“The real voyage of discovery consists not in seeking new landscapes but in having new eyes.”

- Marcel Proust

JUL 2019 | VOL. 16

THE LEISURE ISSUE

INVESTMENT AND INSURANCE PRODUCTS: NOT FDIC INSURED • NOT A BANK DEPOSIT • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • NO BANK GUARANTEE • MAY LOSE VALUE.
“Sell in May and go away” has been one of the most researched and documented seasonal patterns in the stock market. Coined by many as an “investment strategy,” the saying is merely based on a theory that stocks experience higher returns, on average, from November to April. Employing this strategy would suggest that stocks be sold at the start of May and the cash held through October, when it is time to buy again. While at times this may make sense—especially during times when potentially impactful rhetoric takes on less predictable outcomes—most of the time, investors are better off employing strategies that hedge risk rather than remaining on the sidelines (in cash).

Undoubtedly, risks appear to be rising and global economic headwinds seem to be swirling. Nonetheless, we advise maintaining broad investment exposure across world markets as history suggests that portfolio timing can lead to deep underperformance, FIGURE 1. While modest valuations could pave the way for a market rebound, so too could potentially positive news developments. Should you sell in a panic, you could miss out on that opportunity.

FIGURE 1. IT PAYS TO STAY INVESTED

Taking all this into consideration makes us wonder why Wall Street has yet to coin some variation of “Diversification before vacation.” That’s certainly how we feel. Vacation season is upon us at the same time that market concerns are broadening. While we certainly address our broad economic and asset class views in this edition, we also take the opportunity to go on vacation with you and talk about the many ways that people are choosing to spend their leisurely time and money. Quite seemingly an issue about millennials, understanding this generation’s behavior trends is an important step, potentially providing insights into future investments.

Across these pages, we navigate through the mostly demographic-driven winds of change in travel while enjoying some food and wine commentary. We land, along our voyage, on the evolving world of entertainment and, finally, arrive at ways to hedge your portfolio using non-traditional assets. That said, diversify, kick back, relax, and enjoy the reading.

---

1 MarketWatch. Chart and images in this publication are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. Asset Allocation and diversification does not assure profit nor does it guarantee against losses. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.

---
THE
LEISURE ISSUE

In This Issue

Wellness Travel .................................................... 4
The Rise of the Asian Middle Class ........................................... 6
Lodging Dynamics ...................................................... 8
Food & Wine ............................................................ 10
New Age Entertainment .............................................. 12
eSports ................................................................. 14
Economic Impact of Hosting a Major Sporting Event ............. 16
Looking at Art with New Eyes ...................................... 18
Citi’s House Views .................................................... 22

All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Refer to the Glossary and Important Information at the end of this publication.
Tourism is the second-fastest growing sector in the world, ahead of health care, information technology, and financial services, behind only manufacturing. In the last five years, tourism has added one job for every five new jobs created and makes up one in ten jobs globally. The sector has grown faster than the global economy for eight consecutive years (at 3.9% vs. the global economy’s 3.2%) and contributed roughly 10.4% to world GDP in 2018.1

The industry’s growth has been accredited to four major forces: global affluence, demographic shifts, convenience, and awareness. Certainly, a rising middle class throughout the world, most notably in India and China (which together account for one third of the globe’s population), means that more people have additional disposable income to spend on travel. (More on this in The Rise of the Asian Middle Class article.) Perhaps intentionally, the countries and regions with the highest economic growth rates have governments that emphasize and support domestic tourism through improvements in transportation and developments in infrastructure.2 China and India are a few examples of this—both countries are top spenders in airport and rail expansion—however, some African countries have also joined the trend, FIGURE 2.

Coincidentally, a lot of the new travelers (approx. 73 million people) are also millennials, those born between the mid-1980s and late-1990s. With an inherently different set of values than past generations, millennial travelers are opting for more non-traditional travel experiences and choosing less popular destinations.

Over time, travel has also become more affordable. A rise in low-cost airlines and non-traditional lodging (like Airbnb), have been two factors that have contributed to its increasing appeal. (More on Lodging Dynamics later.) Additionally, with the advent of social media, blogs, and the internet, travelers can read reviews and rankings to validate their expectations prior to booking. Targeted advertising has similarly taken advantage by directing travelers to “before they’re gone destinations”, like Antarctica and the Great Barrier Reef.

GAINING IMPORTANCE

Millennials are also conscious consumers of value, mindfulness, wellness, experience, and health—and want their vacations to be a reflection of this. “Millennials’ demand for memorable moments and activities over material goods has created what many call the experience economy,”2 FIGURE 3. In a nutshell, they seek mind and body experiences that cross roads with the travel and tourism sector at different settings.

FIGURE 2. TRAVEL & TOURISM (T&T) REGIONAL PERFORMANCE, 2018*
FIGURE 3. HOLISTIC VALUES THAT DRIVE THE ACTIVITIES AND CHOICES OF WELLNESS TRAVELERS

<table>
<thead>
<tr>
<th>Mind</th>
<th>Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
<td>Fitness</td>
</tr>
<tr>
<td>• Volunteering</td>
<td>• Health Centers</td>
</tr>
<tr>
<td>• Time with family &amp; friends</td>
<td>• Nutrition - Health Food Stores</td>
</tr>
<tr>
<td>• Time alone</td>
<td>• Culinary experiences - organic &amp; natural restaurants</td>
</tr>
<tr>
<td>• Spiritual retreats</td>
<td>Beauty &amp; Anti-Aging</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>• Massages, acupuncture &amp; body treatments - Spas, Healthy hotels</td>
</tr>
<tr>
<td>• Stress reduction</td>
<td>Adventure</td>
</tr>
<tr>
<td>• Life coaching</td>
<td>• Camping, hiking, biking - National parks, nature preserves</td>
</tr>
<tr>
<td>• Music &amp; arts</td>
<td></td>
</tr>
<tr>
<td>Do Good</td>
<td></td>
</tr>
<tr>
<td>• Site restorations, community outreach projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Global Wellness Institute, Citi IPB U.S.

FIGURE 4 shows the values and multitude of choices that “wellness” travelers have and illustrates their impact on the economy. As a consequence of millennials’ desire to enjoy unique experience-driven vacations, one of the more popular categories of that wellness and experience travel is Ecotourism. Ecotourism has been around for decades, but is gaining momentum with the thirst for adventure in younger generations—a trend to be aware of as long-term investors.

DID YOU KNOW?

87% of global travelers say that they want to travel sustainably and nearly 4 in 10 (39%) confirm that they often or always manage to travel sustainably.1

2019’s Top 10 Ethical Destinations based on the pillars of environmental protection, social welfare, and human rights are:
Ecuador, Costa Rica, Benin, Fiji, Gambia, Mongolia, Nepal, Palau, Uruguay, and Chile

1Travel Agent Central, Sustainable Travel Report released by Booking.com. 2The International Ecotourism Society (TIES). Other sources: Global Wellness Institute, Deloitte. Chart and images in this publication are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
THE RISE OF THE
ASIAN MIDDLE CLASS

The dynamics of travel and commerce and its possible
economic impact continue to be evaluated as global
economies become more sensitive to consumer spending.
Throughout the world, average incomes have increased, while
levels of absolute poverty have declined. As a result of this, a
portion of the world’s population is neither rich nor poor, by
national standards, but finds itself in the middle of the income
distribution; creating a rising global middle class.

This global middle class is expected to grow to 3.2 billion by
next year (2020), almost doubling from the 1.8 billion seen in
2009. During the next 10 years, it is projected to experience
another 50% growth spurt, to reach an astonishing 4.9 billion
by 2030. Importantly, most of this growth will come from Asia.
The Asian middle class is estimated to represent over 65% of
the global middle class by 2030 compared to just 28% in 2009.

This emerging middle class carries vast potential to be an
engine of growth for future consumption, especially in the
largest emerging markets such as China, India, and sub-
Saharan Africa. Even in Africa, where middle class growth has
not been very robust, it has been noticeable and contributed to
increased domestic consumption in many countries.¹

Weighing in on the already-evident spending
habits of the Asian middle class

• Kweichow Moutai, the world’s most valuable liquor
  company, seen as a bellwether for Chinese luxury
  consumption, reported net profit for the 1Q of 2019
  that had risen 30% compared with the prior year.

• The United Nations World Tourism Organization
  (UNWTO) indicates that Chinese tourists spent a
  quarter of a trillion dollars overseas in 2017,
  FIGURE
  ⁶, up from around $10bn in the year 2000.

FIGURE 5.
GLOBAL MIDDLE CLASS
CONSUMPTION, 2000-2050
(as a percentage of the global total)

Total spending by tourists in 2017 (in billions of U.S. dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>257.7</td>
</tr>
<tr>
<td>United States</td>
<td>135.0</td>
</tr>
<tr>
<td>Germany</td>
<td>891</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>71.4</td>
</tr>
<tr>
<td>France</td>
<td>41.4</td>
</tr>
<tr>
<td>Australia</td>
<td>34.2</td>
</tr>
<tr>
<td>Canada</td>
<td>31.8</td>
</tr>
<tr>
<td>Russia</td>
<td>31.1</td>
</tr>
<tr>
<td>South Korea</td>
<td>30.6</td>
</tr>
<tr>
<td>Italy</td>
<td>27.7</td>
</tr>
</tbody>
</table>

Source: Statista, UNWTO

¹OECD Observer (2012). Sources: OECD, China Outbound Tourism Research Institute. Telegraph, Financial Times. Chart and images in this publication are for illustrative
purposes only. Historical analysis and past performance is not indicative of future results. All forecast are expressions of opinion and are subject to change without notice and
are not intended to be a guarantee of future events. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
To put into perspective the growth potential that this could signify for the travel industry, consider that only 8.7% of Chinese citizens, or approximately 120 million people, hold passports. This is in contrast to 42% of Americans and 76% of Britons. With a population of 1.4 billion, China’s potential for further expansion is large. At the World Economic Forum in Davos, Ctrip CEO Jane Sun, predicted that Chinese passport holders would double to 240 million by next year (2020) alone. And, the China Outbound Tourism Research Institute (COTRI) predicts that overseas trips by the country’s residents will increase to more than 400 million by 2030.

This expected surge will represent an opportunity for all market participants, however, those closer to home might reap the benefits of this new wave of travelers earlier on. Whether it’s because of concerns over long travel time or the potential cost of a European or North American getaway, a nearby destination like Indonesia, Vietnam, or Japan may prove more attractive. That does not mean that Chinese travelers will not be interested in traveling to the U.S. or Europe. Younger, adventure-seeking travelers will also make up a large portion of the growing passport holders and destinations in the U.S. and Europe are already very much on their radar.

**DID YOU KNOW?**

Currently, about 8.7% of Chinese citizens hold passports. This is in contrast to 42% of Americans and 76% of Britons.

Asian travelers say:

86% travel is a form of social currency that forges connections

80% travel is a necessity, not just a luxury

---

**Learning Box**

We frequently encounter portfolios that have little or no exposure to this trend, or indeed to the region more generally.

There is also a belief among some investors that allocating to EM Asia assets and currencies might somehow increase a portfolio’s riskiness.

But while EM Asian investments themselves have a higher risk profile, adding them to a diversified portfolio may help enhance risk-adjusted returns.

We therefore see EM Asia as offering one way to help implement our recommendation to go global. Remember, embracing the future starts with laying the groundwork today. Our favored approach is to seek out actively managed strategies that focus upon the most attractive opportunities.
Technology has fundamentally changed the way people sleep, work, travel, read, shop, and interact. Internet-based service firms are using technological advances to bring innovation to stagnant sectors of the economy, increasing the quality of goods and services while providing individuals and companies new options for generating income.

Companies like Airbnb, Uber, Kayak and Alibaba are challenging traditional business models and forcing deep innovations throughout almost every consumer market segment. One such example is how Airbnb, and similar home-sharing companies, have transformed the lodging industry. Many analysts and consumers predicted that the new challengers’ rapid growth and near-global footprint would bring about the demise of the traditional hotel chain similar to the way Amazon’s growth was the death knell for brick and mortar book sellers and many retailers thereafter.

**HOTELS PROVE RESILIENT**

A decade after the advent of home-sharing companies reveals that U.S. hotel occupancy and revenues have actually risen. Last year alone, the demand for U.S. hotels (which grew 2.5% year-over-year in 2018) exceeded the supply of rooms (which only grew at a rate of 2% during the same time). As a result, the U.S. hotel occupancy rate hit a record 66% in 2018.¹ This was the height of a rate that has steadily grown since the great recession in 2009 (when it stood at 55%). In 2018, U.S. hotel revenue (at $208 billion) also reached the highest level since the downturn, **FIGURE 7**. Similarly, Europe had the highest occupancy rate of 72% with $37 billion in revenue for 2018. Also high on the list, the Asia Pacific region had a hotel occupancy rate of 71% in 2018.

---

¹ Sources: Statista. Chart and images in this publication are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. All forecast are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
HOTELS & NON-TRADITIONAL LODGING CO-EXIST

It is important to note that during the 2008-09 recession, new hotel construction slowed down considerably and it is likely that Airbnb’s simultaneous entrance caused some of that weakness. However, as the economy rebounded, so did corporate demand. Less sensitive to hotel room prices, business travelers demand more amenities (gyms, conference rooms, central locations)—making them more likely to book at traditional hotel chains versus booking an Airbnb.

In effect, peer-to-peer property rentals represent a different demographic. Namely, cost conscious millennials looking for a “local” experience represent half of the hospitality service’s reservations. Undoubtedly, this has increased access to more affordable lodging and possibly contributed to the increase in overall travel rates around the world, albeit in a less structured manner. These home-sharing services have opened the possibility for home owners to rent their second homes or vacation homes (which would previously remain empty or only seasonally-used) without creating the need for bigger investments, as compared to traditional hotel chains.

DISRUPTIONS FROM NON-TRADITIONAL LODGING

One consequence of Airbnb’s success has been the upward pressure on housing prices in high-traffic tourist areas. As investors buy properties in popular cities to turn into short-term rentals, a shortage in affordable housing forces locals to buy homes further or move.

DID YOU KNOW?

While millennials’ preferences are more or less known today, the next generation (Gen Z), will be superseding millennials this year as the largest group of consumers in the world. Gen Z—people roughly from the ages of 7 to 22—already account for a quarter of the global population. Gen Zers don’t know a world without the internet, and they live on social media. They also don’t watch ads on television. They do look at them, though—and similar to millennials—they develop brand loyalties built on recommendations from influencers on Instagram, YouTube, TikTok, or Douyin. Companies that expect to prosper going forward must learn how to reach this socially conscious, always-connected group.2

This phenomenon is as true in the U.S. as it is in other countries. In cities like Lisbon and Porto, the price of homes for sale has increased by 30% in just two years (2014 to 2016)1 mainly as a result of short term rentals. The significance of these shifts have created same side municipal advocacy from historical adversaries – affordable housing advocates and the hotel lobby, which will ultimately push for more regulation, while Airbnb pushes for less regulation. While the outlook for the hotel industry is generally positive, brands who fail to innovate risk losing market share.

LODGING SECTOR OUTLOOK

Lodging is an industry in constant change that is reliant on the health of the hosting economies. This ten-year bull market has created opportunities for new businesses to thrive but also changing social trends have created new challenges for established businesses to overcome. Given its greater sensitivity to the deceleration in global economic growth, Citi believes the lodging sector may encounter headwinds in 2019. The uncertainty around the macroeconomic growth outlook are likely to make significant multiple expansions difficult and for that reason, we maintain a cautious view on the sector.

1Diario de Noticias. *Bloomberg Businessweek (29 Apr 2019). Sources: Citi Research, Forbes, Statista. Chart and images in this publication are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. All forecast are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
While the debate over buying organic or conventional is still out there (as covered in our “Did You Know?”), there’s no arguing that organic consumption has increased over the years. In the last eight years, global sales of organic food has increased over 400%. Recent surveys in the U.S. alone (the largest market of organic retail sales by value, FIGURE 8), have shown that 44% of Americans actively try to include organic foods in their diet. In Europe, these values are also shared. In fact, Switzerland, Denmark, and Sweden top the list as the countries with the largest per capita organic food consumption in the world.

Undoubtedly, interest in organic products extends from the desire to eat healthier, however, many people are drawn to the concept due to its viable environmental impact. Embedded in organic farmers’ goals are practices designed to preserve soil and water quality, reduce pollution, and provide safe and healthy livestock habitats that promote a self-sustaining cycle of resources. Coincidently, being healthier and supporting more environmentally conscious businesses are two principles that go hand in hand with those of millennials.

In a 2016 tracking study among U.S. parents, the Organic Trade Association identified that more than half of organic buyers are millennials. While many of the older millennials are becoming parents, even the youngest are of legal drinking age. This represents a large opportunity for the alcoholic beverage industry but also a major challenge when assessing demographic shifts. Millennials, on average, spend less than baby boomers on alcohol. In addition, they “are more focused on the content of their beverages and the story their favorite brands tell than they are on price. They are less likely to buy mass-marketed beers, possess a willingness to explore new alcohol products, and more likely to look for organic or local products.”

FIGURE 8. WHO CONSUMES THE MOST ORGANIC FOOD?

Retail sales (€) in 2016

Source: europarl.eu

DID YOU KNOW?

There is a growing body of evidence that shows some potential health benefits of organic versus conventionally grown foods. Namely, studies have shown small to moderate increases in some nutrients and antioxidant properties in organic produce; generally higher levels of omega-3 fatty acids (a kind of fat that is more heart healthy than other fats); and lower detectable levels of pesticide residue.

However, other “studies have shown no appreciable difference in nutrition between crops grown either organically or conventionally.” Conventional food advocates also express confidence in the U.S. Department of Agriculture’s (USDA) role in executing its duties to keep consumers well-protected. They argue that synthetic pesticides allowed on conventional crops follow the same standards as the pesticides that organic farmers are allowed to use. And, there is a USDA testing program that demonstrates year after year that the pesticide residues on both organic and conventional foods are at such low levels that we need not worry about them.

*From 2000 to 2017, Sources: Statista, World Atlas, PR Newswire, Tipsy Bartender, PYMNTS, Mayo Clinic, Forbes. Charts and images are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
As such, millennials’ lifestyle choices are perhaps the largest drivers of growth behind the organic wine industry. Averaging a 9.2% annual growth rate, the organic wine industry is growing at a much faster rate than traditional wine (which grew approx. 5% in 2018). Already more than one billion bottles of organic wine are consumed every year. Currently, Europe accounts for approximately 90% of the organic wine consumption in the world, with France and Spain leading the way. This is compared to only 12% in America. According to U.S. News Magazine nearly four out of every five bottles of organic wine were sold in Europe, with France alone capturing 7.70% of the market share.

Despite its robust growth, the organic wine market share remains a small part of the total wine industry. Today, only 3.6% of total wine consumption is organic. Certainly, organic wine still has a long way to go. Still in its early stages, the industry has faced attacks from larger, usually better-financed, traditional winemakers attempting to discredit the health benefits of choosing organic. Additionally, in order to compete, the newcomers have to prove that they too can produce quality wine. As these challenges abate and the generational shifts come to fruition, winemakers are also taking notice of the opportunities that the organic wine segment presents. This new segment provides a way for current producers to expand their customer base and diversify their product offerings, and is also a vital component for the longevity (an sustainability) of their businesses.

Three main tailwinds exist for investors interested in taking advantage of the momentum in the wine industry. One is the industry’s rapid growth. Second, large advertising budgets may not be necessary, as social media facilitates propaganda. Supportive of this, data shows that highly-followed social media “promoters” who post pictures of food or drinks result in higher sales and brand clout than advertising through traditional outlets. Third, certain countries (like France and Spain) have cultural preferences for wine consumption, making geographic sales targeting easier.
NEW AGE ENTERTAINMENT

Since 2007, when video streaming became a viable alternative to ordering DVDs in the mail or going to a brick and mortar rental store, the media and entertainment sector has experienced a series of drastic changes. During this period, many traditional business models were challenged, imposing adaptations that catered to the then-new web-based delivery service. As a result of the changes, new players also emerged. Many internet giants, traditionally only in the technology industry, realized the engagement potential in the video on-demand (VOD) market and devoted a large amount of resources to also enter the entertainment business. In order to successfully pivot their strategies toward the future, the media sector has begun to consolidate. Companies are getting bigger, more vertically integrated and expenditures have ramped up to generate the content needed to win the fight for viewership.

We've seen a series of splashy acquisitions in recent years (FIGURE 9), like the $85bn tie-up between AT&T and Time Warner, and Disney's acquisition of Fox for $71.3bn. Smaller players like Discovery Communications and Scripps Networks (to name a few) have also merged. This fast moving market has also brought on the launch of new products and business lines by the new and the old guards of entertainment alike. Namely, we have seen the unveiling of Disney+, HBO Go, Amazon's Prime Video, Apple's TV Plus, Alphabet's YouTube Channel and Facebook's Watch—all of which intend to increasingly draw young (and old) generations of viewers into their platforms.

Content generation and ownership of the content are two very important factors to remain competitive in the VOD market. With a consistently growing stream of popular franchises launching their own service, firms are eager to stand out to consumers and establish themselves as a must-have service in every household. It is this gold rush for content that is driving media and internet firms to allocate generous amounts of capital into original scripted series and movies. According to FX network research, as of December 2018, online streaming services accounted for almost a third of the scripted series in the U.S. FIGURE 10. This figure is expected to grow even further in the next five years as companies announcing blockbuster deals with the who's who of Hollywood bring more high end premium TV into their platforms.

Learning Box

Vertical integration is a strategy where a firm seeks to reduce costs and improve efficiencies by acquiring a business operation involved in the firm's supply chain. For example, AT&T (a telecom company) buying Time Warner (a content media and entertainment company).

EBITDA is a company’s net Earnings Before Interest, Taxes, Depreciation, and Amortization are subtracted, and serves as a proxy for a company’s current operating profitability.

Sources: Citi Global Perspectives & Solutions, FX Network Research, Barrons, Bloomberg, Wikipedia. Charts and images are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. All forecast are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
This year alone, the market leader in video streaming anticipates spending up to $15bn in content, of which 85% is expected to be original productions. And, newcomers are expected to spend a combined $10bn on new content as they ease their way into the market. This ramp-up in capital expenditure has forced some companies to issue more debt, sending the average leverage for the sector to new highs.

FIGURE 11 shows the upward trend in net leverage of the top companies in the media industry during the last seven years, compared against the EBITDA margin (an important profitability ratio) for the same companies. It is also worth noting that, thus far, this increment in liabilities has not translated into higher profits. In the meantime, the ramp-up in financing and simultaneous entrance of new players into the space, will likely add pressure to the balance sheets of these companies and potentially hurt their profitability margins.

While media companies are all the buzz, cable and satellite companies have also had to endure a transformation because of this trend. Now that consumers are presented with more options to choose from, movie theaters could see a downturn in attendance, and advertisers alike could see some negative consequences as a result. This does not mean that it is the end for those industries. In fact, the cable business is still very profitable and movie theaters are still around. What it does mean is that firms have increasing pressure to reinvent themselves to prepare for the future: we’ve seen the big telecom firms making acquisitions and getting into entertainment and digital media, while movie theaters have been improving their customer experience by either offering high-end services or focusing on cost and convenience.

On the positive side, the demand for more new original content has given birth to more job openings for writers, producers, and actors, not only in the U.S. but internationally. Following Netflix’s international engagement geared toward creating or acquiring local productions in the last few years, we can also presume other firms will follow by tapping local markets in order to attract international subscriptions. Evidently, the entertainment war is still being fought. In the following years, the winners could emerge from media companies focused on attracting a base of loyal viewers, not only by producing more content, but by also improving their offering with competitive prices and engaging platforms. Stay tuned!

*Include CBS Corp, Comcast, AT&T (including acquisition of Time Warner), Discovery (including acquisition of Scripp Networks Interactive), Netflix, Viacom, and Walt Disney (including acquisition of Twenty-First Century Fox). Sources: Bloomberg, companies quarterly reports. Charts and images are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. All forecast are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
eSPORTS

Despite numerous warnings from concerned parents, video gaming has evolved into a competitive sport with millions of viewers, professional leagues in different nations, and massive revenue opportunities. This phenomenon is not isolated to a small group of people, on the contrary, eSports viewership has experienced double digit growth over the last five years and it is expected to reach over 550 million viewers by 2021, FIGURE 12. In fact, eSports has already remarkably surpassed the U.S. National Hockey League (NHL), Major League Baseball (MLB) and National Basketball Association (NBA) in terms of annual viewership, FIGURE 13, only falling behind the National Football League (NFL).

Although eSports boasts a global viewership of over 350 million individuals, as of 2017, the revenue generated from the industry amounted to just $700 million—representing approximately a fifth of the NHL’s revenues, despite having nearly 2.5 times its viewership, FIGURE 14.

FIGURE 12. ESPORTS GLOBAL AUDIENCE GROWTH

![Audience Growth Chart]

Source: NewZoo

RECENT TRENDS

“The video game ecosystem has been evolving over the last few years—towards group play vs. single play, to in-game monetization vs. software sales, to renting vs. buying hardware, to video games being a spectator sport, and to software being made for all devices vs. software made specifically for hardware. These new trends in the video game industry could make it much easier for the big cloud players to come in and start pulling away revenue.”

Today, over a third of individuals playing video games are doing so on their mobile devices, FIGURE 15. Of course, pre-internet this was merely impossible. As computing capacity and infrastructure developments (faster internet speed, 5G networks, etc.) broaden the breadth of data that can be transferred, the industry is likely to explore different methods of video game monetization.

DID YOU KNOW?

The advent of eSports has been so prominent that even skeptical parents are buying into the trend. According to the National Association of Collegiate eSports, there was a total of $15MM in scholarship funds awarded in nearly 200 colleges that currently offer varsity eSports programs.

FIGURE 13. ANNUAL VIEWERSHIP OF TRADITIONAL PRO SPORTS VS. ESPORTS (2017E)

![Viewership Comparison Chart]

Source: Invesco

FIGURE 14. REVENUE OF TRADITIONAL PRO SPORTS VS. ESPORTS (2017E)

![Revenue Comparison Chart]

Source: Invesco

*Citi GPS. Sources: NewZoo, Invesco. Charts and images are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. All forecast are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
In 2014, Amazon purchased game-streaming platform Twitch for approximately $1bn. At the close of 2018, Wall Street analysts valued the subsidiary at $3.8bn. Today, Twitch experiences one million views every sixty seconds and has a market share of approx. 3.5% of all internet streaming traffic. In light of the growth potential, internet-giant Google has also announced its own project to develop a streaming video game platform. Stadia, as it is called, seeks to bypass gaming consoles and hours of downloads and is expected to be yet another player in the space.

Traditional console manufacturers are already in the planning stages of their next-generation consoles. Other game developers, observant of the changes in trends, are also extending the life of existing video games through downloadable additional content packages that can be purchased directly from the gaming console and installed off the internet onto the device. In fact, many players are recognizing the benefits of cloud gaming platforms, FIGURE 16, and some are using this approach to develop device agnostic games. This would imply that consumers can play on PC, for example, pause the game and continue on their mobile device. Whatever the strategy, competitors realize the growth potential for in-game monetization, in-game advertising, and broadcasting.

FIGURE 15. NOT ALL GAMING IS EQUAL: ESTIMATED SIZE OF GLOBAL GAME INDUSTRIES

![Graph showing estimated size of global game industries from 2005 to 2025.](image)

Source: Invesco

2019 is poised to be a milestone year for eSports. In July, Epic Games will hold the first ever Fortnite World Cup which will have a total prize pool of $30 million, surpassing the largest prize pool ever for an eSport, FIGURE 17. And this is not the only eSport event of its kind, FIGURE 17 shows four eSport events to date that already dominate the top of the rosters in size of prize money. Needless to say, the eSports industry is here to stay. Despite its sheer size and astounding growth rate, the industry is still in its early stages and irrefutably bound to resonate with young audiences.

FIGURE 16. BENEFITS OF CLOUD GAMING PLATFORMS

For consumers: every screen will experience the same level of play
For game developers: compatibility issues are reduced and more devices can be supported
For console manufacturers: revenues can migrate from episodic to monthly recurring

Source: Citi GPS: Video Games: Cloud Invaders

FIGURE 17. HOW ESPORTS PRIZES COMPARE TO TRADITIONAL SPORTS

<table>
<thead>
<tr>
<th>Events</th>
<th>Sport</th>
<th>Prize Pool - Millions of USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIFA 2018 World Cup</td>
<td>Soccer</td>
<td>$400</td>
</tr>
<tr>
<td>US Open 2018</td>
<td>Tennis</td>
<td>$53</td>
</tr>
<tr>
<td>Fortnite World Cup 2019</td>
<td>Fortnite</td>
<td>$30</td>
</tr>
<tr>
<td>The International 2018</td>
<td>Dota 2</td>
<td>$26</td>
</tr>
<tr>
<td>Confederations Cup 2017</td>
<td>Soccer</td>
<td>$20</td>
</tr>
<tr>
<td>Indy 500</td>
<td>Motorsports</td>
<td>$13</td>
</tr>
<tr>
<td>US Open 2019</td>
<td>Golf</td>
<td>$12</td>
</tr>
<tr>
<td>The Masters 2018</td>
<td>Golf</td>
<td>$11</td>
</tr>
<tr>
<td>ICC Champions Trophy 2019</td>
<td>Cricket</td>
<td>$10</td>
</tr>
<tr>
<td>Stanley Cup</td>
<td>Ice Hockey</td>
<td>$7</td>
</tr>
<tr>
<td>Lol World Championship 2018</td>
<td>League of Legends</td>
<td>$7</td>
</tr>
<tr>
<td>PDC World Darts</td>
<td>Darts</td>
<td>$2</td>
</tr>
<tr>
<td>Halo World Champion 2018</td>
<td>Halo 5: Guardians</td>
<td>$1</td>
</tr>
<tr>
<td>eSports Events</td>
<td>Traditional Events</td>
<td></td>
</tr>
</tbody>
</table>
ECONOMIC IMPACT
OF HOSTING A MAJOR
SPORTING EVENT

The Centennial Cup Americas (commonly known as the “Copa America”), the oldest international continental football competition, will be hosted by Brazil this year.

After winning the 2007 bid to host the 2014 World Cup, Brazil invested heavily in stadiums and infrastructure. The euphoria of hosting the highest tournament for the jogo bonito, filled the country with illusion and the positive sentiment filled the hearts of government and citizens alike. To get the country ready for the two-month event meant a lot of spending—an idea typically sold as a potential source of prosperity for the country. However, the challenge was that the project was met with a lot of overspending. For example, the Brazilian government built and restored twelve stadiums as opposed to the eight required, with some built even in parts of the country that lack professional local teams. In total, Brazil footed a bill of about $15bn to host the 2014 World Cup.¹

Do countries that host mega-sporting events actually see any economic benefits? This is a topic that is hotly debated today. Countries that bid for those events often pitch an influx of tourism and an economic boost from construction to merchandising—what is referred to as the “spin-off” effect in economics. Groups that are pro-participation also argue that the initial investment in building a stadium creates a legacy effect. At large, the thinking is that the new infrastructure improves the country’s chances of being chosen to host another mega event. In the case of Brazil, its sporting ministry then was pressed to secure a bid to host the 2016 Olympics following its investment for the 2014 World Cup.

On the other hand, the camp against hosting these events argues that they often cost cities more than they’re worth.² Particularly in developing countries, mega events typically show the disparity between the moneyed elites and the rest of the nation. This comes as an offense to some groups that might feel that the amount of money being spent in sports infrastructure could be better spent on social programs. There is also evidence that a lot of the money spent by tourists and fans often benefit larger businesses instead of small or micro business owners—creating an even a larger disparity.

Case in point; Brazil’s initial budget for the 2014 World Cup infrastructure project was $11.3bn and ultimately ended up costing close to $15bn, or nearly three times what it cost Germany to host the 2006 World Cup. This brought many protests at the time, including a protest triggered by the government raising fares for public transportation to pay for some of the new stadiums. Some of these protests escalated quickly and FIFA officials almost changed the event to another hosting country.

DID YOU KNOW?

During the global financial crisis in 2008, Greece dove into a deeper recession because of how indebted it was from hosting the 2004 Olympics.
A MIXED PICTURE

Brazil’s infrastructure investment did, in fact, increase its chances to host mega sporting events. In the last six years alone, the country has held the:

• FIFA Confederations cup 2013
• FIFA World Cup 2014
• World Summer Olympics 2016
• Copa America 2019 (in July)

However, also over this time, the country experienced a small recession, almost a 40% drop in the IBOVEPSA, and the impeachment of a President.

Despite these trials, the IBOVEPSA has been resilient, rallying over 165% towards the end of the 1Q 2019 from the lows at the beginning of 2016.* With these events now behind us, and the Copa America event in full steam, this could translate into improved investors’ confidence in the Brazilian market.

FIFA has taken notice of the financial and social strains that these mega events have on the hosting country and is taking measures to mitigate its impact. As a solution, starting next year, the association will begin allowing more than one nation to host an event. In 2020, for example, the Copa America will be jointly hosted by Colombia and Argentina. And, 2026 will mark the first time that the World Cup will be held across a continent— with cities across Mexico, the U.S., and Canada all participating as hosts.

Only time will tell if the economic benefit of these large-scale investments is greater than their social cost. At least for now we can count on the common love for the game for the sake of keeping the hosting country united.

*20 Jan 2016 to 18 Mar 2019. Sources: CNBC, The Atlantic. Chart and images in this publication are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
LOOKING AT ART WITH NEW EYES

When looking at a piece of art, an infinite palette of interpretations arises through the eyes of the spectator. There are no rights or wrongs, just this magnificent reaction, intended by the artist hidden behind his creation. Through the eyes of an investor, however, we see art from a completely different perspective.

ART AS AN ALTERNATIVE INVESTMENT

The rise of art as a diversifier within an investment portfolio came into vogue during the Great Financial Crisis (GFC) of 2008. Why? Art typically has a low correlation with traditional equity markets, as well as with other alternative assets. FIGURE 18. Due to this, Art can serve as a hedge during periods of high volatility. While investors typically think of gold as a hedge, history has shown that art has also held up well during market stress. (See the Did You Know?) Modern portfolio theory tells us that the ability to put money into investments whose prices move independently of one another is essential to limiting or offsetting any potential losses that may arise in times of heightened market uncertainty. During the GFC, “while the U.S. banking system faced uncertainty as Lehman Brothers was collapsing, the value of masterpieces changing hands at auction had nearly quadrupled to a record-breaking $2.2 billion.”

DID YOU KNOW?

Art has outperformed gold over a very long period of time (since 1960).

Learning Box

Correlations are measured from -1 to 1. A negative correlation signifies that when one asset rises, the other typically falls. A positive correlation implies that the two assets usually rise and fall together. The closer to -1, the stronger the negative correlation and the closer to 1, the stronger the positive correlation between the two assets. A correlation closer to zero signifies that movements in the values are unrelated.

Sources: 1Morgan Stanley, 2The Wall Street Journal, Research Gate, Citi Private Bank, Global Financial Database, Citi GPS. Charts and images are for illustrative purposes only. Indices are not managed, have no expenses and cannot be directly invested in. Asset Allocation does not assure profit nor does it guarantee against losses. Historical analysis and past performance is not indicative of future results. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
Given the hedging benefits of art, how should an investor think about the asset class in the context of their portfolio? Citi’s asset allocation methodology, Adaptive Valuation Strategies (AVS), seeks to optimize risk and return based upon historical research and the outlook for the future. Evidently, emerging market debt and commodities rank higher in the “risk” category than developed market investment grade debt and cash, FIGURE 19. With this notion, by changing the mix and weights of each asset class, we are able to design a diversified portfolio tailored to your risk tolerance and financial objectives. At the same time, it is important to note that art investments are hard to compare with conventional ones given the volatility, irrationality, and general illiquidity of its market, and the complexity of its valuations.

**FIGURE 18. 40-YEAR ANNUAL RETURNS CORRELATION MATRIX**

<table>
<thead>
<tr>
<th></th>
<th>Art</th>
<th>S&amp;P 500</th>
<th>Gold</th>
<th>Hedge Funds</th>
<th>Private Equity</th>
<th>Real Estate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>1</td>
<td>0.11</td>
<td>0.10</td>
<td>0.02</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>0.11</td>
<td>1</td>
<td>-0.21</td>
<td>0.72</td>
<td>0.64</td>
<td>0.50</td>
</tr>
<tr>
<td>Gold</td>
<td>0.10</td>
<td>-0.21</td>
<td>1</td>
<td>-0.09</td>
<td>0.06</td>
<td>0.03</td>
</tr>
<tr>
<td>Hedge Funds</td>
<td>0.02</td>
<td>0.72</td>
<td>-0.09</td>
<td>1</td>
<td>0.74</td>
<td>0.58</td>
</tr>
<tr>
<td>Private Equity</td>
<td>0.01</td>
<td>0.64</td>
<td>0.06</td>
<td>0.74</td>
<td>1</td>
<td>0.77</td>
</tr>
<tr>
<td>Real Estate</td>
<td>0.02</td>
<td>0.50</td>
<td>0.03</td>
<td>0.58</td>
<td>0.77</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Global Financial Database, Citi Private Bank as of April 2013.

**FIGURE 19: LONG-TERM RETURN ESTIMATES VS. ESTIMATED RISK OF LARGE PRICE DECLINES**

Art as measured by the Mei Moses World Art Index ranks above cash, emerging market debt, high yield debt and commodities using Citi’s risk-return estimates for investors willing to hold illiquid assets.

“The search for uncorrelated asset classes that followed major downturns in the last decade has led many savvy investors to turn to art as a way to protect their wealth and increase returns in the long-run.”

Masha Golovina, Director of Market Analysis for MasterWorks
DID YOU KNOW?

At the end of 2018, the Wall Street Journal asked itself:

What were the best investments of the year?

As it turns out, the answer was luxury collectibles! Art and Wine appeared to be the clear winners, ahead of classic cars, bonds, gold and global equities. The WSJ reported that “investors who put money into art at the beginning of 2018 saw an average gain of 10.6% by the end of November” FIGURE 20. In the same time period, the S&P 500 was down 5.1%. As a result, those who diversified their portfolio with collectibles were able to offset losses in the financial markets with stable gains on other investments, and their economics were better than had they not invested in art, for example.²

Sources: ¹Morgan Stanley, ²The Wall Street Journal; Research Gate, Citi Private Bank, Global Financial Database, Citi GPS. Charts and images are for illustrative purposes only. Indices are not managed, have no expenses and cannot be directly invested in. Asset Allocation does not assure profit nor does it guarantee against losses. Historical analysis and past performance is not indicative of future results. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
The Strategic Allocation Illustrated Below Represents That of A Moderate Level 3 Portfolio

54% Equities
- 27% North America Large Cap
- 4% North America Small/Mid Cap
- 10% Europe
- 4% Japan
- 2% Asia ex Japan
- 5% Emerging Asia
- 1% Emerging EMEA
- 1% Emerging LatAm

32% Fixed Income
- 21% Developed Sovereign
- 7% Developed Investment Grade
- 2% Developed High Yield
- 2% Emerging Market

12% Alternatives*
- 12% Alternative Investments*

2% Cash
- 2% Cash

---

<table>
<thead>
<tr>
<th>Most Conservative</th>
<th>Conservative-Moderate</th>
<th>Moderate</th>
<th>Moderate-Aggressive</th>
<th>Most Aggressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>For investors who seek capital preservation and relative safety over the potential for a return on investment.</td>
<td>For investors seeking income generations and capital preservation.</td>
<td>For investors with a blended objective who seek balance between investments that offer income and a potentially higher return.</td>
<td>For investors who seek long-term growth of capital with moderate risk and market value fluctuations.</td>
<td>For investors who seek maximum long-term growth of capital with greater risk and market value fluctuations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>6%</td>
<td>4%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>94%</td>
<td>62%</td>
<td>32%</td>
<td>12%</td>
</tr>
<tr>
<td>Equities</td>
<td>0%</td>
<td>26%</td>
<td>54%</td>
<td>72%</td>
</tr>
<tr>
<td>Alternatives*</td>
<td>0%</td>
<td>8%</td>
<td>12%</td>
<td>14%</td>
</tr>
</tbody>
</table>

This model portfolio allocation follows Citi Private Bank's Adaptive Valuations Strategy (AVS) methodology. Source: Global Strategy Quadrant (Jun 2019). *Alternative investments include hedge funds, private equity, and real estate among others. Asset Allocation does not assure profit nor does it guarantee against losses. Chart and images are for illustrative purposes only. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
CITI

HOUSE VIEWS

Financial markets have had a bumpy run since early December. Risk assets fell sharply in the fourth quarter of 2018 and swiftly recovered in Q1 2019. Equities have bounced sharply, particularly in emerging markets; corporate credit spreads have narrowed; and government bond yields have moved to new lows due to a softer growth outlook.

EQUITIES

Market volatility has risen. Nonetheless, our base case view calls for mid- to single-digit gains for equities over the coming year (through 2020) and, perhaps, even beyond. That said, we don’t believe trade escalation and retaliation measures are embedded in current corporate earnings estimates. We maintain a cautious view on large cap U.S. equities while downgrading our expectations for small- and mid-caps. Considering the current macroeconomic landscape, we have downgraded our view toward cyclicals and upgraded that toward defensive sectors. We build on our semiconductor downgrade by cutting the tech sector more broadly from positive down to neutral—in light of the potential for government-led retaliation or Chinese consumer boycotts of U.S. brands.

Even with further ECB dovishness, we believe European equities face earnings pressure as the trade war effects on business sentiment and supply chains start to have more impact. We advocate a selective approach, aiming to raise overall quality. We are focused on high dividend yielders with strong franchises at reasonable valuations preferably in sectors like healthcare which have resilient earnings outlooks.

In Asia, equity volatility is concentrated in May through August, on average, influenced by China’s annual policy cycle. While we believe that government policy will be supportive enough to sustain growth, we see markets facing headwinds in the coming months due to policy uncertainty. Chinese cyclical industries like Energy, Transportation, and Financials tend to be the most sensitive among all EM Asian industry groups. On the more resilient side, Household products and Healthcare in India and Korea and Malaysian Telecom are the most resilient industry groups and could generate positive returns during these months. In Latin America, we maintain our constructive view based on the region’s positive fundamentals, especially in Brazil.

FIXED INCOME

Slowing global growth, declining inflation and rising trade uncertainty has induced a global bond market rally. Many countries have seen their long-term sovereign yield reach record lows, with many diving deeper into negative territory. Currently, over one-third of the entire developed bond universe trades with a yield less than 1%. This leaves the US Treasury market as one of the most attractive yield opportunities in the developed world.

Despite the Federal Reserve turning considerably dovish last March, markets have priced a much more aggressive policy outcome. Currently, futures markets imply nearly 100bp of rate cuts by the end of 2020, with rising probabilities of one cut by this September. Despite the near-term uncertainties, we do not believe the Fed will cut rates over a deepening trade war alone.

External emerging market (EM) bonds continue to present superior value over most global fixed income markets. Fundamentals have improved and technicals are supportive. Though EM markets tend to be more volatile, wider risk premiums have supported performance over longer holding periods.

In light of near-term uncertainties, we downgrade global high yield. Though low refinancing risks and modest gross supply are supportive, the coming months may still be challenging for risks assets. In this space, we favor bank loans over bonds.

We continue to focus on higher quality. For U.S. investment grade (IG) corporates, we continue to favor duration extension strategies, with better values found in 5-7 year maturities. Tactically, we favor defensive sectors, as trade and growth concerns build. At the same time, we are upgrading our view on US Treasury Inflation Protected Securities. For Euro IG, we believe wider spreads and higher yields still do not present an attractive opportunity for income-oriented investors.
On The Yield Curve...
The U.S. yield curve has moved slightly steeper in response to healthier economic data in the U.S. and other markets. Historically, an inverted yield curve has been viewed as an indicator of a pending economic recession. On December 3, 2018, the Treasury yield curve (comparing 3-year vs. 5-year notes) inverted for the first time since the recession. The curve (now comparing 3-month vs 10-year notes), inverted again at the end of May—potentially starting the clock on when the next recession will strike. In the past, there have been, on average, 12 months from inversion to recession. Despite the alarm bells, it is difficult to say which curve is the better predictor. Also, this bull market has been quite different from past ones (with this one including Fed quantitative easing)—making it difficult to say if the same predictors still hold this time around.

THE ECONOMY
We see global growth slowing as the long post-crisis expansion nears its final stage. The U.S. is again poised to outpace its developed peers, underscoring our preference for U.S. assets within the developed world. We expect fiscal and monetary stimulus to drive a Chinese growth turnaround from the second quarter, underpinning global growth. As far as economic data, the U.S. economy grew by 3.1% to start the year, slightly better than expected and providing some relief to investors. Global monetary policy has taken on a dovish tilt. The Fed has pledged to be very patient in evaluating its next rate move. Other monetary authorities, including the ECB, are indicating policy will remain easy for some time. In addition, China is loosening credit conditions and fiscal policy.

The European region is experiencing an overall slowdown to more sustainable growth levels, not a genuine downturn. Expect regional GDP growth of 1.5% in 2019, followed by 1.6% in 2020. A key factor of resilience for 2019 is likely to stem from the support to economic growth coming from a looser fiscal policy stance.

In Latin America, we maintain our constructive view based on the region’s positive fundamentals, especially in Brazil. Citi analysts forecast real GDP growth of 2.2% for the region in 2019 and inflation to stand at around 4.2%.

1Q EARNINGS RUNDOWN
The 1Q 2019 delivered better EPS (earnings per share) than the average EPS estimate for 76% of the S&P 500 companies that reported earnings—making it the best 1Q in over 20 years. The S&P 500 ended the 1Q higher, eking out a total return of almost 14% that exceeded all market expectations. Information Technology and Consumer Discretionary had the largest percentage of companies reporting earnings above estimates, while Utilities appeared on the opposite end (with the lowest percentage of companies reporting earnings above estimates).

We expect that the gap between U.S. and non-U.S. EPS gains is likely to close in 2019 as the effects of 2018’s U.S. corporate tax cuts fade. Outside the U.S., investor sentiment and economic growth expectations are weak, making positive surprises more likely.

It is worth noting that initial public offerings (IPOs) for the 1Q raised over $7.7 billion—a significant decrease from previous quarters, however, as expected following market turbulence and a prolonged U.S. government shutdown. Although the IPO market was slower compared to previous quarters, activity is expected to improve as the year progresses but if the trend continues the impact may severely limit companies opportunities for further growth in research, infrastructure, expansion, and job creation.

DID YOU KNOW?
The S&P 500 is composed of 11 sectors heavily weighted toward Information Technology, Health Care, and Financials. These top-weighted sectors may have been growing overall but they have not necessarily been the best performing sectors every year.

Source: Citi Research. Charts and images are for illustrative purposes only. Historical analysis and past performance is not indicative of future results. All forecast are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. For additional information, please refer to the Glossary and Disclosure section at the end of this publication.
Glossary

Commodities

WTI Crude: West Texas Intermediate (WTI), also known as Texas Light Sweet, the majority of which is located in the Permian oil field. It is a type of crude oil used as a benchmark in oil pricing and the underlying commodity of New York Mercantile Exchange’s oil futures contracts.

Brent Crude: Is used to price two thirds of the world’s internationally traded crude oil supplies. Brent Blend is a combination of crude oil from 15 different oil fields in the North Sea. It is less “light” and “sweet” than WTI, but still excellent for making gasoline. It is primarily refined in Northwest Europe, and is the major benchmark for other crude oils in Europe or Africa.

LME: London Metal Exchange

Currencies

Currency Abbreviations: AUD: Australian Dollar; GBP: British Pound; EUR: Euro; CHF: Swiss Franc; JPY: Japanese Yen; BRL: Brazilian Real; MXN: Mexican Peso; CNY: Chinese Renminbi; INR: Indian Rupee; USD: U.S. Dollar

Indices

MSCI AC World: The MSCI All Country World index is a market capitalization weighted index designed to provide a broad measure of equity-market performance throughout the world.

S&P 500: Index of 500 widely held common stocks that measures the general performance of the market.

Euro Stoxx 600: Dow Jones STOXX 600 Index represents large, mid and small capitalization companies across 18 countries of the European region. Free float market capitalization subject to 20% weighting cap.

FTSE 100: This is a share index of the 100 most highly capitalized UK companies listed on the London Stock Exchange.

Topix: Tokyo Stock Price Index is an important stock market index for the Tokyo Stock Exchange (TSE) in Japan, tracking all domestic companies of the exchange’s First Section. It is calculated and published by the TSE.

MSCI EM: The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The MSCI Emerging Markets Index consists of the following 25 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

MXCN: The MSCI China Index captures large and mid cap representation across China H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs). With 150 constituents, the index covers about 85% of this China equity universe.

Sensex: Is a value-weighted index composed of the 30 largest and most actively traded stocks in India, representative of various sectors, on the Bombay Stock Exchange.

Bovespa: The Bovespa Index is an index of about 50 stocks that are traded on the São Paulo Stock, Mercantile & Futures Exchange in Brazil.

Bolsa: The IPC index is Mexico’s balanced weighted selection of shares that are representative of all the shares listed on the exchange from various sectors across the economy. Weight is determined by market capitalization.

Fixed Income

Investment Grade Bonds: A bond is considered investment grade, or IG, if its credit rating is BBB- or higher by Standard & Poor’s or Baa3 or higher by Moody’s. By Fitch, the rating must be BBB- or higher to be considered IG. Generally these are bonds that are judged by the rating agencies as likely enough to meet their payment obligations.

High Yield Bonds: A high-yield bond is a high paying bond with a lower credit rating than investment-grade bonds. Because of the higher risk of default, these bonds pay a higher yield than investment grade bonds. Based on the two main credit rating agencies, high-yield bonds carry a rating below “BBB” from S&P, and below “Baa” from Moody’s. Credit ratings can be as low as “D” (currently in default), and most bonds with “C” ratings or lower carry a high risk of default; to compensate for this risk, yields will typically be very high.

Yield: The yield is the income return on an investment, such as the interest or dividends received from holding a particular security. The yield is usually expressed as an annual percentage rate based on the investment’s cost, current market value or face value.

Yield Curve: A graph illustrating the term structure of interest rates by plotting the yields of all bonds of the same quality, with maturities ranging from the shortest to the longest available.

Emerging Market Bonds: Emerging market bonds are debt issues by countries with developing economies as well as by corporations within those nations. Bonds are issued from developing nations and corporations based in countries, such as Asia, Latin America, Eastern Europe, Africa and the Middle East. Typically offering higher returns, emerging market issues tend to carry higher risks than those associated with Treasuries and domestic corporate bonds. The risks of investing in emerging market bonds include the standard risks that accompany all debt issues, such as the variables of the issuer’s economic or financial performance and the ability of the issuer to meet payment obligations. These risks are heightened due to the potential political and economic volatility of developing nations. Although emerging countries, overall, have taken great strides in limiting country risks, it is undeniable that the chance of socioeconomic instability is more considerable in these nations than in developed countries, particularly the U.S. When assessing the risks associated with each emerging nation, investment analysts often refer to that country’s sovereign risk. Emerging markets also pose other cross-border risks, including exchange rate fluctuations and currency devaluations. If a bond is issued in local currency, the rate of the dollar versus that currency can positively or negatively affect your yield. If you do not want to participate in currency risk, it is possible to invest in bonds that are dollar-denominated, or issued only in U.S. dollars.
Risk Premia: Is the return that you receive above the return of a risk-free investment. In other words, it is the excess return the investor receives for taking on a higher level of risk.

Spread: A spread measures the difference between the yield earned on a Treasury bond and the yield of a corporate bond of similar maturity but lesser credit quality.

Maturity: The date on which a security may be presented to the issuer for payment of face value.

Basis Points (bps): One basis point is equal to one hundredth of 1% i.e. 130 basis points equals 1.30%. It is generally used to denote a percentage change.

CREDIT QUALITY AND RATINGS DEFINITIONS

Standard & Poor’s:

Investment Grade: AAA obligator has extremely strong capacity to meet its financial commitments; AA obligator has very strong capacity to meet its financial commitments. It defers from the highest rated obligators only in small degree; A obligator has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions that obligators in higher-rated categories; BBB obligator has adequate capacity to meet its financial commitments but adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to meet its financial commitments.

Non-Investment-Grade: BB obligator is less vulnerable in the near term than other lower-rated obligators. However, it faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions which could lead to the obligator’s inadequate capacity to meet its financial commitments; B obligator is more vulnerable than the obligator rated BB but it currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair its capacity or willingness to meet its financial commitments; CCC obligator is currently vulnerable, and is dependent upon favorable business, financial, and economic conditions to meet its financial commitments; CC obligator is currently highly vulnerable; R obligator is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision the regulators may have the power to favor one class of obligations over others or pay some obligations and not others; SD and D obligators has failed to pay one or more of its financial obligations when it came due. D is assigned when S&P believes that the default will be general and that the obligator will fail to pay all or substantially all of its obligations as they come due. SD rating is assigned when S&P believes that the obligator has selectively defaulted on a specific issue or class of obligations but it will continue to meet its payment obligations on other issues or classes of obligations in timely manner. Plus (+) or minus (-): ratings from AA to CCC may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

Moody’s:

Investment Grade: Aaa obligations are judged to be of the highest quality, with minimal risk; Aa obligations are judged to be of high quality and are subject to very low default risk; A obligations are considered upper-medium grade and are subject to low credit risk; Baa obligations are subject to moderate credit risk, they are considered medium-grade and as such may possess certain speculative characteristics.

Non-Investment-Grade: Baa obligations are judged to have speculative elements and are subject to substantial credit risk; B obligations are considered speculative and are subject to high credit risk; Caa obligations are judged to be of poor standing and are subject to very high credit risk; C obligations are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest; WR Withdrawn. Moody’s appended numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category. When Moody’s places a rating on watch, Bloomberg uses ++ for possible upgrade, -- for downgrade, and * for developing.

Fitch:

Investment Grade: AAA-ratings denote the lowest expectation of credit risk. They are assigned only in case of exceptionally strong capacity for timely payment of financial commitments. AA–denotes very high credit quality, as well as very low expectation of credit risk. Indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events. A–denotes high credit quality and low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. However, this capacity may be more vulnerable to changes in circumstances or in economic conditions than is the case for higher ratings. BBB denotes good credit quality. BBB ratings indicate that there is currently a low expectation of credit risk. The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity.

Non-Investment Grade: BB denotes speculative quality. BB ratings indicate that there is a possibility of credit risk developing, particularly as the result of adverse economic change over time. However, business or financial alternatives may be available to allow financial commitments to be met. B denotes highly speculative quality. B ratings indicate that significant credit risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment. CCC, CC, C denote high default risk. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. CC rating indicated that default of some kind appears probable. C ratings signal imminent default. D ratings indicate an issuer that in Fitch Ratings opinion has entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, or which has otherwise ceased business.
DISCLOSURES

This Communication is intended for clients of International Personal Bank U.S. (IPB U.S.), a division of Citigroup Inc. (“Citigroup”) comprised of Citigold Private Client (“CPC”), Citigold® International (“CI”) and International Personal Banking (“IPB”) businesses in the United States of America. IPB U.S. provides its clients access to a broad array of products and services available through Citigroup, its bank and non-bank affiliates worldwide (collectively, “Citi”). In the United States, banking products and services are provided by Citibank, N.A. Securities and brokerage products and services are available through:

- Citi International Financial Services, LLC (“CIFS”), member FINRA and SIPC, and a broker-dealer registered with the Securities and Exchange Commission, which offers brokerage products and services only to non-U.S. citizens, nationals, residents, or non-US entities or
- Citi Personal Investments International, a business of Citigroup Inc., which offers securities through Citigroup Global Markets Inc. (“CGMI”), member FINRA and SIPC, an investment advisor and broker-dealer registered with the Securities and Exchange Commission. Brokerage accounts are carried by Pershing LLC, member FINRA, NYSE, and SIPC. CIFS, CGMI, and Citibank, N.A. are affiliated companies under the common control of Citigroup Inc. Not all products and services are provided by all affiliates or are available at all locations.

Citi Private Bank (“CPB”) is a business of Citigroup, Inc. (“Citigroup”), which provides its clients access to a broad array of products and services available through Citigroup, its bank and non-bank affiliates worldwide (collectively, “Citi”). Not all products and services are provided by all affiliates, or are available at all locations.

The products and services mentioned in this document are not offered to individuals resident in the European Union, European Economic Area, Switzerland, Guernsey and Jersey. Your eligibility for a particular product and service is subject to a final determination by us. This document is not, and should not be construed as, an offer, invitation or solicitation to buy or sell any of the products and services mentioned herein to such individuals.

Transactions may be executed outside of your country and without any participation from any Citigroup or Citibank subsidiary, branch or affiliate in your country. Some products may not be registered with the financial regulatory body of your country, nor may they be governed or protected by the laws and regulations of your country. Products and services offered by Citigroup and its affiliates are subject to the applicable local laws and regulations of the jurisdiction where they are booked and offered. Not all accounts, products, and services as well as pricing are available in all jurisdictions or to all customers. Your country of citizenship, domicile, or residence may have laws, rules, and regulations that govern or affect your application for and use of our accounts, products and services, including laws and regulations regarding taxes, exchange and/or capital controls. This Communication is not directed at you if Citi is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that Citi is permitted to provide this Communication to you under relevant legislation and regulation.

The data and information set forth in this Communication may be complex. The data and information contained herein is not intended to be and is not an exhaustive discussion of the strategies, concepts, industries, companies, markets, or indices mentioned herein. As such, recipients of this Communication should obtain advice based on their own individual circumstances from their own tax, financial, legal and other advisors about the risks and merits of any transaction before making an investment decision, and only make such decisions on the basis of their own objectives, experience, risk profile and resources, and considering other relevant factors beyond the data and information presented herein. Citi is not acting as an investment or other advisor, fiduciary or agent, and this Communication is not tax or legal advice.

Although the data and information contained herein were obtained from sources believed by Citi to be reliable, its accuracy and completeness cannot be assured, and such information may be incomplete or condensed. Any assumptions or information contained in this Communication constitute a judgment only as of the date of this document or on any specified dates and is subject to change without notice (Citi has no obligation to update, modify or amend this report and information). Insofar as this Communication may contain historical and forward looking information, past performance is neither a guarantee nor an indication of future results, and future results may not meet expectations due to a variety of economic, market and other factors. Further, any projections of potential risk or return are illustrative and should not be taken as limitations of the maximum possible loss or gain. Any prices, values or estimates provided in this Communication (other than those that are identified as being historical) are indicative only, may change without notice and do not represent firm quotes as to either price or size, nor reflect the value Citi may assign a security in its inventory. Forward looking information does not indicate a level at which Citi is prepared to do a trade and may not account for all relevant assumptions and future conditions. Actual conditions may vary substantially from estimates which could have a negative impact on the value of an instrument.

This Communication is provided for information and discussion purposes only, at the recipient’s request. Unless otherwise indicated, (i) it does not constitute an offer or recommendation to purchase or sell any security, financial instrument or other product or service, or to attract any funding or deposits, and (ii) it does not constitute a solicitation, and (iii) it is not intended as an official confirmation of any transaction. Unless otherwise expressly indicated, this Communication does not take into account the investment profile (i.e. investment objectives, risk tolerance, financial situation, among other considerations, of any particular person and as such, investments mentioned in this document may not be suitable for all investors. Citi is not acting as an investment or other advisor, fiduciary or agent. The information contained herein is not intended to be an exhaustive discussion of the strategies or concepts mentioned herein or tax or legal advice.

Recipients of this Communication should obtain advice based on their own individual circumstances from their own tax, financial, legal and other advisors about the risks and merits of any transaction before making an investment decision, and only make such decisions on the basis of their own objectives, experience, risk profile and resources.
Any forecasts contained herein reflect research published by Citigroup entities. Forecasts are provided for discussion purposes only, are not a guarantee of future performance, and a variety of economic, market and other factors may lead to results that differ materially from any forecast. Actual results may vary from the forecast rates provided herein. Recipients should obtain advice based on their own individual circumstances from their own tax, financial, legal and other advisors about the risks and merits of any transaction before making an investment decision.

The Citi personnel who took part in the preparation of this Communication are not research analysts, and the information in this Communication is not intended to constitute “research” or a “research report”, as that term is defined by applicable regulations. The Citi personnel who took part in the preparation of this Communication are not licensed or qualified as research analysts with FINRA or any other US regulatory authority and, accordingly, may not be subject (among other things) to FINRA restrictions regarding communications by a research analyst with the subject company, public appearances by research analysts and trading securities held in a research analyst account. Unless otherwise indicated, any reference to a research report or research recommendation is not intended to represent the whole report and is not in itself considered a recommendation or research report.

Insofar as this Communication may contain historical and forward looking information, past performance is neither a guarantee nor an indication of future results, and future results may not meet expectations due to a variety of economic, market and other factors. Further, any projections of potential risk or return are illustrative and should not be taken as limitations of the maximum possible loss or gain. Any prices, values, forecasts or estimates provided in this Communication (other than those that are identified as being historical) are indicative only, may change without notice and do not represent firm quotes as to either price or size, nor reflect the value Citi may assign a security in its inventory. Forward looking information does not indicate a level at which Citi is prepared to do a trade and may not account for all relevant assumptions and future conditions. Actual conditions may vary substantially from estimates which could have a negative impact on the value of an instrument.

Views, opinions and estimates expressed herein may differ from the opinions expressed by other Citi businesses or affiliates, and are not intended to be a forecast of future events, a guarantee of future results, or investment advice, and are subject to change without notice based on market and other conditions. Citi is under no duty to update this document and accepts no liability for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained in or derived from this Communication.

Investments in financial instruments or other products carry significant risk, including the possible loss of the principal amount invested. Financial instruments or other products denominated in a foreign currency are subject to exchange rate fluctuations, which may have an adverse effect on the price or value of an investment in such products. This Communication does not purport to identify all risks or material considerations which may be associated with entering into any transaction. Citi accepts no liability for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained in or derived from this communication. Any prices, values or estimates provided in this Communication (other than those that are identified as being historical) are indicative only, may change without notice and do not represent firm quotes as to either price or size, nor reflect the value Citi may assign a security in its inventory. You should contact your Financial Professional directly if you are interested in buying or selling any financial instrument or other product or pursuing any trading strategy that may be mentioned in this communication.

Retail Investment Products are (i) not insured by any government agency; (ii) not a deposit or other obligation of, or guaranteed by, the depository institution; and (iii) subject to investment risks, including possible loss of the principal amount invested. Before entering into these transactions, you should: (i) ensure that you have obtained and considered relevant information from independent reliable sources concerning the financial, economic and political conditions of the relevant markets; (ii) determine that you have the necessary knowledge, sophistication and experience in financial, business and investment matters to be able to evaluate the risks involved, and that you are financially able to bear such risks; and (iii) determine, having considered the foregoing points, that capital markets transactions are suitable and appropriate for your financial, tax, business and investment objectives.

An investment in alternative investments (e.g., hedge funds, private equity) can be highly illiquid, speculative and not suitable for all investors. Investing in alternative investments is for experienced and sophisticated investors who are willing to bear the high economic risks associated with such an investment. Investors should carefully review and consider potential risks before investing. Certain of these risks may include, loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; lack of liquidity in that there may be no secondary market for the fund and none is expected to develop; volatility of returns; restrictions on transferring interests in the Fund; potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; absence of information regarding valuations and pricing; complex tax structures and delays in tax reporting; less regulation and higher fees than mutual funds; and manager risk.

Factors affecting commodities generally, index components composed of futures contracts on nickel or copper, which are industrial metals, may be subject to a number of additional factors specific to industrial metals that might cause price volatility. These include changes in the level of industrial activity using industrial metals (including the availability of substitutes such as man-made or synthetic substitutes); disruptions in the supply chain, from mining to storage to smelting or refining; adjustments to inventory; variations in production costs, including storage, labor and energy costs; costs associated with regulatory compliance, including environmental regulations; and changes in industrial, government and consumer demand, both in individual consuming nations and internationally. Index components concentrated in futures contracts on agricultural products, including grains, may be subject to a number of additional factors specific to agricultural products that might cause price volatility. These include weather conditions, including floods, drought and freezing conditions; changes in government policies; planting decisions; and changes in demand for agricultural products, both with end users and as inputs into various industries.
Citi often acts as an issuer of financial instruments and other products, acts as a market maker and trades as principal in many different financial instruments and other products, and can be expected to perform or seek to perform investment banking and other services for the issuer of such financial instruments or other products. The author of this Communication may have discussed the information contained therein with others within or outside Citi, and the author and/or such other Citi personnel may have already acted on the basis of this information (including by trading for Citi’s proprietary accounts or communicating the information contained herein to other customers of Citi). Citi, Citi’s personnel (including those with whom the author may have consulted in the preparation of this communication), and other customers of Citi may be long or short the financial instruments or other products referred to in this Communication, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different from or adverse to your interests.

Neither Citi nor any of its affiliates can accept responsibility for the tax treatment of any investment product, whether or not the investment is purchased by a trust or company administered by an affiliate of Citi. Citi assumes that, before making any commitment to invest, the investor and (where applicable, its beneficial owners) have taken whatever tax, legal or other advice the investor/beneficial owners consider necessary and have arranged to account for any tax lawfully due on the income or gains arising from any investment product provided by Citi.

This Communication is for the sole and exclusive use of the intended recipients, and may contain information proprietary to Citi which may not be reproduced or circulated in whole or in part without Citi’s prior consent. The manner of circulation and distribution may be restricted by law or regulation in certain countries. Persons who come into possession of this document are required to inform themselves of, and to observe such restrictions. Citi accepts no liability whatsoever for the actions of third parties in this respect. Any unauthorized use, duplication, or disclosure of this document is prohibited by law and may result in legal action.

Citi and its affiliates may be acting in a number of capacities in connection with the instruments herein. Citi and each affiliate acting in any capacity will only have the duties and responsibilities agreed to by such entity in the relevant capacity, and will not, by reason of it or any affiliate acting in any such capacity, be deemed to have other duties or responsibilities or be deemed to be held to a standard of care other than as expressly provided with respect to each such capacity.

Portfolio diversification is an important element for an investor to consider when making investment decisions. Concentrated positions may entail greater risks than a diversified portfolio. A broad range of factors affect whether an investment portfolio is sufficiently diversified. Some of the factors may not be evident from a review of the assets within your Citi account(s). It therefore is important that you carefully review your entire investment portfolio to ensure that it meets your investment goals and is within your risk tolerance, including your objectives for investments diversification. To discuss asset allocation and potential strategies to reduce the risk and/or volatility of a concentrated position, please contact your Citi Financial Professional.

Citigroup Global Markets Inc. Citi Research is a division of Citigroup Global Markets Inc. Citi Research focuses on delivering the company, sector, economic and geographic insights to clients globally. The unit includes equity and fixed income research, economic and market analysis and product-specific analysis.