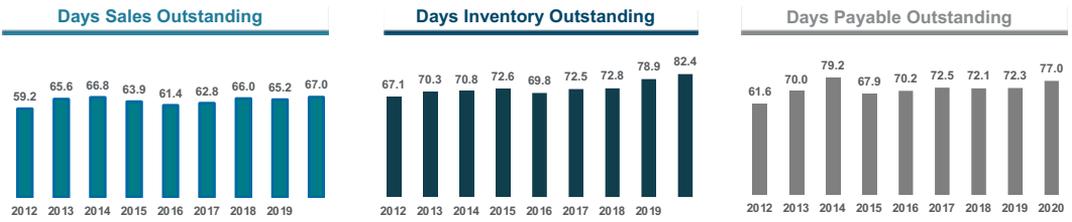


Source: Capital IQ

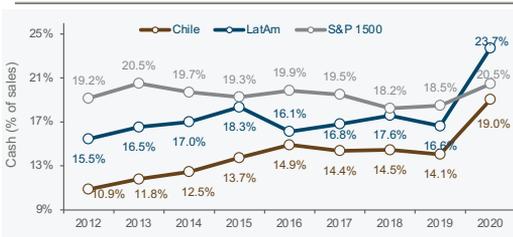
Key insights

- Brazil and China’s economies are inextricably linked due to the trade of commodities and raw materials.
- Brazil’s exports to China fell significantly in 2020, principally affecting those products with forward linkages in the value chains.
- Working capital metrics for DIO were most affected on a percentage basis year over year, as inventories and restrictions on imports/exports proved complex and difficult.
- Like other Latin American countries, geopolitics and commodity prices exert a strong influence over the Brazilian economy, for which corporates tend to hold higher cash buffers in anticipation of unforeseen market dynamics.

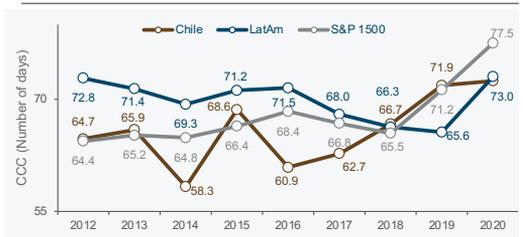
Of the US\$51.0 billion of liquidity trapped in Latin America’s working capital, there is potential to release US\$10.4 billion in Chile.



Cash levels across Chile, Latin America and S&P 1500



CCC trend across Chile, Latin America and S&P 1500

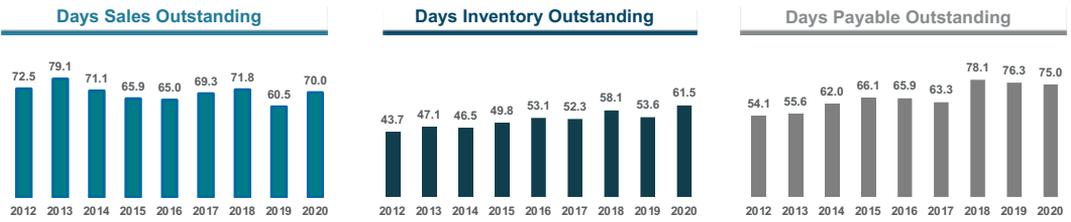


Source: Capital IQ

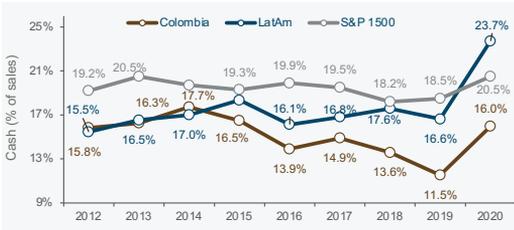
Key insights

- The small nation has bounced back strongly from the 2008 crisis and surprised many regional economists by growing around five percent annually prior to the pandemic, despite slumps that impacted large neighbors Brazil and Argentina.
- The pandemic plunged the economy into the worst recession in decades. GDP contracted six percent in 2020, with copper prices touching a bottom in March 2020. However, since that time, copper prices have rebounded and helped drive the economic recovery in 2021.
- As a nation, Chile has been exemplary in their pandemic vaccination programs, improving overall GDP forecasts along with short term accommodative fiscal policy.

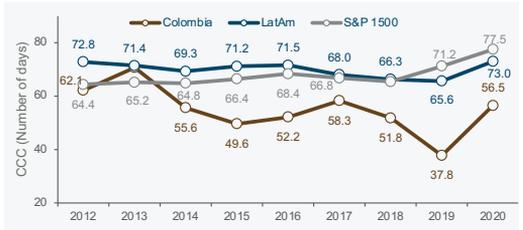
Of the US\$51.0 billion of liquidity trapped in Latin America’s working capital, there is potential to release US\$1.9 billion in Colombia.



Cash levels across Colombia, Latin America and S&P 1500



CCC trend across Colombia, Latin America and S&P 1500

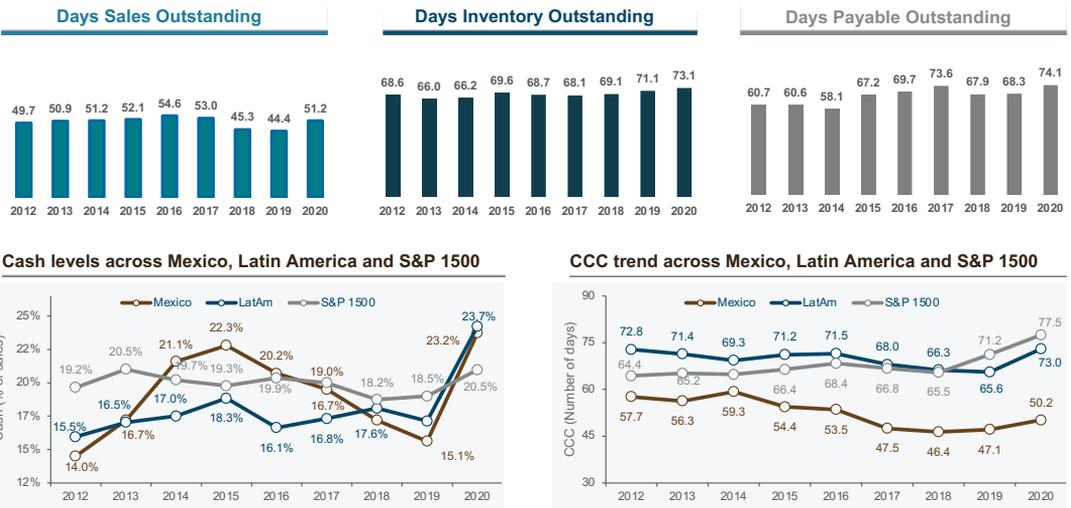


Source: Capital IQ

Key insights

- ➔ Among the Latin American countries analyzed, Colombia saw one of the greatest improvements in their Cash Conversion Cycle (CCC) between 2013 and 2019, driven by a significant improvement in DPO.
- ➔ The pandemic put a halt to the positive CCC trend and saw DPO fall while DSO and DIO metrics increased dramatically, culminating in the worst deterioration in CCC year over year of those countries evaluated in this report.
- ➔ Since mid-2014, Colombia has had to adjust to several adverse events of diverse nature and magnitude, which arose on both the external and domestic fronts.
- ➔ Colombia imports 4.5 percent of their intermediate inputs from China which were negatively impacted due to the pandemic, also impacting the region’s export performance.

Of the US\$51.0 billion of liquidity trapped in Latin America’s working capital, there is potential to release US\$15.8 billion in Mexico.



Source: Capital IQ

Key insights

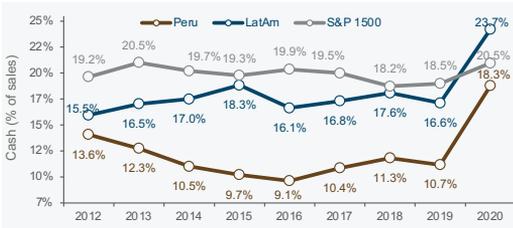
- ➔ More than other Latin American countries, Mexico’s economy is closely associated with the U.S.
- ➔ The sharpest deterioration in terms of working capital metrics was in DSO, increasing by seven days from 2019 to 2020 due to delayed collections.
- ➔ The pandemic had a severe impact as the U.S. went into prolonged lockdowns, with a severe impact observed seen in the auto and auto parts sector, which began to recover toward the latter half of the year.
- ➔ As the U.S. continues to reopen and a large percentage of those living in Mexico receive the vaccine, there are expectations that external demand will continue to remain supportive as U.S. stimulus boosts further growth through increased exports and remittances.

Peru

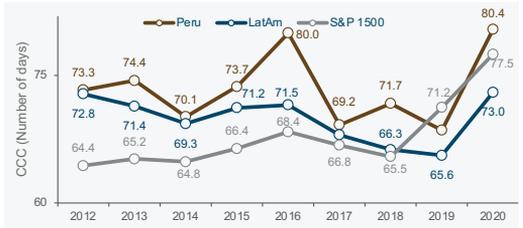
Of the US\$51.0 billion of liquidity trapped in Latin America’s working capital, there is potential to release US\$2.8 billion in Peru.



Cash levels across Peru, Latin America and S&P 1500



CCC trend across Peru, Latin America and S&P 1500



Source: Capital IQ

Key insights

- The global pandemic has had a measurable impact on the country. A strict and prolonged quarantine led to a decline in GDP of 11.1 percent in 2020. Employment fell an average of 20 percentage points between April and December 2020. Up until 2013, Peru was one of the fastest-growing countries in Latin America with a favorable external environment and prudent macroeconomic policies which created a scenario of high growth and low inflation.
- Following a robust expansion during the previous decade, the Peruvian economy grew at a slower pace between 2014 and 2019.
- Between 2014 and 2018, the growth slowed mainly due to lower international commodity prices, including copper, the leading Peruvian export commodity.
- Peru’s CCC crossed Latin America and the S&P 1500 level, implying opportunity for better working capital management. Moving forward, this will continue to be a key area of focus for treasurers to mitigate the impact of pandemic aftershocks.

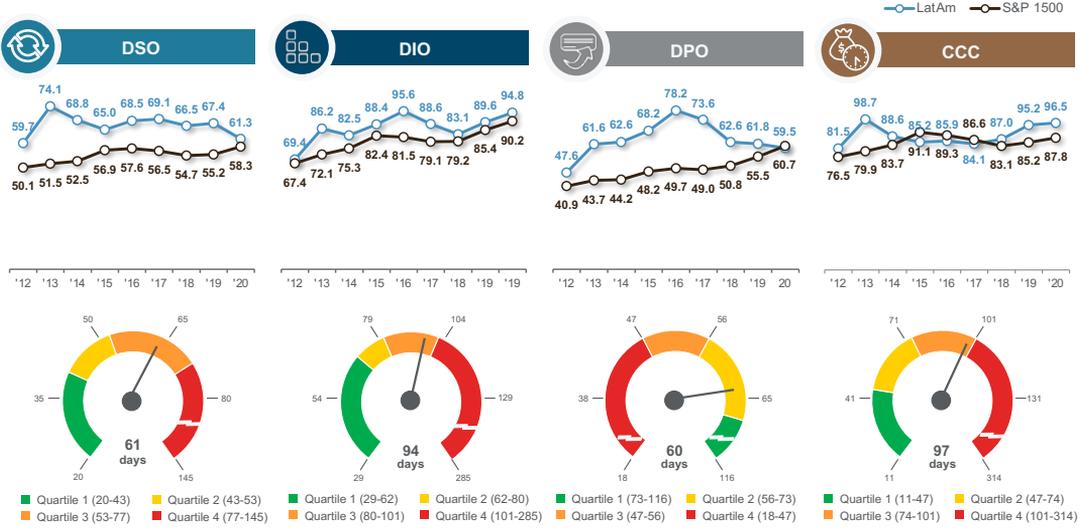
8 Industry focus

In this section, we examine the shifts in working capital levels and the drivers of change for select industry segments of Latin America over the years in comparison with the S&P 1500. We have also introduced a tool to gauge the working capital performance among companies in each selected industry. The tool consists of parameters made up of four quartiles, with the first quartile representing the performance of the companies in the top 25 percent within the industry and the fourth quartile corresponding to the bottom 25 percent.

This tool will allow treasury practitioners to identify industry averages and benchmark their organization's working capital performances against their peers.

I. Chemicals

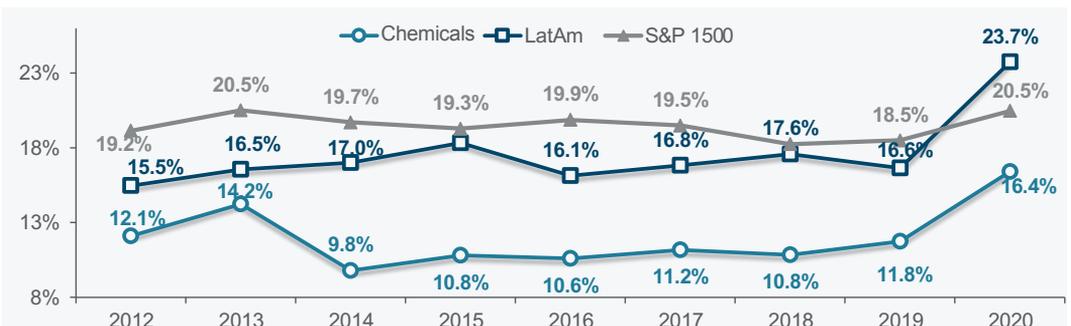
Comparison of working capital parameters within the chemicals sector 2012-2020 (in average number of days)



Key insights

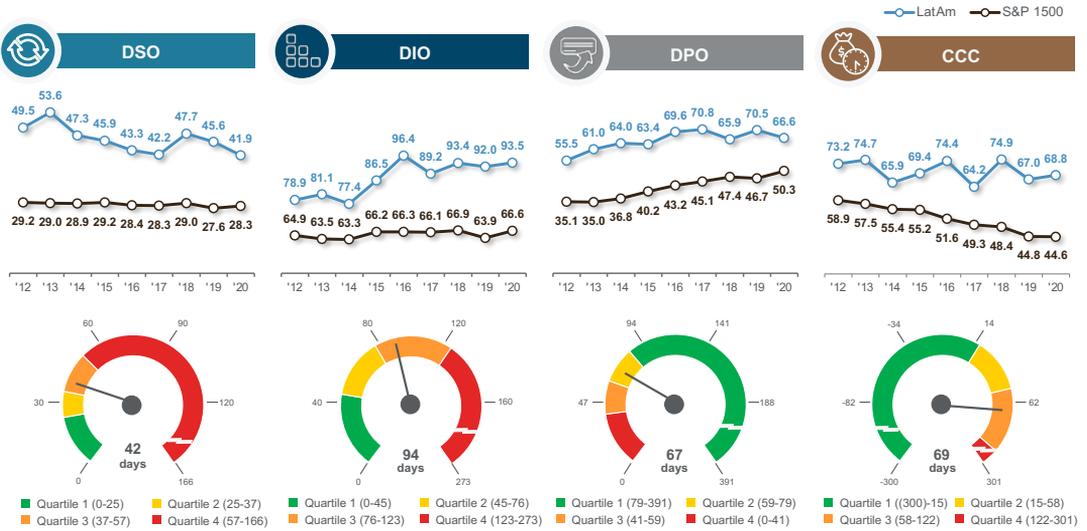
- Overall the global chemical industry was hit hard by the crisis and Latin American corporates in this sector, like their S&P 1500 peers, saw an increase in their DIO metric due to country restrictions and other logistical complications.
- The chemical companies with closer ties to transportation and the auto industry faced more uncertainty than those supporting the consumer staples sector as lockdowns loomed throughout the year across the region.
- Similar to other industries, we observed a rise in cash/sales as corporates looked to raise liquidity buffers to endure the uncertainty.

Cash/Sales



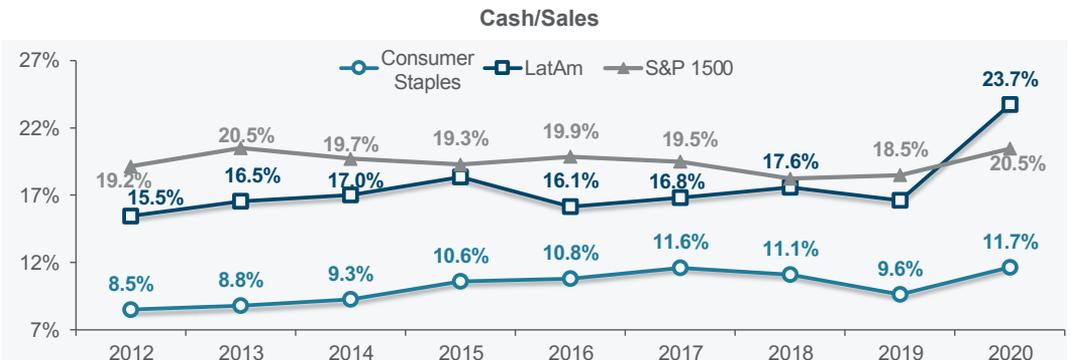
II. Consumer staples

Comparison of working capital parameters within the consumer staples sector 2012-2020 (in average number of days)



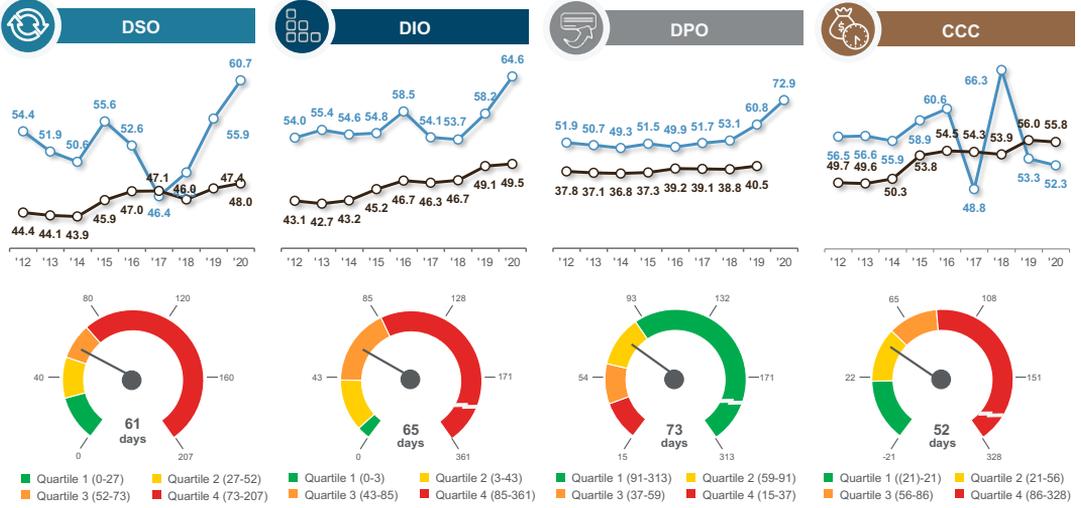
Key insights

- There has been consistent improvement in the CCC of consumer staples companies in the S&P 1500 over the years, while Latin American corporates have seen more volatility due to fluctuating DIO metrics.
- The rising popularity of supply chain finance has also seen consumer staples firms, which generally have healthy credit ratings, tap into trade solutions to lengthen their DPO.
- In 2020, the consumer staples sector did not face the same challenge as other industries in that the demand remained relatively strong for household and other products, however supply chains and access to the end consumer proved challenging to navigate.
- In terms of cash/sales, consumer staples companies in Latin America increased their relative levels, but less than other industries as consistency in the sector facilitated easier forecasting.



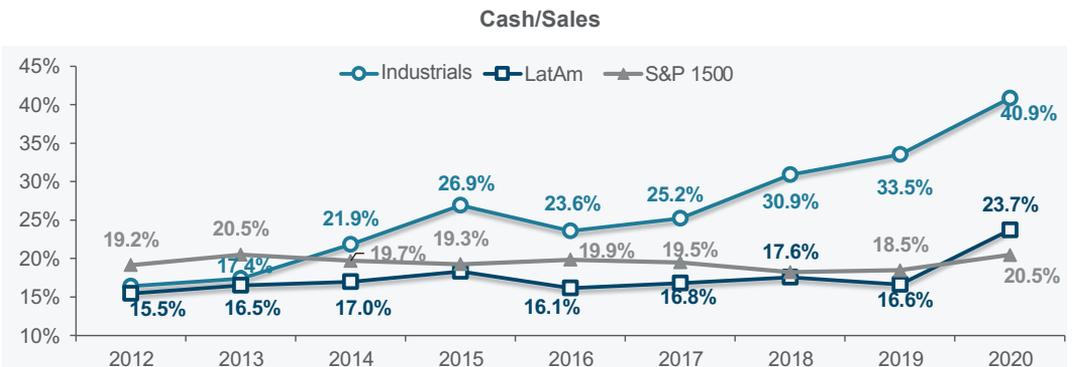
III. Industrials

Comparison of working capital parameters within the Industrials sector 2012-2020 (in average number of days)



Key insights

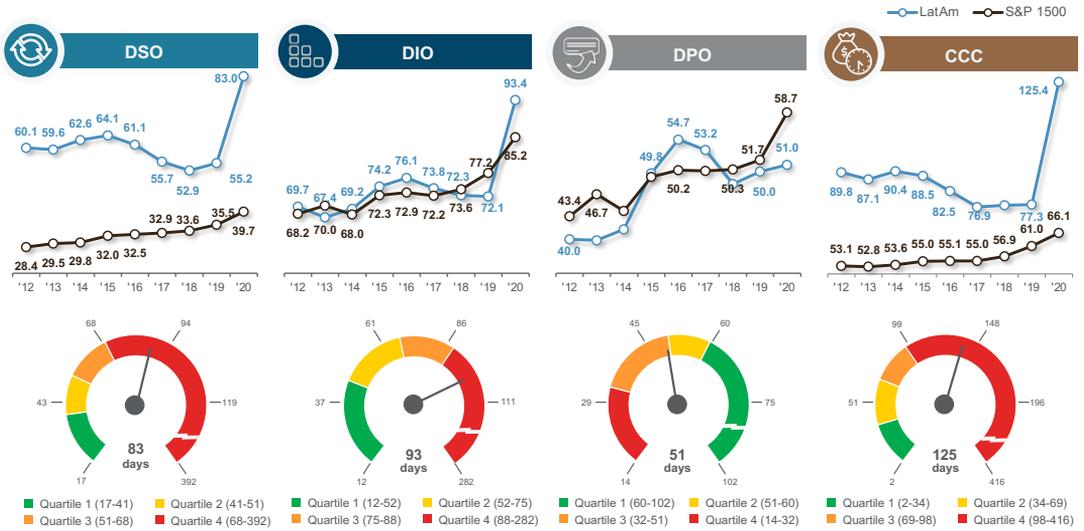
- The working capital metrics of Latin America’s industrials space lie in the second or third quartiles implying scope for improvement.
- The impact on the CCC in 2020 can be attributed to a rise across all the working capital metrics, with the highest impact on DIO due to global logistical complications and government lockdowns.
- Both corporates and their vendors/suppliers saw increases in DPO and DSO as payments were delayed in combination with disjointed order fulfillments and shifting demand.
- Global trade was already slowing down before the coronavirus outbreak due to the trade disputes, and this sector in Latin America continues to carry high cash buffers to offset continued volatility across the region.



IV. Auto and auto parts

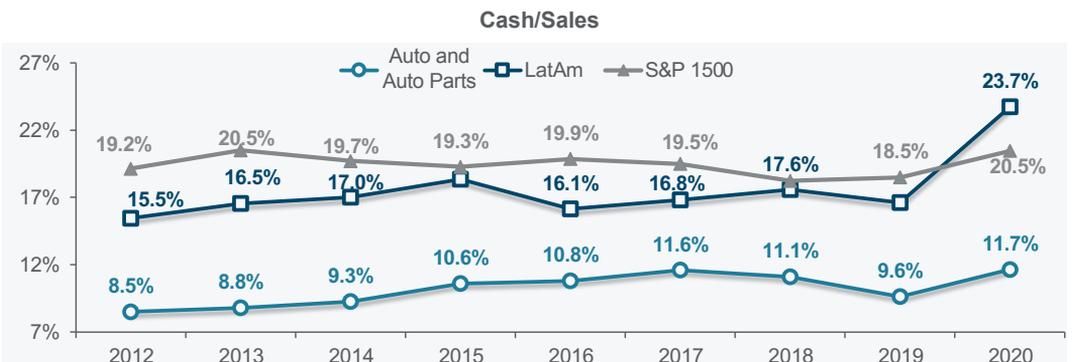


Comparison of working capital parameters within the auto and auto parts sector 2012-2020 (in average number of days)



Key insights

- The auto and auto parts industry were some of the hardest hit sectors at the onset of the global pandemic as widespread factory closures, slumping car sales and massive layoffs led to supply and demand shocks for both auto suppliers and automakers. Inventory levels rose significantly in the first half of 2020 as demand collapsed.
- A rebound in demand in the second half of 2020 helped to reduce inventories from the highs of the first half of 2020. On average, the DIO for Latin American corporates in this sector rose by 21 days compared to 2019 levels.
- The DPO rose one day as companies were only able to negotiate for temporary extensions of payments terms with suppliers and service providers in response to the pandemic. The 28 day rise in the DSO was reflective of an increase in receivables in the fourth quarter of 2020 when demand for auto parts rebounded.



9 A lesson from history

As the focus of businesses turns towards recovery, we wanted to examine past economic downturns of similar magnitude to derive lessons we can apply to the current recovery phase.

Using data from the S&P 1500 companies during the global financial crisis (GFC) of 2008, we calculated the percentage change in their revenue at the height of the crisis (the 12 months ending December 2008) and post recovery from the crisis (12 months ending June 2011).

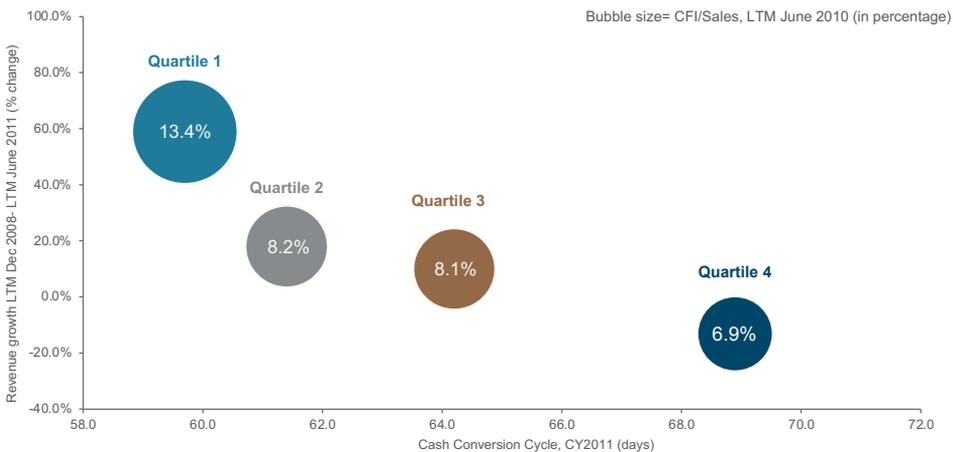
We also calculated their cash flow from investing (CFI) as a percentage of sales from July 2009 to June 2010—widely viewed as the initial phase of the recovery from the GFC and a period we are using as a benchmark to compare recovery trends in the current environment. Finally, we cross checked the S&P 1500 companies' CCCs in 2011 against growth rates during GFC recovery period.

We observed a strong correlation between the amount companies invested during the early phase of recovery and the pace of rebound in their revenue growth. Also, the companies who invested the most and registered strong revenue growth also displayed low CCC readings (categorized in Quartile 1) reflecting robust working capital efficiencies.



This demonstrates the importance of working capital management during the recovery phase of a crisis in facilitating a rebound; the S&P 1500 companies that were able to manage working capital efficiently could access a cheap internal source of funding during recovery phase of the GFC allowing them to quickly deploy more cash towards growth activities.

Correlation between revenue growth and working capital efficiency as well as cash deployment



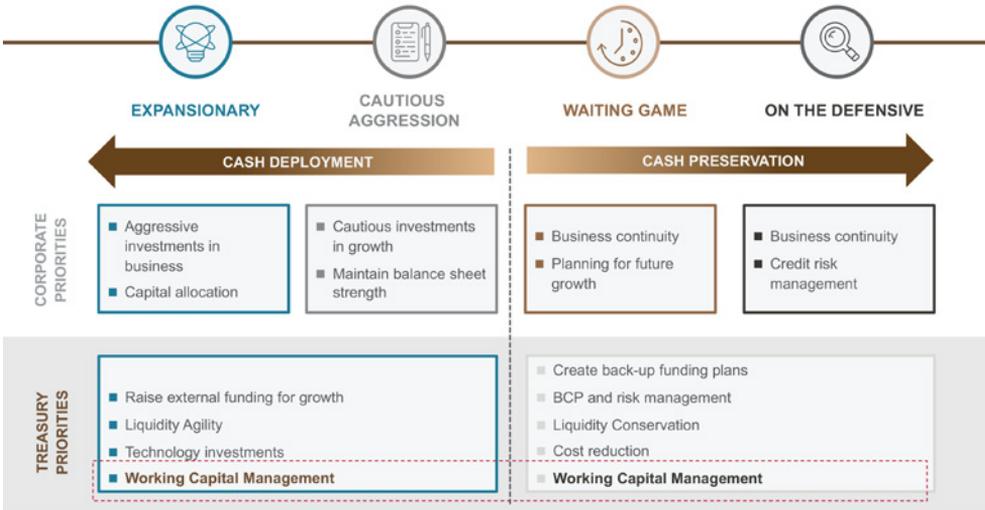
Source: Capital IQ

Note: S&P 1500 companies have been categorized into four quartiles based on their revenue growth, with the first quartile representing the top 25% companies with the highest revenue growth within their industries, while the fourth quartile corresponds to the bottom 25% companies with the lowest revenue growth in their respective sectors.

10 Conclusion

The global pandemic has put unprecedented financial pressures on businesses, compelling CFOs and corporate treasurers to reevaluate their cash and liquidity management to ensure business and operational continuity.

Treasurers will continue to play an important role as businesses recover from the pandemic. We highlight four different approaches treasurers can take to navigate the crisis this year, depending on the speed of recovery and the strength of their balance sheets.



Expansionary: Companies with strong balance sheets that are expecting a fast recovery would likely invest aggressively either through organic or inorganic means for growth in 2021. Cheap cost of funding and high cash levels can provide the necessary firepower for these companies to execute their plans. The key priority for treasury in these companies will be to ensure that necessary cash is available at the right place, at right time and in right currency to fund high value transactions.

Cautious aggression: Companies that are expecting a quick recovery but have high leverage ratios may have challenges accessing external capital due to limitations to further stretch their balance sheet. Treasurers will need to balance funding growth while ensuring the company does not face liquidity challenges.

Waiting game: Companies with a slow expected recovery but with strong balance sheets will likely wait a little longer to invest in the growth. Focus for treasurers in these companies will likely be to continue with cash preservation activities like reduction in capex, M&A activities and discretionary expenses to create reserves for funding growth when the opportunities arise.

On the defensive: Companies with a slow expected recovery and weak balance sheets will be the most at risk of further impacts from the crisis. Conserving liquidity will be the key priority as treasurers look to ensure the company has enough cash until the crisis blows over.

While there are varied paths treasurers will have to take during recovery in 2021, we are expecting working capital optimization to continue to remain a key priority for treasurers. With approximately US\$51bn currently trapped in working capital that can potentially be released, it can provide a cheap source of funding to either support the growth for companies experiencing strong recovery or provide the liquidity cushion for businesses waiting to ride out the crisis.

11 Summary of findings

\$51^B Estimated working capital that can be released across Latin America companies¹

Colombia

18.7 days

Maximum deterioration in CCC (2020 from 2019)

Brazil

\$18.9B

Maximum liquidity trapped in working capital



Maximum increase in cash levels in the last eight years

Top three industries showing deterioration in CCC from 2019

(Number of days the CCC lengthened by)



43.5

Auto & auto parts



32.2

Entertainment



25.5

Media

Top three industries showing improvement in CCC from 2019

(Number of days the CCC shortened by)



16.7

Airlines



9.7

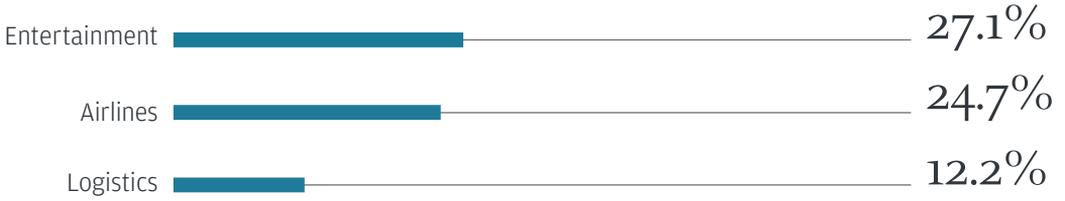
Industrial machinery



1.0

Industrials

Top three industries showing increase in cash levels from 2019



Cash Conversion Cycle



7.4 days

Jump in average CCC of Latin American companies from 2019

Days Inventory Outstanding



8.2 days

Deterioration in DIO from 2019

Source: Capital IQ

Note: ¹Calculation assumes that every company's DSO, DPO and DIO improves to the next quartile

12 Authors



Gourang Shah

Global head for Treasury and Working Capital Optimization
Wholesale Payments, J.P. Morgan

gourang.shah@jpmorgan.com



Dennis Santa Paula

Head of Wholesale Payments Solutions,
Latin America J.P. Morgan

dennis.s.paula@jpmorgan.com



Kevin Montoya

Advisor, Wholesale Payments Solutions,
Latin America J.P. Morgan

kevin.x.montoya@jpmorgan.com

J.P.Morgan

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