

# LatAm Tech Trends: The COVID-19 Series

## Edition #1: VC Funding, Stay-At-Home Economy and Tech in Equity Markets

April 23, 2020

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We are launching our COVID-19 Tech Report series to discuss the potential implications of the coronavirus crisis on technology trends in various industries and, ultimately, on LatAm listed companies.

## VC Funding, Stay-At-Home Economy and Tech in Equity Markets

**Introducing our COVID-19 Tech Report series.** We are launching our COVID-19 Tech Report series to discuss the potential implications of the coronavirus crisis on technology trends in various industries and, ultimately, on LatAm listed companies. In this first edition, we present six main topics showing how past epidemics have affected VC funding and changes in funding since the beginning of the COVID-19 pandemic, as well as the tech industries that could benefit from the Stay-at-Home Economy. Over the next few editions, we plan to delve deeper into specific industries to evaluate how the COVID-19 crisis could impact technology in each sector.

### VC Funding in Past Epidemics

**Private funding decreased significantly during the SARS and Zika virus outbreaks.** We note that the SARS and Zika virus outbreaks had a swift impact on private market funding in Asia in 2003 and South America in 2016, with funding amounts decreasing by 27% and 49% one year after the virus surged, respectively. We also note that the most recent epidemics were not the only reasons for funding shortages, given that VC investments were incipient in Asia before the SARS epidemic and the Zika virus spiked in South America during one of the worst economic crises in countries such as Brazil and Argentina.

### COVID-19 Spillover on VC Funding So Far

**The COVID-19 pandemic has already impacted global funding rounds.** Startup financing is already taking a beating from the COVID-19 crisis, with global private market funding expected to see the second steepest quarterly decline in the past ten years. The dramatic increase in market volatility should cast a pall on appetite for riskier assets, harshly impacting VC funds' capacity to raise and deploy money. Seed funding to likely suffer the most on a relative basis.

### Coronavirus's Impact on Tech and Other Asset Classes

**Zoom and Netflix outperformed FAMGA and gold has survived the COVID-19 chaos; Brazil Tech and Crypto have yet to recover.** U.S. Tech companies such as Zoom and Netflix outperformed tech giants from the FAGMA group on the back of the Stay-at-Home economy. Tech-related stocks in Brazil have yet to recover to pre-crisis levels, although e-commerce and EdTech stocks have seen some recovery. Cryptocurrencies were also hammered, weakening the argument that the assets are counter-cyclical, as investors have preferred to go straight for traditional cash as a safe haven.

### The Stay-at-Home Economy

**Grocery deliveries, e-commerce and entertainment seem to be the main winners for now.** Companies that make products geared toward staying at home and have a tech platform seem to be the unexpected beneficiaries of the evolving coronavirus economy. The crisis has directly affected consumer spending in different countries and recent data from China and the U.S. shows consumers increasing expenditures with grocery delivery, gaming and video streaming.

### Startups Taking Advantage of the Crisis

**InLoco and Olivia, two startups that have been surfing the crisis.** InLoco recently developed the Social Distancing Index, which measures the percentage of the Brazilian population that is respecting the social distancing recommendations to help Brazilian states fight the COVID-19 pandemic. Olivia could be an interesting alternative to help people in Brazil by using artificial intelligence to save money during the expected macro downturn and recession.

### Insights from Venture Capital Firms

**The COVID-19 crisis from a venture capital perspective.** We hosted webinars over the past few weeks with Softbank's Managing Partner, Paulo Passoni; Monashees co-founder Eric Acher; Valor Capital co-founder Scott Sobel and Kaszek Ventures co-founder Hernan Kazah. In this report, we present the main insights from these venture capital firms and what they expect in terms of challenges and opportunities arising from the COVID-19 crisis.

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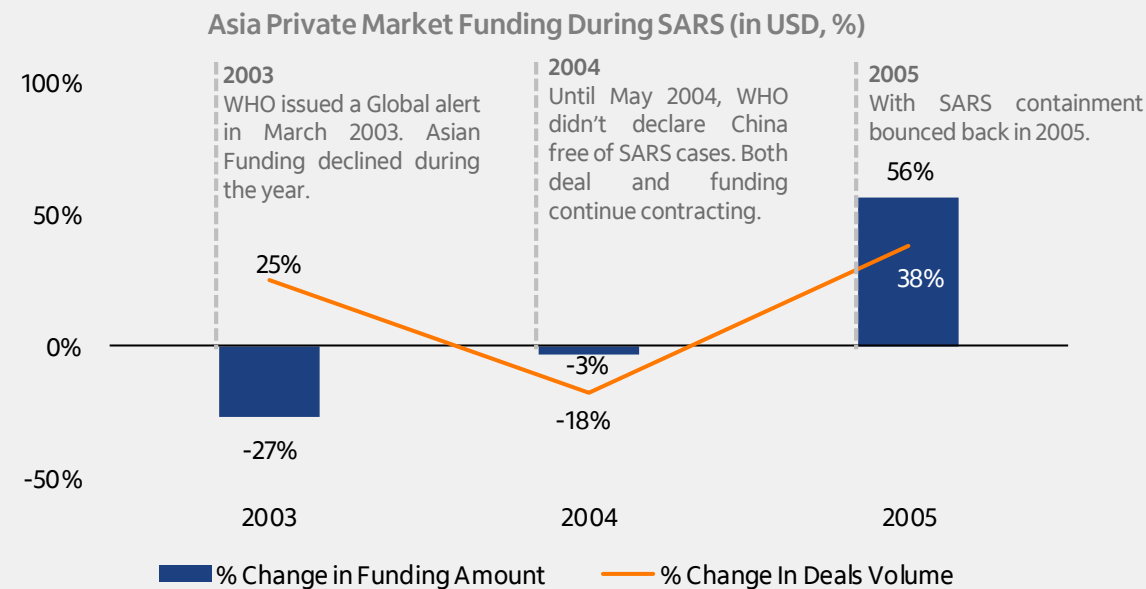
## Section 1

# VC Funding in Past Epidemics

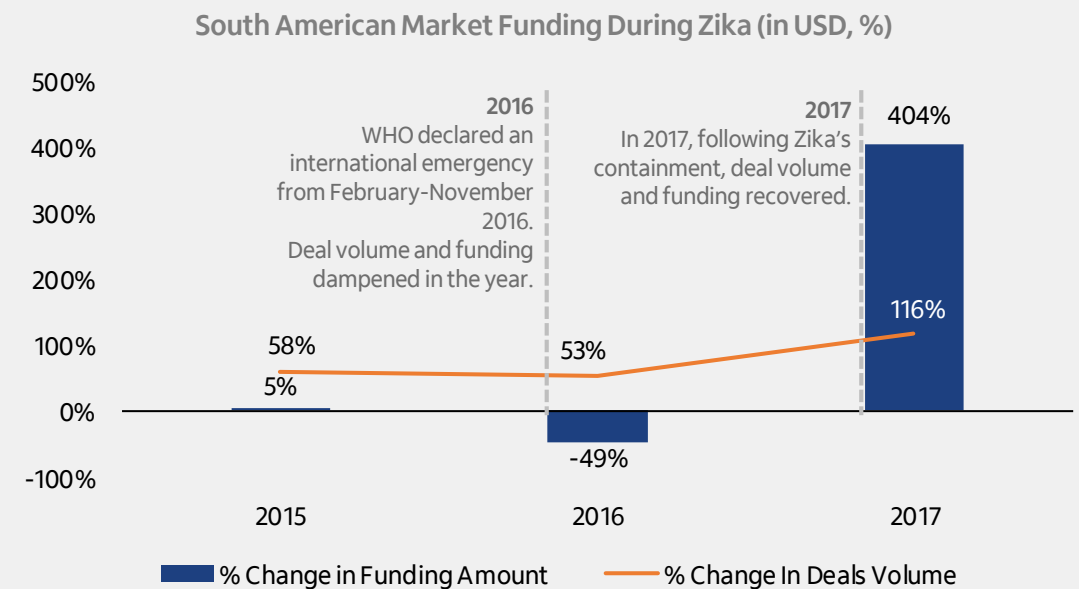
## Private Funding Decreased Significantly During the SARS and Zika Virus Outbreaks

- Spillover of SARS epidemic on Asian private funding.** The SARS epidemic surged in November 2002 in China but gained global recognition in March 2003 when the World Health Organization (WHO) issued a global alert for the disease given its fairly high mortality rate. We note that SARS had a rapid impact on Asian private markets, with total funding in 2003 and 2004 falling 27% and 29% from 2002 levels, respectively. The amount of deals and funding rapidly increased in 2005 once China was declared free of SARS cases by May 2004.
- Zika virus and South American private funding activity.** The Zika virus epidemic started in early 2015 in Brazil and consequently spread to the rest of South America, but gained relevance in the media by September 2016, when the number of cases spiked. The Zika virus epidemic also seemed to impact private market funding in South America, with funding activity falling by almost 50% in 2016 (vs. 2015). With the end of the WHO's global Zika warning in early 2017, deal and funding activity recovered, with funding deal amounts skyrocketing by 404% compared with 2016 levels (or a 116% jump in the number of deals).

### Asian Private Funding Was Negatively Affected During the SARS Outbreak...



### ...and a Similar Pattern Was Repeated in South America During the Zika Virus.

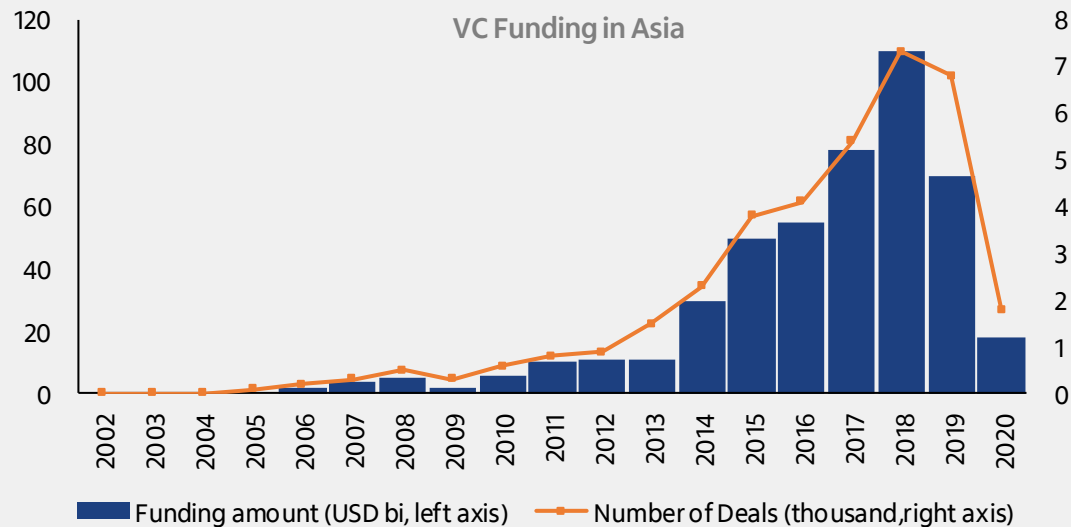


Source: Itaú BBA and CB Insights.

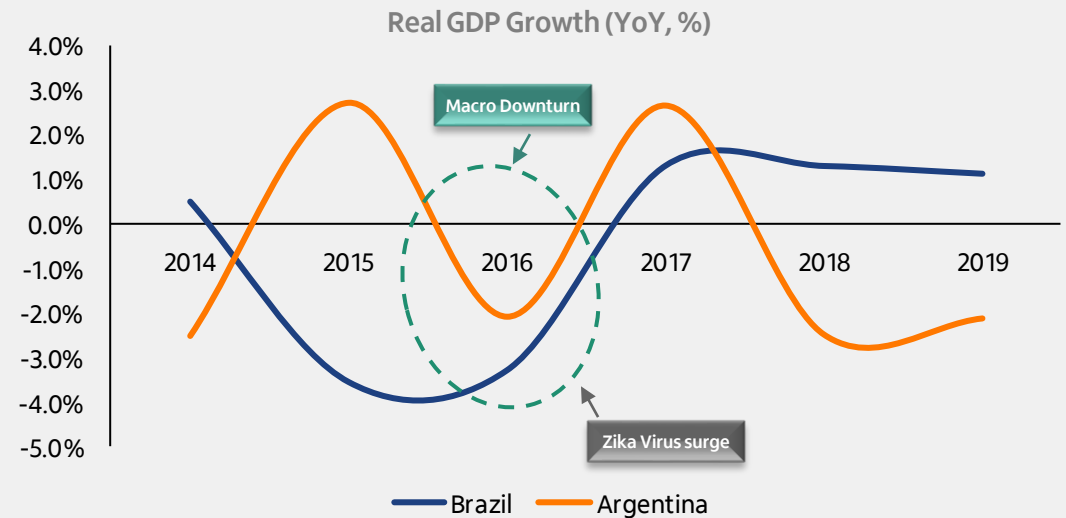
## Recent Epidemics, However, Were Not the Only Reasons Behind the Funding Shortage

- VC Investments in Asia were incipient when SARS emerged.** We note that the SARS outbreak could be one of the reasons for the shortage of private market funding in Asia back in 2003 and 2004, but it is important to highlight that VC investments in Asia were in their infancy until 2016. As a matter of fact, VC investments in China started to accelerate in 2013, with the Chinese government acting as an important sponsor. That said, we do believe that the SARS epidemic had a relatively small and short impact on VC investments in Asia.
- Zika virus appeared during one of the worst recessions in Brazil and Argentina.** The Zika virus spiked in Brazil during one of the country's worst economic crises, with a significant macro deceleration occurring in 2015 and 2016 (real GDP shrank by 3.6% in 2015 and 3.3% in 2016). Furthermore, Argentina also went through a macro downturn in 2016, at the same time that the number of Zika virus peaked in South America. With that, and given that Brazil and Argentina have been home to the bulk of VC investments in South America (82% of the region since 2002), we believe that the Zika virus is not the only reason behind funding scarcity in 2016.

### VC Funding in Asia Only Started to Increase Exponentially in 2013...



### ...and the Zika Virus Surged During Macro Downturns in Brazil and Argentina.



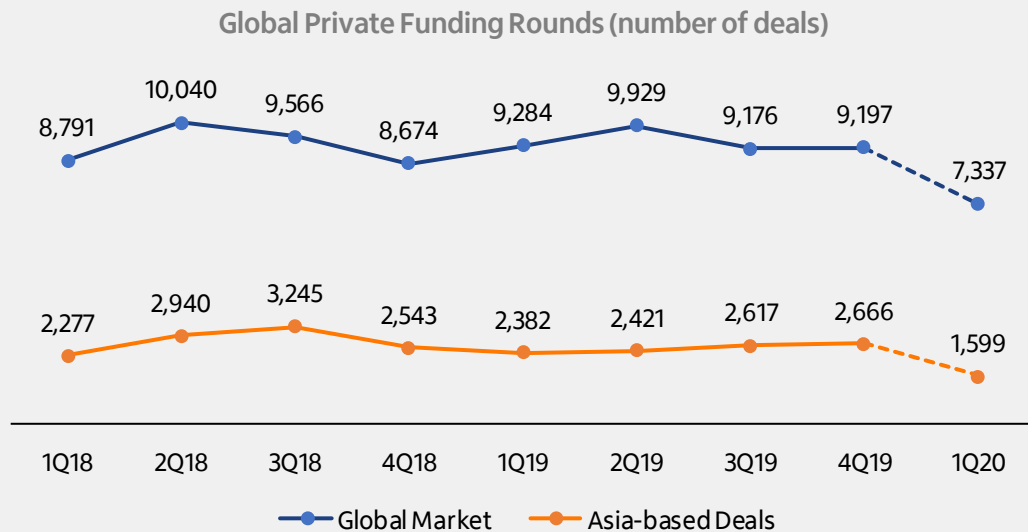
## **Section 2**

# COVID-19 Spillover on VC Funding Thus Far

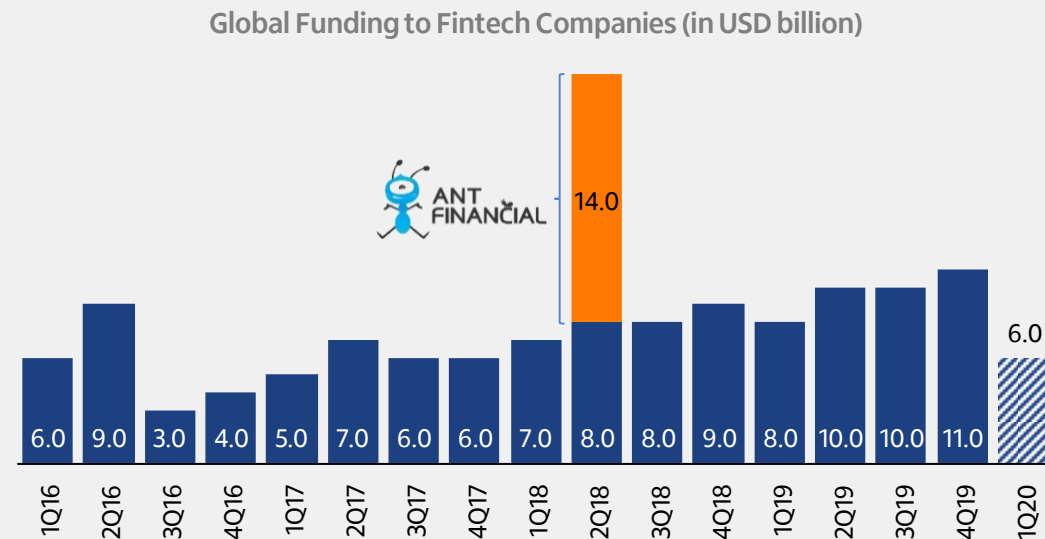
## The COVID-19 Pandemic Has Already Impacted Global Funding Rounds

- Global private market deals have already fallen and the pattern in Asia is similar to past outbreaks.** Startup financing has already taken a blow from the coronavirus crisis, with global private market funding expected to reach USD 77 billion in 1Q20, down 16% QoQ and 12% YoY. The projected decline is set to be the second steepest quarterly decline in the past ten years and Asia is likely to face the most drastic drop now that the region is following funding patterns similar to those seen in past outbreaks, such as SARS.
- Fintech funding has already decelerated and is set to fall to 2017 levels in 1Q20.** The fintech space went through massive equity rounds in recent years, with skyrocketing valuations, and companies have mainly been focused on growth and customer acquisition rather than profitability and cash generation. With the outbreak of the coronavirus pandemic, we expect to see a relevant change in funding conditions, forcing fintechs to focus on cash generation and self-sustaining unit economics. Data from CB Insights indicates that the number of global fintech deals has been falling in 1Q20 across different regions (North America, Europe and Asia), already reflecting negative spillover from the coronavirus crises. As a matter of fact, global fintech funding is expected to reach USD 6 billion in 1Q20, a level not seen since 2017.

### Global Private Funding Will Face the Steepest Decline in the Past 10 Years...



### ...and Global Funding to Fintech Companies Is Set to Fall to 2017 Levels.

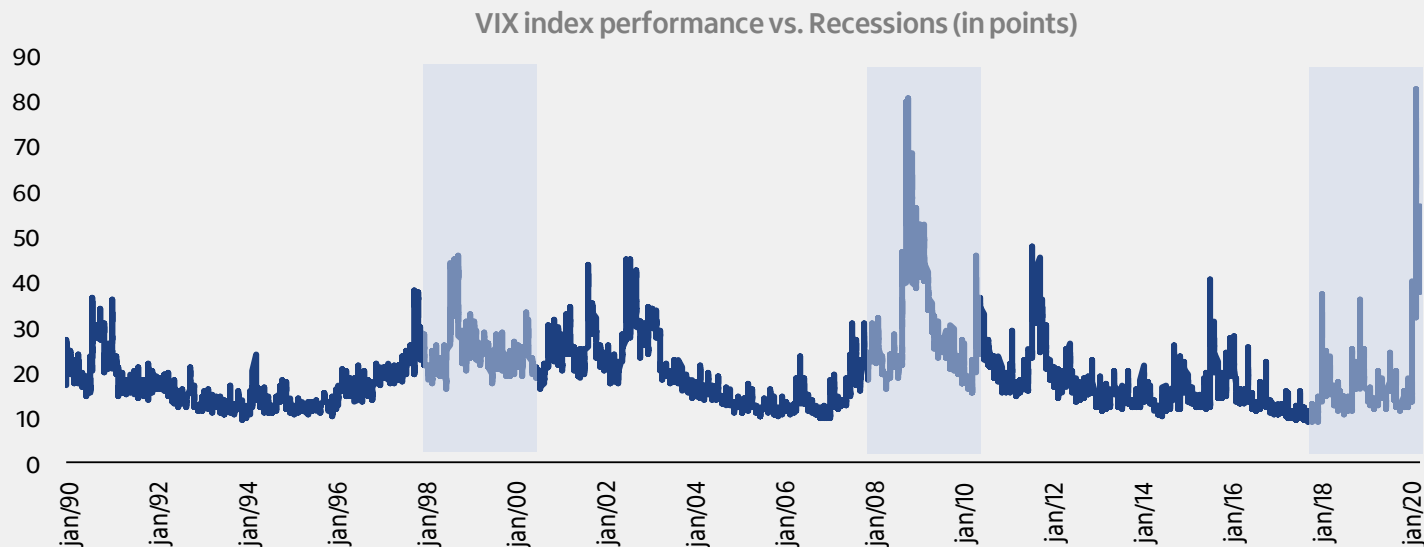


Source: Itaú BBA and CB Insights.

## Market Volatility Should Further Jeopardize VC Funding Availability in the Short Term

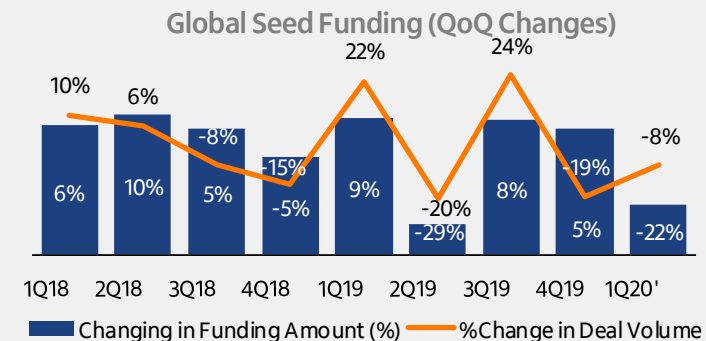
- Risk-off mode.** The COVID-19 pandemic led to a surge in market volatility. The VIX Index (Chicago Board Options Exchange) surpassed the 80-point mark at the end of March 2020, implying a staggering 563% increase from the beginning of the year. The dramatic increase in market volatility should take a toll on the appetite for riskier assets, harshly impacting VC funds' capacity to raise and deploy money. Accordingly, we believe that the scenario of high market volatility should further contribute to the outlook of falling private funding.
- Seed funding to likely suffer the most on a relative basis.** We believe that riskier assets, such as seed investments, are likely to decrease the most following the coronavirus outbreak, given that VC funds will shift their short-term attention from deal sourcing to managing already invested and mature startups in their portfolios.

### VIX Index Surpassed the 80-point Mark at the End of March...

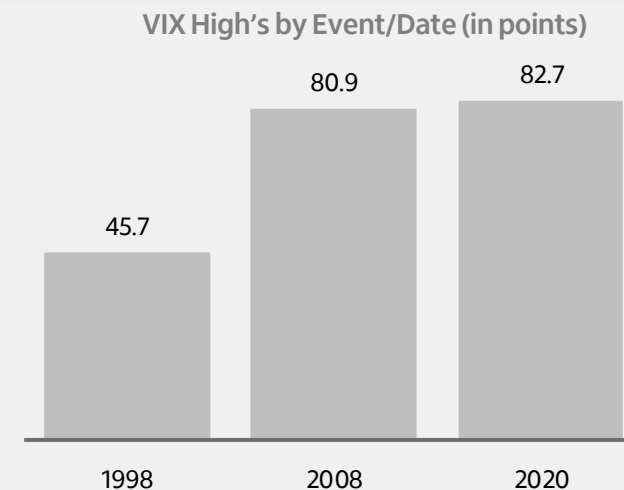


Source: Itaú BBA, CB Insights and Macro Trends.

### Global Seed Funding to Reflect Risk-Aversion...



### .... Reaching Levels Similar to Those Seen in Other Financial Crises.



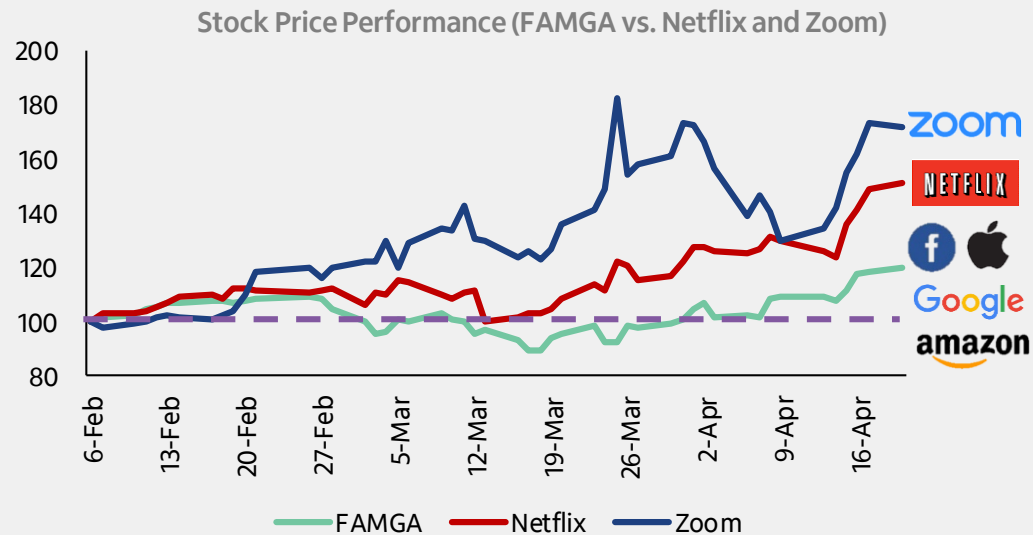
## **Section 3**

# Coronavirus Impact on Tech and Other Asset Classes

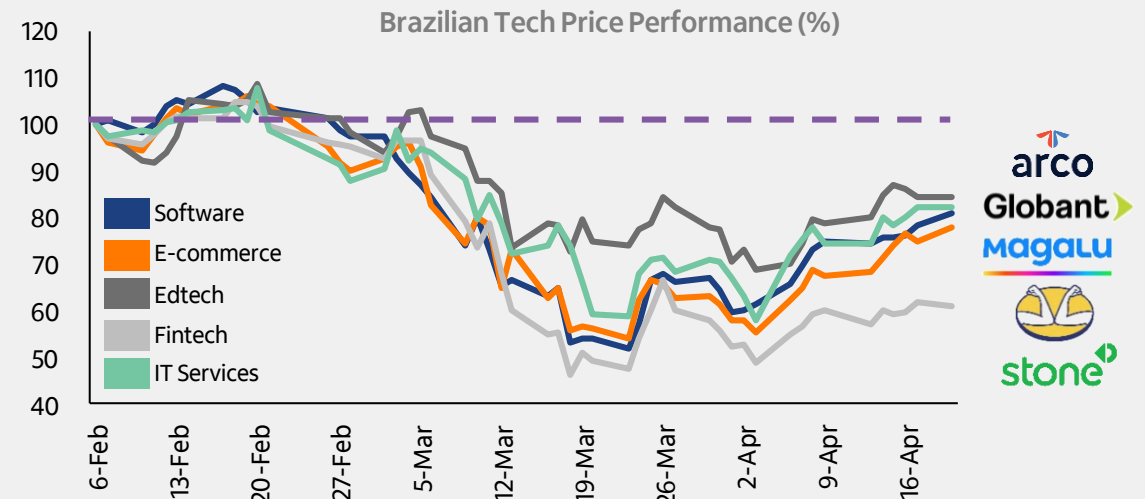
## U.S. Tech Giants Seem to Have Escaped the COVID-19 Chaos; Tech Names in Brazil Have Yet to Recover

- U.S. tech, a safe heaven.** The fallout from COVID-19 had a heavy impact on overseas equity markets, with the S&P 500 index down 10% since beginning-March. Tech-related stocks in the U.S., such as the FAMGA group (Facebook, Apple, Microsoft, Google and Amazon), suffered in the first weeks of the coronavirus lockdown, but have recovered significantly, with stocks up 19%-30% over the last month, excluding Apple. It is interesting to note, as highlighted in our Equity Strategy report “When the Scenario Changes, I Change My Mind” published on April 5, that the market cap of Zoom (a tech communication company that provides video-telephony and online chat services via a cloud-based peer-to-peer software platform) has surpassed the combined market caps of Delta, United and American Airlines. Netflix has been one of the main outperformers, given that it is a clear winner in the Stay-at-Home Economy.
- The Brazilian tech answer.** Similar to equity market in U.S., the Brazilian stock exchange has taken a beating since the beginning of the coronavirus lockdown, with the IBOV index plummeting by 30% since beginning-March. Overall, the majority of tech-related stocks in Brazil have yet to recover to pre-crisis levels, given that a relevant part of their revenues also depend on the offline, the opposite of business models such as Facebook, Amazon and Google in the United States. That said, we have been seen Brazilian e-commerce and EdTech stocks recovering, as being digital has proven to be an advantage in the coronavirus lockdown and positive underlying trends for distance learning could arise from staying at home.

Netflix and Zoom Have Outperformed the FAMGA Group During COVID-19 Fallout...



...and Tech Companies in Brazil Have Yet to Recover to Pre-Crisis Levels.

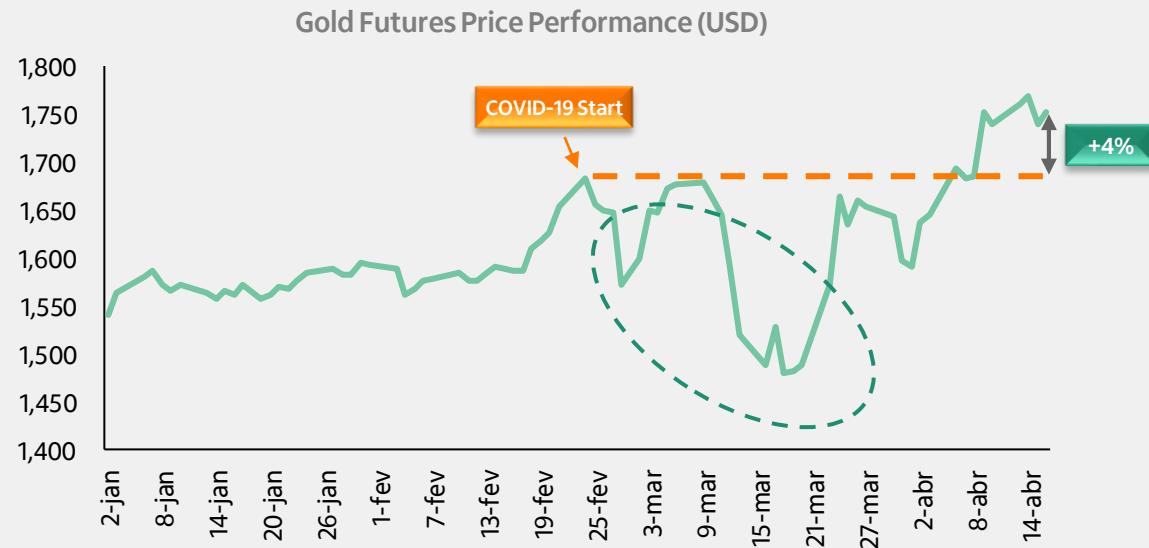


Source: Itaú BBA and Bloomberg.

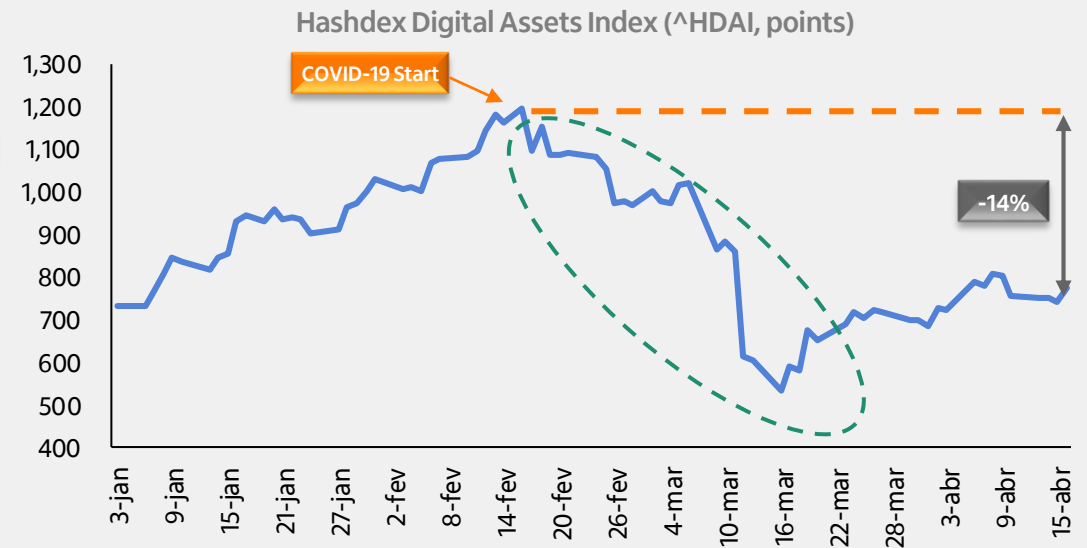
## Traditional Safe Havens Such as Gold Suffered; Cryptocurrencies Were Also Hurt

- **Gold is gold.** Gold is one of the most complicated assets to price, because its value is not necessarily determined by fundamentals or physical supply and demand like stocks, currencies and other commodities. Gold prices have historically moved indirectly with the strength of the global economy and traditional asset classes, making it a natural hedge against market volatility. It is interesting to note that even gold has suffered from the outbreak of the COVID-19 crisis, with future prices falling by 12% from mid-February to mid-March. Nevertheless, gold has recovered over the last month and future prices are already 4% above pre-coronavirus levels. In our view, this is justified by the fact that the coronavirus crisis will drive a recession scenario and global economies have been lowering interest rates to stimulate growth. That said, we note that gold usually has a negative correlation to interest rates.
- **The crypto sanity check.** The price of cryptocurrencies and their relation to traditional asset classes and the question of if crypto could be considered a hedge against hyperinflation and economic crises have been a major debate since the creation of digital currency. The coronavirus crisis would be the ideal moment for crypto to demonstrate its status as a safe haven, serving as a counter-cyclical hedge, but recent experience shows that investors have preferred to go straight for traditional cash. As a matter of fact, the Hashdex Digital Assets Index (i.e. Nasdaq index with different cryptocurrencies) decreased by 55% from mid-February to mid-March and the index is still 14% below pre-crisis levels.

### Gold Prices Suffered, But Have Already Recovered to Pre-Crisis Levels...



### ...While Crypto Is Still Underperforming, Heating the Counter-Cyclical Debate.



Source: Itaú BBA and Bloomberg.

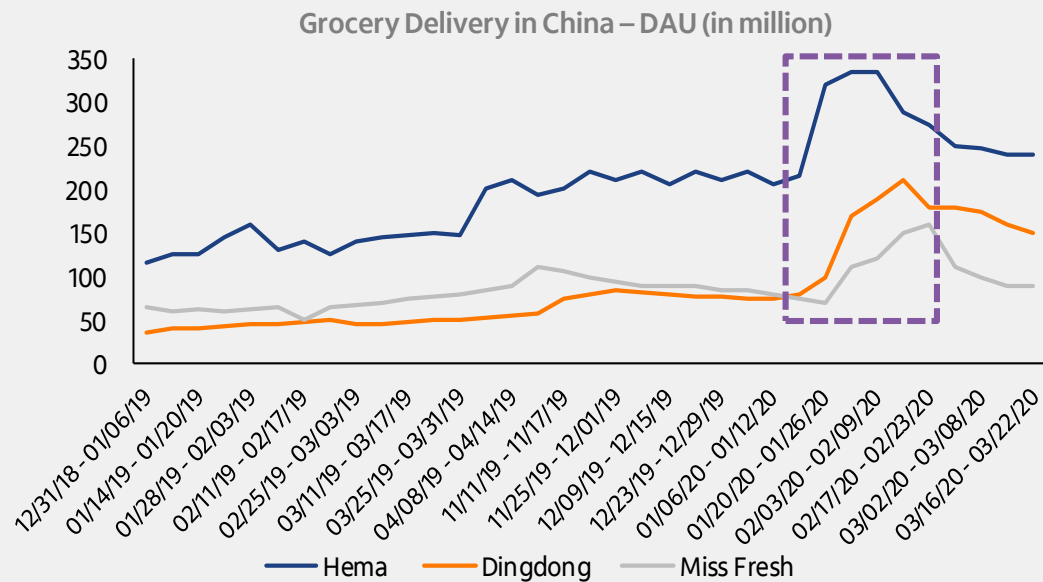
## **Section 4**

# The Stay-at-Home Economy

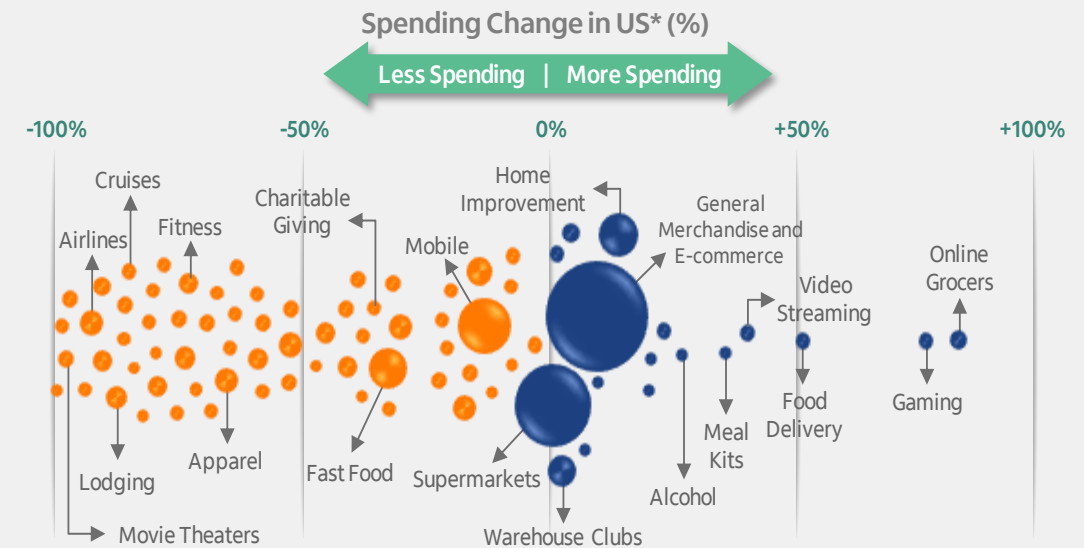
## Grocery Deliveries, E-Commerce and Entertainment Seem to Be the Main Winners for Now

- A new consumption concept in the spotlight.** Companies and startups that make products geared toward staying at home and have a developed tech platforms seem to be the unexpected beneficiaries of the evolving coronavirus economy. Despite the fact that the COVID-19 lockdown has had a negative impact on different sectors in the economy and is likely to cause a recession going forward, we note that a few industries and segments are likely to take advantage of the current environment. This new consumption concept involving consumer internet is called the “Stay-at-Home Economy.” We will delve deeper into specific sectors in forthcoming editions of this report, but in short, the Stay-at-Home Economy involves food and grocery delivery, e-commerce, online education and distance learning, mobile gaming and entertainment, online recruiting and other segments such as wealth management.
- A radical change in consumer spending.** The coronavirus outbreak has directly affected consumer spending in different countries. In broad strokes, data shows that daily active users (DAU) of grocery delivery apps in China surged during the lockdown, given that people preferred to prepare food at home in order to avoid contamination. Similarly, we have seen a similar trend in consumer spending in the U.S., with people increasing expenditures with food & grocery delivery, gaming and video streaming.

### DAUs to Grocery Delivered Apps Spiked in China During the Quarantine...



### ...and the Same Pattern Has Been Observed in U.S. Consumer Spending.

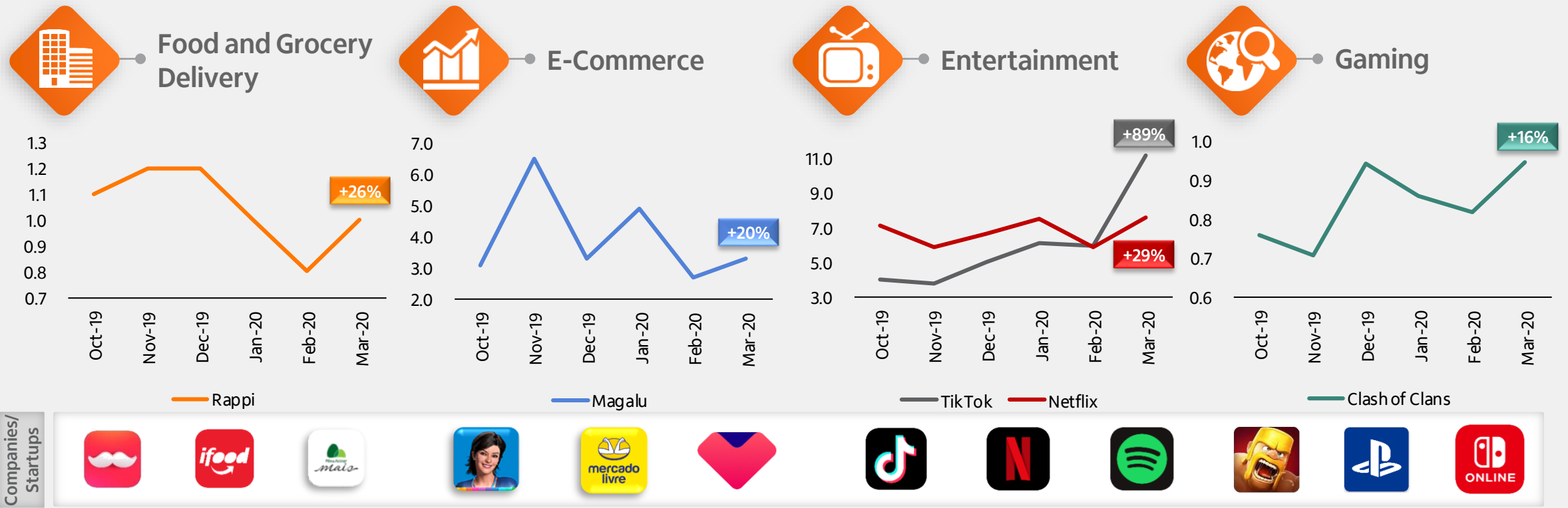


Source: Itaú BBA, Eddie DENG and Earnest Research. \*Change in spending from 2019 for the week ending April 1st (bubbles are sized by industry sales).

## A Few Apps in Brazil Have Already Started to Reflect the Stay-at-Home Concept

■ **Stay-at-Home Economy trends in Brazil.** We still lack data on the recent daily effect of the coronavirus lockdown in Brazil, but the country seems to be following similar trends when analyzing companies and segments that in theory would be benefited from the Stay-at-Home economy. Looking at data from SimilarWeb, we can infer that a few apps in categories such as food & grocery delivery (Rappi), e-commerce (Magazine Luiza), entertainment (TikTok and Netflix) and Gaming (Clash of Titans) have seen an increase in the number of downloads.

Data From SimilarWeb Shows That a Few Specific Apps in Brazil Posted a Solid Increase in the Number of Downloads Since the Quarantine Started.



Source: Itaú BBA and SimilarWeb.

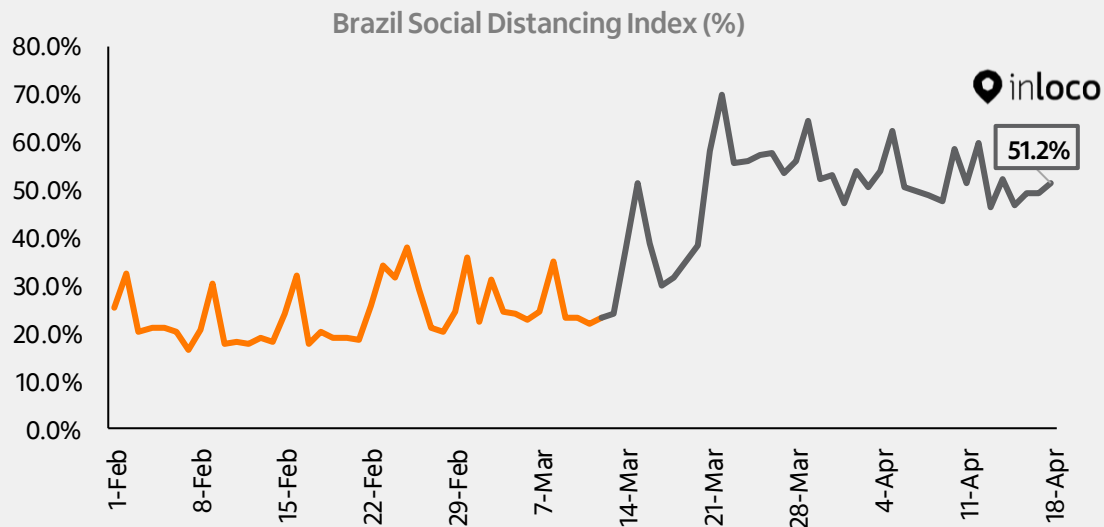
## **Section 5**

# Startups Taking Advantage of The Crisis

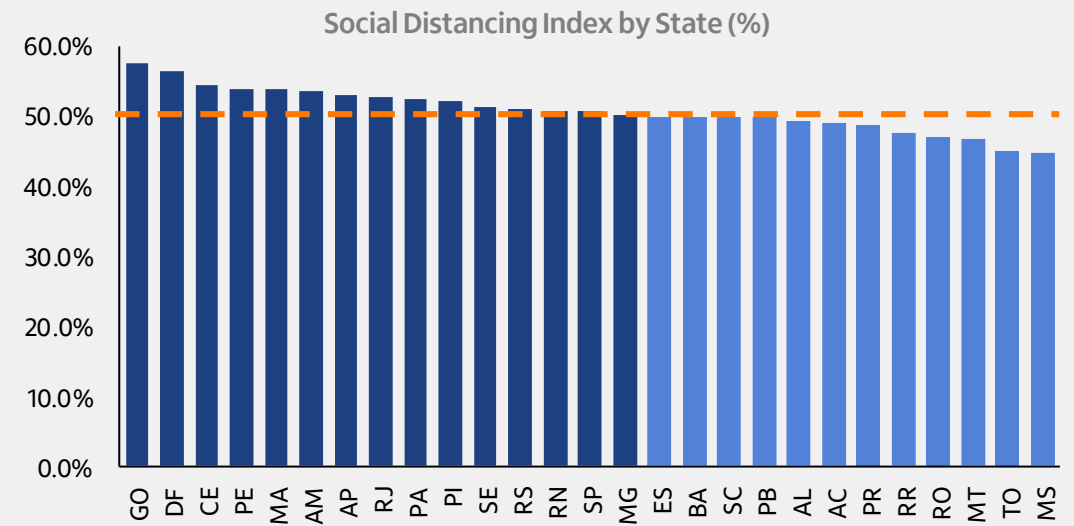
## InLoco: Creating The Social Distancing Index

- **InLoco: providing intelligence based on location data.** InLoco is a Brazilian technology company that provides intelligence based on location data and offers solutions that allow companies to gain insights into their business while ensuring the anonymity of their customers. The company currently has a team of 180 employees spread throughout the cities of Recife, São Paulo and Rio de Janeiro. InLoco has a database of over 60 million registered devices, recording around 1.8 billion visits per month to physical locations. Among the functionalities of its platform, InLoco intends to engage app users with push notifications at the right time based on the user's location and improve app sign-up experiences.
- **Creating a location tool to fight COVID-19.** InLoco recently developed the Social Distancing Index, which measures the percentage of the Brazilian population that is respecting social distancing recommendations to help Brazilian states fight the COVID-19 pandemic. The idea is to provide anonymized location data from 60 million devices to the authorities to enhance public safety and minimize the spread of the pandemic using a privacy-first technology. This is an interesting example of a startup that has been using its platform to help the community while taking advantage of the COVID-19 pandemic to demonstrate the advantages and functionalities of its product.

### InLoco's Index Shows an Increase in Adherence to Social Distancing...



### ...but the Index Is Still Below the Recommended 70% in All States.

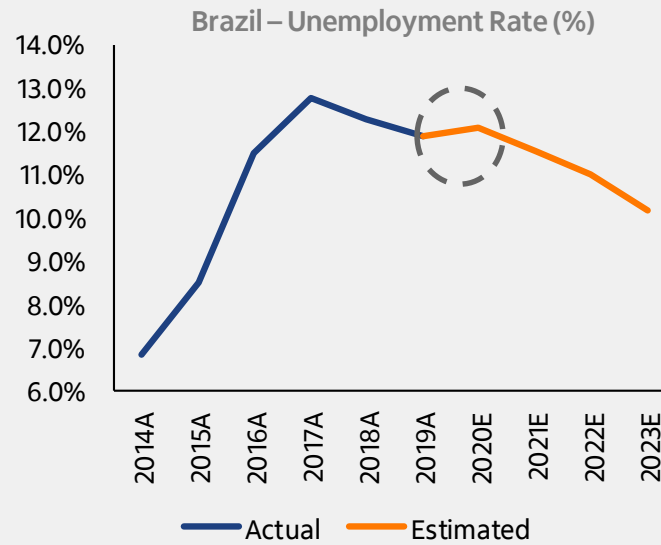
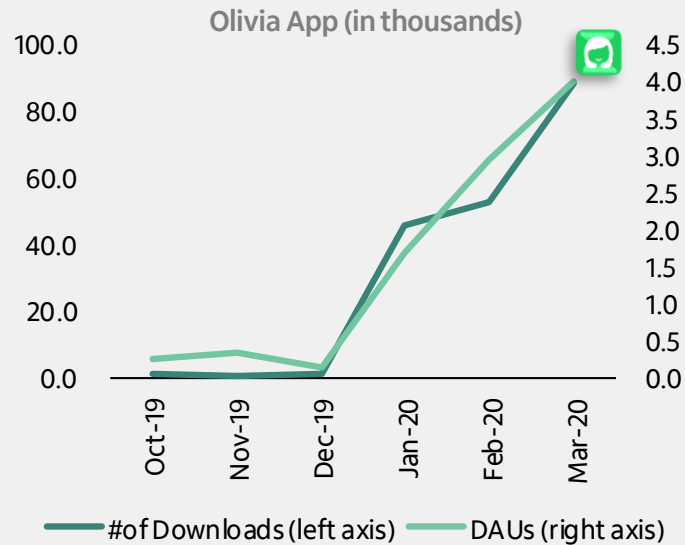


# Startups Taking Advantage of The Crisis

## Olivia: Ideal Financial Assistant for Macro Downturns

- **Olivia: helping people save money.** Olivia is a technology company that developed an app that acts as a free financial assistant to help people spend smarter and save more. The app applies artificial intelligence to learn users' spending patterns, predict purchases and recommend ways for users to get more for their money. The app was launched in Brazil in January and the number of downloads increased exponentially in March.
- **An ideal tech tool to navigate the crisis.** Unemployment rates are set to increase in Brazil following the COVID-19 crisis and Olivia could be an interesting alternative to help people in Brazil save money during the expected macro downturn. As such, the startup is another interesting example of a company that could take advantage of the current crisis to leverage its tech platform and enhance users' app adherence.

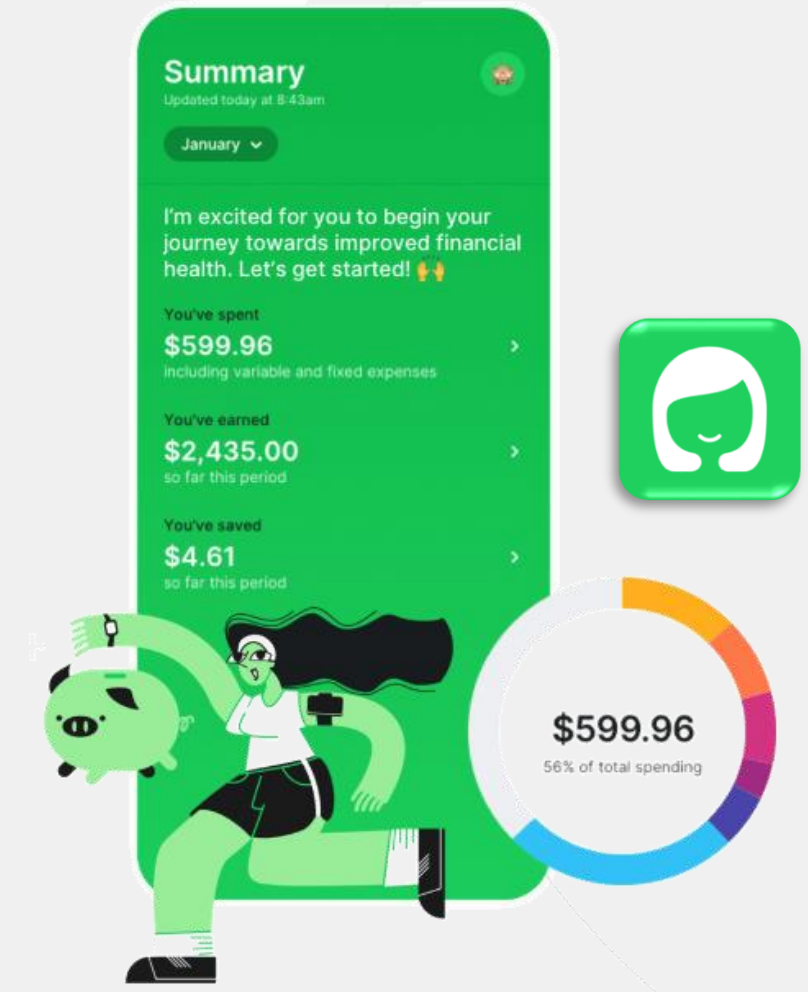
### The Olivia App Has Increased Penetration and Utilization Could Increase on Macro Backdrop...



Source: Itaú BBA, SimilarWeb and Olivia.

### ...Given That Olivia Uses AI to Help People Save Money.

#### Olivia's App Interface



## **Section 6**

# Insights From Venture Capital Firms

## Webinar With Softbank, Monashees and Valor Capital



**The COVID-19 crisis from a venture capital perspective.** We hosted a webinar on April 8 with Softbank's Managing Partner Paulo Passoni; Monashees co-founder Eric Acher; and Valor Capital co-founder Scott Sobel. During the event, we discussed the challenges and opportunities for venture capital (VC) arising from the current COVID-19 crisis.

**Cash is king.** Softbank, Monashees and Valor Capital have created startup taskforces to develop a specific strategic plan for each company to navigate the COVID-19 crisis, given that some operations have been halted by the lockdown. Despite the fact that startups have different business models and are at different stages of investment, the rule of thumb is to preserve cash at this point, particularly because the timing of the lockdown is still uncertain. Interestingly, some of the companies in their portfolios raised equity last year and have a cash cushion to weather the crisis, while other startups that have yet to reach breakeven would likely need bridge loans in the event of a longer lockdown.

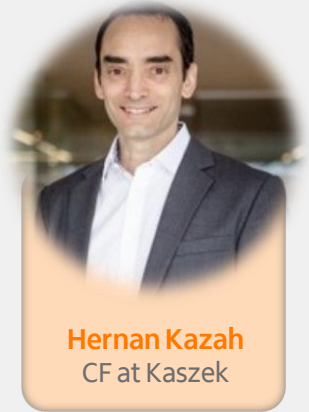
**Survival of the fittest.** Softbank, Monashees and Valor Capital highlighted that the crisis will accelerate VCs' investment bias toward startups with a capital-efficient mindset over companies focused solely on speeding up growth without self-sustaining unit economics. VC investments are also likely to shrink going forward, as was the case in past crises (for reference, VC investments in China have dropped by 50% since the start of the crisis), and could take from one to three years to return to pre COVID-19 levels. As such, the crisis will favor the survival of self-sufficient business models and entrepreneurs who are in the game for the long haul. As a matter of fact, most of the long-standing tech companies in Brazil were born during crises and without VC capital.

**Supply chain disruption.** The COVID-19 pandemic will have a disruptive impact on the global supply chain and globalization in the medium term, given the shortage of healthcare equipment currently faced by countries the world over. According to the VC partners, countries will have to rethink their global strategy and supply chains will become even more local, creating interesting opportunities for emerging markets to create a more unified supply chain. They expect globalization to continue for virtual goods (gaming, content, etc.), but physical goods are likely to become more local going forward. Digitalization has also proven vital during the COVID-19 pandemic and could serve as an opportunity for emerging markets to leapfrog and catch up to developed markets.

**Winners and losers.** There are also opportunities arising from likely significant changes in consumer behavior caused by the lockdown, accelerating the adoption of online products and business models. The main winners will be e-commerce and logistics-related business models, such as food & grocery delivery apps (Rappi, iFood, Uber Eats), dark kitchens (Mimic), logistics (Loggi, CargoX), augmented and virtual reality and distance learning. The segments most likely to suffer are the travel, hospitality and event industries, given the inclination toward social distancing.

For more details on this Webinar, please click [here](#).

## Webinar With Kaszek Ventures



We hosted a webinar with Kaszek Ventures' co-founder and managing partner, Hernan Kazah, on April 17. He shared his views on what the tech environment will look like once the crisis is over and discussed the prospects for startups in this challenging period.

**A balanced portfolio.** Mr. Kazah disclosed that Kaszek's portfolio is currently composed of over 40 companies with different cash positions, operating in several different segments. Some of the fund's invested companies operate in the e-commerce, online education and digitalization segments and have seen strong increases in demand; others operate in local commuting and tourism and have suffered sharp decreases in revenues; but the majority of the fund's portfolio is somewhere in between. He also pointed out that Kaszek's investment strategy has always been to look for early-stage tech startups with feasible unit economics. At this time, it seems like this strategy has paid off.

**Four different approaches going forward.** Mr. Kazah sees four different paths that a startup could follow, depending on its balance sheet and business model:

- 1. Companies that have a strong cash position and still believe in their business model.** He expects no significant change in course for these companies. In his view, they need only protect their capital and work under the hood to improve their solutions so that they can hit the ground running once the crisis is over.
- 2. Companies that are in a challenging financial situation, but believe in their business model for the long term and have created palliative solutions for making money in the meantime.** As an example, Mr. Kazah pointed to a commuting company in Kaszek's portfolio. Because people are not moving around, the company has started making deliveries with its vans – a way of making use of assets that otherwise would be completely unproductive. After the crisis, this solution is not likely to remain in the company's portfolio.
- 3. Companies that are in a challenging financial situation, but believe in their business model for the long term and have created solutions that will become part of their business models moving forward.** As an example of this approach, Mr. Kazah mentioned Gympass, a B2B gym solution that has faced difficulties since gyms were closed due to COVID-19. The company has since developed an online platform that, given its success, will probably remain an integral part of its core business even after the crisis has passed.
- 4. Companies that have realized that their business model does not make sense.** Even companies that have not been hurt by this crisis have taken this opportunity to reassess their business models and pivot toward better opportunities that may have appeared in this constantly changing scenario.

For more details on this Webinar, please click [here](#).

## Material Information

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## Relevant Information – Analysts

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