

# The Last Decade: its impacts and some thoughts on the present decade

The year 2021 marks the beginning of a new decade, the third of the 21st century. We believe it is a fitting moment to review the main events that had an impact on global financial markets over the past 10 years. This will provide some context for the possibilities that lie ahead in the coming decade. The phrase "history doesn't repeat itself, but it often rhymes," attributed to the American writer Mark Twain, fits the bill here. Predicting the future is a difficult task, and the events that have the greatest impact in markets are unpredictable by their very nature. But a retrospective analysis can help us calibrate the set of possibilities and better prepare ourselves for what lies ahead.

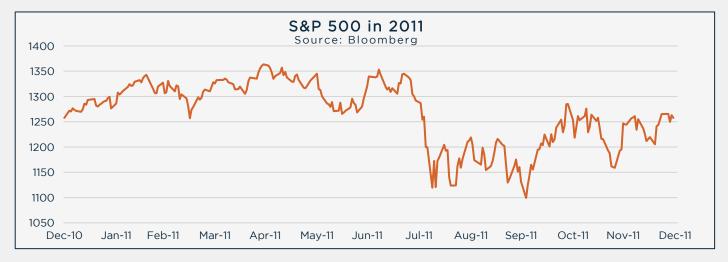
The 2011-2020 decade was forged in the aftermath of the Global Financial Crisis (GFC) of 2008. This was triggered by the bursting of the American housing bubble and its widespread impact on the global banking system. This was a credit crunch on a grand scale and its aftershocks were felt throughout this period, particularly in the first half.

In this letter we will review the key events that marked this period and reflect on the upcoming years. We have no intention of mentioning every event of the past decade, but rather highlighting those we feel had the biggest impact on the "psyche" of investors and economic policy makers. Those which have had a lasting consequence on the prices of financial assets.

#### 2011-2021: Aftershocks of the Great Crisis

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The year 2011 was marked by geopolitical events, including the Arab Spring, and natural disasters such as the earthquake and tsunami that hit Fukushima in Japan. There was a wave of protests in the beginning of the year against high unemployment, better living conditions and democratic rights which spread through a number of Middle Eastern countries. Toppling regimes that had been in power for many years. The price of oil shot up by over 30% by the beginning of the second quarter, reflecting greater political risk in the region. This crowned a recovery in oil prices after the lows reached in December 2008. However, financial markets regarded the political standoff in the US over the increase in the Debt Ceiling as the most significant event. On August 5<sup>th</sup> 2011, the global credit rating agency Standard and Poor's (S&P) downgraded the US government's credit rating from AAA to AA+ as it believed the fiscal consolidation plan approved by Congress would not go far enough to stabilize the medium-term performance of public debt. This created great turbulence in prices from August onwards. The S&P500 index ended the year on even ground after recording a fall of about 20%, as shown in the graph below.



On the other side of the Atlantic, the European Central Bank (ECB) made a mistake in its economic policy and raised interest rates twice in the first half of the year. This was the first attempt to normalize interest rates after the great crisis<sup>1</sup>, but the ECB was forced to reverse the move because the tightening of financial conditions caused an increase in spreads on government bonds in Greece, Italy, Spain, Portugal and Ireland. The excesses committed in the pre-GFC period led these countries' deficits and debt to balloon in the wake of the bursting of the housing & credit bubbles, and the bailouts of the financial system that followed. In fact, Greece had already negotiated a bailout package with

<sup>1</sup> The ECB had cut interest rates to 1%.

the International Monetary Fund (IMF) the previous year and its debt was leaving the hands of the market and passing to official agencies.

The European crisis became more serious in 2012. The Euro Zone faced the first big test of its monetary union when the yields on these countries' treasury bonds rose sharply as investors demanded higher premiums in fear of redenomination into national currencies. The prospect of Grexit (Greece's potential exit from the Euro Zone) was already causing nervousness in the markets but the rising yields of countries like Italy and Spain, shown in the following chart, added fuel to the fire. Not only because of the size of these economies but also because their respective banking systems held a good portion of these bonds.

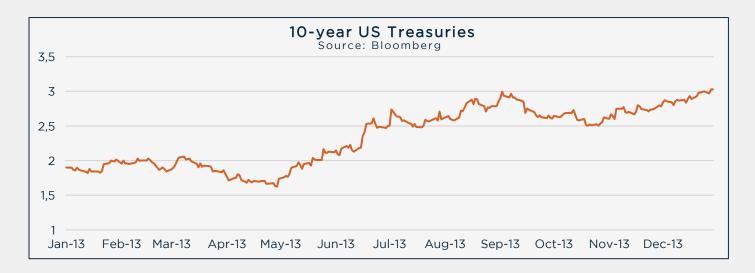


The crisis was only defused when Mario Draghi, the then new president of the ECB, gave a speech in July removing once and for all any remaining doubts about the authority's commitment to the survival of the monetary union. In that speech, Draghi made the famous statement that, "the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough." Indeed, that speech was of fundamental importance and from then on there was a downward trajectory and greater convergence of risk premiums across the countries.

#### 2013-2014: Taper Tantrum and oil prices in free fall

The taper tantrum was already the big event in 2013 when Ben Bernanke, then chairman of the Fed, indicated in May that at some point it would reduce purchases of securities for its balance sheet that had been made over three quantitative easing programs<sup>2</sup>. The last program had been launched in September of the previous year.

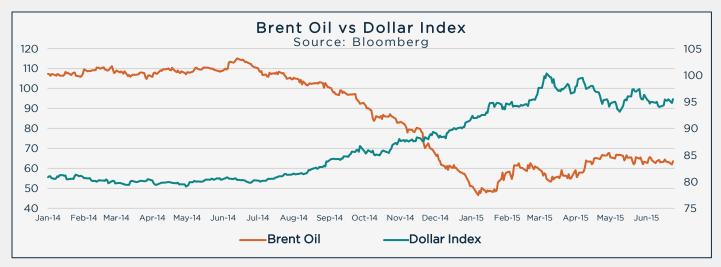
As shown by the chart below the 10-year treasury rate rose by approximately 150 basis points by early September. This move triggered a liquidation event in emerging country risk assets, especially those with high current account deficits or dollar liabilities. The five weakest ones were Indonesia, South Africa, Turkey, India and, unfortunately, Brazil<sup>3</sup>.



<sup>2</sup> Without getting into technicalities, the basic mechanism works as follows: the central bank buys assets, usually government bonds using bank reserves, i.e. crediting the seller's bank account with money, thereby increasing liquidity in the economy. This means the monetary authority's balance sheet is expanded with an increase in assets (government bonds) and liabilities (bank reserves). Another important associated issue is that the central bank can calibrate its purchases of longer maturity securities, thereby reducing the longer interest rates with a greater stimulus effect on the economy. 3 Brazil had a current account deficit of around 3.5% of GDP at the time.

Another issue was the slump in the price of oil starting in July 2014, driven by a key development that the US became self-sufficient in oil. Hydraulic fracking technology allowed the extraction of shale reserves. Low interest rates encouraged a flood of capital into oil exploration companies that became very profitable with the elevated prices of oil. There is a saying in the commodity markets that the cure for high prices is the high price itself because it boosts supply.

The increased supply of shale oil in the US combined with falling demand due to the economic slowdown in China took the price of a barrel of oil from just over \$110 in mid-2014 to below \$30 in early 2016. The following chart shows that this period coincided with a strong appreciation of the US Dollar, which was up by over 20% against the DXY index.



### 2015-2016: The Quasi-Grexit and Chinese Hard Landing

In Europe, a new government won the elections in Greece promising solutions to the country's severe economic crisis arising from an anti-austerity platform. A referendum was called in which the population was asked whether it would approve the conditions imposed by the Troika - the European Commission, the IMF and the ECB - in exchange for extending a new aid package to the country. Investors interpreted the referendum as a choice for the population to keep the Euro or not and this instability intensified the flight of capital, forcing the declaration of bank holidays and restrictions on the movement of resources in Greece. Although the referendum did not approve the conditions imposed, the project to remain in the Euro zone prevailed.

However, market turbulence in 2015 came mainly from the other side of the world. Economic cycles in China are usually shorter and marked by booms and busts. The appreciation of the US dollar contributed to the tightening of financial conditions in China as its currency was managed to maintain a certain parity with the US currency. However, amid fears of a hard landing China allowed the Renminbi to depreciate, and from August it fell from 6.20 to the US\$ to almost 7.00. This policy was part of a set of measures that included expanding credit to households and businesses.

In December 2015, the US unemployment rate was running at 5% and the Fed finally removed the zero-interest rate policy after seven years, a much longer period than was initially expected. This highlighted the enormous difficulty of withdrawing stimulus measures after a major financial crisis.

Global economic activity began to stabilize in early 2016 and the US dollar stopped appreciating. There was speculation in markets that there was a tacit agreement made at the G20 meeting in February of that year to curb the rise of the dollar<sup>4</sup>. However, the main surprises of that year were of a political nature. The referendum in the UK called by then Prime Minister David Cameron resulted in the victory of the group that supported Brexit. This triggered the start of negotiation process with the European Community on the terms of the "divorce" that dragged on for years. In the US, Donald Trump, a complete outsider in terms of traditional American politics, beat Hilary Clinton in the race for the US presidency. Amid all this economic and political uncertainty, the Fed continued the process of raising interest rates only in December 2016, with a hike to a range between 0.50% and 0.75%.

#### 2017-2018: Synchronized global growth and the start of the Trade War

2017 was a year of positive surprises and synchronized global growth. There was also a lot of concern in Europe over the presidential and parliamentary elections in France. The election of Trump and Brexit raised issues such as populism, nationalism and protectionism to the fore. Emmanuel Macron beat Marine Le Pen by promising economic reforms with a pro-European union discourse and offsetting political risks in the region. The Trump administration in the US implemented a tax cut, thereby loosening fiscal policy. One of the main measures was the tax cut for companies which

<sup>4</sup> Known as the "Shanghai Accord".



started to pay a single rate of 21%. These elements were all positive for risk assets, particularly the American stock markets. Another important aspect was that investors began to shine the spotlight on the digital revolution and all technology related to data, and its production, gathering and interpretation. Concepts such E-Commerce, Social Media, Cloud Computing and the Internet of Things<sup>5</sup> became mainstream. Anecdotal evidence can be seen in the constantly inspiring covers of The Economist magazine. Some examples from 2017 are shown below.



In 2018, the Fed took the opportunity to speed up the process of normalizing interest rates. The US unemployment rate reached 3.8%, the lowest level since the 2008 crisis. Although inflation did not respond as expected, the monetary policy committee showed concern about not moving further away from zero interest rates, thereby opening room for future interest rate cuts without hitting the lower bound. The Fed also showed some concern that low interest rates and the considerable size of its balance sheet might be artificially inflating asset prices. To address these concerns, it began to roll over only a fraction the bonds it had bought in the quantitative easing programs to gradually reduced its overall balance sheet.

The year 2018 also saw the start of the trade war between the US and China, with tariffs being raised on both sides and threats of imposing tariffs on other countries. This caused enormous uncertainty in global supply chains, with a subsequent drop in investments and cooling in global industrial activity. Another event worth mentioning is that Jerome Powell, the Fed chairman, indicated in an interview in early October that he thought the interest rate was still far from the neutral rate. This was the last straw that led to a sharp increase in volatility and a correction in the prices of risk assets at the end of the year.

#### 2019-2020: End of the long economic recovery?

The whole situation raised the question of whether the economic expansion cycle and the US stock market's long bull market were at an end. However, bull markets do not die of old age. They are usually finished off by central banks when they over-tighten financial conditions, by the bursting of a more systemic asset bubble, or by an exogenous shock. In 2019 the world watched with apprehension as the yield curve inverted, pointing to an excessive tightening. The spread between 10-year and 3-month US Treasury bonds became sustainably negative from the middle of the year. Against this backdrop, the Fed made three cuts of 0.25% regarded as "preventive" in the second half of the year even though the global industrial Purchasing Managers' Index (PMI) was crossing over the 50-mark pointing to an expansion in economic activity.

Finally, we get to 2020 - the year of the outbreak of the Covid-19 pandemic followed by a sharp global recession. We saw even stronger than post-GFC monetary and fiscal policy responses across the globe. As 2020 is so fresh, it does not require a detailed review, but it is the main starting point in understanding what may lie ahead.

#### Reflections on the current decade and its challenges:

Our current decade also starts from a crisis, but the fundamental difference lies in the nature of the source. This is a global health crisis, and the most recent precedent occurred just over 100 years ago. The prior global crises were of an economic and financial nature, the result of excesses and overconfidence that ended in bubbles bursting in tech stocks in the early 2000s and real estate and credit in 2008. As already stated, recovering from this kind of crisis takes longer as the excesses need time to be flushed out and "digested".

The first reflection that follows from this is that with vaccination programs gaining traction globally the economic recovery will likely come about much faster. This outcome is increasingly likely when we consider the rapid and enormous economic policy response of governments around the world. Another fallout is that we may have a shorter

<sup>5</sup> Read more about this subject in our Letter 24 "A Revolução Digital e os Impactos na Economia" ("The Digital Revolution and the Impacts on the Economy") available on our site.



economic cycles. One example is that financial markets are already showing a certain nervousness about what will happen when stimulus measures are withdrawn. Will we see another taper tantrum like that of 2013?

There is also a possibility of a less cyclical nature. Monetary policy was the main lever in the economic responses to previous crises. The unconventional monetary policy of quantitative easing is now completely conventional. However, major central banks had already been warning about the lower effectiveness of monetary response should there be another major crisis and pointed to the need for some support from fiscal policy. In the developed world, situations such as the liquidity trap and secular stagnation have led to consensus around this prescription among economists in the intersection of economic policy makers, academic centres and think tanks. One of the remedies from this school of thought is that fiscal policy must play a more active role through government spending and taxation.

The dominant view is that inflation has been essentially brought under control and that the most pressing problems are low economic growth, and above all, income inequality. Monetary policy should continue to provide support, but it is fiscal policy that should take on the leading role. In this sense the pandemic marked an important paradigm shift as it created the opportunity to put theory into practice.

Let's look at what is happening right now in the US. The Fed has announced a change in its framework by implementing FAIT (Flexible Average Inflation Targeting). This means it will be pursuing an inflation target that is just above 2% to make up for periods when inflation was below this target. Members of the monetary policy committee have been emphasizing in their recent speeches the need for stimulus measures not to be withdrawn prematurely, pointing to a greater weight for improvement in the labour market to alleviate income inequality.

After undertaking a US\$ 1.9 trillion fiscal aid package to fight the pandemic the Biden administration put forward an infrastructure investment package of more than US\$ 2.3 trillion. In a recent speech to the US Congress Biden stressed the importance of the government's role in this type of investment. This speech is symptomatic of the winds of change.<sup>67</sup>

In Europe, the joint recovery fund marked a further step towards greater fiscal union. Meanwhile, the Italian prime minister, Mario Draghi, was called on to draw up and implement the spending of the resources Italy will receive from this recovery fund. This is the same Mario Draghi mentioned earlier who was a crucial figure in saving the Euro.

A challenge that could appear during this decade is how to finance the increase in public spending and establish the limit of public debt. Financing public debt is easy as long as global interest rates are low, but what happens when interest rates rise? What about inflation? Factors such as technology, demographics, globalization, decreasing labour union membership and inflation targeting have contributed to a structural decline in inflation. However, with the amount of monetary and fiscal stimulus measures and a reversal or even slowing in the rate of some of these trends, we may see a more sustained rise in inflation<sup>8</sup>. At the very least, we may have some inflation scares and choppy markets, since both fixed income and variable income have benefited from the fall and the greater predictability of inflation. Still on this subject, there are questions over how central banks will behave if inflation rises above expectations.

From a more structural viewpoint, the 20s of the 21st century bring interesting analogies with the 1920s in the US which became known as the "Roaring Twenties." In fact, the 1920s also followed the great Spanish flu pandemic of 1918 that coincided with the last year of the First World War. These traumatic events led to a general feeling of wanting to live as if there was no tomorrow. Scott Fitzgerald's novel "The Great Gatsby" captures this zeitgeist perfectly. Another important similarity is around technological ebullience. The 1920s saw the consolidation of the automobile industry that was revolutionizing mobility, and the commercial introduction of the radio, the first medium of mass communication. These two innovations led to the emergence of a whole chain of products and services, and new business models with them.

It is worth remembering that the "Roaring Twenties" ended up provoking excesses and a huge stock market bubble that triggered the Great Depression when it burst in October 1929. However, we believe that we are not doomed to this same fate, even though we are cognizant this is an auspicious environment for the formation of speculative bubbles.

<sup>6 &</sup>quot;These are the investments we made together as one country, and investments that only the government was in a position to make. Time and again, they propel us into the future" https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/04/29/remarks-by-president-biden-in-address-to-a-joint-session-of-congress/) 7 Ray Dalio takes an insightful look at this question of the pendulum of the ideas related to the role of the state in a recent article https://www.linkedin.com/pulse/biden-tax-

spend-plan-big-cycle-swing-ray-dalio/?published=t 8 A recently published book which covers this theme is "The Great Demographic Reversal: Ageing Societies, Waning Inequality, and an Inflation Revival" by Charles Goodhart and Manoj Pradhan.



## SPACs: An alternative to the IPO

A SPAC is an alternative to a traditional Initial Public Offering (IPO), allowing a privately held company to become a public company without the constraints of a classic listing. This is because the company becomes publicly traded after being acquired by an entity that is already listed. The determining factor is that the listed company is a legal structure with no operating business, revenues, or assets, and only has cash that been contributed by its investors. This unusual entity is called a SPAC, a Special Purpose Acquisition Company, and its simple purpose is to find a private company that will agree to combine with it to become a public company. As well as cash, a SPAC has a lean team and a timeframe of 18 to 24 months to carry out its purpose. If this does not happen, the structure is self-liquidating, and the capital is returned to its shareholders.

As there is no operating business, the main driver of attracting capital is the reputation of the people involved. This is why the SPAC's team usually consists of experienced and well-known executives. This team does not have to commit to a full-time role and does not receive a salary or bonus. Their compensation is directly tied to the success of the acquisition, as the management team receives a significant stake in the acquired company (normally 20% of the stake acquired by the SPAC) subject to a 12-month lock-up. It is a lucrative opportunity for the team to help a company and its management team handle the various elements involved in the transition to being a listed company.

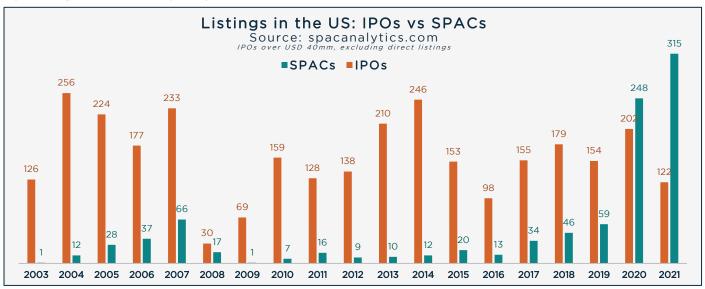
The SPAC goes through its own IPO process in which to attract initial investors. However, as it has no financial history or assets, the process is much easier and can be carried out in weeks. The initial investors are usually institutional investors who are attracted by the combination of the team's reputation and the attractive terms of this particular arrangement. The structure of a SPAC involves units that are made up of a share and a warrant (an option to buy a share). Another unusual feature is that when the target company is announced, the shareholders have the right to redeem their share and receive their principal (plus accrued interest) back if they do not agree with the proposed deal. In other words, the shareholder in a SPAC has a high degree of optionality and can capture significant upside if the share price appreciates as well as the right to withdraw from any deal.

A private company has a number of advantages when choosing the SPAC route and can benefit from one or more of the following elements:

- **Speed of listing:** by avoiding the tortuous path of having to choose an underwriter, followed by a road show and book building elements, a listing via a SPAC can take place in weeks rather than months.
- Centralized and confidential negotiation: no filing is required, and the company can choose to deal directly with just one SPAC, or as many as it wants.
- Flexibility in using financial projections and forward guidance: not allowed in an IPO, a private company has more flexibility in communicating with its potential investors when choosing to deal with a SPAC.
- **Earn-outs:** the possibility of including clauses allowing the company's executives to be compensated with more equity if the share price reaches a certain level. This is common in private M&A deals but is not allowed in an IPO.
- Additional capital: through PIPEs (Private Investment in Public Equity) and FPAs (Forward Purchase Agreements) a SPAC can offer more capital from institutional investors for the deal than just its own cash.

On the other hand, the cost of listing via a SPAC can be more expensive than a traditional listing for the private shareholders. Estimates put the costs of underwriting fees and sponsor remuneration (SPAC team) at more than 30% of the SPAC's capital.<sup>1</sup> However, these estimates are likely outdated as the terms of SPAC deal are flexible and have become progressively more founder friendly in an increasingly competitive environment.

We have seen a tsunami of listing of SPACs over the last 16 months. 248 SPACs were listed in the US in 2020, representing an aggregate volume raised of USD 83.5 billion. This represents a 320% increase in the number of SPACs and of over 500% in dollar volume when compared to the previous year!\* Listings of SPACs accounted for 46% of total primary variable income volume issued in 2020.\* These record figures were easily surpassed in just the first four months of 2021 when 311 SPACs raised over USD 100 billion, representing over 60% of total primary issuance volume.\*



1 https://www.forbes.com/sites/antoinegara/2020/11/19/the-looming-spac-meltdown/?sh=417dd5b70d7e \* https://www.spacanalytics.com



It may be a surprise to many that SPACs are not a new concept and have actually existed in different forms since at least the 1920s.<sup>2</sup> However, it has a dubious past, particularly in the 1980s when the entities were known as ""blank check or "blind pool companies". More than 2,700 of these structures were listed from 1987-1990<sup>3</sup> and there were numerous occurrences of manipulation and fraud. The Securities and Exchange Commission (SEC) created a task force in 1988 to supervise and inspect these structures more aggressively<sup>4</sup> which eventually led to the introduction of new regulation, the Securities Enforcement Remedies and Penny Stock Reform Act of 1990. On the back of these new rules, blank check companies virtually disappeared from the market in 1990, as there were less than 15 blank check companies listed that year.

One of the rules introduced by the SEC in 1990 has become one of the most interesting features of the current architecture: giving the investor the option to withdraw from the deal after the target is announced. In 1992, David Nussbaum, a lawyer and CEO of GKN Securities<sup>5</sup>, coined the term SPAC, incorporating in his new arrangement all the measures introduced by the SEC. He listed 13 of these new structures between 1993 and 1994<sup>6</sup> but SPACs faded away as capital became widely available for public offerings by start-ups and small companies during the tech boom

These structures resurfaced when the tech bubble burst in the early 2000s. In August 2003, the same David Nussbaum, now at EarlyBirdCapital, listed Millstream Acquisition Corporation and inaugurated a new fertile period of SPAC listings. More than 160 structures were listed by 2008.<sup>7</sup> The market cooled down again after the Great Financial Crisis of 2008 and less than 10 SPACs per year were listed in the following years.<sup>8</sup>

One of the most noteworthy SPACs of the last decade arose during this lull. Justice Holdings Limited, was created in 2011 in partnership by Bill Ackman, Nicolas Berggruen and Martin Franklin, well-known executives and investors. In April 2012, Justice announced the acquisition of 29% of Burger King Worldwide Holdings from 3G Capital, bringing the fast-food company back to the public market.

The 2010decade was marked by a zero-interest rate environment, an abundant supply of capital and a strong wave of innovation and startups. The easy monetary conditions allowed tech companies unprecedented access to private capital, This resulting in the postponement of public offerings and an extraordinary accumulation of unicorns (private companies with a valuation of over USD 1 billion). The few companies that did become publicly listed decided to do so at a much more mature state, and the average age on the IPO date jumped from 5 to 11 years.<sup>9</sup> One side effect of private investors' dominance over of the early growth phases of tech companies and the low tide of IPOs appears to be the avalanche of SPACs in 2020-2021.

With over 420 SPACs currently sitting on more than USD 137 billion\*, the segment is at a real fever pitch. What were typically small structures with an average of less than USD 100 million<sup>10</sup> in capital, have risen to a new magnitude and we've wtitnessed the listing of 10 SPACs with over USD 1 billion of cash on hand. This includes Bill Ackman's Pershing Square Tontine Holdings with USD 4.9 billion.<sup>11</sup> This new wave also includes reputable figureheads such as Howard Marks (Oaktree Acquisition Corp), Peter Thiel (Bridgetown Holding), Chamath Palihapitiya (14 SPACs, including vehicles that merged with Virgin Galactic, Opendoor, and Clover Health) and Michael Klein (7 SPACs). Celebrities and former athletes have also joined the fray, such as Serena Williams (Jaws Spitfire Acquisition Corp.), Steph Curry (Dune Acquisition Corp.), Ciara (Bright Lights Acquisition Corp.) and Shaquille O'Neal (Forest Road Acquitision Corp.).

Brazil has not missed out, and we have a few SPACs with a Brazilian focus and/or sponsors. The pioneer was HPX Corp., launched in June 2020 with USD 220 million to acquire a Brazilian company. Its Co-Chairmen are Bernardo Hees (former CEO Kraft Heinz) and Rodrigo Xavier (former CEO and Chairman of Bank of America Merrill Lynch Brazil) and the CEO is Carlos Piani (former Chairman of Kraft Heinz Canada). In January 2021, we saw the launch of two SPACs with Brazilian elements, Itiquira Acquisition Corp and LDH Growth Corp I. Itiquira with USD 200 million also focused on the acquisition of a Brazilian company, which has as CEO and Chairman Paulo Gouvêa (Managing Partner of Ygeia Capital) and CFO Marcus Silberman (Partner of CH Global Capital and former Head of M&A in Latin America at Bank of America). LDH Growth Corp I was also launched with USD 200 million and intends to acquire a technology company in Latin America. It is sponsored by SoftBank, and Brazilian Paulo Passoni is a Managing Partner. The following month, Waldencast Acquisition Corp. was launched with USD 678 million. It has no geographic focus and aims to acquire a company in the beauty, personal care or wellness sectors. Felipe Dutra (ex-CFO of Anheuser-Busch InBev) is chairman and Cristiano Souza from Dynamo Capital is a board member. Both are Brazilian.

We cannot predict all the side effects of this current record-braking wave of SPACs, but what is certain is that there have never been so many financing options for private companies. Private equity players continue to operate at full steam (with their own recordbreaking fundraising stats), a robust appetite for traditional IPOs, plus the newly tested direct listings (a mechanism pioneered by Spotify in 2018) and the plethora of SPACs. There have never been so many choices.

The SEC is closely monitoring the tsunami of SPACs and introduced new guidance related to warrant accounting in April. There are also rumors that it may introduce new restrictions on financial projections and forward-looking statements. Nevertheless, the market has cooled rapidly for new listings and the crop of companies that were listed through SPACs in the first four months of 2021 lost on average 39% of their market value by the end of April.<sup>12</sup> No doubt there are excellent reasons to cultivate a robust and permanent presence of SPACs in equity markets but, as we have seen in the past, the market tends to self-correct excesses (sometimes with the help of corrective actions by regulators) and balance things out. However, there are tell-tale signs that we have just witnessed another episode of excessive euphoria.

<sup>2</sup> https://economics.sas.upenn.edu/sites/default/files/filevault/13-013.pdf pg 3 3 https://core.ac.uk/download/pdf/159610375.pdf pg 532 4 https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1160&context=law\_lawreview pg 936 5 https://www.forbes.com/sites/antoinegara/2020/11/9/the-looming-spac-meltdown/?sh=417dd5b70d7e 6 https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1160&context=law\_lawreview pg 931 e 945 7 https://economics.sas.upenn.edu/sites/default/files/filevault/13-013.pdf pg 28 8 https://media2.mofo.com/documents/110401-a-new-spac-structure-may-lead-to-renewed-interest-in-spac-offerings.pdf pg 2 9 https://www.ipe.com/ipos-unicorn-hunting/10031918.article 10 https://scochmarketmba.com/listofshellcompanies.php 12 https://www.ft.com/content/c7c0filc-b678-491d-9173-fe49ea29b4b8