



Global Investment Committee | August 2020

On the Markets

A Pause That Refreshes

During the past few months, equity markets have had a difficult time making much upside progress. We chalk it up to three things. First, the spike in COVID-19 cases suggests the coronavirus remains far from contained in the US and is challenging the pace of reopening of the economy, schools and our everyday activities. Next, polls are currently suggesting a possible Democratic sweep in this year's elections. This could usher in meaningful policy changes that are perceived to be less market friendly, such as higher corporate taxes. Finally, valuations for the most favored parts of the equity market have likely reached their limits, with some stocks potentially now in bubble territory.

On the last point, higher valuations can be justified for businesses that have proven to be quite resilient during this pandemic. Many of these stocks happen to be in sectors perceived to be secular growers—companies that can do well in any kind of economic environment. The pandemic has in many ways proven this thesis for many of these leaders. Finally, record-low, long-term interest rates boost the valuations for hypergrowth stocks as near-term profitability becomes less important and top line growth rules the day.

From my vantage point, such valuations have reached extreme levels that are very hard to justify using any reasonable assumption on the growth these companies can deliver. Secondly, the perceived resilience of certain business models during these past few months may be challenged in the second half of the year when it becomes clear that such businesses were simply beneficiaries of a pull-forward of demand as people worked from and stayed at home.

Just as in the physical world, momentum in financial markets often goes too far and eventually exceeds certain limits, with the proverbial pendulum swinging back and forth. While difficult to time, we think the pendulum for growth stocks, and other beneficiaries of the current environment, may have swung too far and is likely to start swinging back in the other direction. Given their large market capitalizations, a correction in the valuations of such stocks will likely hit the major indexes. Ultimately, this will be an opportunity to buy some of these great businesses at lower prices. It would also be a healthy development—and necessary condition—for the bull market that began in March to continue as we expect. For longer-term investors, it should be a pause that refreshes. ■

Michael Wilson

Chief Investment Officer
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ECONOMICS

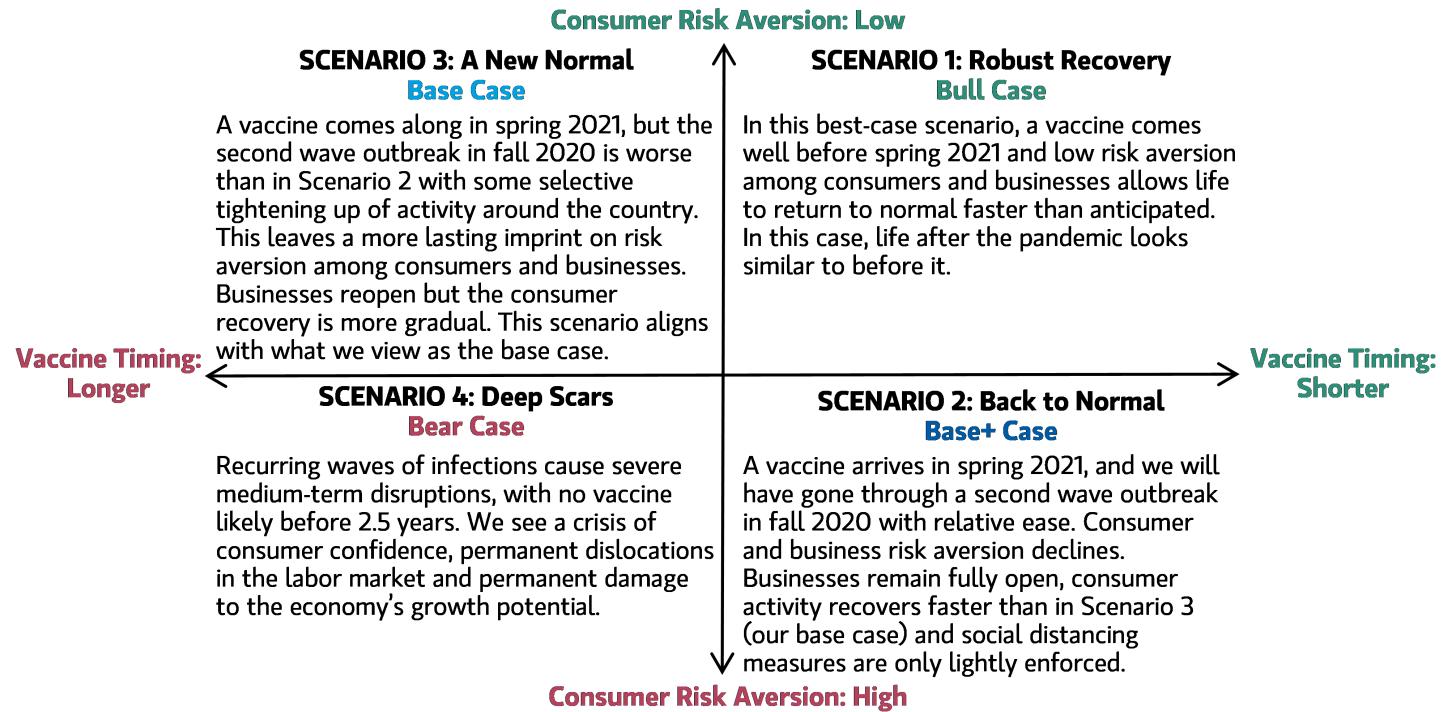
Life After COVID-19

Ellen Zentner, Chief US Economist, Morgan Stanley & Co.

Though we believe the COVID-19 recession will go down as the shortest in history, the magnitude of decline in activity is unparalleled. A recession as deep as this can cause lasting damage to the economy if the return to pre-COVID normalcy is prolonged. In the medium term, that is, the next three to five years, we could see lower trend output that reduces capital formation, weakens the labor market and affects human capital. In turn, such conditions hurt productivity and pump up fiscal deficits. The worse the crisis that plays out over the next 18 months is, the deeper the scars down the line. On the other hand, a rapid return to pre-COVID conditions could undo the damage sooner than expected.

The pace of the recovery during the next 18 months holds the key to the medium-term outlook. A classical deep recession can have a lasting impact on output, productivity and potential GDP, and the scenarios we explore are anchored in our recently published forecasts. In brief, our base case sees real GDP returning to its pre-COVID level by the end of 2021, but the bear and bull cases present significantly different outcomes. The implications informed by our scenarios are detailed in the table below.

Quadrant Framework for Life After COVID-19



Source: Morgan Stanley Research as of June 21, 2020

We've also identified countervailing forces that could offset the damage from job loss, lower consumption and other drags to the economy.

Accelerating Technology Trends. Our equity sector analysts detail the impacts of the recession on technology adoption (see page 5). This includes the acceleration of e-commerce gains in market share, the surprising uptake of telehealth by both patients and providers and corporate plans to expand investment in the cloud and automation. Rekindling productivity growth would be strongly positive for the longer-term outlook.

Working From Home. We explore the broad adoption—50% of US workers, based on our AlphaWise survey—of work-from-home (WFH) arrangements in the pandemic. If they persist at higher levels (30% in our base case versus 15% pre-COVID), productivity could receive an added boost. What's more, the workforce could expand as more women return to work and cohorts previously limited or excluded, such as the disabled, can now take a place at the table.

Output, Labor and Productivity. In our base case, productivity growth is likely to be more subdued in the near term and labor supply is also likely to remain soft owing to a multiyear period of depressed participation in the labor force.

Economic Variables Based on Four COVID-19 Scenarios (through 2025)

Scenario	Case	Potential GDP	Avg. Real GDP Growth	Cumulative Output Gain/Loss	Unemployment Rate	Productivity	Savings Rate	Trend CPI Inflation	Real Neutral Rate	Govt. Debt/GDP
1. Robust Recovery	Bull	2.50%	2.40%	+\$1.5 Trillion	3.5%	1.75%-2.0%	7.3%	2.4%-2.5%	1.25%	97%
2. Back to Normal	Base+	2.00	1.90	-2.9 Trillion	4.0	1.25	9.0	2.3-2.4	0.75	121
3. A New Normal	Base	1.70	1.40	-4.4 Trillion	4.3	1.00	10.0	2.0	0.50	126
4. Deep Scars	Bear	1.00-1.25	0.25	-15.0 Trillion	6.0	0.50	15.0	1.7-2.0	0.0	167

Source: Morgan Stanley Research as of June 21, 2020

We expect WFH arrangements to remain nearly twice pre-COVID levels and unemployment to be still elevated at 4.3% by the end of 2025. In this period, productivity growth stays anchored around 1%, and GDP growth averages 1.4% (see table above).

In our bull case, GDP growth averages 2.4% through 2025 as unemployment falls to 3.5% and productivity approaches 2%. Abating risk aversion in our back-to-normal scenario has GDP growth averaging 1.9% through 2025 and productivity reaching a trend pace of 1.25%. Unemployment declines to 4.0% by the end of 2025.

The crisis of confidence in our bear case drives average real GDP growth to just 0.25%, due to structurally higher unemployment of 6.0%, while productivity slumps to 0.5%.

Consumer Spending. Against the backdrop of higher levels of WFH, we use shifts in spending patterns when people move from working into retirement as a proxy to anticipate changes in consumption shares. In a best-case scenario, spending patterns return to pre-COVID trend, but if higher WFH arrangements are sustained, we expect substantial shifts away from apparel, food away from home and transportation (see table below). We expect the savings rate to decline as normal activity resumes, but in our base case, it remains elevated at 10.0% due to lingering higher risk aversion. In a more robust recovery, the savings rate drifts back down to the 7.3% average of the past cycle. Due to a slower decline in unemployment in the back-to-normal scenario, the savings

rate settles at 9.0% over the long run. The high risk aversion and weak labor market recovery in the bear case lifts the savings rate to twice the pre-COVID level over the long run, at 15.0%.

Inflation. Longer term, we expect inflation to reemerge more forcefully than in the three previous cycles, particularly in the US. In our base case, we envision a steeper normalization path for the US economy than after the financial crisis. The level of coordinated expansion of monetary and fiscal policy is also likely to be inflationary. We expect Consumer Price Index (CPI) inflation to run right at 2.0% by 2021 and through 2025. In our bull case, the positive output gap by end of 2025 and structural shifts imply CPI inflation trending around 2.4% to 2.5%. In our base-case-plus scenario, inflation is centered at around the Federal Reserve's 2.0% goal for the Personal Consumption Expenditures Index and CPI trends around 2.3% to 2.4%. With persistent slack in the economy under our bearish scenario, underlying CPI inflation remains in a soft 1.7% to 2.0% range.

Monetary Policy. With the ultimate goal of lifting the standard of living for all Americans, monetary policy will need to remain as accommodative as necessary to significantly improve the economic situation of the most disadvantaged individuals and use policy to aggressively pursue a rapid return to pre-COVID levels of unemployment. With respect to the longer-run neutral rate of interest, the interest rate that is neither an economic stimulant nor restraint, a slower growth rate of potential output maps into an appropriate longer-run, or sustainable, stance of monetary policy.

From that level, based on our scenarios for potential output, in our bullish scenario, higher longer-run potential output maps into a higher longer-run real neutral rate of 1.25%, consistent with a 3.25% longer-run nominal neutral rate. In our base-case-plus scenario, the real neutral rate rises to 0.75%, consistent with a 2.75% longer-run nominal neutral rate. In our base case, the real neutral rate remains broadly unchanged around the Fed's median 0.50% estimate, while in the bear case it falls to zero.

How Consumer Spending Could Change Five Years Forward

Category	Five-Yr. Avg.	Bull Case	Base+ Case	Base Case	Bear Case
Food at Home	39.9%	38.5%	38.4%	38.4%	38.3%
Shelter	19.8	21.0	20.7	20.6	20.5
Transportation	16.5	15.5	15.4	15.4	15.4
Food Away	7.6	9.2	9.7	9.9	10.1
Other	7.3	7.21	7.3	7.3	7.4
Health Care	5.6	5.9	5.8	5.7	5.7
Apparel	3.2	2.8	2.7	2.7	2.7

Source: Morgan Stanley Research as of June 21, 2020

Please refer to important information, disclosures and qualifications at the end of this material.

Morgan Stanley Wealth Management

Deficits. The long-run growth trajectory for the economy is the key determinant of the fiscal trajectory. Taking into account the fiscal stimulus delivered after COVID, under current law assumptions, the output trends we have laid out suggest that fiscal deficits may be materially wider over the medium term than previously expected, both on an absolute basis and as a percent of GDP. This outcome is only averted in our most bullish scenario, where we estimate deficits will be on average \$1.6 trillion per year from 2020 through 2025, with the deficit falling below \$1 trillion in each fiscal year from 2023 through 2025. In that scenario government debt-to-GDP rises to 97% of GDP in 2025 from 79.2% in 2019.

Other scenarios we consider have much starker implications for the fiscal deficits. In our bear case, we estimate that

deficits will average \$3.9 trillion per year for the next five years, and will end 2025 at some \$3.6 trillion, raising government debt as a percent of GDP to an outsized 167%. In a back-to-normal case, we estimate that deficits will average \$2.5 trillion per year, but slightly stronger growth outcomes mean debt levels would only rise to 121% of GDP, while in our base case we expect deficits will average \$2.6 trillion per year, raising debt-to-GDP to 126% at the end of 2025. ■

This article was excerpted from the Morgan Stanley & Co. report "Life After Covid," June 21, 2020. For a copy of the report, contact your Financial Advisor.

EQUITIES

Emerging Themes in Life After COVID-19

Adam Virgadamo, US Equity Strategist, Morgan Stanley & Co.

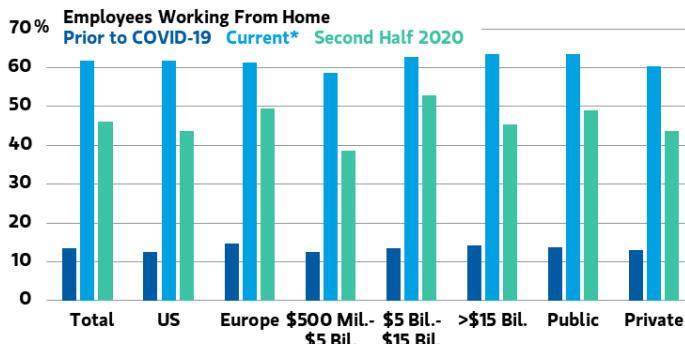
Morgan Stanley & Co. has been compiling views on a post-COVID world from dozens of analysts covering hundreds of companies, and we have garnered some common themes. At the core of each theme is what the sum of millions of individual choices may look like as we cope with the virus, and how such choices today may change tastes and preferences in the future. We discuss six high level themes here. For the complete report, contact your Financial Advisor.

Work From Home

With 50% of the US workforce now working from home, US employers have effectively been forced into a radical experimental shift in the locations of their workforce en masse. Industries will vary in how and when workers return to the office, but in general, we think the experiment was a relative success. We think that success will likely mean a shift in worker locations well after the threat of COVID-19 is a memory. The implications of such a shift are nuanced and varied.

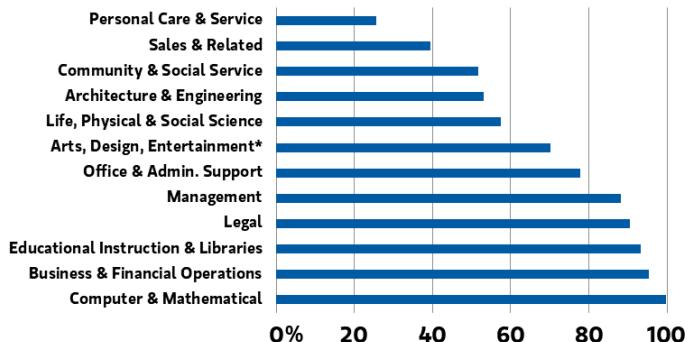
Our analysis indicates overall US work-from-home capacity should be about 40% (see chart below). To arrive at an upper bound for the percentage of the US labor force that may be able to perform more of their job duties from home, we conducted a detailed bottom-up analysis. First, we assessed the feasibility of working at home for some 750 occupations. We arrived at subjective estimates based on whether the occupation has an information component, has a strong individual work component, does not require in-person contact with customers and does not require on-site physical work. We compared those results with numbers from the Occupational Information Network surveys, which also provides estimates for remote work capabilities by industry (see chart upper right).

Working From Home Not Just a Passing Phase



Work From Home Is Possible in Many Fields

Work-From-Home Potential



*Includes sports and media

Source: Occupational Information Network, Bureau of Labor Statistics, Morgan Stanley Research as of June 21, 2020

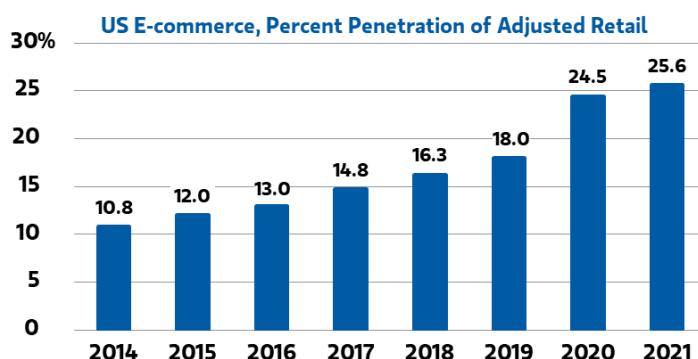
E-commerce

More people working from home likely means more shopping from home as well. The move to the electronification of consumption is gaining even more speed as the risk aversion of consumers not wanting to leave home is added to secular trends already in place.

Trends have accelerated monthly as shoppers have moved from stocking up (March), to buying more essentials and home items (March/April), to broad-based, larger, more frequent buying (April to now). Our bottom-up e-commerce model leads us to estimate 60% year-over-year growth in e-commerce in April and about 65% for May/June. As in other online behaviors, we think part of this acceleration is structural, with more shoppers, spending and categories per shopper (namely grocery) moving online faster. All told, we estimate COVID-19 has pulled forward about three years of e-commerce adoption (see chart, page 6).

We believe that consumers who shift to e-commerce now are unlikely to return fully to in-person shopping even after the threat of COVID-19 has faded. This means new opportunities for the internet giants in small business connectivity and in helping retailers build out their digital offerings. Ridesharing firms as logistics and last-mile delivery partners, industrial REITs as the warehouse support beyond e-commerce and payments firms are all among the beneficiaries. Traditional retailers with large physical infrastructure, companies without the ability to scale a digital offering and landlords to a rationalizing retail footprint are all among the more challenged cohorts from this trend.

This Year Accelerated E-commerce's Market Share



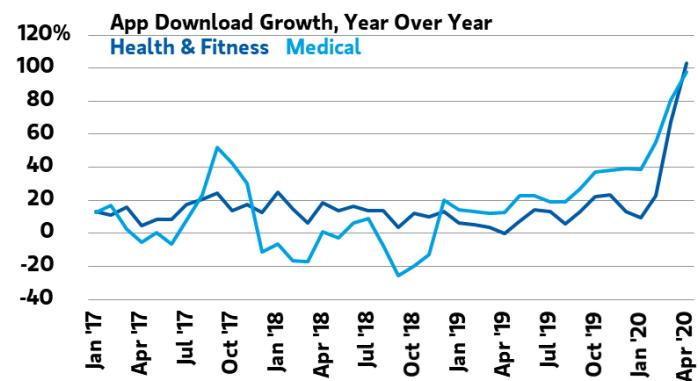
Source: Company data, Morgan Stanley Research as of June 21, 2020

E-services

The trend toward increased purchases of goods via the internet has been a freight train, but the consumption of services online has been slower to catch on. COVID-19 is turbocharging digital adoption by the laggards. Areas like telehealth, online gambling and gaming, wealth management and banking have all seen further moves toward a digital model. For example, downloads of health/fitness and medical apps are up nearly 100% year over year (see chart below).

The lessons from goods-based online consumption mean that the rewards of scale will likely drive further consolidation ahead, especially in areas such as hospitals, medical groups and wealth management. Consumer tech may also see a relative boost on these trends as texting photos of heart rate monitors to a doctor leaves a lot of room for creative companies to improve the model. Once again, real estate owners and construction may be relatively disadvantaged here as consolidation and the lower need for a physical presence are headwinds to capacity over time.

COVID-19 Provided a Shot in the Arm for Health-Related Apps



Source: Sensor Tower, Morgan Stanley Research as of June 21, 2020

Experiences & Travel

Until consumers feel generally more comfortable attending public events/places with several people, there are pockets of the economy that will have to adapt. Restaurants have already been quick to adopt more robust takeout and delivery business models. Once again, those with the better digital offerings are winning. Facilitators such as the providers of direct-to-consumer tech and delivery options can also be beneficiaries in this world. Offerings such as online gaming in lieu of physical and direct-to-consumer media/movie releases are also examples of the kind of change we might expect. A nonexhaustive list of where we see challenges: restaurants, which also affect agriculture demand and therefore farm equipment demand; gaming/lodging/cruising; theaters and concerts and the ticketing providers to such events; conference organizers and staffing firms; and landlords as physical store counts are rationalized.

How and when travel outside the home in any form bounces back is an open question. We do not think that air travel is secularly impaired, though it may be for the foreseeable future. Business travel in particular is likely to be lower for longer, which affects not only the travel providers but hotel occupancy, restaurant demand, providers of in-flight Wi-Fi and construction of new capacity in any of these fields. Diminished use of public transportation could impact municipal budgets and actually increase the demand for autos, where there is also a debate around the longer-term transitions to electric vehicle adoption as gasoline-based alternatives remain more economically viable. Other areas that may be seeing a boost as travel is slow to recover are recreational vehicles and internet-based advertising to newly stationary consumers.

Tech Enables Transformation

Underlying many of the shifts noted above is technology that allows for changes in business models at a scale not possible even during the last recession. We expect more industries to become increasingly digital as effective application of technology changes business models, whether to defend market share in a new reality or take share in new opportunities. This will be key to the transitions of most businesses in the post-COVID world. Software, internet and semiconductor stocks benefit most from increasing use of cloud, data and analytics, and collaboration tools. By contrast, information technology hardware stocks are relatively challenged, as demand for on-premise data center infrastructure and office printing shrinks at even faster rates. We also see opportunity for vendors in augmented and virtual reality; however, adoption is relatively low today and the timing and size of the addressable market are less clear.

Social Reallocations

Broadly speaking, we expect that the COVID-19 crisis will further catalyze an increased focus on environmental, social and governance factors and sustainability. While the long-term sustainability implications are widespread across a range of themes and topics, we see two developments in particular that investors should consider. The first, which has direct implications for the US consumer sector, are potential fundamental changes in terms of human capital management

and the social safety nets that companies are required (by regulatory means or other) to provide their employees. Separately, while not directly linked to the US consumer, the implications that COVID-19 may have on the trajectory of climate change and decarbonization will be a critical thematic element to consider for many of the sectors previously discussed in this report, particularly given divisive political dynamics around environmental policies in the US. ■

EQUITIES

Public BDCs Have Had a Rocky Year, Too

John Duggan, Investment Strategist, Morgan Stanley Wealth Management

As with other leveraged credit sectors, the path for publicly traded business development companies (BDCs) in 2020 has been rocky—but it's also been differentiated, as the magnitude of price swings and timing of bounce backs have been driven by factors unique to BDCs. Following a partial, but substantial, rebound, the outlook is again somewhat obscured, making this a good time for potential investors to ponder the latest signposts.

Public BDCs are exchange-listed portfolios that mostly invest in the relatively illiquid and frequently nonrated debt of private, middle-market companies. Often working with private equity partners, they seek to finance these businesses while generating pass-through income derived from the coupon payments and appreciation of underlying floating-rate loans. Having grown substantially after the financial crisis, the sector now comprises 50 funds with a total market capitalization of \$33.2 billion and an average dividend yield of 11.5%.

WEAK INITIAL REBOUNDS. BDCs fell more sharply than high yield bonds through late March, as the combination of leverage, widening discounts and concerns over structural viability took their toll. Once the bottom for the high yield sector was reached, many BDCs floundered instead of rebounding forcefully. The primary reason? Investors were hesitant to commit before the sector's traditionally late earnings season, at which point all-important net asset values (NAVs), updated only four times a year, were set to reveal the pandemic's impact on the sector. While not pretty—quarterly NAVs, on average, were down approximately 15% sequentially—the declines, accompanied by mixed manager commentary and earnings reports, were less severe than feared, and BDCs staged a relief rally. From May 5, when the sector's largest component reported, to June 8, the Wells Fargo Business Development Company Index was up 29.9%, compared with 8.2% for the ICE BofA US High Yield Index. Since then, BDCs have given back some of those gains, in sympathy with broader market gyrations and ongoing economic concerns (see chart).

Going forward, we expect several themes to dominate. Although discounts to NAV, at 27.3%, on average, price in further declines, it's important to ask where valuations are headed. On the one hand, investors can take solace in the recent price recovery of syndicated senior loans, which, despite financing larger companies, tend to align directionally with the middle market. Since March 31, the S&P/LSTA Leveraged Loan Price Index has risen to 91.63 from 82.85. Some of that technical price boost to BDC holdings is likely

to be offset by slower portfolio growth and a ramp-up of nonaccruals, which are akin to defaults in the private debt market. Having bottomed in 2019 in the 2.0%-to-3.0% range on an original-cost basis, nonaccrual rates as a percent of BDC assets under management ticked up by approximately 200 basis points in 2020's first quarter. According to a survey by Carl Marks Advisors, participants in the middle market expect defaults to reach at least 10% in the second half of the year. Portfolios with outsized exposure to energy, leisure and retail, along with more second-lien and subordinated holdings, could be hit harder than higher-quality and more diversified peers. Indeed, while the second quarter earnings season has just begun, some of the larger funds released preliminary results last month indicating partial NAV recoveries.

MIXED OUTLOOK. Expect net earnings, which fuel BDC distributions to shareholders, also to be watched closely. As with NAV projections, the outlook is mixed. Nonaccruals, which affect earnings as well as valuations, should be a detractor. Also, increases in payment-in-kind income and reduced rates on short-term LIBOR, to which nearly all BDC loan coupons are linked, could be negatives. Mitigating those factors are the 100-basis-point LIBOR floors embedded in most middle-market loans and lower borrowing costs on floating-rate BDC debt. Since March 31, 16 BDCs have cut their regular quarterly dividends, and more are likely to follow, especially among those without meaningful spillover income or the ability to judiciously increase leverage.

Investors should note the ample BDC opportunities at current valuations. In our view, the best performers are likely to be those that combine management expertise navigating distressed markets with sufficient dry powder and advantageous platform relationships. As usual, the high-risk/high-reward public BDC sector should be approached with a healthy dose of caution as we move through ongoing bouts of volatility. ■

BDC Index Recovers in Price, but Remains Far From Its 2020 High



Source: Bloomberg as of July 31, 2020

FIXED INCOME

Amid the Pandemic, Muni Bonds Show Stability

Daryl Helsing, CFA, Associate, Morgan Stanley Wealth Management

Matthew Gastall, Investment Strategist, Morgan Stanley Wealth Management

Federal Reserve monetary policy, the CARES Act, creation of the Municipal Liquidity Facility (MLF) and the now supportive seasonal backdrop have helped the market to maintain impressive stability throughout the pandemic. This strength has been demonstrated during a period of virus-related shutdowns, increased unemployment, travel restrictions, and other anomalous disruptions that, together, have resulted in unbudgeted expenditure increases and sudden declines in state and local government tax revenues.

RELATIVE VALUE. Despite the challenges, high-quality municipals have still kept pace with the price action of US Treasuries as those yields have revisited all-time lows. In fact, the yield on the 10-year AAA municipal benchmark declined to a record low 0.65% on July 31 from a peak of 2.79% in March. This has helped municipal/Treasury yield ratios to improve, with the 10-year ratio strengthening to roughly 120% after breaching the all-time high of 370% during March's market volatility. We believe this metric may remain elevated to the long-term average of 83%, due to probability that pandemic-related credit issues will surface—particularly with nonessential public issuers.

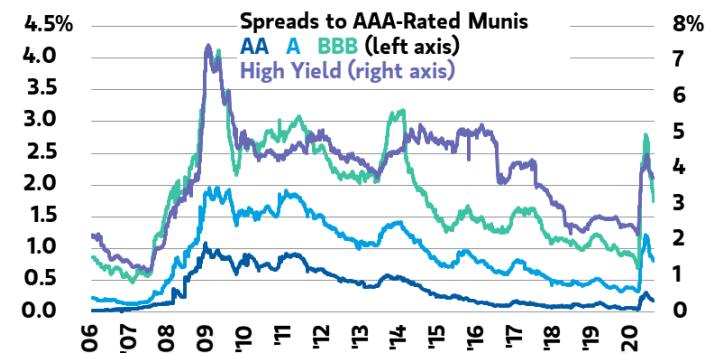
According to recent projections from the Center for Budget and Policy Priorities, state budget shortfalls over the course of the next three fiscal years will total \$555 billion. While appreciating how challenging this may be to financial profiles, it is important to acknowledge the authority most states control to help alleviate fiscal pressures; they include raising taxes, reducing payrolls, cutting nonessential expenditures, leveraging deficit and interfund borrowing, bonding, borrowing from the Federal Reserve's Municipal Liquidity Facility and curbing funding for certain programs. Considering a significant portion of local government revenues are derived from state government aid, state fiscal austerity will likely have negative downstream repercussions for many local governments and select revenue systems.

TESTING MUNI CREDIT. At this juncture it appears municipal credit quality is going to be tested in unprecedented ways. Thus far since the onset of the crisis, credit rating actions taken by the agencies have predominantly been negative outlook revisions. Of the 1,265 ratings actions to date related to COVID-19 taken by S&P Global Ratings within the public finance sector, only 63 have been downgrades (as of July 24). However, robust negative outlook revisions indicate we are likely headed into a wave of downgrades alongside other credit-related challenges. Should such developments

transpire, market sentiment may be tested. Selling may also spill over to cause broader market weakness.

Generally speaking, credit spreads on lower-rated bonds and within highly affected sectors such as tourism, transportation, hospitals/health care and higher education remain wider than when they entered the crisis; yet they are much tighter than levels seen in prior downturns. Having started the year trading 38 and 90 basis points wider than AAA-rated bonds, credit spreads for the A- and BBB-rated indexes are now at 80 and 175 basis points, respectively, which is close to the averages posted since the financial crisis (see chart). While another round of federal aid may be forthcoming, this support may be insufficient to alleviate the full extent of the damage wrought across the various segments of public finance.

Muni Spreads Tighter Now Than in Past Downturns



Source: Bloomberg as of July 31, 2020

UP IN QUALITY. Given these dynamics, we recommend that investors complete portfolio reviews and exercise an "up in quality" investment approach while the market remains firm. Maintain a focus on essential sectors, such as highly rated state general obligation securities and essential-service public utility revenue bonds. Contrasting essential entities with those not considered so, municipals may soon experience a tale of two markets, as those deemed critical for the public benefit are often bolstered by noncyclical operating revenues and exogenous support.

While credit-specific opportunities may exist, we advocate investors exercise caution with structures that are not traditionally viewed as foundational mainstays of the public finance arena. We believe this constructive period provides an advantageous, and possibly final, opportunity to complete portfolio reviews and upgrade credit quality. For further information regarding our market outlook and recommended investment strategy, please see the July 22 issue of *Municipal Bond Monthly*. ■

Short Takes

US Stocks Rise Even Though the Dollar Outlook Is Bearish

At first the 2020 recession increased the demand of safe-haven assets such as US Treasuries, which in turn elevated the US dollar to its highest level since 2017. But as markets recovered, demand for Treasuries softened, reducing the dollar's strength. Coordinated policy action by global central banks and an unprecedented fiscal stimulus have supported a global recovery, with the S&P 500 rising 46% during the four months since the bear market low. During the same period, the dollar declined 7% as measured by the US Dollar Index (see chart). That's because the Federal Reserve has been more aggressive than other central banks, effectively reducing the real interest rate advantage that the US had over other economies—yet another negative for the greenback. Since the Fed has also indicated that it will continue to support zero-bound interest rates, we expect the dollar to remain in a bearish trend.—*Vibhor Dave*



Source: Bloomberg as of July 31, 2020

Copper/Gold Ratio Signals Better Economy, Yet Bond Yield Hasn't Budged

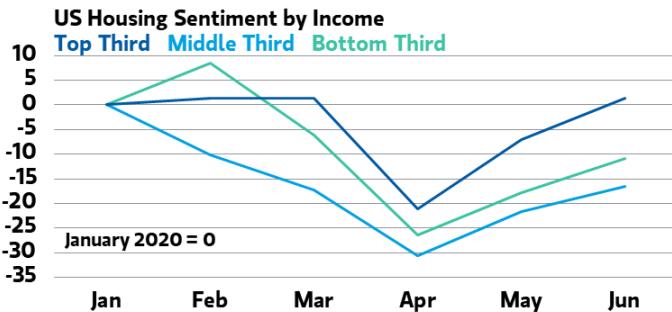


Source: Bloomberg as of July 31, 2020

Historically, the copper/gold ratio advances as economic activity improves and demand for copper, an industrial metal, accelerates. When gold outperforms, the indicator turns downward. Until recently, the ratio's correlation to the 10-year US Treasury yield has been quite high, which makes sense given gold outperforms and yields fall during times of panic, and copper outperforms and yields rise during times of growth (see chart). The copper/gold ratio's recent ascent suggests reflationary forces may be building in the economy. So why haven't bond yields followed? The Federal Reserve's aggressive bond buying has put a lid on interest rates.—*Chris Baxter*

Sentiment Toward Housing Varies by Income Cohorts

Recessions typically also mean the housing market slumps, as consumers are less willing to make significant purchases given employment and market uncertainties. This time, however, home prices are increasing, demand outweighs supply and homebuilder confidence is back near decade highs. While all-time low mortgage rates near 3% increase housing affordability, not all consumers see it the same way. Using the January 2020 University of Michigan Consumer Sentiment Index as a starting point, the top one-third of earners' sentiment toward housing has returned to prerecession levels (see chart). Notably, the bottom third sits above the middle-income tier. Sentiment in the low-income cohort has likely benefited from the extra \$600 per week in unemployment benefits. If Congress decides to discontinue these benefits, the lower third's positive sentiment may disappear with them.—*Nick Lentini*



Source: Morgan Stanley & Co., University of Michigan as of July 6, 2020

ALTERNATIVES

Charting a Course in Commodities

Michael Suchanick, Investment Analyst, Morgan Stanley Wealth Management

Gray Perkins, Associate, Morgan Stanley Wealth Management

Jodie Gunzberg, Chief Institutional Investment Strategist, Morgan Stanley Wealth Management

Although typically a small part of diversified portfolios, commodities are generating renewed interest, partly due to their unique characteristics compared with other asset classes. Inclusion into a portfolio may serve several purposes, as historically commodities have demonstrated low correlation to equities and bonds over longer periods (see table). They may act as a hedge against inflation or a weakening US dollar, both of which are considered visible risks given unprecedented fiscal and monetary actions taken this year by global governments and central banks. As such, Morgan Stanley Wealth Management's Global Investment Committee (GIC) recommends an overweight in commodities given the prospects for a reflationary scenario to unfold. However, as investors look to access commodities, there are a number of considerations to keep in mind.

How Commodities Help Diversify a Portfolio

Bloomberg Commodity Index Correlations				
Currency/Index	Five Years	10 Years	15 Years	20 Years
US Dollar	-0.32	-0.59	-0.61	-0.53
S&P 500	0.49	0.55	0.50	0.40
MSCI EAFE	0.53	0.62	0.61	0.53
MSCI Emerging Markets	0.61	0.65	0.65	0.55
Bloomberg Barclays US Aggregate	-0.11	-0.10	0.02	0.02

Source: PSN Informa as of June 30, 2020

PRACTICALITY MATTERS. Newer investors to the commodities field may ask, "Why can't I buy at today's spot price?" Herein lies the reality that the storage of many physical commodities is typically not practical for individuals. Indeed, what would one do with 40,000 pounds of lean hogs? While purchasing at spot price may be practical in some instances, such as gold, an alternative to consider is regulated commodity futures. These contracts are often used as a tool by both producers and processors of commodities to hedge their exposures from fluctuations in the spot price.

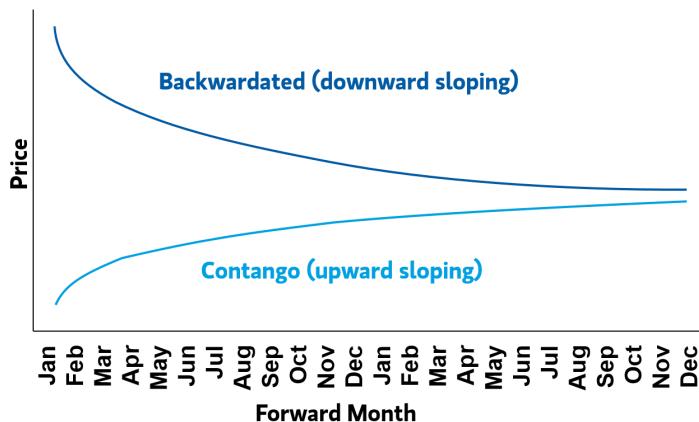
The price of futures differs from spot prices, and from one monthly future contract to the next, as the futures price incorporates the cost of storage less the "convenience yield" of receiving the commodity immediately. Investing in a diversified commodity futures portfolio is necessary to obtain

the return that comes from five major sources: collateral, typically short-term fixed income securities, which provide expected inflation plus a real rate of return; expectational variance, derived from supply-side shocks such as an oil spill or drought; the convenience yield; risk premium, which is the price uncertainty between producers and processors; and the frequency of rebalancing. These all contribute to achieving the diversification and inflation hedge commodities offer as an asset class.

ROLLING CONTRACTS. Since commodity futures contracts expire periodically, portfolio managers "roll" contracts near expiration to later-dated ones to avoid taking physical delivery—that is, selling the contracts near expiration and replacing them with longer-date contracts. A major contributor to excess and total return of commodity strategies is the "roll yield," which can be positive or negative, according to Robert J. Greer, who the Chicago Mercantile Exchange calls "the Godfather of Commodity Investing." When there is excess inventory, later-dated futures contracts are more expensive than the near-term contracts, causing an upward sloping price curve in a condition called contango (see chart). This condition dilutes spot returns with a negative roll yield due to the cost of purchasing more expensive contracts as they are rolled into subsequent months. Conversely, when there is a shortage, later-dated contracts are priced below those with near expiration in a condition called backwardation that is profitable from its positive roll yield. With that said, commodity forward curves are currently more likely to be in contango, thereby weighing on returns.

Individual futures contracts are not accessible to retail investors unless they open a margin account, but futures-based exposure is available within both mutual fund and exchange-traded fund (ETF) formats. Mutual funds generally have baskets of commodity futures, while ETFs offer both single and broad commodity portfolios. Many of the first

Consider the "Roll" In Commodity Futures



Source: PIMCO

ETFs that were designed to provide passive commodity exposure in a futures format are structured as commodity pools, thereby subjecting shareholders to a Schedule K-1, which can be a headache come tax time.

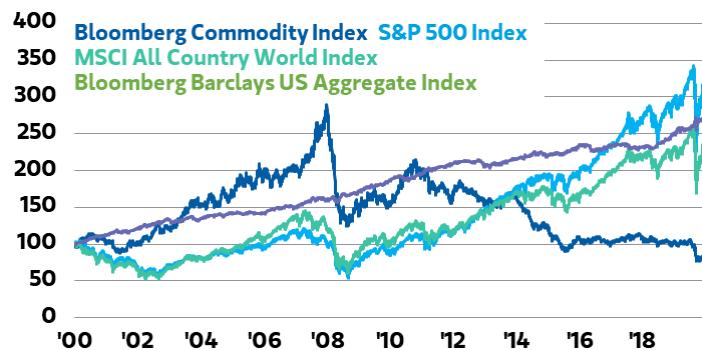
However, many newer ETFs circumvent this issue by investing through a subsidiary, permitting the fund to be regulated under the Investment Company Act of 1940, as are mutual funds—and, like mutual funds, they do their tax reporting in the simpler Form 1099.

Investing in commodities through equities is another solution. Many products, including ETFs or mutual funds, offer broad exposure to companies involved with commodities, including energy, agriculture or metals. This approach may be useful for investors with restrictions preventing them from using futures strategies, or for obtaining exposure to commodities without deep futures markets. Importantly, commodity-related equities differ from commodity futures. Company-level risk factors such as management decisions and the hedging of commodities themselves can translate to weaker return correlations with underlying commodities and increased links to broader equity market movements.

UNDERPERFORMER. Commodities, both futures and equities, have dramatically underperformed US markets during the past decade. The Bloomberg Commodity Index, currently 41% precious and base metals, 35% agriculture and 24% energy futures contracts, has lagged the S&P 500 by 18.4% during the past five years ended June 30, and by 19.8% during the

past 10 years on an annualized total-return basis (see chart). The index has only outperformed the S&P 500 in one of the past 10 calendar years and six of the past 20, although the limited outperformance has been meaningful; in both 2000 and 2002, the index outpaced the S&P 500 by more than 4,000 basis points. Overall, longer-term commodity underperformance plays into the GIC's positive view for what they see as an undervalued asset. For those looking to exploit this potential opportunity through a fund format, either futures or equity-based, we suggest seeking broad, active strategies whereby managers can help mitigate some of the risks. ■

Commodities Index Has Long Been a Relative Laggard



All indexes rebased to 100 and represent total-return versions.

Source: Bloomberg, Morgan Stanley Wealth Management ETF & CEF Research as of June 30, 2020

Q&A

Investing With a Concern About Climate Change

Despite increasing discussion about the role of fossil fuels in an investment portfolio, many investors remain unsure of the impact of greenhouse gases and climate change on their investments. As the effects of climate change accelerate, they will likely affect business models, corporate profitability and government budgets. To address such issues and challenges, Susan McDowell and Emily Thomas from the Investing with Impact team within Global Investment Manager Analysis (GIMA) spoke with Stephen M. Liberatore, lead portfolio manager and head of the ESG/Fixed Income Strategy team at Nuveen, and Karina Funk, a portfolio manager on the Brown Advisory Large Cap Sustainable Growth strategy. They shared their thoughts on considering climate change and fossil fuel factors when investing in the public equity and fixed income markets, and how this data can potentially add value for shareholders. The following is an edited version of their conversation.

EMILY THOMAS (ET): Can you provide an overview of how awareness of climate change became an investment concern?

KARINA FUNK (KF): It's been an evolution, from screening out the "bad guys" like oil, to now screening in the good companies and trying to make an impact. In the 1970s, shareholder activists started to use proxy voting to leverage their concerns. In the 1980s, we saw some of the first investment management companies incorporate environmental, sustainable and governance (ESG) factors into their investment philosophy—though they may have called it "impact," "values alignment" or "socially responsible" investing.

By 2010, the United Nations Principles for Responsible Investment, largely considered the industry's premier membership of sustainable investing professionals, had fewer than 800 signatories. This year, there are more than 7,000, representing over \$80 trillion in assets under management. In 2012, the 350.org divestment movement—the number 350 is the parts per million in the atmosphere that's considered safe in terms of greenhouse gas concentrations—started to gain steam with the goal of avoiding the worst effects of global warming. By March of this year, nearly 1,200 institutions and more than 58,000 individuals representing \$14 trillion in assets worldwide had committed or began committing to a divestment from fossil fuels.

The bottom line, though, is that climate change and fossil fuel awareness investing mean different things to different people. Do you just avoid the largest polluters? Do you include or avoid upstream or downstream service providers? There are also the fundamentals of finding companies with durable growth opportunities and sustainable advantages.

ET: Steve, how do you apply these practices to fixed income?

STEPHEN LIBERATORE (SL): Fixed income is a little more nascent in ESG investing, but we have a unique perspective. Besides being able to identify industry leaders that are doing their best in mitigating their climate impact, we also have the ability to control how the proceeds of debt issues are utilized.

Depending upon the nature of the project, we look for a variety of different data points, and then through the impact reporting that we provide, try to generate something that our investors can see not only in their financial performance, but also in the impact that they're making through their investments. We focus on transparency and disclosure. So for a security to fit into our impact framework, it has to have a direct, measurable social or environmental outcome assessment with it.

We also try to get a number that gives the magnitude of the impact, and translate that information into something that the common investor would understand. It's not just reporting that the investments we made generated "886.3 million megawatt hours of renewable energy," but rather "the equivalent of powering 75 million average us homes for one year." That helps give a sense of the magnitude of the investment that you're making.

KF: The entire reason why we do a lot of sustainability research is because we think it helps us turn over more rocks, get more information and put the mosaic together to understand the most basic questions: How does this company make money? And do I want to own it for the long term?

Just like there are no shortcuts to understanding whether a company has high barriers to entry, or whether the business model is getting stronger, or if the management team is trustworthy, similarly, there are also no shortcuts to understanding ESG risks and opportunities.

In terms of ESG, questions we ask include: Does the company have a handle on labor relations? Does it have business controversies or environmental liabilities? Are the management teams making the right investments for their own long-term sustainability in their own economic self-interest so that they can continue to thrive? Is the company poised to grow revenues faster by offering a product or service that helps customers be more efficient?

To gain investment insights, we need to see tangible evidence that these sustainability strategies are adding to shareholder value in specific ways—but that alone doesn't reveal if a company enjoys persistent drivers of growth or has a resilient business model; there's no shortcut to gaining these insights. However, when combined with additional fundamental due diligence, I think they inform better investment decisions.

SUSAN McDOWELL (SM): How is the overall landscape evolving?

SL: I think what's really interesting is that on the fixed income side, we're seeing much more of a growing diversification of opportunities with different types of transactions coming to market. This helps to broaden out the eligibility in the universe and offers a far more robust universe to choose from.

Underlying that is an indication that issuers are responding to investor demand for more environmentally friendly options in their investment portfolio. It also helps to continue to get issuers comfortable with providing the information that we look for and we ask for.

We still have plenty of conversations with issuers where they're either uncomfortable or unable to provide impact data, but the continual push for environmentally friendly opportunities is making issuers recognize the need for them to respond by providing this level of disclosure and information.

Last year, on the environmental side, we saw under \$300 billion in "green bond" issuance, which pushed the amount of outstanding green bonds north of \$1 trillion for the first time. Also, a lot of those issuers now are contemplating COVID-19-related relief packages. So I think we're going to see a shift in the impact universe to having a higher proportion of social bonds and sustainability bonds being issued.

KF: Sustainability really affects all levels of the company, especially when it comes to the long term, and we're finding that you can learn so much about a company's strategy, operations and prospects for growth by looking at this information. We're going to continue to see a lot more attention here, and investors will use these ESG insights to engage with companies. They don't have to wait until proxy voting season anymore.

SM: Regarding the economic disruptions related to the coronavirus crisis, there have been articles about positive impacts such as cleaner water in Venice and lower carbon footprint from decreased travel—but we've also heard about the negatives, such as increased use of single-use plastics. How do you anticipate this affecting longer-term trends?

KF: It's hard to draw any sort of parallels between the COVID-19 crisis and climate change, and painting that as good news. Yes, transportation emissions are down, and the photos of some large urban areas with a lack of air pollution are really stark. So the environmental impact in many ways is being decreased.

But there's a human cost. Let's not forget that climate change exacerbates the risk of COVID-19: Data shows that those

most exposed to air pollution are at greater risk of COVID-19.

Longer term, the hope is that we learn from this. This pandemic has demonstrated how humans in general now find it really hard to invest to mitigate massive and unpredictable "black swan" events. Similarly, when it comes to climate change, humans tend to assign a high discount rate to events in the future, which is why it seems difficult to invest in projects for prevention, mitigation and adaptation.

However, the difference between being unprepared for a pandemic is that we had no idea about the timing, the probability and the magnitude of the impact. Meanwhile, we actually know a lot about those things when it comes to climate change, which makes it an eminently solvable problem. We also know that climate change can be as much about avoiding risks as it is about seizing the opportunity to create jobs to innovate, to improve lives and to save lives.

So while it's all hands on deck today to get through this pandemic, I don't think that the smartest business leaders are going to take their eye off the ball for the long term, and the long term definitely includes climate change.

It's too early to tell, of course, and we're watching whether climate action or other sustainability goals are reset, or fall by the wayside. As an investor, I believe that businesses are not going to care any less about climate change in five years. Instead, they will likely be smarter about how to contribute as part of the solution.

SL: When you look at all of the data and all the information now, when you start seeing cleaner air, cleaner water, and you see the metrics and the graphs and the pictorial evidence of how much better the environment is, hopefully it helps to finally put to rest the question of whether or not we, as a species, are negatively impacting the environment we live in. It's clear that we are.

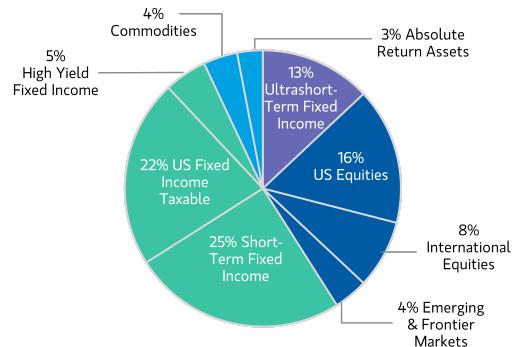
Hopefully, there will be a greater demand for improving air quality and recognizing how important the environment we live in really is to our own health. Hopefully, that will lead people to have a longer-term focus and a longer-term desire to reduce carbon emissions and reduce our footprint on the environment from a carbon perspective while simultaneously recognizing that these investments are actually a long-run benefit economically. ■

Stephen Liberatore and Karina Funk are not employees of Morgan Stanley Wealth Management or its affiliates. Opinions expressed by them are their own and may not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.

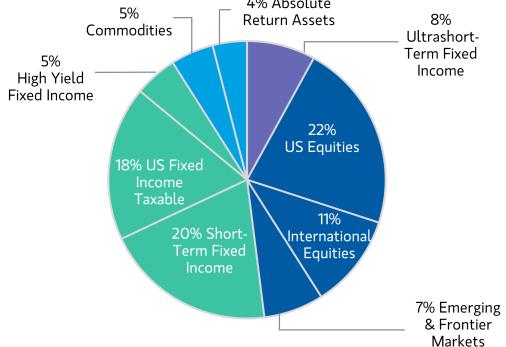
Global Investment Committee Tactical Asset Allocation

The Global Investment Committee provides guidance on asset allocation decisions through its various models. The five models below are recommended for investors with up to \$25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.

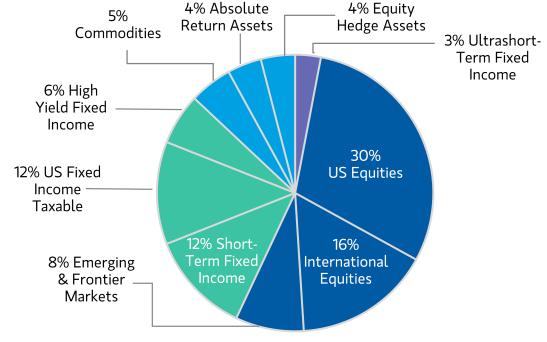
Wealth Conservation



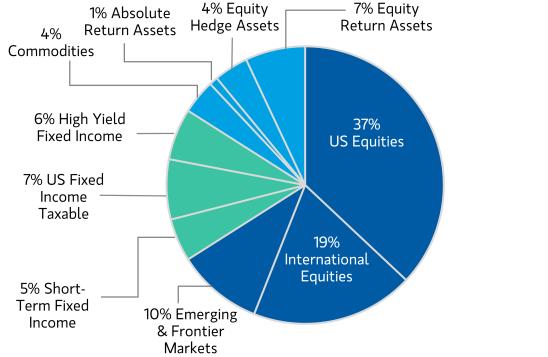
Income



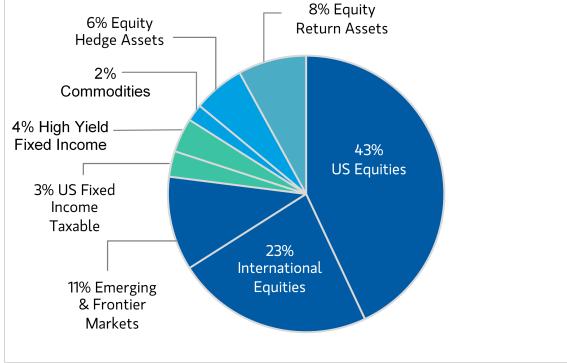
Balanced Growth



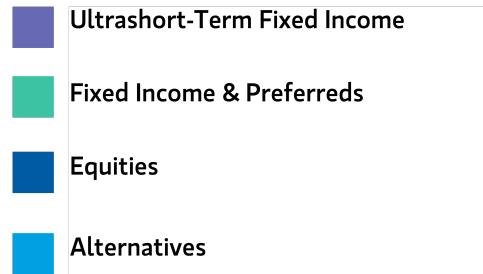
Market Growth



Opportunistic Growth



Key

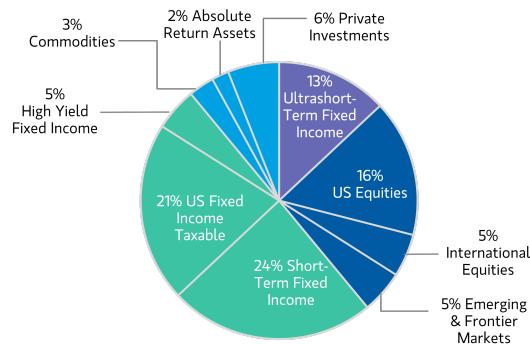


Source: Morgan Stanley Wealth Management GIC as of July 31, 2020

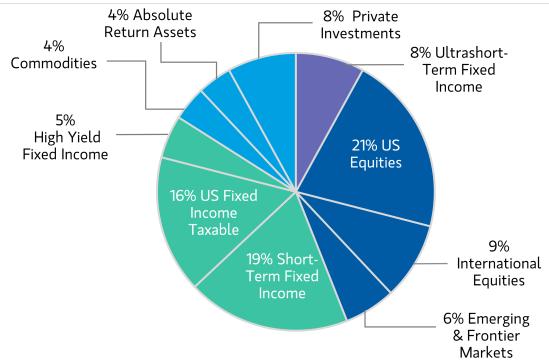
ON THE MARKETS

The Global Investment Committee provides guidance on asset allocation decisions through its various models. The five models below are recommended for investors with over \$25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.

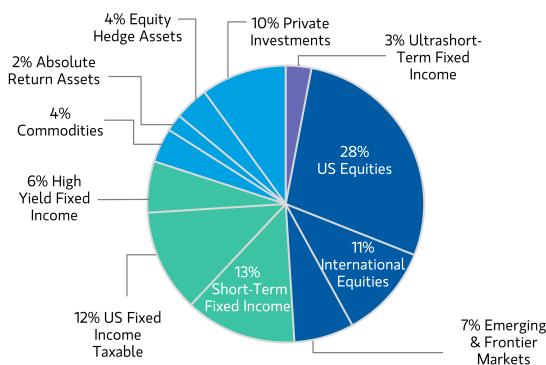
Wealth Conservation



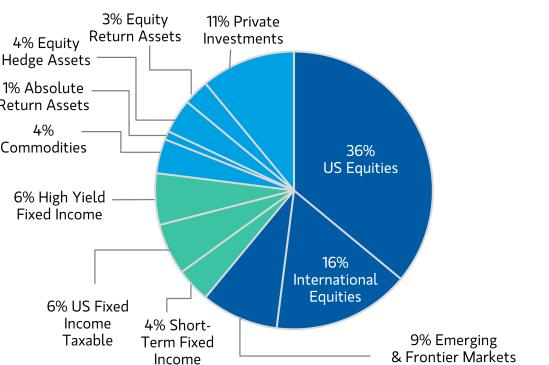
Income



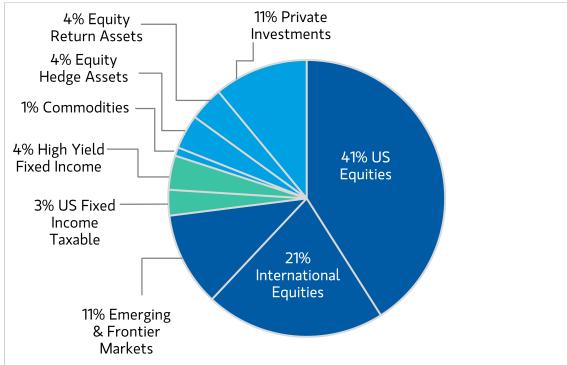
Balanced Growth



Market Growth



Opportunistic Growth



Key

- █ Ultrashort-Term Fixed Income
- █ Fixed Income & Preferreds
- █ Equities
- █ Alternatives

Source: Morgan Stanley Wealth Management GIC as of July 31, 2020

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Overweight	Global stock markets have entered a bear market on concerns about the negative growth impact of the coronavirus. Although we expect US and global recessions in the second quarter of 2020, our base case is that recent extraordinary policy actions from both central banks and national governments will help cushion the economic impact. Markets are already pricing the most likely scenarios. We recently upgraded our exposure to large-cap growth and small- and mid-cap equities, believing that active stock pickers have a good entry point over the next several months.
International Equities (Developed Markets)	Market Weight	We recently reduced exposure to both Europe and Japan believing that while policy responses were meaningful, their impact may ultimately be lumpy and diluted by additional headwinds—in the case of Europe, the lack of fiscal integration, and in Japan, the strength of yen.
Emerging Markets	Overweight	China was the first country to enter the COVID-19 crisis and appears poised to be the first out. Resumption of economic activity during the second quarter should jump-start global growth, especially given huge government stimulus programs. Ample liquidity from the Fed and a weakening dollar should catalyze investor interest. China stands to gain the most from US tariff rollbacks and global trade dynamics should improve. Valuations are attractive and local central banks should be able to maintain accommodation and stimulus. For most countries, especially China, the collapse in oil prices is a material tailwind for consumer purchasing power.
Global Fixed Income	Relative Weight Within Fixed Income	
US Investment Grade	Market Weight	We have recommended shorter-duration* (maturities) since March 2018, given the extremely low yields and potential capital losses associated with rising interest rates from such low levels, and had been pairing that position with a large exposure to long-term US Treasuries to hedge what we expected would be a modest correction in stocks. With long-term Treasury yields troughing for the cycle, we recently removed that position and resumed a benchmark exposure to duration. Recent dislocation of investment grade credit spreads and market illiquidity have created opportunities. Fed programs aimed at backstopping this market give reason to be an active bond selector.
International Investment Grade	Underweight	Negative interest rates suggest that this is not a preferred asset class for US-dollar clients at this time. Actively managed funds may provide very patient, risk-tolerant clients with income opportunities in select corporate credits.
Inflation-Protection Securities	Underweight	The “sudden stop” recession has caused a severe pricing of real interest rates, pushing them negative and near all-time lows. In the near term, upside appears limited.
High Yield	Overweight	High yield bonds remain at the epicenter of the dual risks from COVID-19 and the collapse in oil prices from the failure of OPEC negotiations. In our view, some of the most extreme risks have been discounted, especially in light of unprecedented monetary and fiscal policy intervention aimed not only at market liquidity but in bridging cash flow requirements. It’s time to ease in opportunistically, using active managers.
Alternative Investments	Relative Weight Within Alternative Investments	
REITs	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
Commodities	Overweight	The “sudden stop” global recession has driven commodities such as oil to multidecade lows. The rush to the “safe haven” US dollar, which is near its multiyear high, has exacerbated these dynamics. While we recognize the complexity of the geopolitical issues that surround oil, we believe that on a six-to-12-month basis the outlook for the global economy and overall demand will improve materially. Thus, we suggest risk-oriented clients establish exposure to the broad diversified asset class through the use of active managers. Pure passive exposure is not advised at this time.
Hedged Strategies (Hedge Funds and Managed Futures)	Overweight	The bear market associated with COVID-19 has driven volatility to historic extremes and led to wide dispersion in price performance and stock-level idiosyncratic risk. These factors tend to create a constructive environment for hedge fund managers who are good stock-pickers and can use leverage and risk management techniques to amplify returns. We prefer very active and fundamental strategies, especially equity long/short.

*For more about the risks to Duration, please see the Risk Considerations section beginning on page 18 of this report.
 Source: Morgan Stanley Wealth Management GLC as of July 31, 2020

Disclosure Section

The **Global Investment Committee (GIC)** is a group of seasoned investment professionals from Morgan Stanley & Co. and Morgan Stanley Wealth Management who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend asset allocation model weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

Chris Baxter, Vibhor Dave, John Duggan, Matthew Gastall, Jodie Gunzburg, Daryl Helsing, Nick Lentini, Susan McDowell, Gray Perkins, Michael Suchanick, Emily Thomas, Adam Virgadamo and Ellen Zentner are not members of the Global Investment Committee and any implementation strategies suggested have not been reviewed or approved by the Global Investment Committee.

Index Definitions

For index, indicator and survey definitions referenced in this report please visit the following: <https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

Risk Considerations

Alternative Investments

The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be appropriate for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing.

Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank.

Hypothetical Performance

General: Hypothetical performance should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

Hypothetical performance results have inherent limitations. The performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation.

Despite the limitations of hypothetical performance, these hypothetical performance results may allow clients and Financial Advisors to obtain a sense of the risk / return trade-off of different asset allocation constructs.

Investing in the market entails the risk of market volatility. The value of all types of securities may increase or decrease over varying time periods.

This analysis does not purport to recommend or implement an investment strategy. Financial forecasts, rates of return, risk, inflation, and other assumptions may be used as the basis for illustrations in this analysis. They should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. No analysis has the ability to accurately predict the future, eliminate risk or guarantee investment results. As investment returns, inflation, taxes, and other economic conditions vary from the assumptions used in this analysis, your actual results will vary (perhaps significantly) from those presented in this analysis.

The assumed return rates in this analysis are not reflective of any specific investment and do not include any fees or expenses that may be incurred by investing in specific products. The actual returns of a specific investment may be more or less than the returns used in this analysis. The return assumptions are based on hypothetical rates of return of securities indices, which serve as proxies for the asset classes. Moreover, different forecasts may choose different indices as a proxy for the same asset class, thus influencing the return of the asset class.

ON THE MARKETS

An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.

ETF Investing

An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. Investing in an international ETF also involves certain risks and considerations not typically associated with investing in an ETF that invests in the securities of U.S. issues, such as political, currency, economic and market risks. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economics. ETFs investing in physical commodities and commodity or currency futures have special tax considerations. Physical commodities may be treated as collectibles subject to a maximum 28% long-term capital gains rates, while futures are marked-to-market and may be subject to a blended 60% long- and 40% short-term capital gains tax rate. Rolling futures positions may create taxable events. For specifics and a greater explanation of possible risks with ETFs, along with the ETF's investment objectives, charges and expenses, please consult a copy of the ETF's prospectus. Investing in sectors may be more volatile than diversifying across many industries. The investment return and principal value of ETF investments will fluctuate, so an investor's ETF shares (Creation Units), if or when sold, may be worth more or less than the original cost. ETFs are redeemable only in Creation Unit size through an Authorized Participant and are not individually redeemable from an ETF.

Investors should carefully consider the investment objectives and risks as well as charges and expenses of an exchange-traded fund or mutual fund before investing. The prospectus contains this and other important information about the mutual fund. To obtain a prospectus, contact your Financial Advisor or visit the mutual fund company's website. Please read the prospectus carefully before investing.

MLPs

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk.

The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value.

MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV; and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Duration

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with **emerging markets** and **frontier markets**, since these countries may have relatively unstable governments and less established markets and economies.

Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

Managed futures investments are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually appropriate only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related

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contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be appropriate for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on municipal bonds is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Although they are backed by the full faith and credit of the U.S. Government as to timely payment of principal and interest, **Treasury Bills** are subject to interest rate and inflation risk, as well as the opportunity risk of other more potentially lucrative investment opportunities.

CDs are insured by the FDIC, an independent agency of the U.S. Government, up to a maximum of \$250,000 (including principal and accrued interest) for all deposits held in the same insurable capacity (e.g. individual account, joint account, IRA etc.) per CD depository. Investors are responsible for monitoring the total amount held with each CD depository. All deposits at a single depository held in the same insurable capacity will be aggregated for the purposes of the applicable FDIC insurance limit, including deposits (such as bank accounts) maintained directly with the depository and CDs of the depository. For more information visit the FDIC website at www.fdic.gov.

The majority of \$25 and \$1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price.

The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield.

Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs

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if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Companies paying **dividends** can reduce or cut payouts at any time.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

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