J.P.Morgan
Wealth Management

Outlook 2022
Preparing for a vibrant cycle

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Foreword

2021 was a year of clarity. Economies proved resilient and markets bounced back after the uncertainty brought on by COVID-19.

There are certainly risks we need to manage in the new year including inflation, labor shortages and a persistent global pandemic. But overall, 2022 has a strong foundation for what we hope is a vibrant cycle ahead.

As always, we remain focused on what matters most: our clients' goals. We believe a deep understanding of your financial priorities allows us to build portfolios that can withstand the ebbs and flows of market cycles over the long run.

We rely on our world-class Global Investment Strategy Group to help us identify the risks and opportunities that investors may face. As you read our *Outlook*, consider it in the context of your long-term financial goals, and reach out to your J.P. Morgan advisor to see what it could mean for you and your family.

Thank you for the trust you place in J.P. Morgan Wealth Management.

Happy holidays,

Kristin

Kristin Lemkau
CEO, J.P. Morgan Wealth Management

Preparing for a vibrant cycle.

Most risk markets have delivered stellar returns in 2021 as the global economy continues to heal from the coronavirus pandemic. Yet in recent months, investors have focused on potential risks both to economic growth and market returns. Inflation is complicating central bank policy, supply shortages are hitting economic output, and COVID-19 remains a concern for consumers, businesses and investors.

At the same time, the global crisis has clearly shifted policymaker priorities, solidified household and corporate balance sheets, and accelerated innovation. This new reality may lay the foundation for a far more vibrant economic environment than the sluggish growth and weak productivity that characterized much of the 2010s. The changes could have important consequences for investors, especially those still positioned for a reprise of the previous cycle.

To be sure, several cross-currents are in play. In the United States, the monetary policy response to price pressures and the state of the labor market will matter for markets. In China, the economic transition underway presents near-term downside risk. Over the longer term, the global economy may have to adjust to structurally slower growth in the world's second-largest economy. Globally, the path of the virus will likely continue to have an impact on the economy.

As we examine the interplay of economies and markets, we see compelling returns for goal-aligned portfolios. Earnings growth is likely to drive equity markets across the developed world to new highs. A continued strong growth environment, characterized by healthy inflation, will likely be a headwind to bonds. But given underlying uncertainty, we focus on balance within our broadly optimistic portfolio positioning.

As you read our *Outlook*, remember that your own portfolio positioning should reflect your goals-based plan, investing framework and risk tolerance. Before considering what changes might make the most sense for your portfolio, we recommend that you first take stock of how you're currently positioned, and confirm what your portfolio needs to do for you, your family and your community.

Are your assets earmarked for your lifestyle? Your legacy? Intended to grow in perpetuity? Or do you need access to them in the near term? Keep these answers in mind as you consider our views on economies and markets, and make decisions about your own portfolio construction.

With this context, you should be in a position to make the most of 2022.

Here are the key issues we think will drive markets in the coming year:

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The foundation for a vibrant cycle

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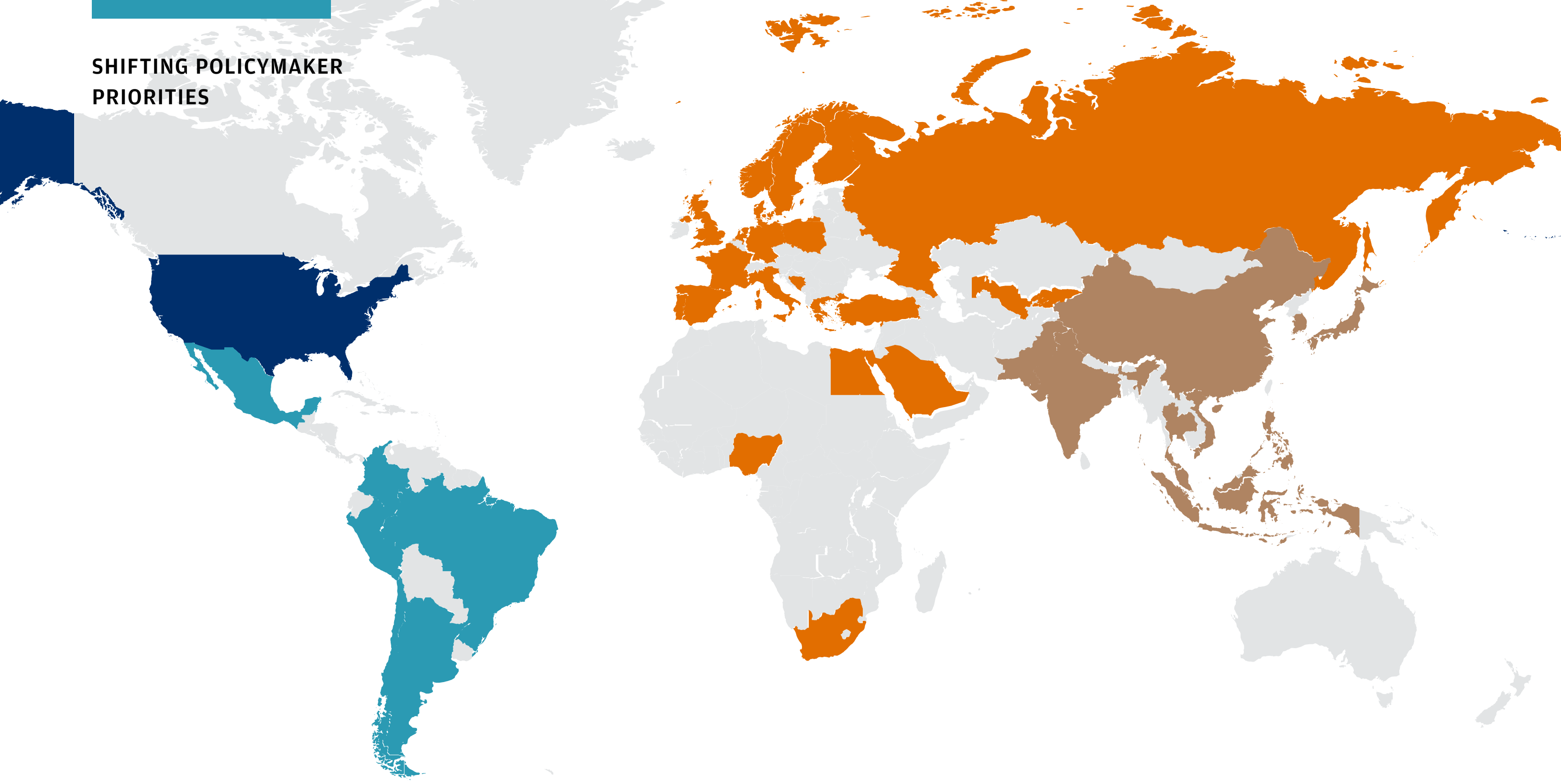
The foundation for a vibrant cycle.

The global crisis has shifted policymaker priorities, solidified household and corporate balance sheets, and embedded innovation. This should set the table for more potent economic growth in the 2020s than we saw in the 2010s.

THE BROADER VIEW

Policymaker priorities are shifting



Fiscal support targets new goals now that the emergency is over

With fiscal stimulus likely past its peak, longer-term spending proposals on infrastructure and other projects are now in focus.

UNITED STATES

Biden's physical and human infrastructure bills plan to allocate trillions of dollars in infrastructure spending, high-speed internet systems and clean energy, and fund other priorities such as childcare and healthcare.

LATIN AMERICA

Governments are generally in fiscal-tightening mode after nearly exhausting the fiscal space to combat the crisis. Monetary policy is also tightening amid elevated inflationary pressures.

EMEA

The EU Recovery Bill and Green Bill focus on research and innovation, digitization, modernization and recovery, and place aggressive standards to address and fight climate issues.

ASIA

Fiscal support varies across Asia. Many developing economies have fiscal space, while developed ones have implemented significant fiscal easing. China, the largest growth driver in the region, seems to be tightening policy in order to rebalance its economy away from real estate.

Sources: U.S. Council on Foreign Relations, International Monetary Fund, and European Commission.
Data as of October 1, 2021. Regions based on JPMC locations.

In many ways, the COVID-19 crisis was more like a war or a natural disaster than an economic recession, and policymakers responded forcefully. Globally, post-pandemic spending commitments totaled almost USD20 trillion, the highest levels of fiscal spending relative to GDP since World War II.

United States

In the United States, Congress and the White House have spent over USD4 trillion responding to the pandemic, and now politicians are debating spending another USD2 trillion over the next 10 years. President Joe Biden's ambitious agenda—if enacted even in part—would have important economic consequences. As this is written, Biden's "Build Back Better" agenda would spur spending on physical infrastructure, research and development in technology (e.g., robotics, artificial intelligence and biotechnology), subsidize domestic semiconductor manufacturing and support development of clean technology. Other measures addressing education, childcare, and supply chains could deliver some positive long-term economic benefits.

Higher taxes will pay for some of the costs of these policies. Personal tax rates for higher-income families are likely to rise, making asset structuring and planning more critical. While the statutory corporate tax rate may stay the same, changes to global intangible income taxes and a corporate minimum tax will likely be a drag on earnings. However, corporate tax changes will probably not be enough to offset the earnings growth we expect from sales and operating leverage. We also do not expect that higher taxes would curtail business investment.

In response to the pandemic, Congress and the White House have spent over

USD4 trillion

Over the next 10 years, Congress is debating spending another

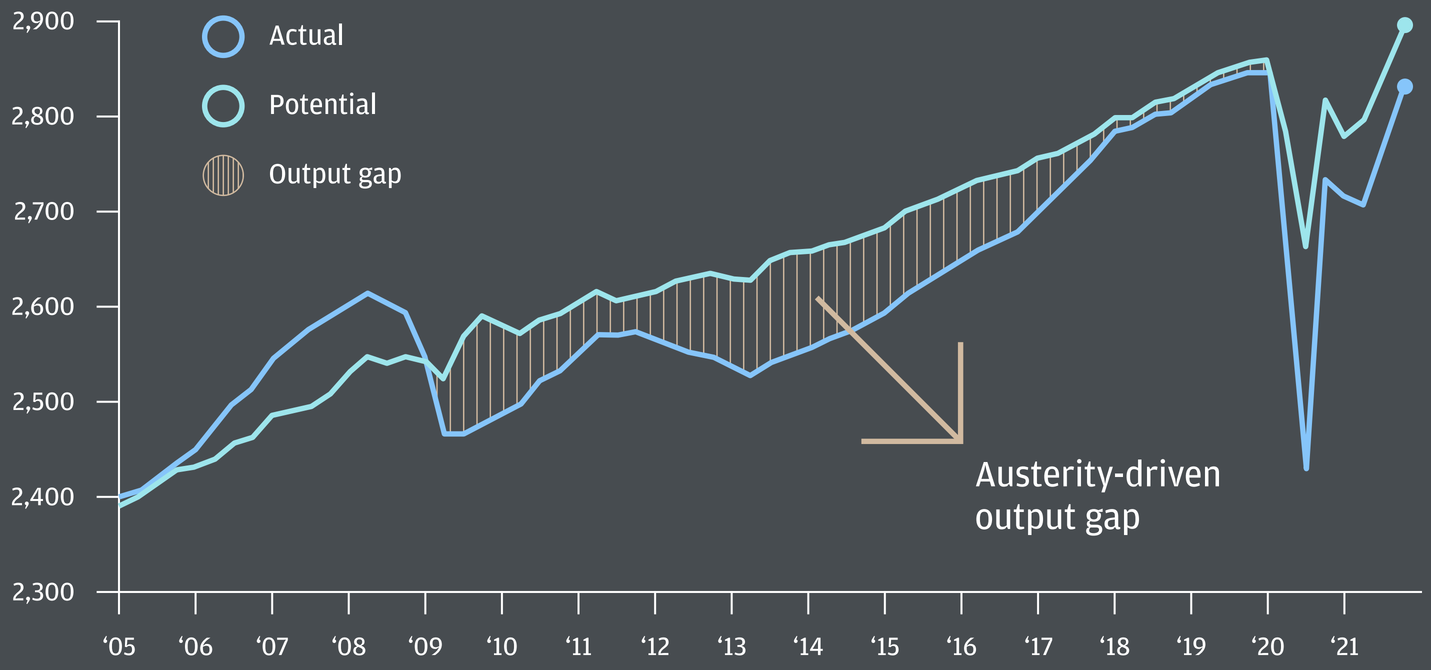
USD2 trillion

Europe

We believe fiscal stimulus will continue to be a powerful force—a marked contrast to the early 2010s, when fiscal austerity damaged already weak economies.

AUSTERITY IN EUROPE CONTRIBUTED TO A WEAK RECOVERY IN THE 2010S

Euro area real output and potential output, EUR billions



Sources: Oxford Economics, Haver Analytics. Data as of Q3 2021.

After the global financial crisis, actual output never recovered to potential (the theoretical long-term gross domestic product of the economy). Now, the European Union has agreed to spend more than 2 trillion euros through 2027 to rebuild after the pandemic. EU areas of focus include digital innovation, research, climate-focused spending and pandemic preparedness programs. To offset the cost: proposed financial transactions taxes, digital levies and corporate “financial contributions.” Nevertheless, we believe the spending will be a net positive for economies and markets.

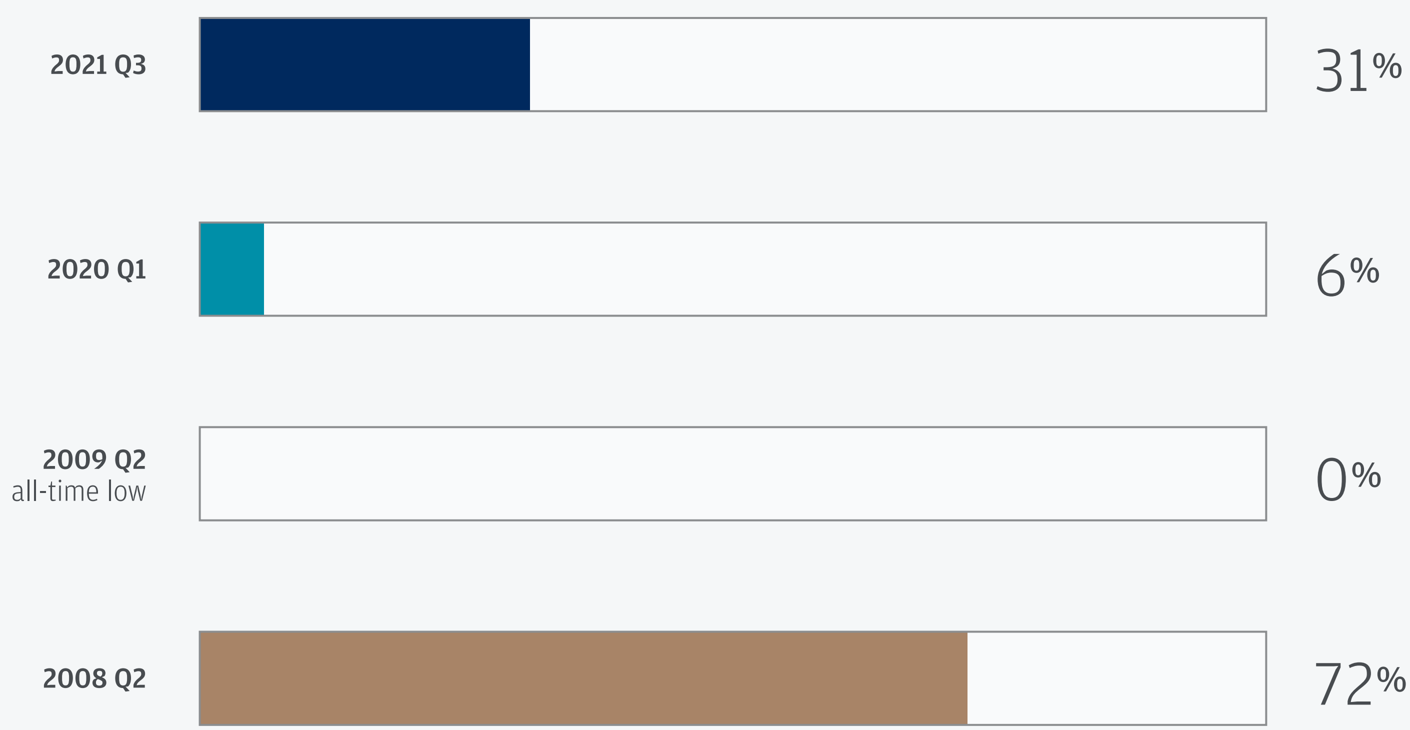
Europe’s stringent fiscal rules have been suspended for two years, and permanent changes seem likely. There seems to be little economic reason to maintain a balanced budget when borrowing costs are negative. However, the continued support of the European Central Bank seems critical to help maintain manageable borrowing costs for the periphery. While the structural problems associated with the monetary union linger, the pandemic has resulted in a more integrated continental Europe, and the fiscal policy stance is much more market friendly.[1]

[1] The Eurozone fiscal deficit as a percentage of GDP (a measure of fiscal support for the economy) is still wider than it was at the peak of the global financial crisis, even though the growth rebound has been much more rapid this time around. Even though fiscal deficits will shrink, this suggests a much more supportive fiscal position than existed previously.

On the monetary side, both the U.S. Federal Reserve (Fed) and European Central Bank (ECB) are committed to generating stronger inflation outcomes with fuller employment. The Fed's new "Flexible Average Inflation Targeting" regime suggests its willingness to tolerate inflation overshoots to support labor market strength. We expect that the Fed will resist aggressive policy tightening—even in the face of the highest inflation readings in a decade. Similarly, the ECB has also unveiled a new strategy that should remove the assumption that the 2% target was a ceiling for inflation, not a symmetric target.

GLOBALLY, A TIGHTENING CYCLE IS UNDERWAY...

% of banks whose last move was a hike



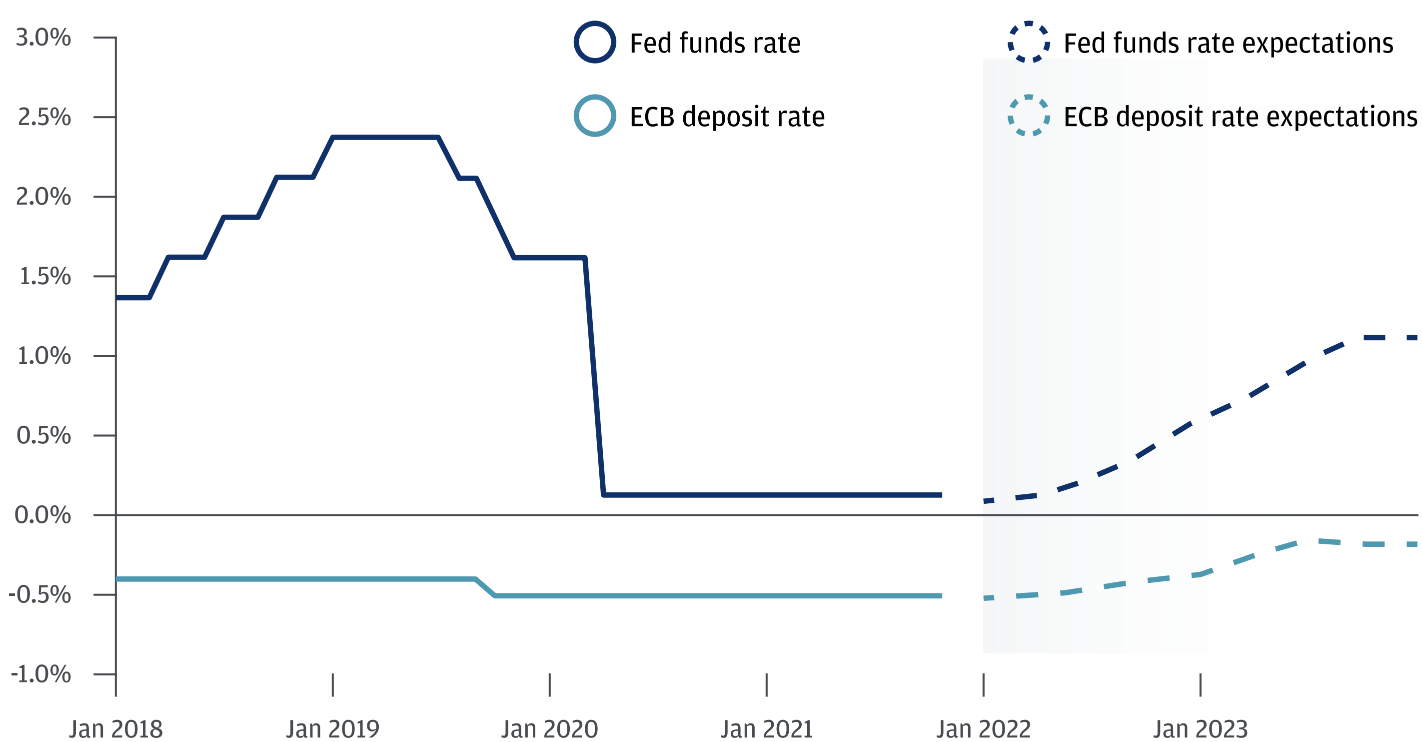
Source: FactSet. Data as of October 31, 2021. Includes 32 central banks.

The shifts from both central banks ought to support markets in 2022 and beyond.

Elsewhere, central banks are moving in different directions. Developed market central banks in Norway, New Zealand, Canada and the United Kingdom have all taken steps toward tightening monetary policy. While divergent policy paths could lead to tactical opportunities across regions and in currency markets, the Fed and the ECB (along with the People's Bank of China) probably matter most for global risk assets.

...AND MARKETS EXPECT THE FED TO START HIKING IN 2022

Policy rate, %



Source: Bloomberg Finance L.P. Data as of November 21, 2021.

Emerging markets

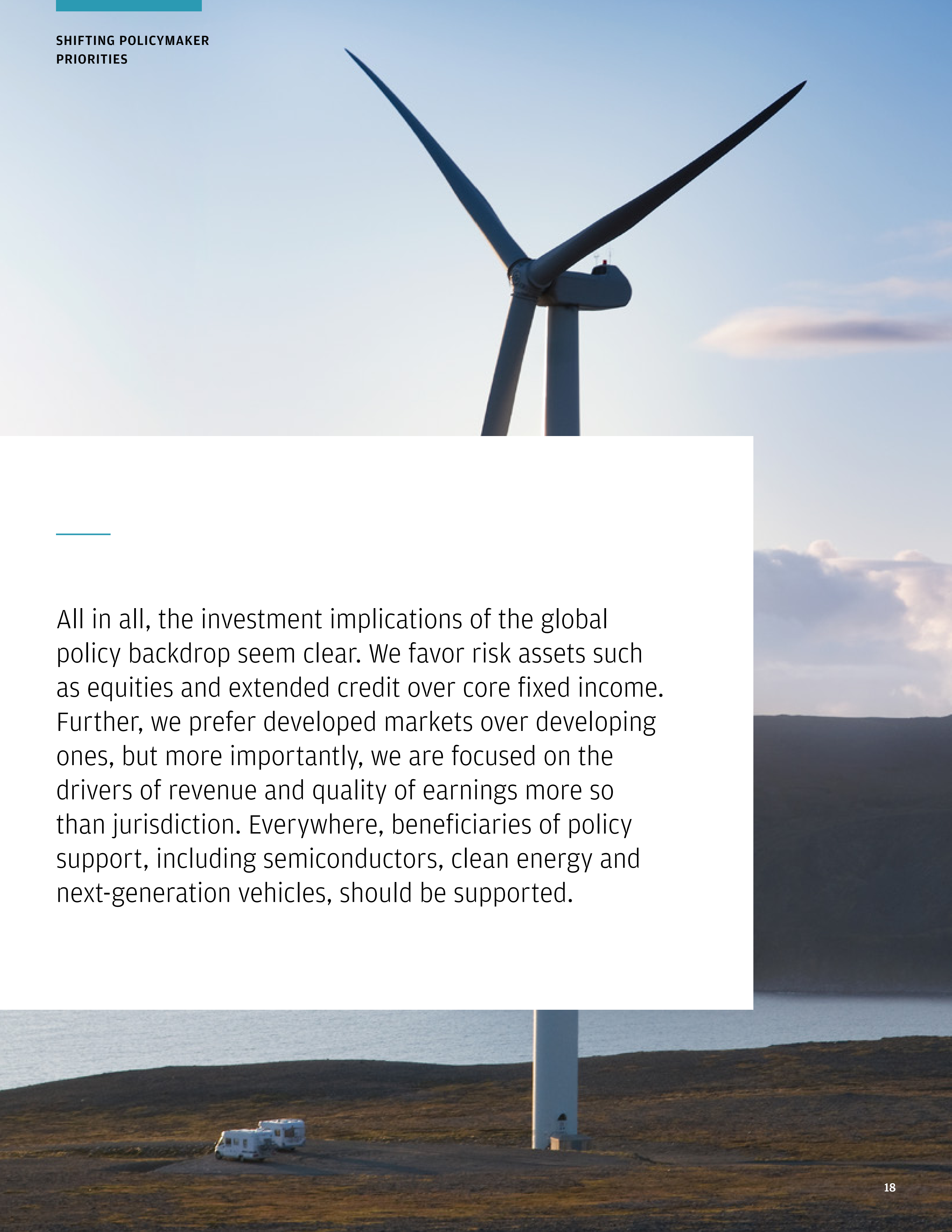
In emerging markets, the policy stance is decidedly less supportive for investors.

Chinese policymakers have been on a campaign to rebalance growth drivers and restructure the economy. Their efforts include renewed tightening in the property sector, rapidly shifting internet regulations, ambitious climate change goals and new social campaigns on inequality and family values. Policymakers pursuing long-term reforms and priorities have been willing to do so at the expense of short-term growth. Over the medium term, investors will likely have to come to terms with the implications of slower structural growth in China. That state may be more sustainable, but the transition presents near-term risks.

In Latin America, a potential shift toward populism could have serious negative economic implications for the region.

So far, there are mixed results from recent elections amid increased social discontent with governments' handling of the pandemic and ensuing economic crisis. Some countries, such as Chile, have voted against populist alternatives, while others, such as Peru, have voted in favor of them.

Leftist candidates lead preliminary polls ahead of key presidential elections scheduled for 2022 in regional powerhouses such as Brazil and Colombia. There are rising concerns that electoral uncertainty may negatively impact consumption and investment.



All in all, the investment implications of the global policy backdrop seem clear. We favor risk assets such as equities and extended credit over core fixed income. Further, we prefer developed markets over developing ones, but more importantly, we are focused on the drivers of revenue and quality of earnings more so than jurisdiction. Everywhere, beneficiaries of policy support, including semiconductors, clean energy and next-generation vehicles, should be supported.

THE BROADER VIEW

Households to spend, corporates to benefit

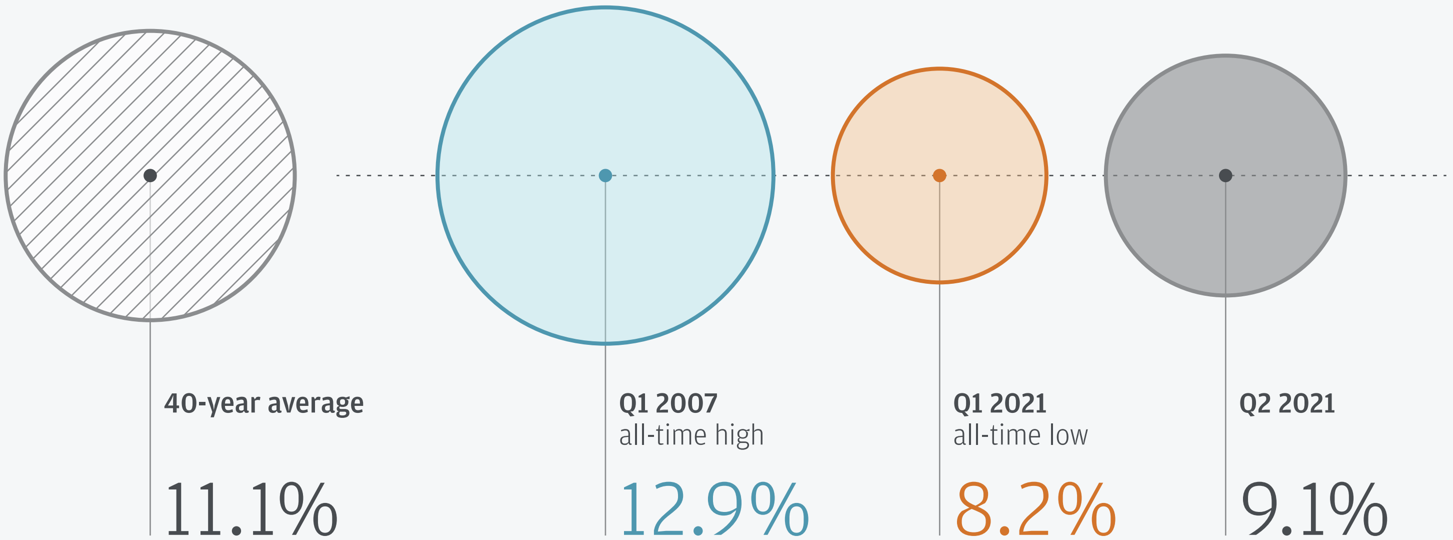
The aggressive policy response to the pandemic prevented a self-reinforcing downturn, and supported household and corporate balance sheets. Looking ahead, we see continued financial strength for both.

Household net worth is at all-time highs, debt service payments are at all-time lows, and consumer sentiment has room to recover. Across the developed world, household savings are elevated. U.S. consumers saved almost USD2.5 trillion in excess of the pre-pandemic trend. This is in stark contrast to the post-global financial crisis experience where falling home values and lower equity prices damaged household wealth.

Be intentional with the excess savings you've accumulated during the pandemic. Define your liquidity bucket and invest the remainder for your longer-term goals.

HOUSEHOLD DEBT SERVICE AT ALL-TIME LOWS

Debt service payments as % of disposable personal income



Source: Federal Reserve Board. Data as of Q2 2021.

U.S. CORPORATE PROFITS AT ALL-TIME HIGHS

Percent of GDP (%)

Sources: Bureau of Economic Analysis, Haver Analytics. Data as of Q2 2021.

The top quartile of income fared best.

The top 20% of earners increased their net worths by a staggering USD17 trillion from December 2019 through the middle of 2021. Still, the middle cohorts in terms of wealth and income are also much better off. Net wealth for the 20th-80th percentile of incomes are up by more than USD6 trillion, and liabilities are at their lowest level relative to assets since the early 1990s.

Jobs are plentiful, and employers are paying a premium to attract workers.

The U.S. quits rate is at the highest level in the series' history back to 2000, suggesting robust demand for labor. (People generally quit their jobs when they feel confident of finding another.) Broadly, wages are up 4–5% year-over-year, the strongest pace since the mid-2000s, and the highest share of small businesses on record are planning on raising compensation. Importantly, wages are growing the fastest at the lowest levels of income.

This seems to be a global trend. In the United Kingdom, for example, the current ratio of job vacancies per filled job is likewise at the highest level on record. All in all, workers have the most pricing power for their labor since the 1990s. While there are reasons to believe the current pace of wage growth will moderate, it will probably run at a much healthier rate than it did in the post-global financial crisis period.

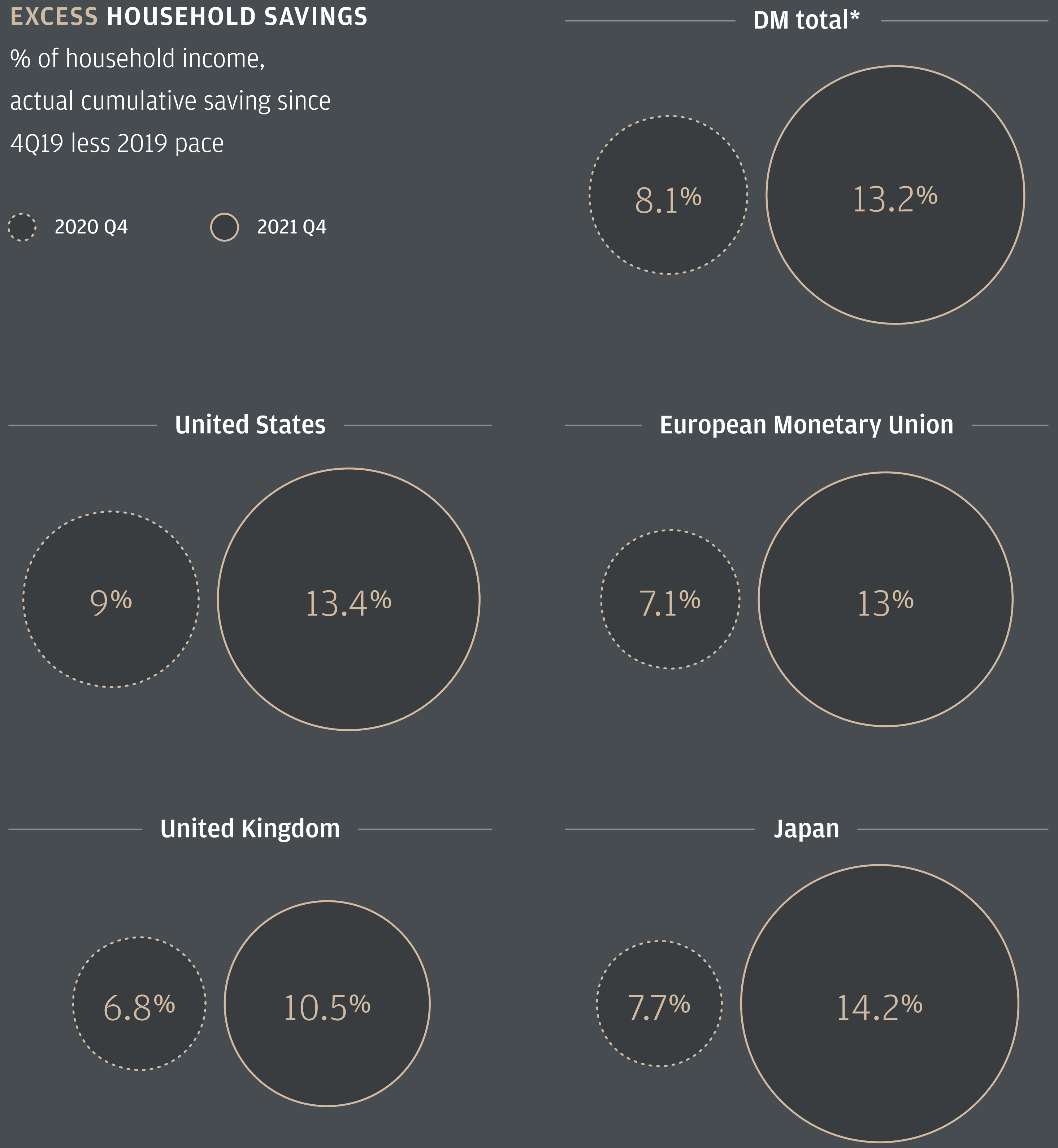
Wages are up

4–5%,

the strongest pace since the mid-2000s

EXCESS HOUSEHOLD SAVINGS

% of household income,
actual cumulative saving since
4Q19 less 2019 pace



* United States, United Kingdom, European Monetary Union and Japan.
Source: J.P. Morgan. Data as of October 28, 2021.

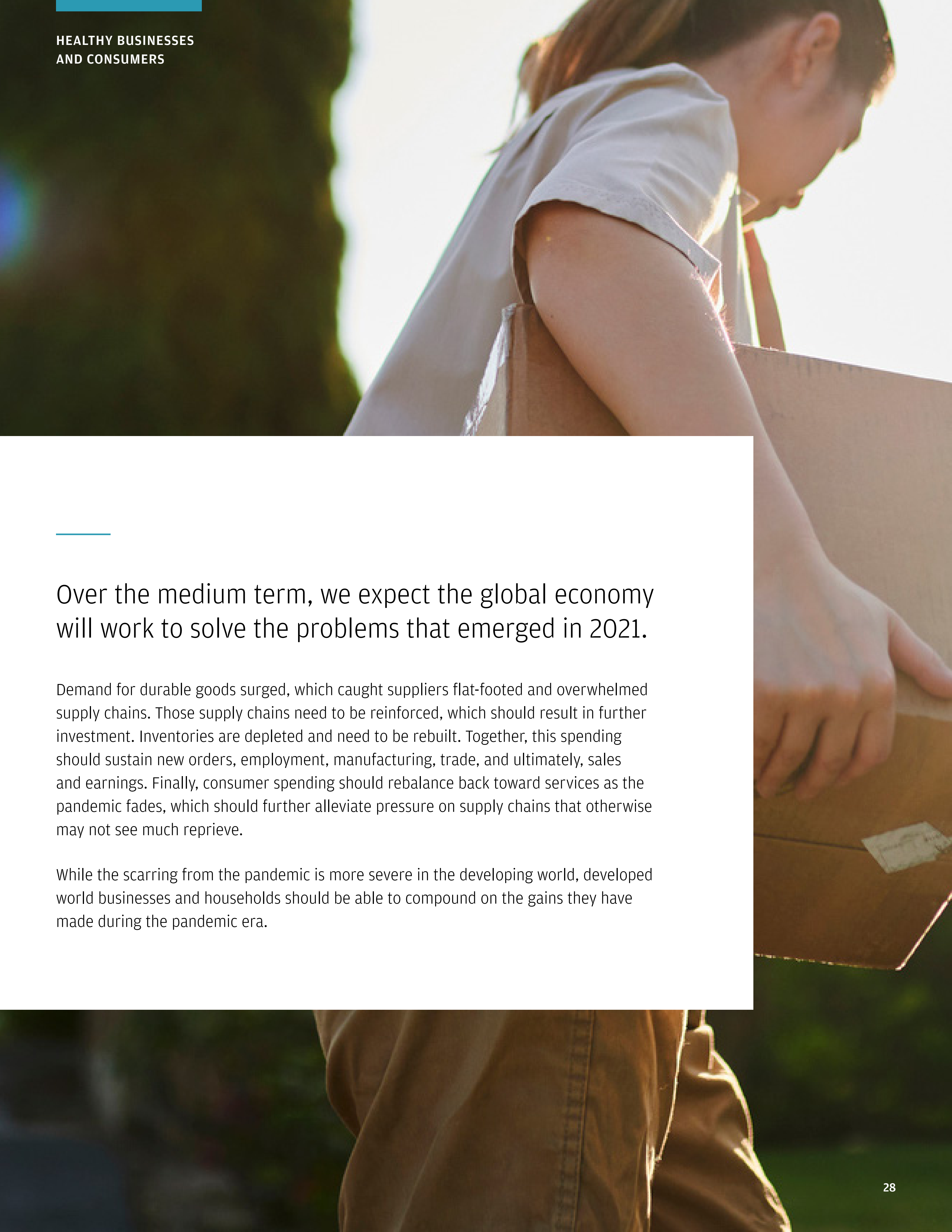
Sectors that lagged during the recovery from the financial crisis, such as housing and autos, may be set to lead in the current cycle. Today's U.S. housing stock doesn't come close to meeting demand. Home prices have risen, but low mortgage rates and income growth are keeping housing affordable.[2] The shift to more flexible work schemes should allow people to move from cities and nearby suburbs to relatively less expensive suburbs and exurbs. Meanwhile, innovation in the automobile industry, including electrification and assisted driving, could lead to a prolonged upgrade cycle in the United States and globally.

[2] According to the National Association of Realtor's index of housing affordability, which adjusts for median income and outstanding mortgage rates, owner occupied housing is more affordable now than it was at any point from 2000 to 2010.

On the corporate side, the starting point is equally impressive.

Earnings and margins are at all-time highs, investment grade credit spreads are at all-time lows, and demand is strong. In the developed world, the financial sector seems solid and willing to lend. S&P 500 companies have translated ~6% global economic growth and 15% sales growth into 45% earnings growth in 2021. That operating leverage surprised investors, and led to ~25% price appreciation for the index.

European earnings results were even more remarkable (even though they were coming off a lower base). Sales growth of 10% generated 64% earnings growth in the region, and European stocks kept pace with their U.S. counterparts in local currency terms for the first time since 2018. While we expect some deceleration in 2022, earnings still have scope to surprise to the upside.



Over the medium term, we expect the global economy will work to solve the problems that emerged in 2021.

Demand for durable goods surged, which caught suppliers flat-footed and overwhelmed supply chains. Those supply chains need to be reinforced, which should result in further investment. Inventories are depleted and need to be rebuilt. Together, this spending should sustain new orders, employment, manufacturing, trade, and ultimately, sales and earnings. Finally, consumer spending should rebalance back toward services as the pandemic fades, which should further alleviate pressure on supply chains that otherwise may not see much reprieve.

While the scarring from the pandemic is more severe in the developing world, developed world businesses and households should be able to compound on the gains they have made during the pandemic era.

THE BROADER VIEW

A new era of innovation is driving value creation

The pandemic entrenched some key megatrends: digital transformation, healthcare innovation and sustainability.

How can you "right size" investments in key megatrends? They're best suited for your longer-term goals, with potentially larger allocations for assets with the longest time horizons and largest risk capacities.

The global economy has become even more digital.

Healthcare innovation delivered powerful vaccines with astonishing speed. Policymakers and corporations remain committed to investment in climate change mitigation.

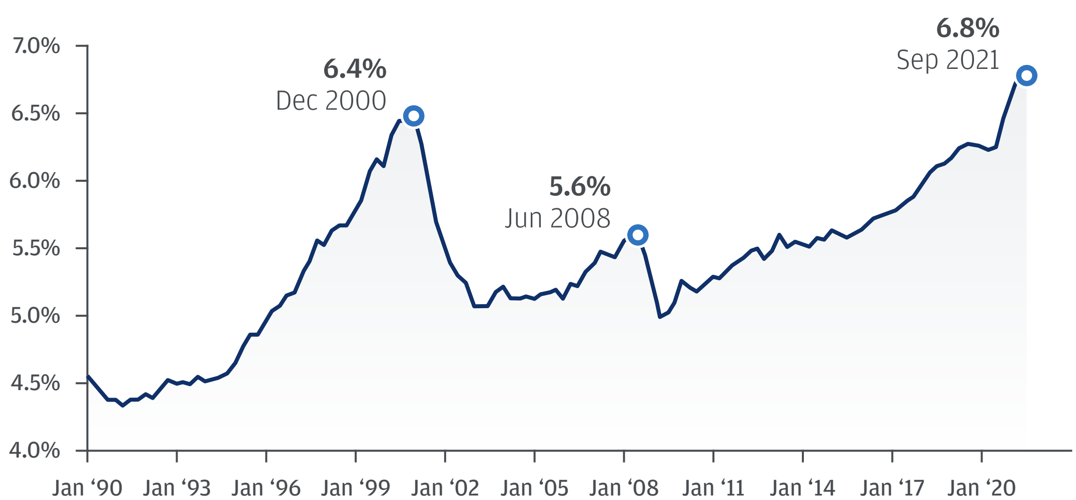
We think these trends will continue to drive research and development, investment and value creation.

In recent years, innovations emerged in e-commerce, tech hardware and cloud computing. E-commerce spending is 20% higher than it was before the pandemic, and global spending on cybersecurity for cloud computing grew at a 40% pace in 2021. All benefited from the fact that people spent more time online.[3]

In the coming years, we expect digital transformation of the economy to continue apace: Automation both in goods-producing and service industries will likely increase, possibly catalyzed by shortages in the labor market. Artificial intelligence and machine learning will continue to enable new technologies such as voice assistants and autonomous driving.

COMPANIES ARE INVESTING IN INNOVATION

Software, info processing, and research and development spending as % of U.S. GDP



Sources: Bureau of Economic Analysis, Congressional Budget Office. Data as of Q3 2021.

[3] Another example: The semiconductor shortage was really driven by the surge in demand for goods from consumers. Most everything has a semiconductor in it these days!

Digital transformation

In the auto industry—in many ways the epicenter of disruption—the electrification of the global fleet will prove to be a powerful force.

One data point is telling: Electric vehicles have at least 4x the semiconductor content of traditional, internal combustion engine ones.

Beyond autos, digital transformation is increasingly common in sectors from finance (payments and the blockchain) to retail (augmented reality), to entertainment (preference algorithms), to healthcare (predictive medicine powered by artificial intelligence). The metaverse could make most life digital, for better or worse.

Cloud computing continues to accelerate. Before the pandemic, 20%–30% of work was done in the cloud. Executives thought it would take 10 years for that share to grow to 80%. Now, it could only take three. For some investors, crypto-assets could represent an interesting long-term opportunity in the context of larger goals-based portfolios.

Healthcare innovation

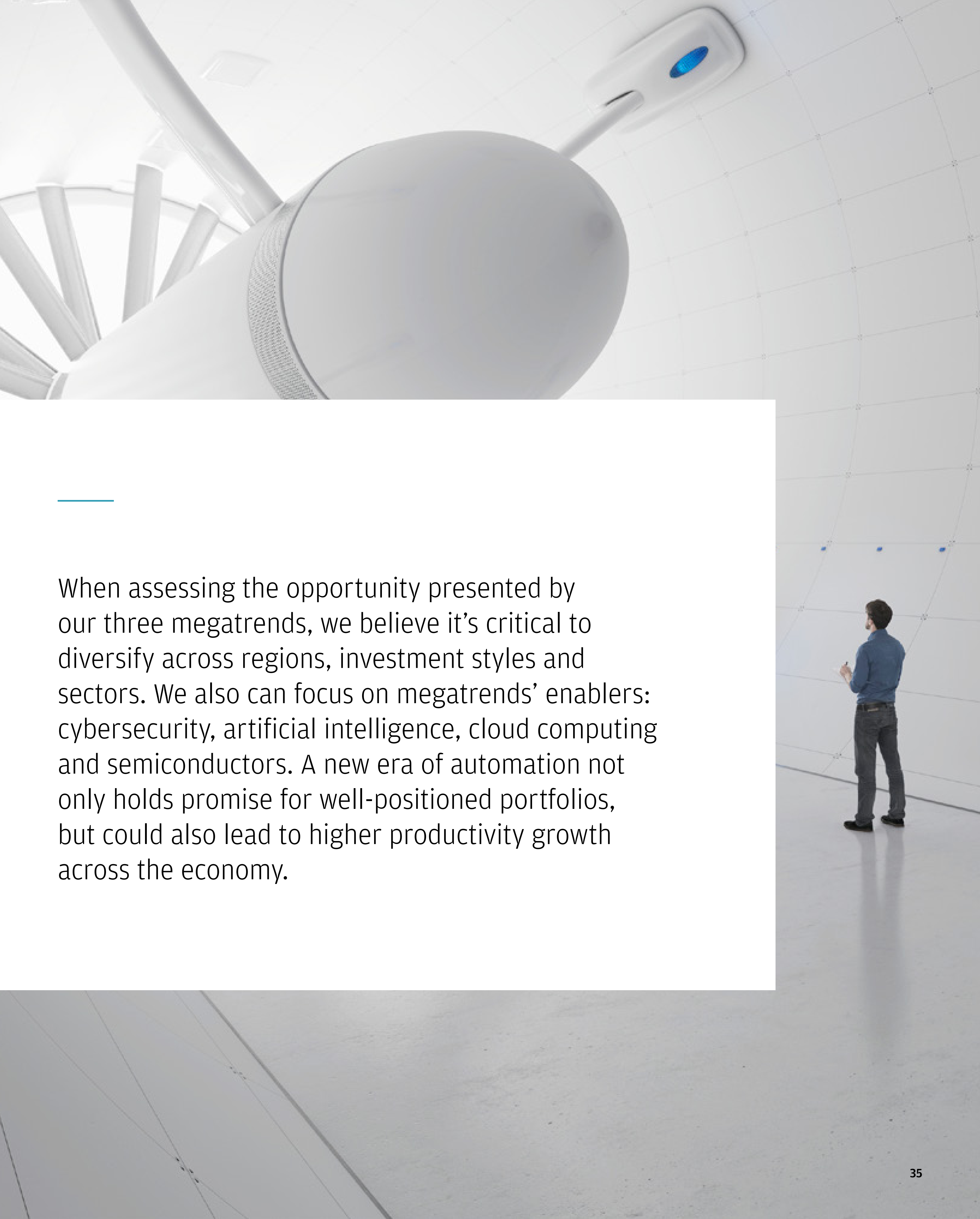
In healthcare, researchers are looking to see whether the mRNA technology behind powerful vaccines can be used to treat other diseases.

As healthcare innovation is set to accelerate, we think the industry is likely to become more personalized, more focused on preventative care and more digital. Wearables, telemedicine and gene editing are other notable areas of investment opportunity.

Sustainability

Policy support from the United States, Europe and China, as well as more frequent and destructive natural disasters, are calling attention to the need for sustainable investment.

Some estimates suggest that USD4–6 trillion per year is needed this decade to decarbonize the global economy. To reach President Biden's goal of decarbonizing the energy grid by 2035, the United States will need to invest up to USD90 billion per year in new wind and solar generation capacity. Despite full valuations, we see opportunities in clean technologies such as carbon capture, battery storage, renewable energy sources and energy efficiency. The circular economy and agricultural technology are also areas of focus. Carbon offset markets could also present opportunities for tactical investors.



When assessing the opportunity presented by our three megatrends, we believe it's critical to diversify across regions, investment styles and sectors. We also can focus on megatrends' enablers: cybersecurity, artificial intelligence, cloud computing and semiconductors. A new era of automation not only holds promise for well-positioned portfolios, but could also lead to higher productivity growth across the economy.

Monitor the cross-currents.

Although we see clear potential for a more vibrant economic cycle, the environment is also fraught with cross-currents. We are confident the economic expansion will continue through 2022, but its strength will likely be determined by the monetary response to inflation, the relative success of Chinese policymakers in rebalancing their economy, and the pace of the transition from a pandemic to an endemic disease.

KEY CONCERNS

Inflation and monetary policy

Some global central banks have already embarked on a rate hiking cycle. Investors are starting to ask when the Fed will join the party.[4]

[4] In Brazil, for example, the central bank has raised policy rates by 5.75% since March, and the Bank of England, Bank of Canada and others seem ready to embark on an aggressive tightening cycle. Despite the rate hikes, inflation in Brazil is still running at a 10% pace, so the degree to which central bank tightening could even address the inflation problems that are happening globally is up for debate.

The market now suggests that liftoff will happen in the middle of next year, and that short-term rates will approach 1% by year-end.

We expect a slightly more patient Fed when it comes to rate hikes. A moderating inflation backdrop (our base-case view) should give the Fed some leeway to wait for the labor market to make a more complete recovery toward the pre-pandemic trend.

In 2021, high core inflation in the United States (which excludes food and energy) was driven by surging demand for goods. Supply chains have been stressed. In recent years, they adjusted to a prolonged period of tepid economic activity, lackluster demand and the uncertainty of U.S.-China trade tensions.

Today, though, real spending on goods is 15% above its pre-pandemic level. Imports from China and the rest of Asia surged, but supply could not keep up with demand, especially given disruptions from strict COVID-19 containment policies. This also led to a shortage of semiconductors, which exacerbated price spikes in the auto sector. In fact, almost 30% of the rise in consumer prices in the United States in 2021 was driven by automobiles, even though that sector only makes up just 7% of the consumer spending basket.

Protecting against inflation is key to reach your long-term goals. Moving into 2022, you can build a portfolio that acknowledges and mitigates inflation risks.

We expect goods price inflation to prove transitory.

As the pandemic fades, consumers should redirect spending from goods and toward services. Supply chain stresses should alleviate, and while foreign direct investment has collapsed, trade and portfolio flows suggest that the secular force of globalization that has kept goods inflation in check for two decades is unlikely to fully reverse.

However, there are signs that price increases are broadening. For example, shelter inflation, an important and sticky component, is on the rise. Further, wage growth is already strong and should be supported by continued progress in the labor market toward maximum employment.

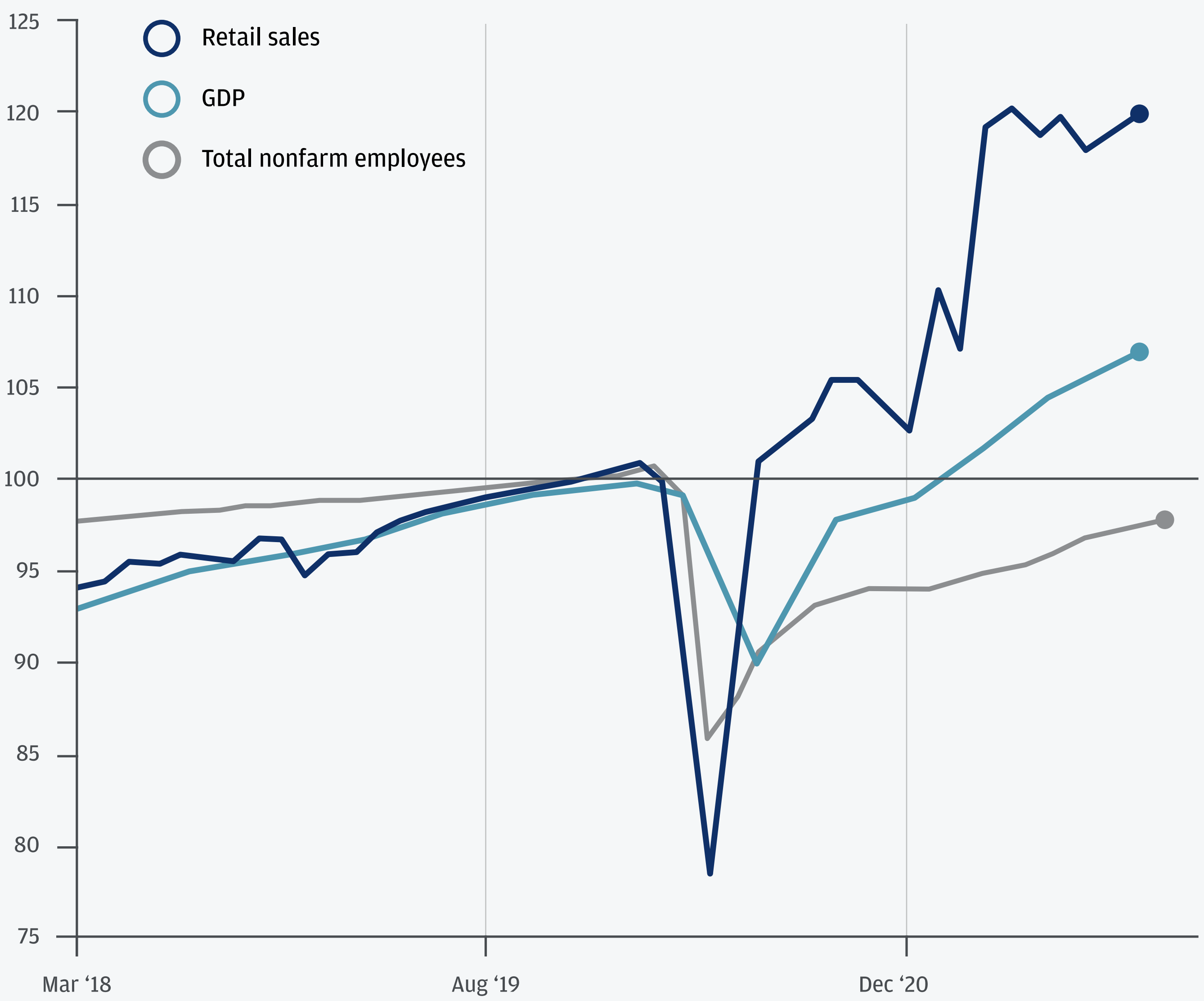
IN THE U.S., GOODS INFLATION HAS SPIKED DUE TO STRONG DEMAND

YoY % change

Source: Bureau of Labor Statistics. Data as of October 2021.

U.S. OUTPUT HAS MADE A FULL RECOVERY, BUT NOT THE LABOR MARKET

Index level (December 2019 = 100)



Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Haver Analytics. Data as of Q3 2021.

But the labor market has been a puzzle for economists and strategists all year.

The U.S. economy is still 5.5 million workers short of the pre-pandemic trend, and the unemployment rate is over 4.5%. These data points suggest there is an ample supply of workers. Yet survey data and other metrics indicate that businesses are having a very difficult time hiring—signaling a labor market that is quickly running out of slack.

Much as the inflation pressures are playing out across the global economy, employment dynamics are not unique to the United States. In many developed markets, job vacancies are elevated, especially in the high-contact leisure and hospitality industries. In the United Kingdom, for example, leisure and hospitality businesses are more than twice as likely as other industries to face labor shortages. In developing countries such as Vietnam, COVID-19 outbreaks led to labor shortages in large cities. The global pandemic is affecting labor dynamics across global markets.

Despite demographic pressure (around 1.5 million workers in the United States retired early during the pandemic), we expect the U.S. labor supply to increase as health risks recede. Further, the ~2.7 million workers who were better off collecting augmented unemployment benefits than working will also probably seek jobs in the months ahead. Strong wage growth ought to entice some of the ~2 million working-age individuals who dropped out of the labor force to step back in. Overall, we believe the "labor shortage" is more appropriately described as a dislocation between the jobs that are available, the wages that they pay, and the willingness and ability of the workers on the sidelines to accept them. In time, this dynamic should come back into balance.

In the Eurozone, while unemployment rates remain elevated, high usage of short-term work has meant the overall decline in the labor force has been less severe than in the United States. As a result, wage growth has been slow to pick up, a dynamic that should help keep the ECB patient. Over the medium term, as the labor market recovery continues, we expect European wage growth to proceed at a healthy clip.

Wage gains have outpaced price increases for goods and services during the pandemic, and we find almost no evidence of margin erosion due to rising costs. The risk to our outlook is that core goods inflation remains elevated or that the employment-to-population ratio never fully recovers. This would suggest that the economy is indeed out of slack, which could induce an aggressive response from the Fed in 2022. That could prove to be very damaging to both the economy and risk assets.

5.5 million

Workers short of the pre-pandemic trend in the United States

1.5 million

Workers in the United States retired early during the pandemic

While that scenario is a risk, the most likely path forward seems to be that solid job gains and moderating inflation in 2022 will keep the Fed on track to likely begin raising rates toward the end of 2022 or the beginning of 2023. The ECB is further behind. Patient policy should support risk assets.

KEY CONCERNS

Can China finesse a very tricky transition?

For many years, Chinese growth was fueled by easy credit, especially in real estate.

Now, growth is slowing significantly.

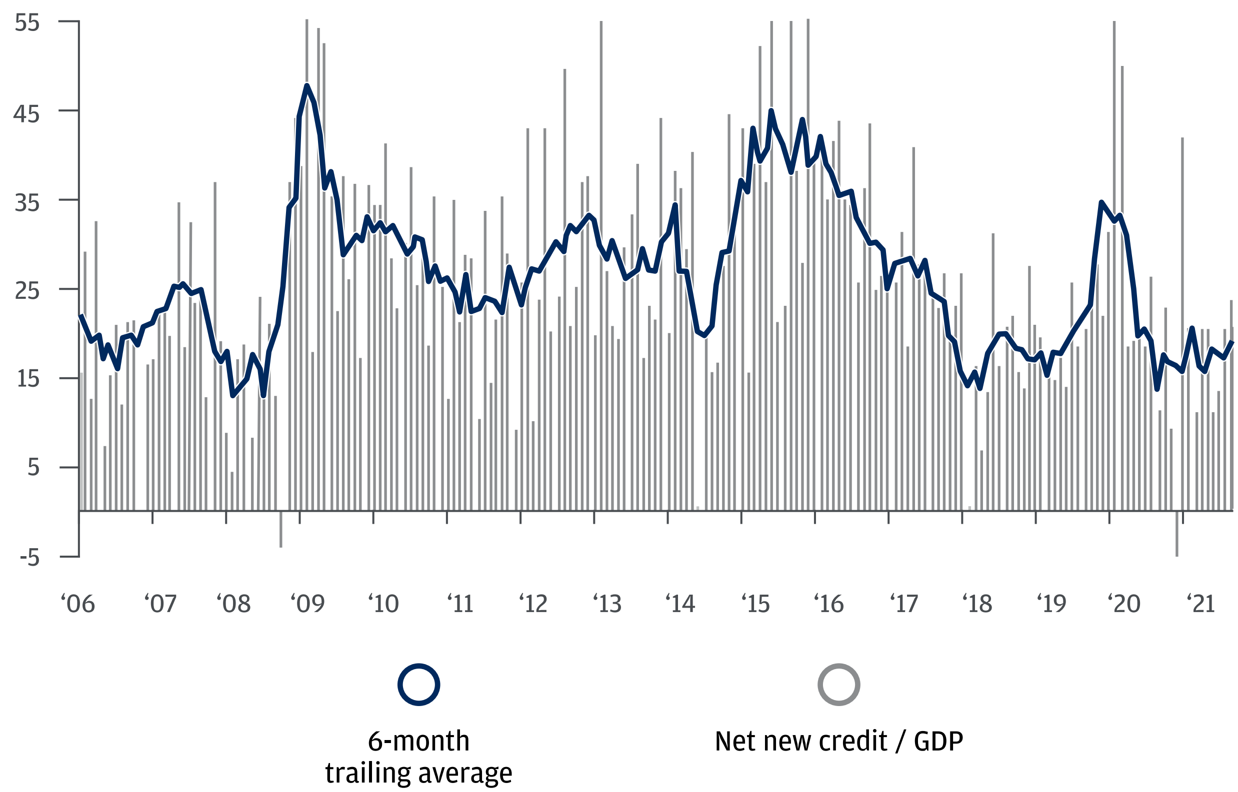
Year-over-year GDP growth in China fell below 5% for the first time outside of the pandemic, after policymakers tightened monetary and fiscal policy to rein in excesses in property markets and to crack down on the digitally enabled consumer sector. In exchange for slower nominal growth, policymakers expect a more sustainable economy driven by middle-class consumption and high value-add manufacturing. The simultaneous pursuit of wide-ranging macro and industrial policies increases the difficulty around policy implementation and introduces downside risks to growth and markets.

Already, the economic and market fallout from this shift has been severe.

Stressed property developer bonds are trading at 20–30 cents on the dollar, and internet companies have lost half of their market value. Alibaba alone saw its valuation fall by over USD400 billion from peak levels. The for-profit education sector has effectively ceased to exist. Economic weakness in China impacts the global economy, largely through trade. China's property sector is one of the largest sources of global demand for industrial commodities. Clearly, this slowdown has repercussions for commodity producers around the world.

CHINESE STIMULUS IS WEAK IN ORDER TO REIN IN EXCESSES

Net new credit as % GDP



Sources: China National Bureau of Statistics, PBOC. Data as of October 2021.

CHINESE INTERNET COMPANIES UNDER SIEGE IN 2021

Year-to-date price change, %

MSCI Emerging Markets

-2.3%

Shanghai Shenzhen CSI 300 (onshore)

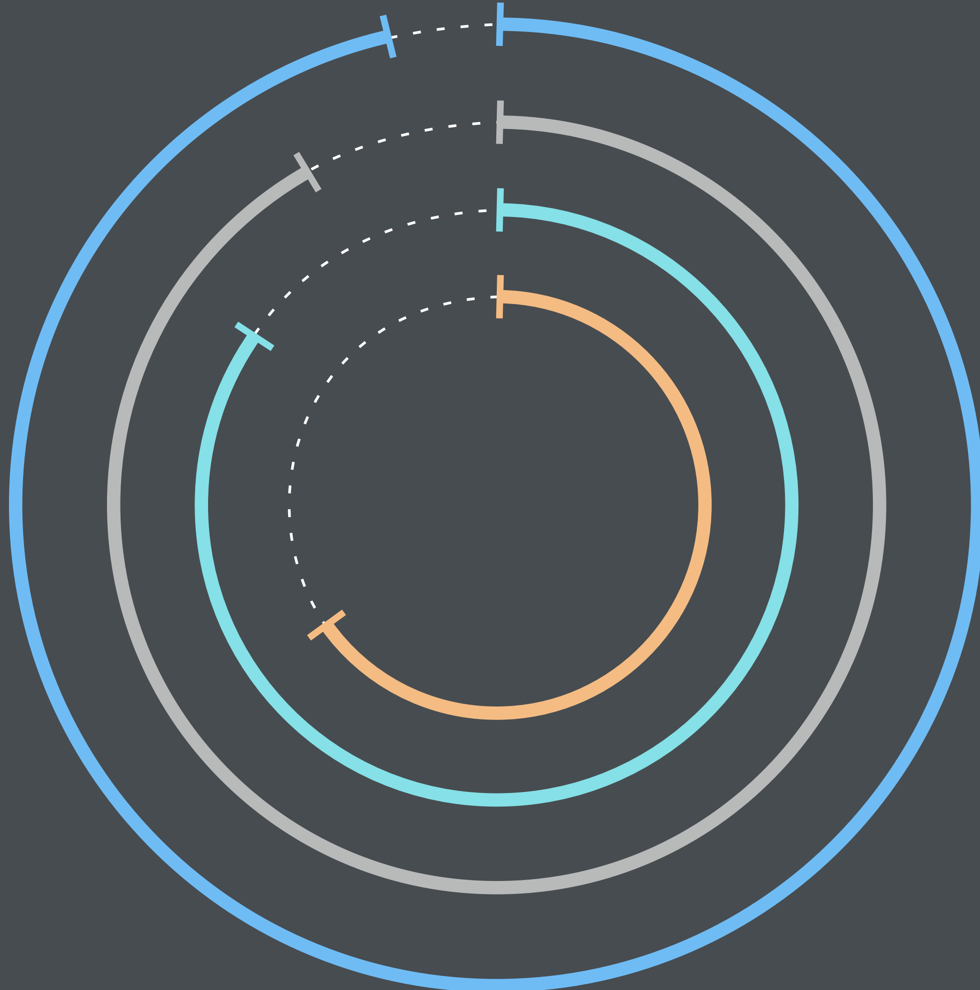
-5.7%

MSCI China (offshore)

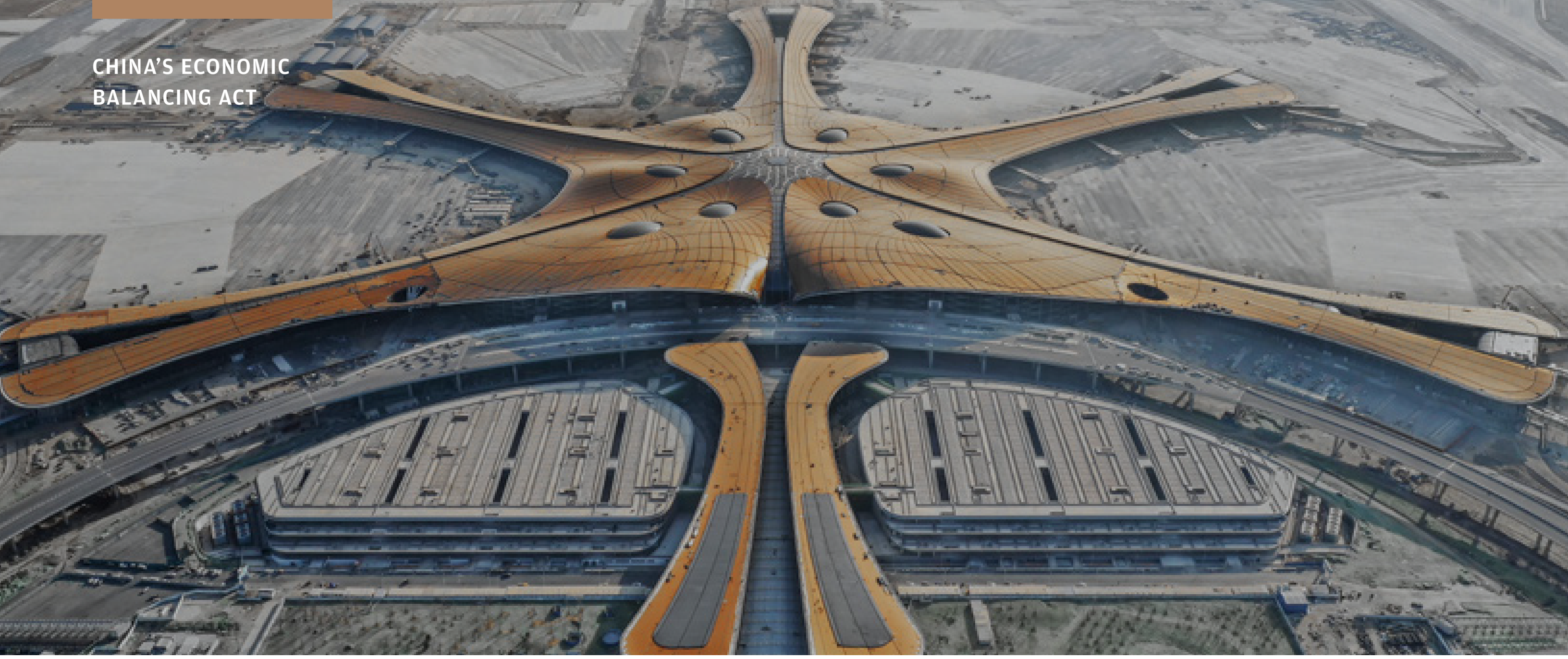
-15.9%

China Internet

-38.0%



Source: Bloomberg Finance L.P. Data as of November 22, 2021.



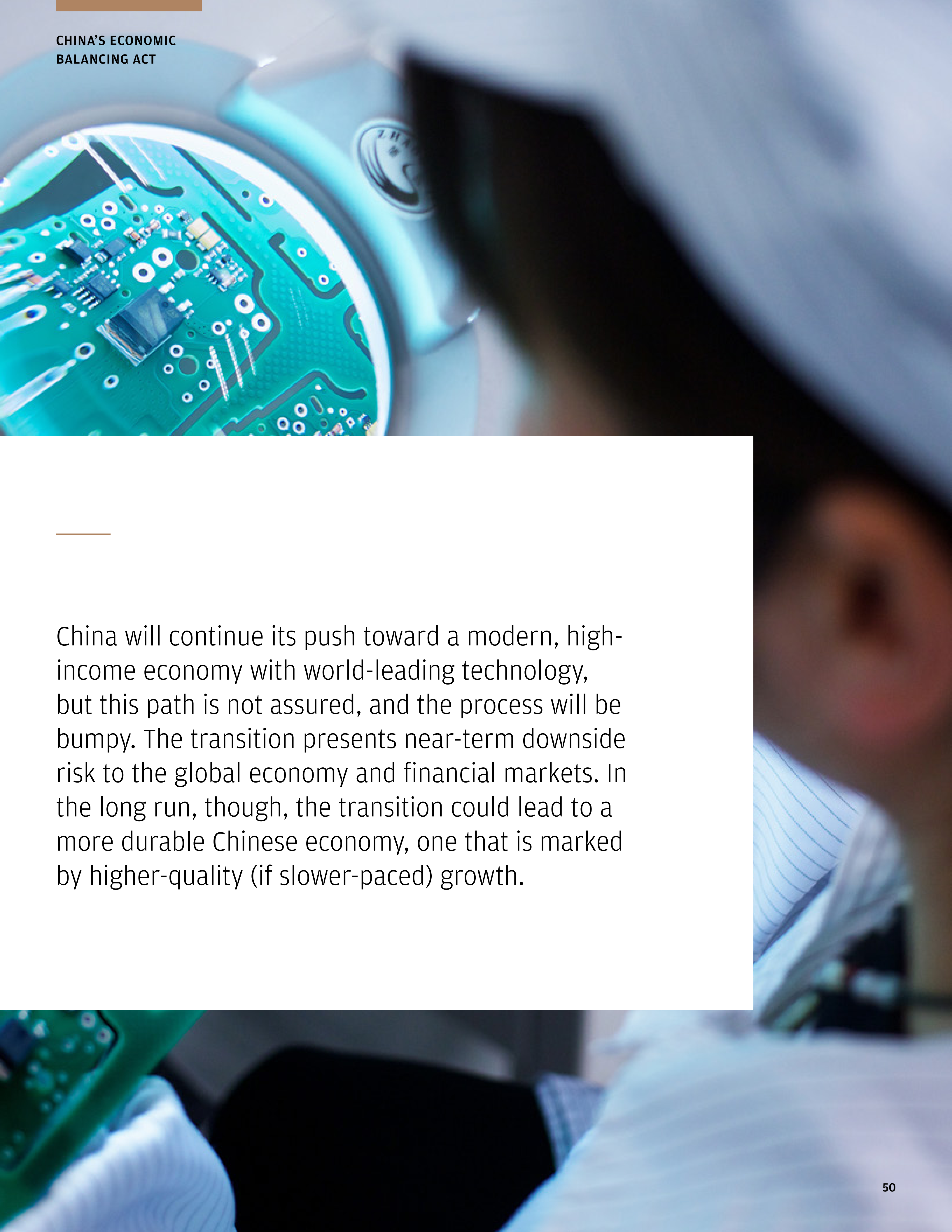
At this point, many are debating if China is investable at all.

We think this is the wrong question to ask. Anything is investable at the right price if the potential returns are deemed worth the risks.

Opportunities can be uncovered, but investors need to consider the full spectrum of Chinese assets and the associated risks. Remember, too, that while most central banks are either raising rates or debating when to raise rates, Chinese policymakers are probably closer to easing. This dynamic could lead to interesting diversification benefits of Chinese bonds, especially given the challenging outlook for developed world fixed income.

The very different characteristics of offshore and onshore indices are critical. The offshore equity index (MSCI China) consists primarily of tech and internet companies, and is owned predominantly by foreign investors. The onshore equity index (CSI300) is more equally distributed across sectors, and is predominantly owned by domestic investors. The latter seems more attractive to us at this point.

In the near term, uncertainty about the impact of current and future regulations on margins and earnings growth could weigh on offshore equities as investors struggle with how to value those firms. However, onshore markets include many of the clean energy, electric vehicle (EV) and semiconductor firms that could benefit from government policy support.



China will continue its push toward a modern, high-income economy with world-leading technology, but this path is not assured, and the process will be bumpy. The transition presents near-term downside risk to the global economy and financial markets. In the long run, though, the transition could lead to a more durable Chinese economy, one that is marked by higher-quality (if slower-paced) growth.

KEY CONCERNS

Coming to terms with the virus

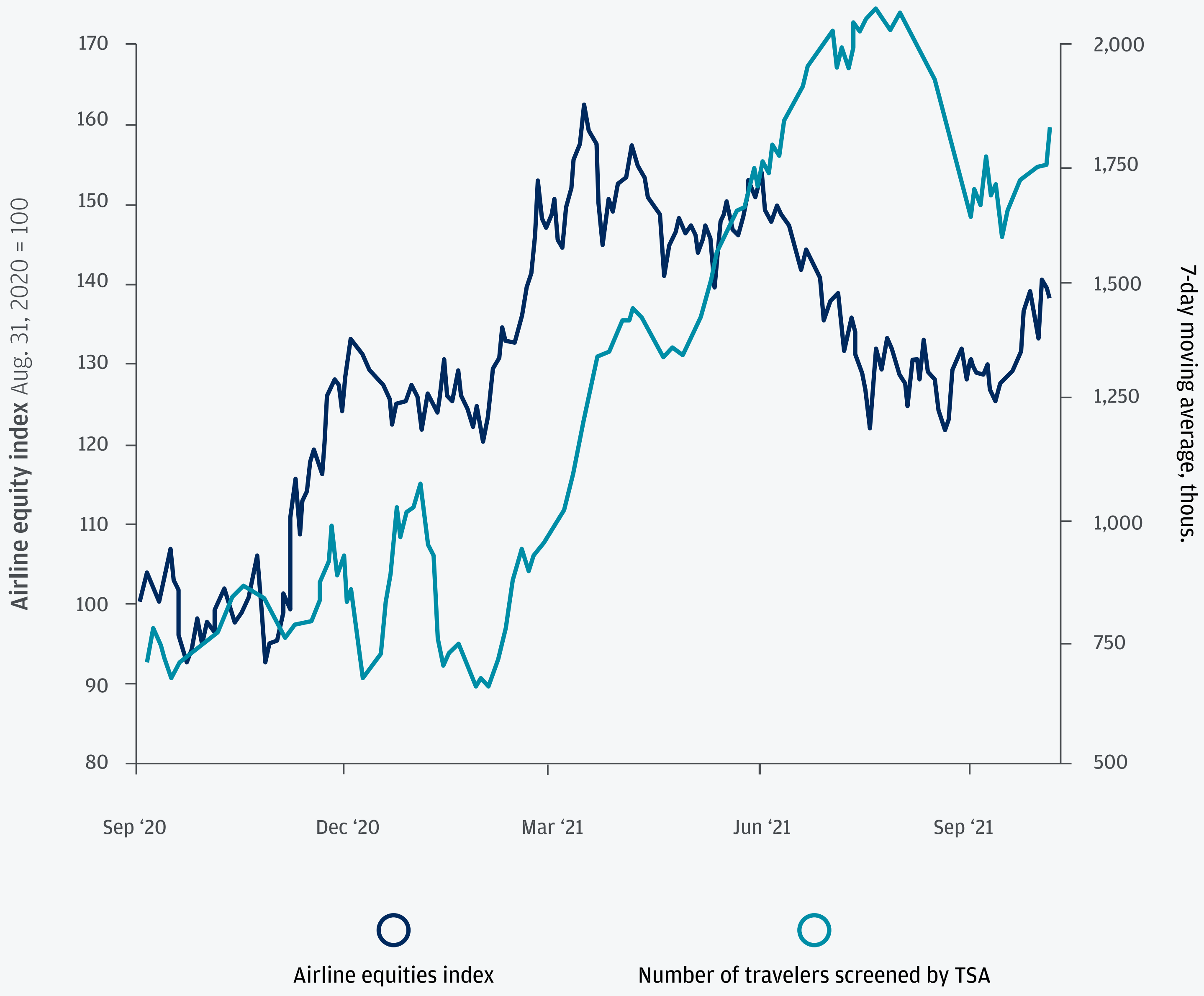
While the path of the coronavirus has proven very difficult to predict, investors now take the uncertainty in stride.

The bad news is that COVID-19 seems likely to become an endemic disease; humans will have to continue to adapt to it. The good news is that vaccinations, immunity gained from prior infection and new treatments all reduce the risks associated with spread of the disease.

Currently, 42% of the developed world population has completed the original COVID-19 vaccination program, and booster shots are now being distributed. Most estimates suggest that over 65% of the world has some form of protection against the virus, either from inoculation or prior exposure.

However, more COVID-19 outbreaks are likely, possibly due to new variants. To understand how markets may react, we look at the U.S. experience with the Delta wave: An unexpected rise in cases battered the stocks of companies tied to mobility (such as airlines) and oil prices. The logic: The more COVID-19 spreads, the less travel is likely to take place, so demand for oil falls.

AIRLINE EQUITIES REACTION AND TRAVELERS SCREENED BY TSA



Source: Bloomberg Finance L.P. Data as of November 22, 2021.

A more complicated consideration for investors is the extent to which certain countries pursue "Zero COVID" policies.

The longer they do, the more potential disruptions there could be to manufacturing output and global supply chains. During the third quarter, companies such as Nike and Toyota cited supply issues due to lockdowns in places such as Vietnam. At one point, up to 50% of all garment and footwear manufacturers in the country were closed. Port shutdowns in China further snarled global shipping.

More broadly, economic growth forecasts for third-quarter annualized U.S. GDP plummeted from 6% to just 2% throughout the quarter amid disruptions to global supply chains that were exacerbated by the rise in virus cases. Business conditions in East Asia (especially China, Australia and Vietnam) further deteriorated.

Bond yields fell until the Delta wave was clearly past its peak in the United States. In equity markets, the mega-cap, digitally oriented areas of the market outperformed those sectors more tied to economic output.

Yet in the end, the Delta wave actually did little to dent either U.S. or European stock markets: The S&P 500 made 28 new highs, and Europe's Stoxx 600 kept pace. Recently, increased vaccine penetration has led to a marked improvement in manufacturing operations in places such as Hanoi, and there are tentative signs that global supply chain issues are starting to ease.

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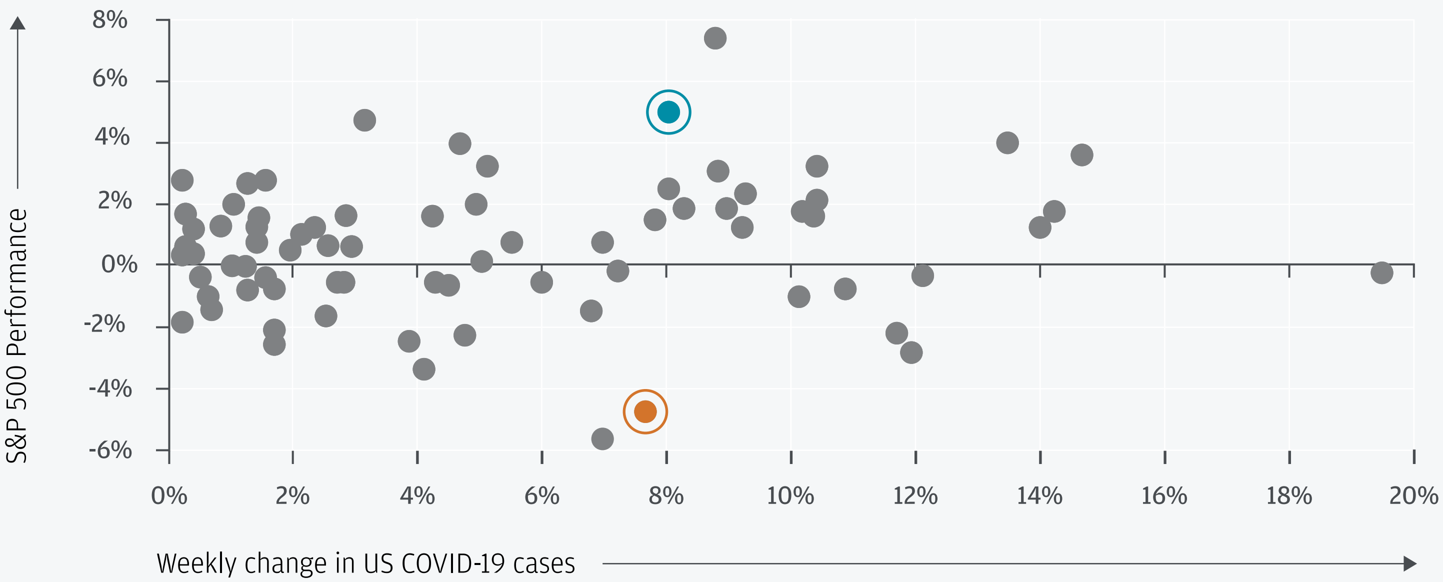
New highs made for the S&P 500 during the Delta wave

NO DISCERNABLE RELATIONSHIP BETWEEN S&P 500 PERFORMANCE AND CHANGE IN COVID-19 CASES AFTER THE FIRST WAVE

Weekly change in S&P 500 Index (May 2020-November 2021)



Source: Bloomberg Finance L.P. Data as of November 19, 2021.

The takeaway for investors? By economic sector and style factor (growth, value, etc.), we believe relative performance will still likely be correlated to virus dynamics, as will bond yields.

But large cap equity markets will likely be able to power through potential disruption—so long as earnings growth remains solid. We focus on quality businesses whose earnings power can drive returns in either rising or falling interest rate environments. Active management in fixed income remains critical.

Bottom line: We expect the virus will continue to have a diminishing impact on economies and markets, even if certain sectors remain vulnerable to an increase in COVID-19 cases.

What does our outlook mean for your portfolio?

At the core of our outlook is the idea that the global economy will be more vibrant during this economic cycle than it was during the last.

Economic policy in the United States, Europe and China aims to foster more durable, quality growth across the income spectrum, even if the relative chances of success vary across regions. Households and corporates in the United States and Europe have healthy balance sheets and enjoy strong demand for their goods, services and labor. Innovation is spurring structural changes across industries and could lead to a more productive global economy.

These forces have important investment implications—especially for the long-term investors who may still be positioned for the economic malaise of the late 2010s.

In 2022, as the U.S. and European economies march further into mid-cycle, we expect a strong growth environment characterized by higher inflation than investors saw in the previous cycle. While the stage of the cycle may differ across regions, these conditions bode well for equity markets globally, especially relative to core fixed income. Dynamic active management could add value as volatility in both equities and fixed income could continue to be elevated. Cash still has a deeply negative expected return after adjusting for inflation; it continues to be our least favorite asset class.

Hold cash for your near-term expenses and as a psychological safety net to weather volatility. But strategic cash—cash as a strategic investment—is our least favorite asset class.

Equities

No, equities are not cheap. For most major markets, they are fully valued at best, but investors are paying a premium for exceptional earnings growth and free cash-flow generation.

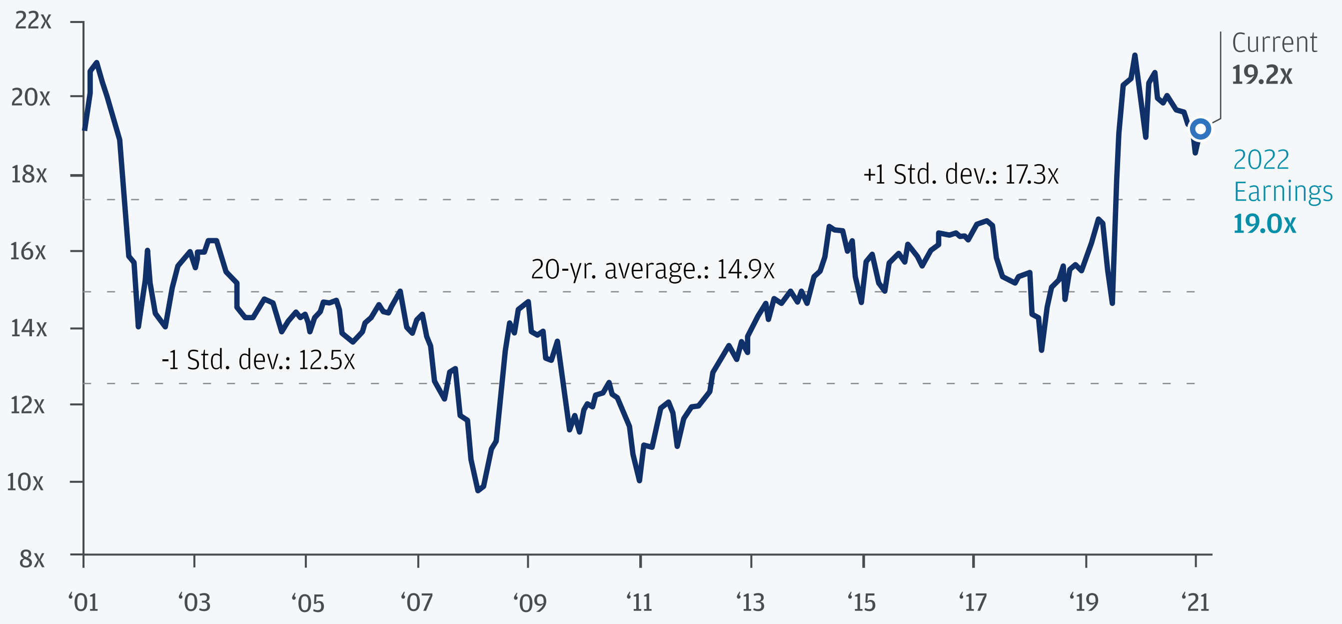
We have a more optimistic view of earnings growth than the consensus does for next year in most of the regions we cover, with the notable exception of China. We favor developed markets over emerging ones, but we care more about the quality of the underlying business drivers and sources of revenue than about jurisdiction. Some investors worry that profit margins will deteriorate. We believe price increases and productivity gains will offset rising input and labor costs.

Indeed, we think we are solidly in the "growth" phase of the market cycle—where earnings growth powers equity market returns and stock-pickers can earn their keep.

Importantly, we expect returns to be more equally distributed across sectors and companies, and not just concentrated in the biggest players with the strongest secular tailwinds. Imbalances may have accumulated in portfolios, given the dynamics of the previous cycle. Of continuing importance will be a balance between long-term secular growth companies that trade at "reasonable" prices and companies that benefit from near-term strength in the physical economy. The technology and financial sectors are two of our favorites for this reason. They serve as portfolio diversifiers because they react in the opposite direction to changes in interest rates, and both sectors should be driven higher by strong earnings growth. As we move further into mid-cycle, active managers should be able to add value to equity portfolios.

MSCI WORLD PRICE-TO-EARNINGS RATIO

MSCI World Forward Next 12 Months Price-to-Earnings (P/E) Ratio



Sources: MSCI, FactSet, J.P. Morgan Asset Management–Guide to the Markets. Price to earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months as provided by FactSet since 2001. Average P/E and standard deviations are calculated using 20 years of FactSet history. Data as of October 31, 2021.

Private investments

For many investors, private markets represent an untapped opportunity set.[5]

Non-public markets may be an especially attractive hunting ground for investments related to the megatrends we've identified (digital transformation, healthcare innovation and sustainability). For example, out of the over 100,000 global software companies, 97% are private. Smaller, private biotech companies are increasingly important sources of innovation for big pharmaceuticals. Only 30% of the top marketed drugs from large pharmaceutical companies were developed internally. We expect private markets to deliver a premium return relative to public markets, in part due to access to these growth drivers.

[5] Private investments are not suitable for all clients and are not offered in all channels.

Bonds

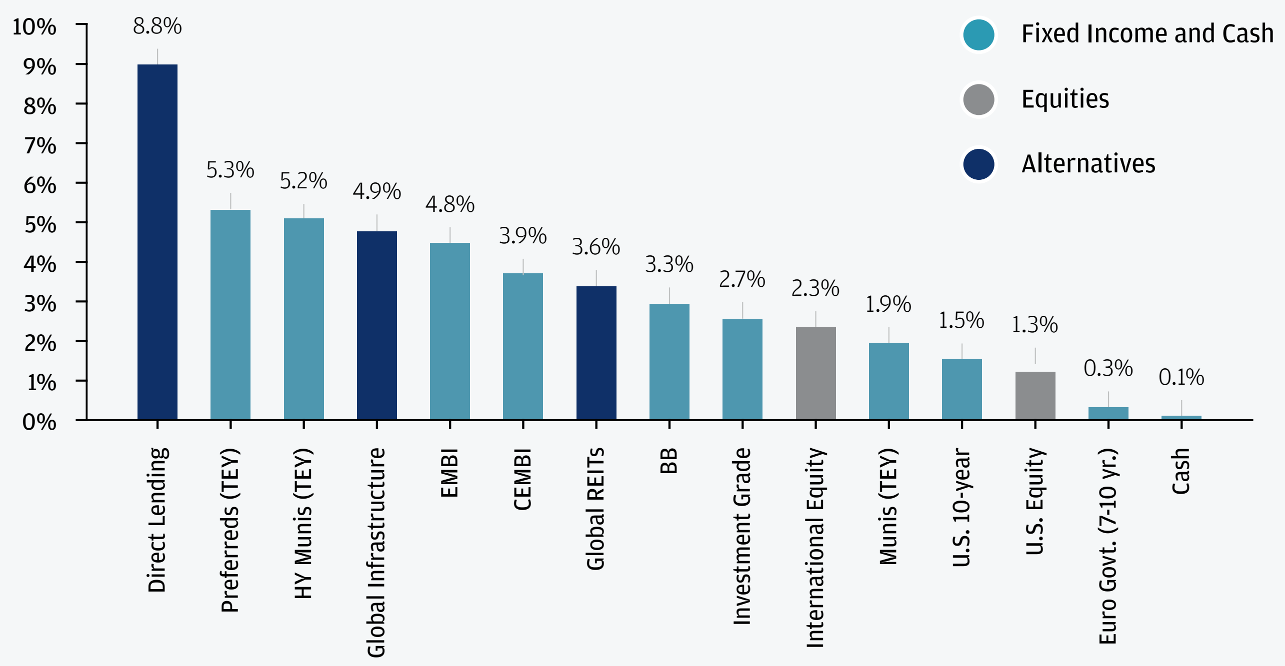
Core fixed income faces a challenging outlook, given historically low yields that are likely to continue to rise while inflation remains elevated.

Investors face twin challenges: finding yield and protecting against potential equity volatility while outpacing inflation.

Core bonds are still a crucial component of portfolio construction. While interest rates' low levels remove some of the potential capital appreciation that had been on offer in the event of an economic downturn, the asset class still provides protection against negative growth outcomes. However, coming into this year, we advocated using flexible active managers (either within fixed income or across asset classes) that could dynamically adjust portfolios based on changing market conditions to help complement core fixed income. This was a strategy that paid off in 2021, and it should continue to be additive to portfolios again in 2022.

GLOBAL YIELD SPECTRUM

Tax-equivalent, %



Sources: BAML, Barclays, Bloomberg, Clarkson, Cliffwater, Drewry Maritime Consultants, Federal Reserve, FTSE, MSCI, NCREIF, Bloomberg Finance L.P. FactSet, J.P. Morgan Asset Management. Yields. Data as of October 31, 2021, except Direct Lending and Global Infrastructure, which are as of June 30, 2020.

To be clear, we are incrementally more positive on core fixed income this year than we were last year. Although rates are low, they have risen materially over the past year, inching closer to the point where bonds could provide a more competitive risk-adjusted return relative to equities. For U.S. investors, especially those in high-tax states, municipal bonds may now look more attractive, given the move higher in yields.

In the near term, growing expectations for Federal Reserve rate hikes are giving investors an opportunity to move out of cash and into short-term bonds.

High yield bond valuations are not compelling (yields are relatively low and spreads are tight), but for good reason: High yield default rates in 2021 were the lowest on record.

However, we suggest relying on other parts of extended credit, such as leveraged loans, hybrid securities and private credit, to augment income with new capital. Investors could also consider bank-preferred equities, given strong capital buffers and preferential tax treatment in the United States.

For investors looking for inflation protection, we do not think Treasury inflation-protected securities or gold are good choices at the moment. Instead, we like to rely on assets whose cash flows are tied to inflation, such as equities with pricing power, direct real estate and infrastructure.

Broadly, diversified portfolios can still achieve investor goals—but they need to be thoughtfully designed and carefully managed.

GLOBAL BALANCED PORTFOLIOS HAVE HAD A STELLAR RUN

Cumulative total return of a global 60% equity, 40% fixed income portfolio

Source: Bloomberg Finance L.P. Data as of November 19, 2021.

Risk-aware, but ultimately optimistic

The global economy should emerge from the pandemic era stronger than it was before.

We already see a vibrant economic cycle underway. As we consider the interplay of economies and markets, we think investors should expect above-average returns for goal-aligned portfolios of risk assets in 2022.

As always, your investment decisions should reflect your goals, investment horizon and risk tolerance. Working with your advisors, you can build portfolios to mitigate any shocks that might derail the cycle. Certainly, you should prepare for a wide range of downside risks. But we are constructive on the outlook—and look to harvest the gains that could come from a prolonged period of growth.

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