Morgan Stanley | RESEARCH

UPDATE

April 6, 2020 04:01 AM GMT

US Equity Strategy | North America

Weekly Warm Up: Cyclical Bear Ending; Secular Bull to Resume; Investor Feedback & FAQs

MORGAN STANLEY & CO. LLC

Michael J Wilson
EQUITY STRATEGIST
M.Wilson@morganstanley.com +1 212 761-2532

Adam Virgadamo, CFA
EQUITY STRATEGIST
Adam.Virgadamo@morganstanley.com +1 212 761-1376

Andrew B Pauker
EQUITY STRATEGIST
Andrew.Pauker@morganstanley.com +1 212 761-1330

Michelle M. Weaver
EQUITY STRATEGIST
Michelle.M.Weaver@morganstanley.com +1 212 296-5254

The end of a cyclical bear means the beginning of a cyclical bull that comes with new leadership and inflation a consideration. Earnings season should bring more stock specific risk (alpha). We recommend a barbell of the best of the best and the best of the most challenged stocks.

Cyclical bear market ending with recession should lead to new cyclical bull. Secular bull market intact as recession accompanied by health crisis brings the shift from monetary to fiscal policy dominance necessary to finally get inflation. This regime shift should usher in a new era of leadership in financial markets. This will take time to fully develop; so we recommend a barbell of quality stocks on sale (Best of the Best) with cyclical stocks that can be resilient (Best of the Most Challenged) and fully benefit from a recovery next year.

After 100s of calls over the past few weeks, we outline the most common questions being asked by investors:

- **How low will earnings go?** We think a decline of low teens to 20% is the right range.

- **Is equity risk premium meaningful given uncertainty on earnings?** Yes - even cutting earnings 25%, ERP still looks attractive.

- **How have companies been guiding?** Guidance withdrawals are increasing and concentrated in Cap Goods, Materials, Retailing, Real Estate and Hotels/Restaurants. This week, we include a list of global companies that have withdrawn guidance.

- **Dividends - where have the cuts come to date and how much did they fall in the last recession?** A few firms, mostly in Discretionary have cut, but more are likely to come. Dividends fell about 12% in the crisis.

- **Buybacks - how much did they fall in the last recession?** They were down nearly 100% in the crisis, but this was skewed by Financials. We think 50% is a reasonable assumption in 2020, which removes about a 1% tailwind to EPS.

- **What to own?** We think the answer is a mix of quality and selective cyclical exposure and provide a few screens.

What to Focus on This Week

The Case for Inflation and the Secular Bull

A few weeks ago we showed how recent US equity market price action resembled both the 1987 and 1929 crashes. March 2020 will go down as an historic period for financial markets and the precursor to what is now likely to be the fastest and steepest recession in history. **Today, we show the updates to these charts and they BOTH remain remarkably on track for one of these episodes to play out.** While we appreciate these analogs always break down at some point, we stand by our view at the time of the first publication that even in the very bad outcome of the 1930s, there was an extraordinary and tradable rally from those initial price lows (Exhibit 1). **Depending on which analog one chooses, it also might determine if we retest the lows of a few weeks ago or not, the number one question we continue to discuss with clients. For what it's worth, we don't think we will have full retest of the lows nor do we think this is the beginning of a depression. In fact, as we have discussed in prior notes, we think this is the *end* of a cyclical bear market that began 2 years ago in the context of a secular bull market that began in 2011.**

Exhibit 1: After the 1929 crash there was no re-test.

Source: Bloomberg, Morgan Stanley Research

Exhibit 2: While in 1987 there was. Which is it?

Source: Bloomberg, Morgan Stanley Research

Without rehashing our established views on the current cyclical bear market, today we would like to focus more on the secular bull market, its drivers and how we get to the other side of what is a sharp recession. First, **our view on the secular bull always assumed we would have a cyclical bear in the middle punctuated by a recession like we are currently experiencing (The Great Cycle Debate, April 2018).** Part of that thesis was based on the view that it would require a recession to get the change in policy from monetary to fiscal dominance necessary to finally get inflation.

While today's economy makes it very difficult to see how we are ever going to get inflation, **we think the seeds required for inflation began to be sown 4-5 years ago.** The global pandemic is just the catalyst that may allow all of these building pressures to work in concert. While the following is not an exhaustive list, it is a comprehensive one that illustrates just how diverse but intertwined these inflationary forces might be.

- **Populism**--this is a growing global trend with many democratic countries having elected populist leaders over the past decade. These leaders have ushered in various forms of protectionist policies that are generally inflationary--minimum wages, immigration controls, tariffs, etc.

- **Wage Growth**--perhaps the most important trend of populism, wage growth is critical to inflation trends. Wages increased during the prior expansion and while some (rightly) complain they have further to go, we are well off the extreme lows of the prior decade and new trend will be hard to push back against given the populist demands. In the US, minimum wage legislation will keep upward pressure on hourly compensation costs even in a recession.

- **Nationalism**--immigration controls, higher military spending and tariffs are all part of this trend and inflationary.

- **De-Globalization**--This is an outgrowth of Populism and Nationalism but there is also an argument that globalization did not work for the majority of people and companies even though it was very good for the 1 percenters. COVID-19 has also exposed the fragilities of a global economy that is heavily reliant on supply chains half way around the world. Such a reversal of this trend would almost undoubtedly add to costs.

- **US Dollar Weakness** -The significant shift that we may be witnessing in US fiscal and monetary policy could lead to a materially weaker dollar.

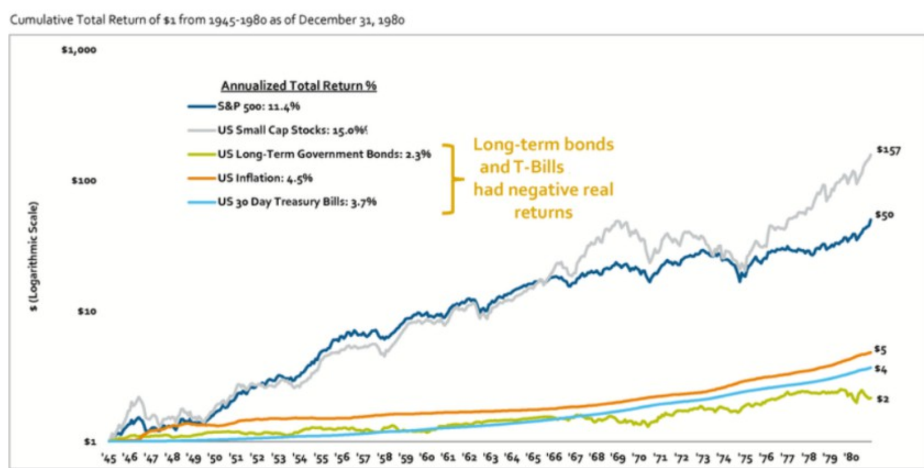
Now, due to the current crisis being health related, the policy response will likely not resemble anything we have previously seen in peacetime. Our economists are forecasting the US fiscal deficit to reach 18% in CY2020. More important, the stimulus is very targeted toward middle class consumers and small businesses with direct payments. This is very different than the first episode of QE post the Great Financial Crisis where the money was used to shore up the regulated banking system and inflate asset prices rather than economic ones. In short, **this should be a much better transmission mechanism to the real economy.** Finally, there is a growing movement against share buybacks with a desire to see corporate cash flow used to either pay higher wages or make real investments that can drive greater productivity and growth. Whether this ends up being legislated or not, the pressure will be on corporations to do this. Once again, such a shift would be inflationary relative to the prior deflationary path of corporate underinvestment and financial arbitrage.

As a final comment on the potential for an inflationary regime shift, we would argue that **inflation is already everywhere except in the statistics.** The three largest expenditures for the consumer are shelter, education and healthcare and in all three cases, inflation is evident and running close to 10% annually for healthcare and education. **Perhaps this is why there has been so much criticism of the methodology used to calculate the CPI** which calls into question its usefulness as a measure of inflation to the average consumer.

Such cost pressures in key consumer expenditures is one reason why more interventionist political platforms have gained traction with voters the past few years. No matter who wins this year's Presidential and Congressional elections, corporates will likely be encouraged by some policymakers to pay higher wages and do fewer share buybacks. The most successful companies of the last cycle could also potentially face a higher tax burden to help pay for the higher near term spending that will be hard to completely stop even after the economy recovers. If so, **this could effectively be the beginning of a cycle of wealth redistribution at the corporate and individual level.**

In such a world, bonds look challenged but stocks can still win. Inflation from very low levels can actually be good for stocks overall, especially those that are geared to *nominal* GDP growth. History suggests that inflation is a problem for stock valuations when it's too low (like today) and when it's above 4 percent. 2-3 percent is the sweet spot, in our view. What we are really talking about is potentially strong nominal returns for stocks but much lower *real* returns after inflation and currency depreciation (USD against others and all currencies against gold). If history is a guide, bonds could generate negative real returns for years even with the roll to higher rates, much like the period following World War II and the last time we had these kinds of deficits and monetary financial repression (Exhibit 3).

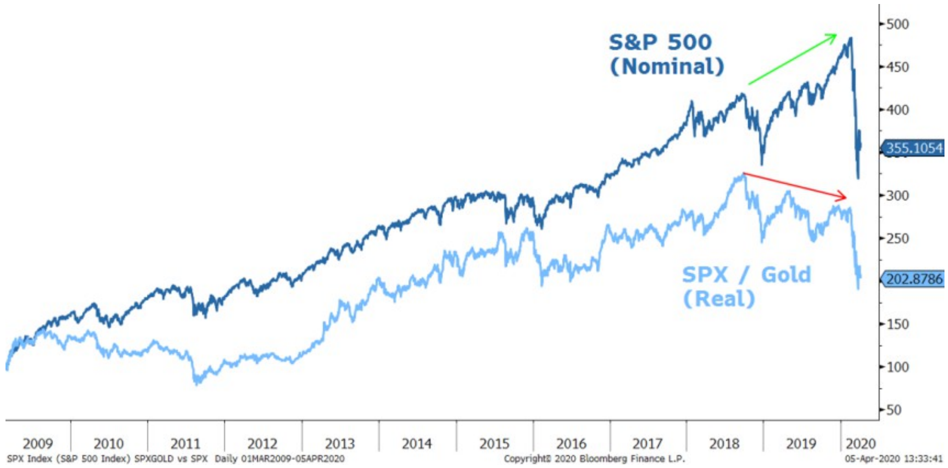
Exhibit 3: Post WWII period was last major inflationary regime shift – Unfavorable for Bonds; Good for Stocks.



Source: Morgan Stanley Wealth Management GIC using data provided by Morningstar/ © 2020 Morningstar, Inc.

Finally it's important to note that *real* returns adjusted for actual inflation have been much more modest the past 10 years. This is exactly what financial repression is and how the wealth transfer from savers to debtors occurs. We believe the only difference going forward is that it will be more obvious to the casual observer which could change behavior and keep inflation higher. Note the massive divergence between S&P 500 real returns and nominal returns in 2019 which lines up with our view that last year's rally was more about liquidity than the fundamentals. With nominal and real returns now more in sync they can rally together and real returns might even do slightly better if one is in the right stocks (i.e. those levered to inflation).

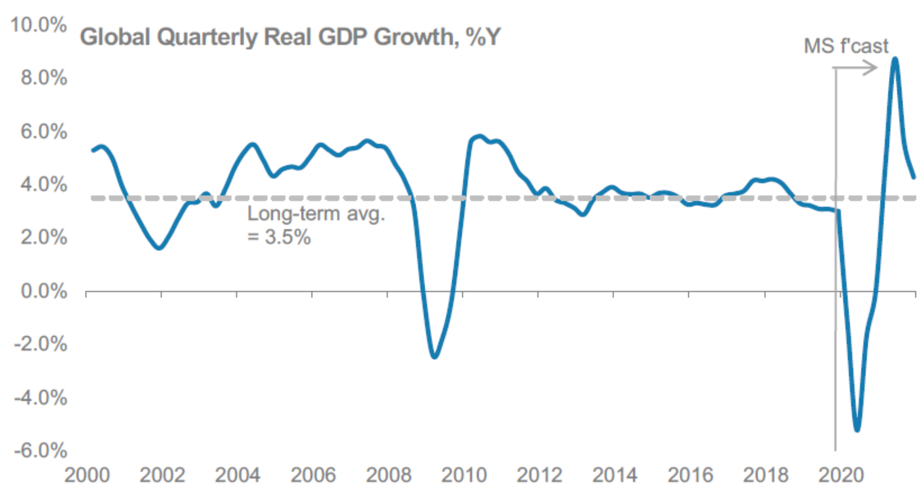
Exhibit 4: 2019 Rally Was About Liquidity Not Improving Fundamental Which Left Real Returns Negative



Source: Bloomberg, Morgan Stanley Research

Obviously, we don't have a crystal ball about the future but the odds of an inflationary regime shift are greater today than at any time in the past 20 years, in our view. If so, it will have significant investment implications for the next decade that will affect all asset categories, not just stocks. From a stock perspective it means style and factor shifts for which few are positioned. It also likely won't all happen at once. The strategy for today is to run a barbell of high quality stocks on sale with a selection of cyclically geared stocks that we believe should have the resilience to make it through this recession intact to take advantage of what could be a sharp recovery next year (Exhibit 5).

Exhibit 5: Deepest Recession since WWII but Also Potentially the Sharpest Recovery.......Looks like "V".



Source: Haver Analytics, IMF, Morgan Stanley Research forecasts. Note: Global real GDP includes economies under MS Research coverage and the growth rate is the PPP-based GDP weighed average.

Investor FAQs

We review some of the most commonly asked questions we've received from investors over the last few weeks.

How low will earnings go?

Last week we stress tested earnings with a bottom up approach … Last week, in an effort to put some context around how low earnings might go, we stress tested S&P 500 EPS, using 2008/2009 as the comparative period. We employed a bottom up approach to do so and found that EPS could be down in the mid-20s in 2020 and then up in the low 30s (on a % basis) in 2021. That said, this analysis does not account for the unprecedented size and scope of the fiscal and monetary policy response that has evolved in recent weeks. As a result, we noted that we did not expect EPS growth to be as extreme as the results of our stress test indicated (our current base case 2020/2021 EPS growth estimates are -13.0%/+12.0%; current bear case 2020/2021 EPS growth estimates are -20.0%/+20.0%; see Weekly Warm Up: Nature of Crisis Drives Bigger Bailout).

… this week we did the same with our top down model. For this week, we took a top down approach to stress testing earnings growth for the S&P using our proprietary Leading Earnings Indicator. We adjusted 3 key inputs to our model—Conference Board Consumer Confidence, ISM Manufacturing PMI and credit spreads—in an effort to project out 3 potential growth outcomes (Exhibit 6). Note that our earnings model uses current data points to forecast 12 month forward earnings growth—meaning projections through March 2021 are already in place. The 3 potential outcomes are:

Sharp Contraction to 2008/2009 Levels: 27% Decline in EPS Implied

- Financial Crisis trough levels in consumer confidence/PMI and a peak at Financial Crisis levels in credit spreads
- Assumes these levels are reached in the next 3 months
- Assumes the same recovery path as the Financial Crisis post troughs/peak

Shallower Contraction to 2008/2009 Levels: 20% Decline in EPS Implied

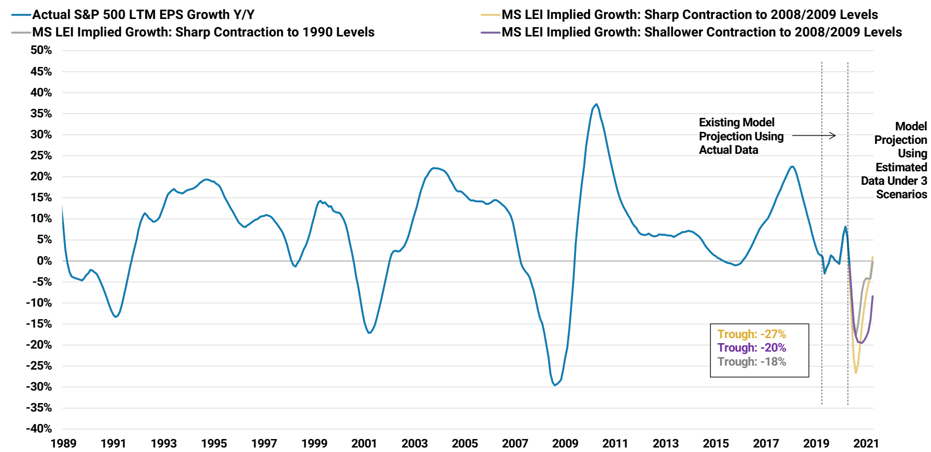
- Financial Crisis trough levels in consumer confidence/PMI and a peak at Financial Crisis levels in credit spreads
- Assumes these levels are reached in the next 9 months
- Assumes the same recovery path as the Financial Crisis post troughs/peak

Sharp Contraction to 1990 Levels: 18% Decline in EPS Implied

- 1990 recession trough levels in consumer confidence/PMI
  - Assumes these levels are reached in the next 3 months
  - Assumes the same recovery path as the 1990 recession post troughs

- Assumes credit spreads peaked March 31, 2020; assumes the same recovery path as the 1990 recession post peak (in terms of monthly % change)

Exhibit 6: Morgan Stanley Leading Earnings Indicator: Potential EPS Growth Paths



Source: Bloomberg, FactSet, Morgan Stanley Research.

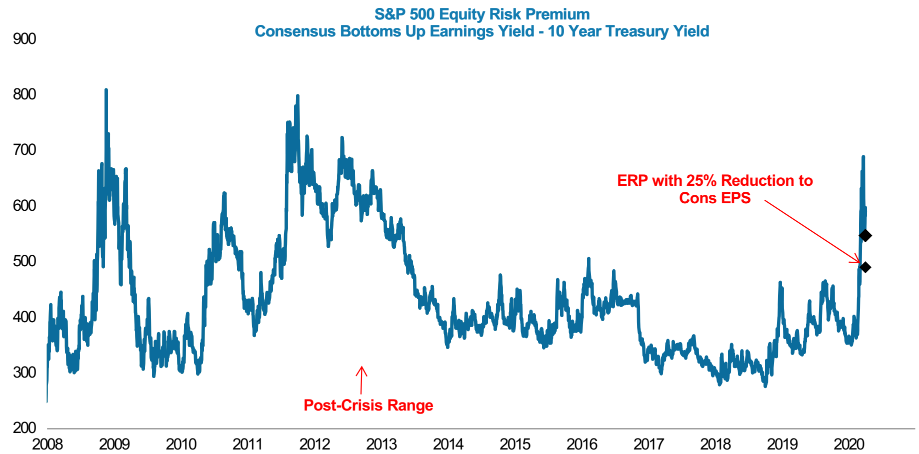
In the most extreme scenario we have modeled (Sharp Contraction to 2008/2009 Levels), trailing EPS could be down in the mid-to-high 20% range at a trough level. This is largely in line with our bottom up analysis findings last week. Given (1) the severity and (2) the unprecedented pace of this recession, we believe that the "Sharp Contraction to 2008/2009 Levels" is probably the best comp to look to at this point in time. However, we strongly believe that the size of the fiscal and monetary response, along with the easier comps from flat earnings last year, mean that the downside to earnings will not be as large as this scenario implies.

Is equity risk premium (ERP) meaningful given uncertainty on earnings?

We still see value. Even though the uncertainty bands around the earnings in the ERP are wide, even with a large haircut to forward earnings, the ERP still looks attractive. Rather than assess valuation on a PE basis, we try to account for the rate environment by looking to ERP, defined as the spread between forward earnings yield and the 10Y Treasury yield, in bps. The ERP is off its peak, but still sits near crisis levels - 592 bps as of Friday's close. Consensus numbers move slowly, but price has adjusted quickly. Reducing the forward EPS number by 25%, a number that is below our bear case for 2020 earnings cuts, would still yield an ERP of ~425 bps, which is still well above the post crisis range. Further a 500 bps risk premium on the highest quality and most liquid equity index in the world, is attractive to asset allocators and longer term investors with return targets that cannot be met via most fixed income assets in a world of now lower rates. We cannot guarantee the ERP won't retest the peaks over what will likely be a volatile 2 months, but through year end, we still see value here.

For those interested, we post the ERP daily to Bloomberg under the ticker MSRPSPX Index.

Exhibit 7: Even Reducing Earnings Estimates

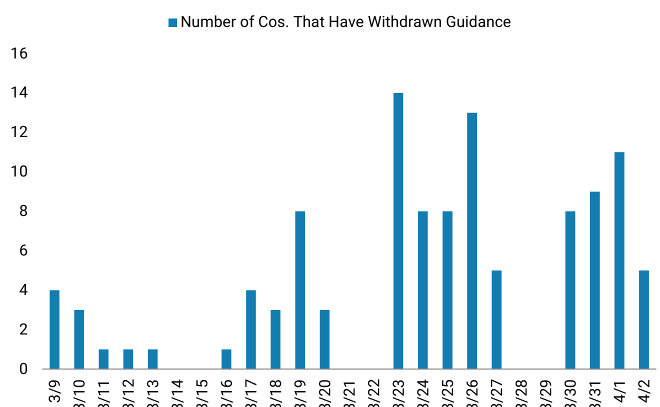


Source: Bloomberg, Morgan Stanley Research.

How have companies been guiding?

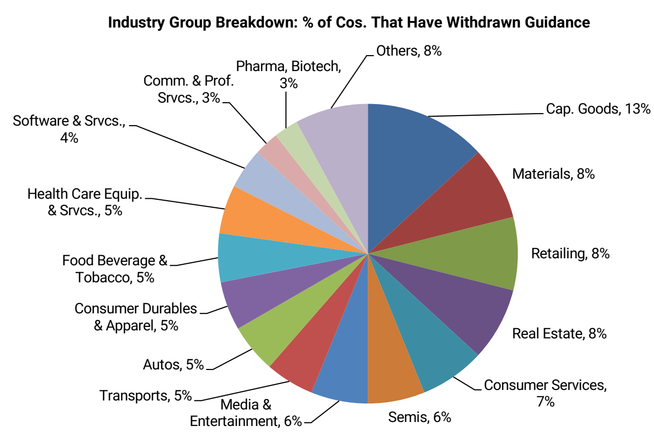
Global companies have been withdrawing guidance at a more elevated rate over the past two weeks (Exhibit 8& Exhibit 9). Guidance withdrawals are concentrated in Cap Goods, Materials, Retailing, Real Estate and Consumer Services. For a comprehensive list of global companies that have withdrawn guidance amid Covid-19 see Exhibit 21, and for a weekly update on the impact of Covid-19 see Global Weekly COVID-19 Impact Update: April 3, 2020.

Exhibit 8: Number of Companies that Have Withdrawn Guidance



Source: AlphaSense, AlphaSense Insights, Morgan Stanley Research as of April 2, 2020. Criteria for search: (1) global cos. with market caps over $5B; (2) search criteria applied across 8Ks, press releases and transcripts; (3) manual selection process utilized after initial screen. Note: list may not be exhaustive due to limits of screen criteria/manual process.

Exhibit 9: Number of Companies that Have Withdrawn Guidance: Industry Group Breakdown



Source: AlphaSense, AlphaSense Insights, Morgan Stanley Research as of April 2, 2020. Criteria for search: (1) global cos. with market caps over $5B; (2) search criteria applied across 8Ks, press releases and transcripts; (3) manual selection process utilized after initial screen. Note: list may not be exhaustive due to limits of screen criteria/manual process.

Dividends - where have the cuts come to date and how much did they fall in the last recession?

Surprisingly few companies have cut dividends so far - 17 companies in the Russell 1000 have discontinued/omitted their dividends since the beginning of March (Exhibit 10). So far, the cuts have been concentrated in Consumer Discretionary (a sector that pays 6% of total dividends among the top 500 stocks by market cap). The cuts have come from companies that have been particularly hard hid by the Covid-19 shutdown and include Hilton and Carnival. Tech and Financials typically pay the greatest share of total dividends with each paying approximately 17% (Exhibit 11). **During the Financial Crisis, dividends fell 12% in aggregate (Exhibit 12). The biggest declines came from Financials, Energy and Industrials.** Dividends rose in the Tech sector between 4Q07 and 1Q09, however, dividends from the sector were only 5% of the total before the crisis. **We would not be surprised to see more dividend cuts from Tech companies during this recession given how much of the total share of dividends they pay and that the sector will not be immune to cyclical pressure.**

Exhibit 10: Companies that Have Discontinued Dividends

Companies That Have Discontinued Dividends Since March 2020

Ticker	Name	Sector	Market Cap ($B USD)	Price
F	Ford Motor Company	Consumer Discretionary	$17.3	$4.36
HLT	Hilton Worldwide Holdings Inc	Consumer Discretionary	$16.1	$57.86
APTV	Aptiv PLC	Consumer Discretionary	$11.6	$45.59
CCL	Carnival Corporation	Consumer Discretionary	$5.5	$7.97
DRI	Darden Restaurants, Inc.	Consumer Discretionary	$5.4	$44.31
TPR	Tapestry, Inc.	Consumer Discretionary	$3.0	$11.01
LB	L Brands, Inc.	Consumer Discretionary	$2.8	$10.15
JWN	Nordstrom, Inc.	Consumer Discretionary	$2.1	$13.18
EQT	EQT Corporation	Energy	$2.0	$7.89
PBF	PBF Energy, Inc. Class A	Energy	$0.7	$5.89
KOS	Kosmos Energy Ltd.	Energy	$0.3	$0.83
MFA	MFA Financial, Inc.	Financials	$0.5	$1.10
BA	Boeing Company	Industrials	$69.6	$123.27
DAL	Delta Air Lines, Inc.	Industrials	$14.5	$22.68
SNX	SYNNEX Corporation	Information Technology	$3.7	$72.47
SABR	Sabre Corp.	Information Technology	$1.3	$4.58
APLE	Apple Hospitality REIT Inc	Real Estate	$1.7	$7.74

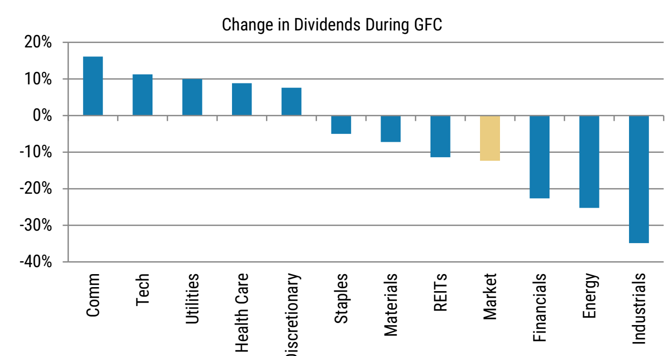
Source: Bloomberg, Factset, Morgan Stanley Research. Price as of April 2, 2020.

Exhibit 11: Share of Dividends by Sector

Sector	% Before GFC	% After GFC	% 4Q19
Comm Services	6.2%	8.2%	7.0%
Discretionary	3.6%	4.5%	6.1%
Energy	10.9%	9.3%	8.3%
Financials	25.8%	22.8%	16.5%
Health Care	8.9%	11.1%	12.0%
Industrials	16.3%	12.1%	9.2%
Materials	3.6%	3.8%	3.0%
Real Estate	2.4%	2.4%	4.0%
Staples	13.1%	14.2%	11.3%
Technology	4.9%	6.2%	17.3%
Utilities	4.4%	5.5%	5.4%

Source: ClariFi, Morgan Stanley Research. Before GFC Date: 4Q07, After GFC Date: 1Q09. LTM Data.. The universe is the top 500 US stocks by market cap.

Exhibit 12: Changes in Dividends During the GFC



Source: ClariFi, Morgan Stanley Research. Change from 4Q07 to 1Q09. LTM Data. The universe is the top 500 US stocks by market cap

Exhibit 13 shows the percent of total dividends coming from each industry as of the end of 2019. Banks and Oil, Gas, & Consumable Fuels have the highest share of total dividends.

Exhibit 13: % of Dividends - Industry Level Detail

Percent of Total Market Dividends by Industry

Industry	%	Industry	%	Industry	%
Banks	9%	Specialty Retail	2%	Household Durables	0%
Oil Gas & Consumable	8%	Machinery	2%	Internet Direct Marketing Retail	0%
Pharmaceuticals	6%	Health Care Equipment & Supplies	2%	Personal Products	0%
Software	5%	Industrial Conglomerates	1%	Independent Power Producers	0%
Diversified Telecommunication	5%	Communications Equipment	1%	Water Utilities	0%
Real Estate Investment Trusts	4%	Media	1%	Life Sciences Tools & Services	0%
Semiconductors	4%	Road & Rail	1%	Distributors	0%
Capital Markets	3%	Automobiles	1%	Professional Services	0%
Electric Utilities	3%	Air Freight & Logistics	1%	Leisure Equipment Products	0%
Computers Peripherals	3%	Consumer Finance	1%	Construction Materials	0%
Insurance	3%	Energy Equipment & Services	1%	Diversified Financial Services	0%
It Services	3%	Entertainment	1%	Gas Utilities	0%
Aerospace & Defense	3%	Electrical Equipment	1%	Auto Components	0%
Beverages	3%	Metals & Mining	1%	Health Care Technology	0%
Tobacco	3%	Containers & Packaging	1%	Construction Engineering	0%
Biotechnology	3%	Textiles Apparel & Luxury Goods	0%	Paper & Forest Products	0%
Hotels Restaurants & Leisure	2%	Electronic Equipment Instrument	0%	Diversified Consumer Services	0%
Household Products	2%	Commercial Services & Supplies	0%	Thrifts Mortgage Finance	0%
Food & Staples Retailing	2%	Multiline Retail	0%	Wireless Telecommunication	0%
Health Care Providers & Services	2%	Mortgage Reits	0%	Marine	0%
Chemicals	2%	Building Products	0%	Real Estate Management Develop	0%
Food Products	2%	Airlines	0%	Interactive Media Services	0%
Multi Utilities	2%	Trading Companies & Distributors	0%		

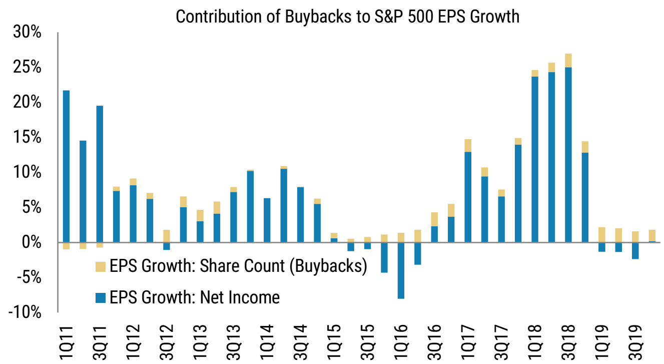
Source: ClariFi, Morgan Stanley Research. Dividend data LTM as of 4Q19

Buybacks - how much did they fall in the last recession?

With cash flows under pressure we expect buybacks to fall in 2020. We think the bigger risk to the market is the reduction of what has been a steady source of demand for equities rather than the removal of a tailwind to EPS, but don't think the buyback reduction will be as large as in the GFC. While net buybacks effectively fell ~100% in the GFC, this was skewed by Financials and outside that group buybacks fell about 50% at trough.

In 2019, share buybacks contributed 1.6% -2.2% per quarter to EPS growth (Exhibit 14). We calculate this share by taking the difference between EPS and Net Income growth. Last year Financials companies saw the biggest boost to EPS growth from share buybacks but most sectors saw a ~2% contribution (Exhibit 15). **Tech companies have the highest share of net buybacks (share issuance - buybacks) followed by Financials (Exhibit 16). After that, there is a substantial drop off in share.** During the Financial Crisis the Financials sector had the biggest decline in net buybacks but a decline of this magnitude would be unlikely during this recession. Tech saw a modest decline that cycle but only made up 20% of total buybacks in 4Q07 vs ~35% today.

Exhibit 14: Buybacks Contribution to EPS Growth



Source: Refinitiv, Morgan Stanley Research. Buyback contribution calculated as YOY EPS growth - YOY Net Income growth

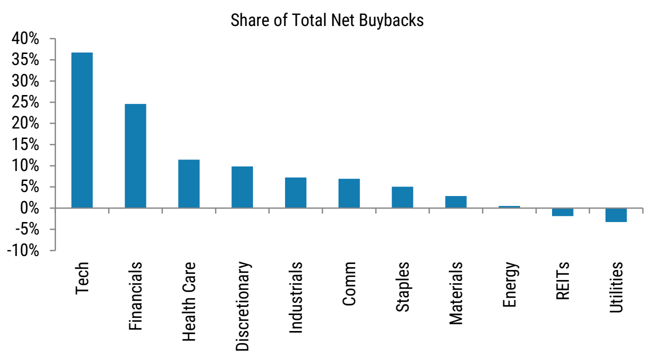
Exhibit 15: Contribution to EPS from Net Income and Buybacks

Contribution to EPS from Net Income & Buybacks

	2018		2019	
Sector	Net Income	Buybacks	Net Income	Buybacks
Comm Services	25.3%	1.6%	2.2%	1.8%
Discretionary	16.0%	1.5%	-0.3%	1.8%
Energy	97.9%	2.7%	-30.5%	1.2%
Financials	25.4%	1.1%	3.1%	2.3%
Health Care	13.1%	1.4%	5.5%	1.9%
Industrials	17.3%	1.5%	-6.0%	1.7%
Info Tech	22.3%	1.5%	-2.0%	1.8%
Materials	21.1%	1.5%	-11.6%	1.6%
REITS	8.0%	1.4%	1.9%	1.8%
Staples	6.4%	1.4%	1.7%	1.8%
Utilities	11.4%	1.4%	2.7%	1.9%
S&P 500	**21.2%**	**1.5%**	**-1.2%**	**1.9%**

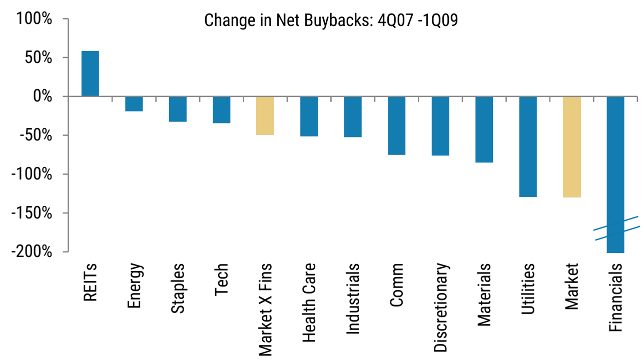
Source: ClariFi, Morgan Stanley Research

Exhibit 16: Share of Total Net Buybacks in 2019



Source: ClariFi, Morgan Stanley Research. Net buybacks = issuance - buybacks

Exhibit 17: Change in Net Buybacks During GFC



Source: ClariFi, Morgan Stanley Research.

Exhibit 18 shows the percent of total net buybacks coming from each industry as of the end of 2019. Banks, Computer Peripherals, and Software have the highest share of total net buybacks.

Exhibit 18: Percent of Total Net Buybacks by Industry

Percent of Total Net Buybacks by Industry

Industry	%	Industry	%	Industry	%
Banks	16.4%	Airlines	1.1%	Independent Power Producers	<1%
Computers Peripherals	16.3%	Diversified Financial Services	<1%	Diversified Telecommunication	<1%
Software	8.1%	Industrial Conglomerates	<1%	Auto Components	<1%
Pharmaceuticals	5.4%	Beverages	<1%	Distributors	<1%
Capital Markets	4.9%	Consumer Finance	<1%	Tobacco	<1%
Semiconductors	4.8%	Textiles Apparel & Luxury Goods	<1%	Wireless Telecommunication	<1%
Interactive Media Services	4.8%	Oil Gas & Consumable	<1%	Real Estate Management Develop	<1%
It Services	4.2%	Road & Rail	<1%	Energy Equipment & Services	<1%
Specialty Retail	3.5%	Multiline Retail	<1%	Construction Materials	<1%
Hotels Restaurants & Leisure	3.1%	Electronic Equipment Instrument	<1%	Diversified Consumer Services	<1%
Communications Equipment	2.8%	Electrical Equipment	<1%	Marine	<1%
Health Care Providers & Services	2.7%	Food Products	<1%	Paper & Forest Products	<1%
Chemicals	2.4%	Containers & Packaging	<1%	Thrifts Mortgage Finance	<1%
Biotechnology	2.2%	Commercial Services & Supplies	<1%	Health Care Equipment & Supplies	<1%
Internet Direct Marketing Retail	2.2%	Trading Companies & Distributors	<1%	Gas Utilities	<1%
Insurance	2.1%	Air Freight & Logistics	<1%	Automobiles	<1%
Food & Staples Retailing	2.1%	Personal Products	<1%	Leisure Equipment Products	<1%
Media	1.9%	Household Durables	<1%	Mortgage Reits	<1%
Household Products	1.8%	Health Care Technology	<1%	Water Utilities	<1%
Machinery	1.3%	Metals & Mining	<1%	Electric Utilities	<1%
Building Products	1.1%	Entertainment	<1%	Multi Utilities	<1%
Aerospace & Defense	1.1%	Construction Engineering	<1%	Real Estate Investment Trusts	<1%
Life Sciences Tools & Services	1.1%	Professional Services	<1%		

Source: ClariFi, Morgan Stanley Research

What to Own?

We think the answer is a mix of quality and selective cyclical exposure. The Recession Playbook we published two weeks ago looked at what industries had the highest outperformance hit rates during various stages of bear markets around recessions. The time to rotate more fully cyclical comes after a durable trough is in but between the big initial sell off and the final trough in the bear market, quality defensives like Health Care and Staples as well as some early cyclical groups, begin to show leadership.

We present a few stock ideas in the exhibits below, many of which tilt toward quality cyclicals. Stocks that overlap across the lists:

- A global list of quality stocks favored by our analysts, now at better prices - Global Equity Strategy: Good Stocks At Better Prices (Exhibit 19)
- From our Recession Playbook a list of MS OW rated stocks that have a history of outperforming after the point market sell off 25% in recessions - US Equity Strategy: Bear Markets End with the Cycle; Time to Employ a Recession Playbook (Exhibit 20)
- Our Fresh Money Buy List which continues to outperform and is made up of a mix of high quality stocks among a mix of defensives, cyclicals and growth. See Fresh Money Buy List Updates

Exhibit 19: Global Quality Stocks At Better Prices

Ticker	Company Name	MS Rating	MS Analyst	Country	Sector	Industry Group	Market Cap ($B USD)
ADBE-US	Adobe Inc.	OW	Keith Weiss	United States	Information Technology	Software & Services	$141.5
BABA-US	Alibaba Group Holding Ltd.	OW	Gary Yu	China	Consumer Discretionary	Retailing	$502.0
GOOGL-US	Alphabet Inc.	OW	Brian Nowak	United States	Communication Services	Media & Entertainment	$752.9
ALO-FR	Alstom SA	OW	Katie Self	France	Industrials	Capital Goods	$8.8
AAPL-US	Apple Inc.	OW	Kathryn Huberty	United States	Information Technology	Technology Hardware & Equipment	$1,056.3
BLL-US	Ball Corporation	OW	Neel Kumar	United States	Materials	Materials	$20.3
BLK-US	BlackRock, Inc.	OW	Michael Cyprys	United States	Financials	Diversified Financials	$65.1
BSX-US	Boston Scientific Corporation	OW	David Lewis	United States	Health Care	Health Care Equipment & Services	$43.6
CLNX-ES	Cellnex Telecom S.A.	OW	Emmet Kelly	Spain	Communication Services	Telecommunication Services	$18.6
941-HK	China Mobile Limited	OW	Gary Yu	China	Communication Services	Telecommunication Services	$160.2
CMCSA-US	Comcast Corporation	OW	Benjamin Swinburne	United States	Communication Services	Media & Entertainment	$154.6
4568-JP	Daiichi Sankyo Company, Limited	OW	Shinichiro Muraoka	Japan	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	$44.2
DOV-US	Dover Corporation	OW	Joshua Pokrzywinski	United States	Industrials	Capital Goods	$11.1
ERIC.B-SE	Ericsson	OW	Dominik Olszewski	Sweden	Information Technology	Technology Hardware & Equipment	$25.7
EL-FR	EssilorLuxottica SA	OW	Elena Mariani	France	Consumer Discretionary	Consumer Durables & Apparel	$46.1
HD-US	Home Depot, Inc.	OW	Simeon Gutman	United States	Consumer Discretionary	Retailing	$192.1
ITUB4-BR	Itau Unibanco Holding SA Pfd	OW	Jorge Kuri	Brazil	Financials	Banks	$37.5
6301-JP	Komatsu Ltd.	OW	Yoshinao Ibara	Japan	Industrials	Capital Goods	$15.5
MA-US	Mastercard Incorporated	OW	James Faucette	United States	Information Technology	Software & Services	$238.2
MSFT-US	Microsoft Corporation	OW	Keith Weiss	United States	Information Technology	Software & Services	$1,170.0
6981-JP	Murata Manufacturing Co., Ltd.	OW	Shoji Sato	Japan	Information Technology	Technology Hardware & Equipment	$32.0
NPN-ZA	Naspers Limited	OW	Miriam Adisa	South Africa	Consumer Discretionary	Retailing	$58.3
NKE-US	NIKE, Inc.	OW	Kimberly Greenberger	United States	Consumer Discretionary	Consumer Durables & Apparel	$122.8
7733-JP	Olympus Corp.	OW	Ryotaro Hayashi	Japan	Health Care	Health Care Equipment & Services	$18.0
PLZL-RU	Polyus PJSC	OW	Dan Shaw	Russia	Materials	Materials	$18.1
SPGI-US	S&P Global, Inc.	OW	Toni Kaplan	United States	Financials	Diversified Financials	$57.5
SU-FR	Schneider Electric SE	OW	Ben Uglow	France	Industrials	Capital Goods	$46.8
SGRO-GB	SEGRO plc	OW	Bart Gysens	United Kingdom	Real Estate	Real Estate	$10.0
SHW-US	Sherwin-Williams Company	OW	Vincent Andrews	United States	Materials	Materials	$38.6
SYK-US	Stryker Corporation	OW	David Lewis	United States	Health Care	Health Care Equipment & Services	$55.5
16-HK	Sun Hung Kai Properties Limited	OW	Praveen Choudhary	Hong Kong	Real Estate	Real Estate	$38.2
TAL-US	TAL Education Group	OW	Sheng Zhong	China	Consumer Discretionary	Consumer Services	$30.0
2330-TW	TSMC	OW	Charlie Chan	Taiwan	Information Technology	Semiconductors & Semiconductor Equipment	$232.4
UNH-US	UnitedHealth Group Incorporated	OW	Ricky Goldwasser	United States	Health Care	Health Care Equipment & Services	$217.7
V-US	Visa Inc.	OW	James Faucette	United States	Information Technology	Software & Services	$298.0
VIV-FR	Vivendi SA	OW	Omar Sheikh	France	Communication Services	Media & Entertainment	$24.8
XLNX-US	Xilinx, Inc.	OW	Joseph Moore	United States	Information Technology	Semiconductors & Semiconductor Equipment	$19.7
YAR-NO	Yara International ASA	OW	Lisa De Neve	Norway	Materials	Materials	$8.8

Source: FactSet, Bloomberg, Morgan Stanley Research.

Exhibit 20: A History Of Outperforming From This Part of the Bear Market On

Ticker	Company	Sector	Industry Group	Market Cap ($B USD)	MS Rating	07-09 Outperformance	00-01 Outperformance	90-91 Outperformance
NKE	NIKE INC -CL B	Consumer Discretionary	Consumer Durables & Apparel	$131.0	OW	5.9	40.0	25.0
AMZN	AMAZON.COM INC	Consumer Discretionary	Retailing	$906.8	OW	51.7	99.6	#N/A
ROST	ROSS STORES INC	Consumer Discretionary	Retailing	$35.2	OW	26.2	127.8	-6.7
TJX	TJX COS INC (THE)	Consumer Discretionary	Retailing	$66.7	OW	18.6	51.5	2.7
AZO	AUTOZONE INC	Consumer Discretionary	Retailing	$25.6	OW	42.5	176.2	#N/A
LOW	LOWE'S COS INC	Consumer Discretionary	Retailing	$75.7	OW	4.1	42.4	14.7
SHW	SHERWIN-WILLIAMS CO	Consumer Discretionary	Retailing	$47.9	OW	13.5	37.2	9.7
WMT	WALMART INC	Consumer Staples	Food & Staples Retailing	$324.1	OW	3.7	24.2	7.0
SPGI	S&P GLOBAL INC	Financials	Diversified Financials	$58.6	OW	21.6	28.4	19.7
UNH	UNITEDHEALTH GROUP INC	Health Care	Health Care Equipment & Services	$263.3	OW	39.6	61.2	40.6
DE	DEERE & CO	Industrials	Capital Goods	$45.8	OW	12.7	32.1	8.6
MSFT	MICROSOFT CORP	Information Technology	Software & Services	$1,169.3	OW	5.3	22.1	22.2
NLOK	NORTONLIFELOCK INC	Information Technology	Software & Services	$11.0	OW	2.1	123.9	36.9
WDC	WESTERN DIGITAL CORP	Information Technology	Technology Hardware & Equipment	$13.5	OW	40.6	117.7	-24.0
APD	AIR PRODUCTS & CHEMICALS INC	Materials	Materials	$45.9	OW	18.6	30.1	14.5
LIN	LINDE PLC	Materials	Materials	$92.9	OW	24.7	48.5	#N/A
BLL	BALL CORP	Materials	Materials	$22.6	OW	26.7	167.5	-7.1
FCX	FREEPORT-MCMORAN INC	Materials	Materials	$11.8	OW	23.0	42.7	#N/A
NEE	NEXTERA ENERGY INC	Utilities	Utilities	$118.0	OW	25.7	23.0	-2.4

Source: FactSet, Bloomberg, Morgan Stanley Research.

List of Global Companies That Have Withdrawn Guidance

Exhibit 21: List of Global Companies That Have Withdrawn Guidance amid COVID-19

Company	Ticker	Country	Industry Group	Date
Stanley Black & Decker, Inc.	SWK	United States	Capital Goods	4/2/2020
Textron Inc.	TXT	United States	Capital Goods	4/2/2020
Bunzl plc	BNZL	United Kingdom	Capital Goods	4/2/2020
Kirkland Lake Gold Ltd.	KL	Canada	Materials	4/2/2020
Beiersdorf AG	BEI	Germany	Household & Personal Products	4/2/2020
Lamb Weston Holdings, Inc.	LW	United States	Food Beverage & Tobacco	4/1/2020
Masimo Corporation	MASI	United States	Health Care Equipment & Services	4/1/2020
T-Mobile US, Inc.	TMUS	United States	Telecommunication Services	4/1/2020
Toro Company	TTC	United States	Capital Goods	4/1/2020
Continental AG	CON	Germany	Automobiles & Components	4/1/2020
Dollarama Inc.	DOL	Canada	Retailing	4/1/2020
Kinross Gold Corporation	KGC	Canada	Materials	4/1/2020
Veolia Environnement SA	VIE	France	Utilities	4/1/2020
Bureau Veritas SA	BVI	France	Commercial & Professional Services	4/1/2020
Bouygues SA	EN	France	Capital Goods	4/1/2020
Shopify, Inc. Class A	SHOP	United States	Software & Services	4/1/2020
McCormick & Company, Incorporated	MKC	United States	Food Beverage & Tobacco	3/31/2020
Dollar Tree, Inc.	DLTR	United States	Retailing	3/31/2020
Stryker Corporation	SYK	United States	Health Care Equipment & Services	3/31/2020
Xylem Inc.	XYL	United States	Capital Goods	3/31/2020
Quest Diagnostics Incorporated	DGX	United States	Health Care Equipment & Services	3/31/2020
Smiths Group Plc	SMIN	United Kingdom	Capital Goods	3/31/2020
WPP Plc	WPP	United Kingdom	Media & Entertainment	3/31/2020
Munich Reinsurance Company	MUV2	Germany	Insurance	3/31/2020
Societe Generale S.A. Class A	GLE	France	Banks	3/31/2020
Western Union Company	WU	United States	Software & Services	3/30/2020
Boston Scientific Corporation	BSX	United States	Health Care Equipment & Services	3/30/2020
Domino's Pizza, Inc.	DPZ	United States	Consumer Services	3/30/2020
Regency Centers Corporation	REG	United States	Real Estate	3/30/2020
Company	**Ticker**	**Country**	**Industry Group**	**Date**
NetApp, Inc.	NTAP	United States	Technology Hardware & Equipment	3/30/2020
AngloGold Ashanti Limited	ANG	South Africa	Materials	3/30/2020
UPM-Kymmene Oyj	UPM	Finland	Materials	3/30/2020
CNH Industrial NV	CNHI	United States	Capital Goods	3/30/2020
ViacomCBS Inc. Class B	VIAC	United States	Media & Entertainment	3/27/2020
Molson Coors Beverage Company Class B	TAP	United States	Food Beverage & Tobacco	3/27/2020
Bruker Corporation	BRKR	United States	Pharmaceuticals Biotechnology & Life Sciences	3/27/2020
South32 Ltd.	S32	Australia	Materials	3/27/2020
Berkeley Group Holdings plc	BKG	United Kingdom	Consumer Durables & Apparel	3/27/2020
Scout24 AG	G24	Germany	Media & Entertainment	3/26/2020
Analog Devices, Inc.	ADI	United States	Semiconductors & Semiconductor Equipment	3/26/2020
Caterpillar Inc.	CAT	United States	Capital Goods	3/26/2020
LKQ Corporation	LKQ	United States	Retailing	3/26/2020
Interpublic Group of Companies, Inc.	IPG	United States	Media & Entertainment	3/26/2020
Lear Corporation	LEA	United States	Automobiles & Components	3/26/2020
VMware, Inc. Class A	VMW	United States	Software & Services	3/26/2020
Dell Technologies Inc Class C	DELL	United States	Technology Hardware & Equipment	3/26/2020
Umicore	UMI	Belgium	Materials	3/26/2020
Infineon Technologies AG	IFX	Germany	Semiconductors & Semiconductor Equipment	3/26/2020
MTU Aero Engines AG	MTX	Germany	Capital Goods	3/26/2020
Magna International Inc.	MG	Canada	Automobiles & Components	3/26/2020
EssilorLuxottica SA	EL	France	Consumer Durables & Apparel	3/26/2020
Federal Realty Investment Trust	FRT	United States	Real Estate	3/25/2020
Target Corporation	TGT	United States	Retailing	3/25/2020
Rentokil Initial plc	RTO	United Kingdom	Commercial & Professional Services	3/25/2020
Persimmon Plc	PSN	United Kingdom	Consumer Durables & Apparel	3/25/2020
Whirlpool Corporation	WHR	United States	Consumer Durables & Apparel	3/25/2020
Northern Star Resources Ltd	NST	Australia	Materials	3/25/2020
SunPower Corporation	SPWR	United States	Semiconductors & Semiconductor Equipment	3/25/2020
Company	**Ticker**	**Country**	**Industry Group**	**Date**
Dexus	DXS	Australia	Real Estate	3/25/2020
Mid-America Apartment Communities, Inc.	MAA	United States	Real Estate	3/24/2020
Anheuser-Busch InBev SA/NV	ABI	Belgium	Food Beverage & Tobacco	3/24/2020
Elanco Animal Health, Inc.	ELAN	United States	Pharmaceuticals Biotechnology & Life Sciences	3/24/2020
Ambev SA	ABEV3	Brazil	Food Beverage & Tobacco	3/24/2020
Mastercard Incorporated Class A	MA	United States	Software & Services	3/24/2020
General Motors Company	GM	United States	Automobiles & Components	3/24/2020
Square, Inc. Class A	SQ	United States	Software & Services	3/24/2020
Agnico Eagle Mines Limited	AEM	Canada	Materials	3/24/2020
Newmont Corporation	NEM	United States	Materials	3/23/2020
Coca-Cola Company	KO	United States	Food Beverage & Tobacco	3/23/2020
TRATON SE	8TRA	Germany	Capital Goods	3/23/2020
Compagnie de Saint-Gobain SA	SGO	France	Capital Goods	3/23/2020
V.F. Corporation	VFC	United States	Consumer Durables & Apparel	3/23/2020
Best Buy Co., Inc.	BBY	United States	Retailing	3/23/2020
Airbus SE	AIR	France	Capital Goods	3/23/2020
Axel Springer SE	SPR	Germany	Media & Entertainment	3/23/2020
Unibail-Rodamco	URW	Netherlands	Real Estate	3/23/2020
Aptiv PLC	APTV	United States	Automobiles & Components	3/23/2020
Applied Materials, Inc.	AMAT	United States	Semiconductors & Semiconductor Equipment	3/23/2020
Twitter, Inc.	TWTR	United States	Media & Entertainment	3/23/2020
Deere & Company	DE	United States	Capital Goods	3/23/2020
Gaming and Leisure Properties, Inc.	GLPI	United States	Real Estate	3/23/2020
Cummins Inc.	CMI	United States	Capital Goods	3/20/2020
Sysco Corporation	SYY	United States	Food & Staples Retailing	3/20/2020
A.P. Moller - Maersk A/S Class B	MAERSK.B	Denmark	Transportation	3/20/2020
Burlington Stores, Inc.	BURL	United States	Retailing	3/19/2020
Ross Stores, Inc.	ROST	United States	Retailing	3/19/2020
Darden Restaurants, Inc.	DRI	United States	Consumer Services	3/19/2020
Company	**Ticker**	**Country**	**Industry Group**	**Date**
Exact Sciences Corporation	EXAS	United States	Pharmaceuticals Biotechnology & Life Sciences	3/19/2020
Cintas Corporation	CTAS	United States	Commercial & Professional Services	3/19/2020
Ford Motor Company	F	United States	Automobiles & Components	3/19/2020
Estee Lauder Companies Inc. Class A	EL	United States	Household & Personal Products	3/19/2020
Sonic Healthcare Limited	SHL	Australia	Health Care Equipment & Services	3/19/2020
Marriott International, Inc. Class A	MAR	United States	Consumer Services	3/18/2020
Skechers U.S.A., Inc. Class A	SKX	United States	Consumer Durables & Apparel	3/18/2020
GPT Group	GPT	Australia	Real Estate	3/18/2020
REA Group Ltd	REA	Australia	Media & Entertainment	3/17/2020
Ramsay Health Care Limited	RHC	Australia	Health Care Equipment & Services	3/17/2020
Ventas, Inc.	VTR	United States	Real Estate	3/17/2020
Lam Research Corporation	LRCX	United States	Semiconductors & Semiconductor Equipment	3/17/2020
Southwest Airlines Co.	LUV	United States	Transportation	3/16/2020
Expedia Group, Inc.	EXPE	United States	Retailing	3/13/2020
Broadcom Inc.	AVGO	United States	Semiconductors & Semiconductor Equipment	3/12/2020
Hilton Worldwide Holdings Inc	HLT	United States	Consumer Services	3/11/2020
Royal Caribbean Cruises Ltd.	RCL	United States	Consumer Services	3/10/2020
American Airlines Group, Inc.	AAL	United States	Transportation	3/10/2020
Delta Air Lines, Inc.	DAL	United States	Transportation	3/10/2020
JetBlue Airways Corporation	JBLU	United States	Transportation	3/9/2020
Host Hotels & Resorts, Inc.	HST	United States	Real Estate	3/9/2020
Booking Holdings Inc.	BKNG	United States	Retailing	3/9/2020
Vail Resorts, Inc.	MTN	United States	Consumer Services	3/9/2020
Hyatt Hotels Corporation Class A	H	United States	Consumer Services	3/2/2020
Microchip Technology Incorporated	MCHP	United States	Semiconductors & Semiconductor Equipment	3/2/2020
United Airlines Holdings, Inc.	UAL	United States	Transportation	2/24/2020
MGM Resorts International	MGM	United States	Consumer Services	2/12/2020

Source: Alphasense, AlphaSense Insights, Morgan Stanley Research as of April 2, 2020. Criteria for search: (1) global cos. with market caps over $5B; (2) search criteria applied across 8Ks, press releases and transcripts; (3) manual selection process utilized after initial screen. Note: list may not be exhaustive due to limits of screen criteria/manual process.

Fresh Money Buy List Updates

Each week, we will use a section of our Weekly Warm Up to provide brief updates on select stocks on our Fresh Money Buy List.

Exhibit 22: Fresh Money Buy List - Stats & Performance

Company Name	Ticker	MS Rating	Sector	Market Cap ($Bn)	Price	MS PT	% to MS PT	MS Analyst	Date Added	Total Return Since Inclusion	
										Absolute	Rel. to S&P
Amazon.com Inc	AMZN	Overweight	Consumer Discretionary	$984.7	$1,906.59	$2,400.00	26%	Nowak, Brian	2/10/2020	(8.3%)	16.6%
Walt Disney Co	DIS	Overweight	Communication Services	$176.2	$93.88	$130.00	38%	Swinburne, Benjamin	3/14/2018	(6.9%)	(0.7%)
Humana Inc	HUM	Overweight	Health Care	$40.5	$291.63	$343.00	18%	Goldwasser, Ricky	7/19/2018	(6.8%)	1.7%
Johnson & Johnson	JNJ	Overweight	Health Care	$355.5	$134.17	$160.00	19%	Lewis, David	2/3/2020	(9.3%)	13.2%
Linde PLC	LIN	Overweight	Materials	$88.9	$162.13	$205.00	26%	Andrews, Vincent	3/23/2020	7.2%	(0.9%)
MasterCard, Inc.	MA	Overweight	Information Technology	$242.0	$237.03	$266.00	12%	Faucette, James	3/2/2020	(18.3%)	(2.8%)
Microsoft	MSFT	Overweight	Information Technology	$1,192.5	$153.83	$180.00	17%	Weiss, Keith	3/14/2018	67.9%	74.2%
Procter & Gamble Co.	PG	Overweight	Consumer Staples	$300.9	$115.08	$125.00	9%	Mohsenian, Dara	3/18/2019	15.3%	25.3%
S&P Global Inc	SPGI	Overweight	Financials	$59.2	$238.80	$290.00	21%	Kaplan, Toni	3/23/2020	14.4%	6.3%
T-Mobile US, Inc.	TMUS	++	Communication Services	$73.0	$81.98	++	++	Flannery, Simon	3/14/2018	26.2%	32.4%
Current List Performance											
Average (Eq. Weight)				$351.3			21%			8.1%	16.5%
Median				$209.1			19%			0.2%	9.8%
% Positive Returns (Abs. / Rel.)										50%	70%
% Negative Returns (Abs. / Rel.)										50%	30%
Avg. Hold Period (Months)											11.5
All Time List Performance											
Average (Eq. Weight)										3.1%	6.3%
Median										(5.7%)	(0.7%)
% Positive Returns (Abs. / Rel.)										41%	45%
% Negative Returns (Abs. / Rel.)										59%	55%
Avg. Hold Period (Months)											10.1

++ Rating and other information has been removed from consideration in this report because, under applicable law and/or Morgan Stanley policy, Morgan Stanley may be precluded from issuing such information with respect to this company at this time.

Performance returns shown above represent local currency total returns, including dividends and excluding brokerage commission. Returns are calculated using the closing price on the last trading day before the date shown in the "Date Added" column through close on the last trading day prior to publication of this report for stocks currently on the list and through close on the day of removal for stocks formerly on the list. These figures are not audited. Past performance is no guarantee of future results.

Source: Bloomberg, Morgan Stanley Research

Walt Disney Co (DIS), Ben Swinburne

- **A Whole New World - Remain OW** - Disney's portfolio is in the crosshairs of both the recession and the global pandemic. Assuming it can capture the streaming opportunity headlined by Disney Plus, the pullback in shares has led to the core business trading at ~8x our lowered CY21 core EPS - an entry point worth the risk.

Microsoft Corp (MSFT) - Keith Weiss

- **CIO Survey Takeaways — Seeing Near-term Resiliency, Longer-term Secular Position Strengthening -** While our 1Q20 AlphaWise CIO Survey indicates slower IT budget growth and potential for negative revisions, software is still an IT budget share gainer and Microsoft is exposed to many near-term remote work priorities. Microsoft remains a top vendor for the key secular trends in tech. Remain OW.

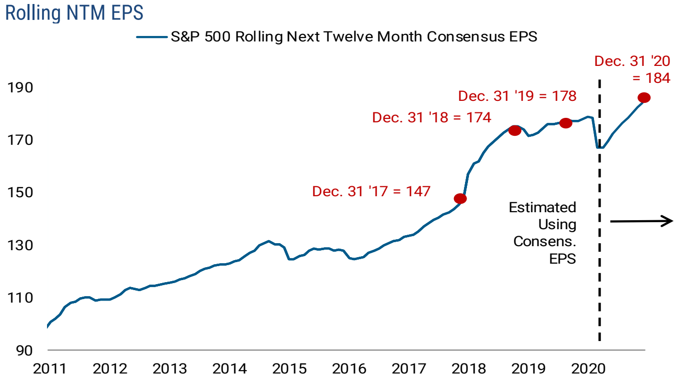
T-Mobile US (TMUS) - Simon Flannery

- **Sprint merger finally closes - Synergy, network targets reiterated as Legere hands CEO reins to Sievert -** T-Mobile and Sprint announced the closing of their merger this morning, nearly 2 years after first announcing the deal. This announcement is not the full completion of the deal, which still awaits approval from the CPUC. The parties withdrew applications in front of the CPUC a couple of days ago, ahead of a planned 4/16 CPUC vote. The Tunney Act sign off on the DoJ settlement also remains outstanding. T-Mobile reiterated their synergy target of at least $43bn, which will require investments of $40bn over the next 3 years as the company deploys Sprint's 2.5 Ghz spectrum to expand 5G capacity. The company plans to offer speeds of 100 Mbps+ to over 90% of the country over the next 6 years. Long time CEO John Legere is stepping down a month early. Incoming CEO Mike Sievert who has operated as COO for several years was tapped to succeed Legere several months ago.

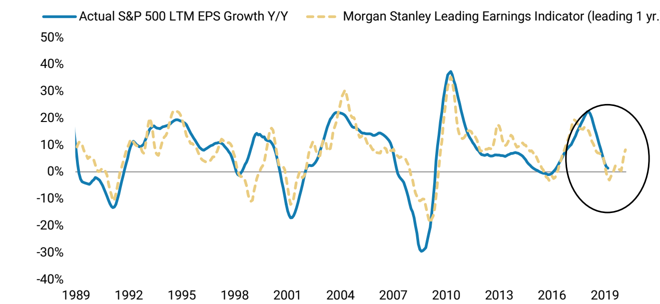
Weekly Charts to Watch

Exhibit 23: Four Charts to Focus On

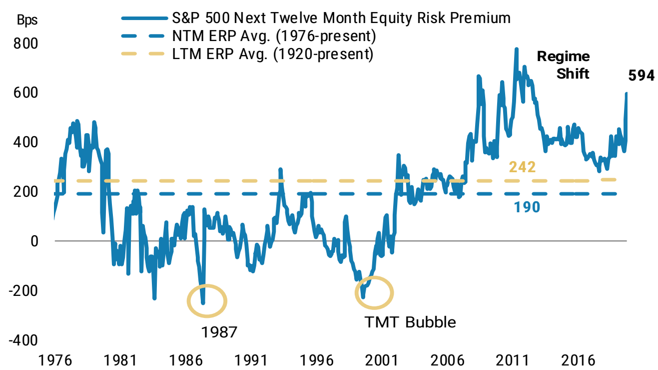
Rolling NTM EPS



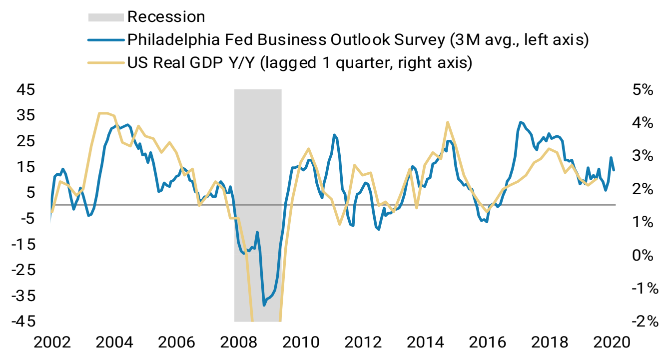
Morgan Stanley Leading Earnings Indicator



S&P 500 NTM Equity Risk Premium



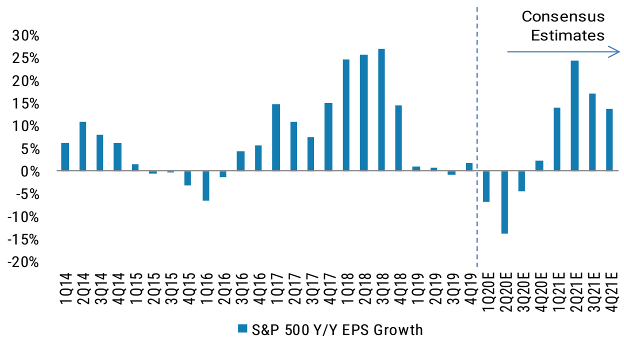
Phil. Fed Business Outlook Survey Leads Real GDP Growth



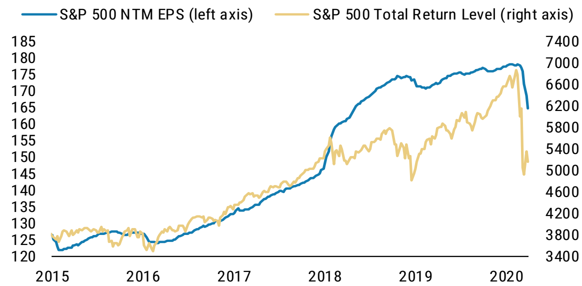
Source: FactSet, Bloomberg, Robert Shiller, Morgan Stanley Research. Top: As of Mar 31, 2020. Bottom Left: As of Apr 2, 2020. Bottom Right: As of Feb 29, 2019. MS Leading Earnings Indicator is a macro factor based earnings model that leads actual earnings growth by one year with a 0.7 12-month leading correlation. Note: S&P 500 fundamental data used post March 1993; Top 500 by market cap data used before 1993. LTM equity risk premium average is since 1920. ERP based on forward earnings yield and 10-year Treasury Yield.

Exhibit 24: US Earnings Snapshot

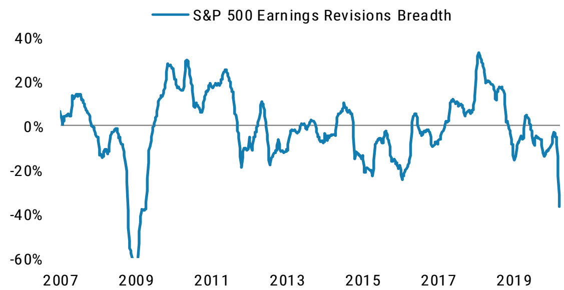
S&P 500 Y/Y EPS Growth



S&P 500 NTM EPS vs. Total Return Level



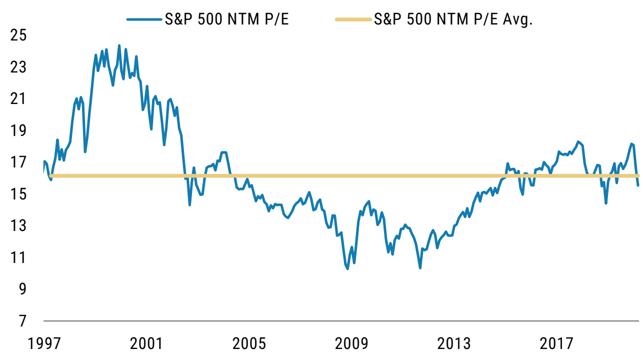
S&P 500 Earnings Revisions Breadth



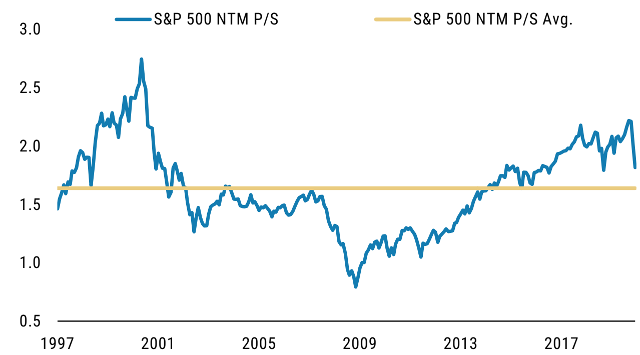
Source: Thomson Financial, FactSet, Morgan Stanley Research. As of Apr 2,, 2020.

Exhibit 25: US Equity Market Traditional Valuation Measures

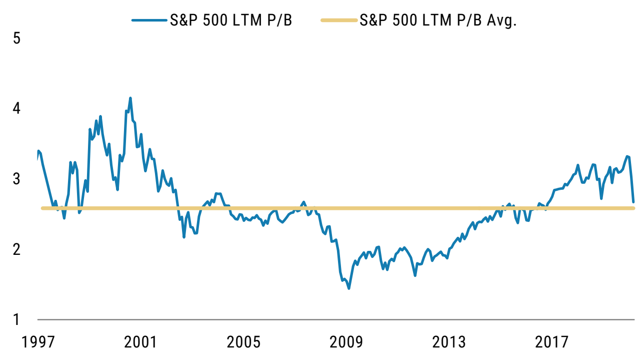
S&P 500 NTM P/E



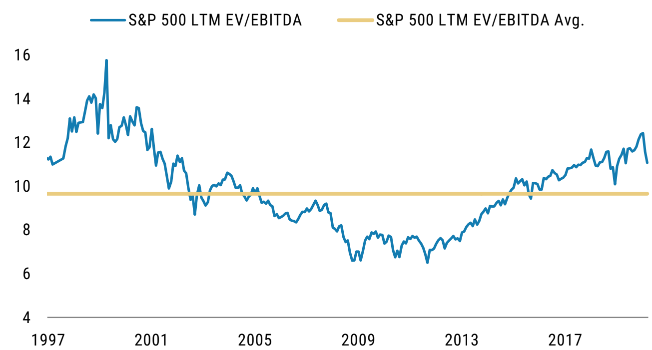
S&P 500 NTM P/S



S&P 500 NTM P/B



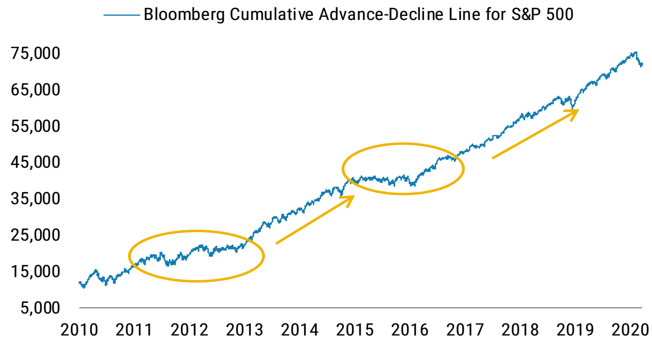
S&P 500 NTM EV/EBITDA



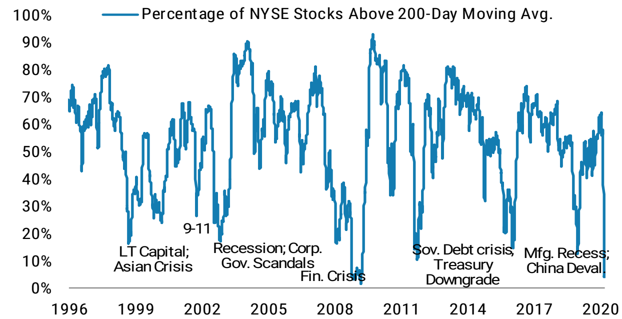
Source: FactSet, Morgan Stanley Research as of Mar 31, 2020. Monthly Data. Note: S&P 500 fundamental data used post March 1993; Top 500 by market cap data used before 1993.

Exhibit 26: US Equity Market Technicals and Financial Conditions

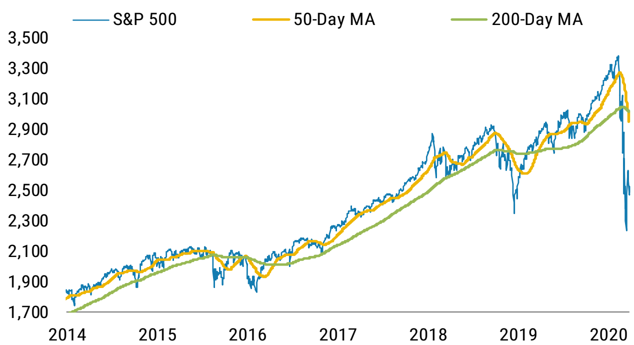
S&P 500 Cumulative Advance-Decline



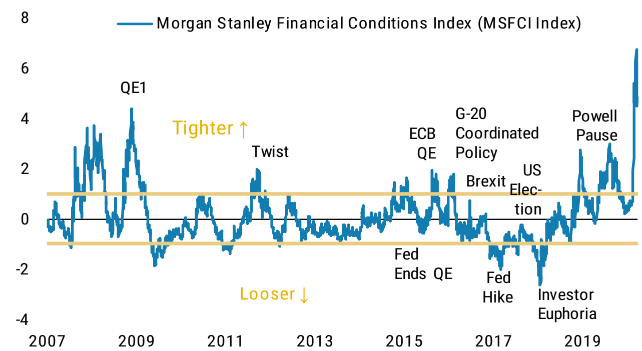
S&P 500 Percent Members Above 200-Day Moving Average



S&P 500 with Moving Averages

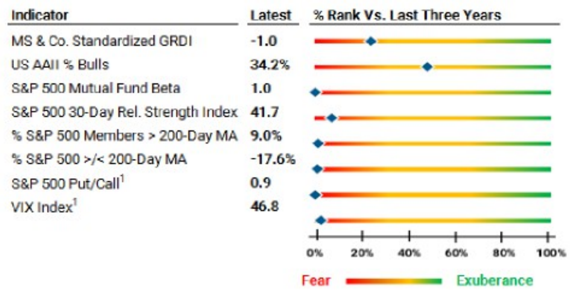


Morgan Stanley Financial Conditions Index

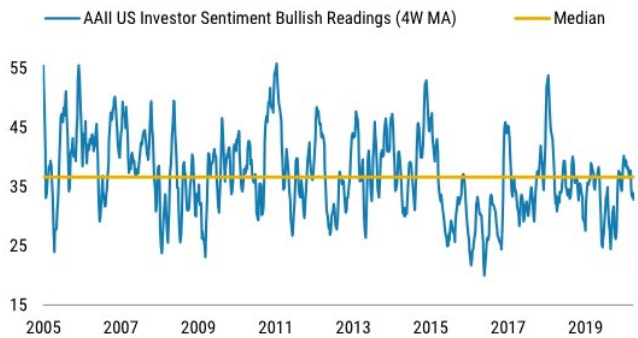


Source: Bloomberg, Morgan Stanley Research. All: As of Apr 2, 2020

Exhibit 27: US Equity Market Sentiment

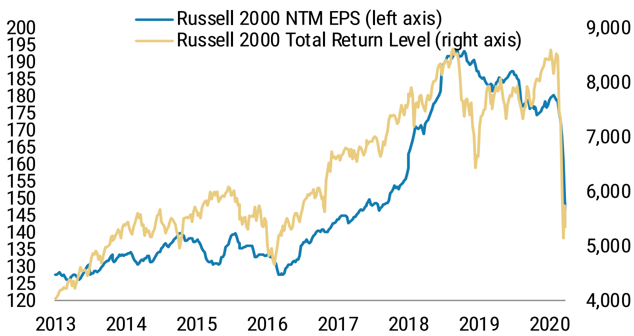


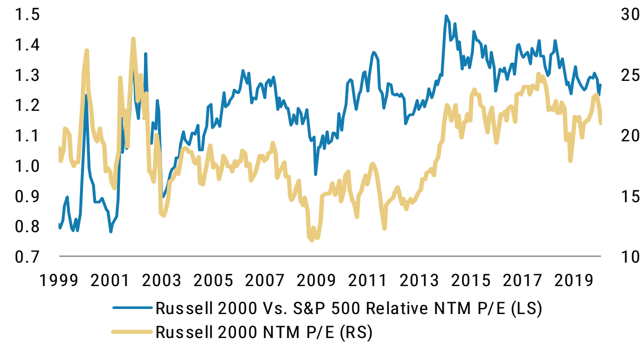
Indicator	Latest	% Rank Vs. Last Three Years
MS & Co. Standardized GRDI	-1.0	
US AAII % Bulls	34.2%	
S&P 500 Mutual Fund Beta	1.0	
S&P 500 30-Day Rel. Strength Index	41.7	
% S&P 500 Members > 200-Day MA	9.0%	
% S&P 500 >/< 200-Day MA	-17.6%	
S&P 500 Put/Call[1]	0.9	
VIX Index[1]	46.8	

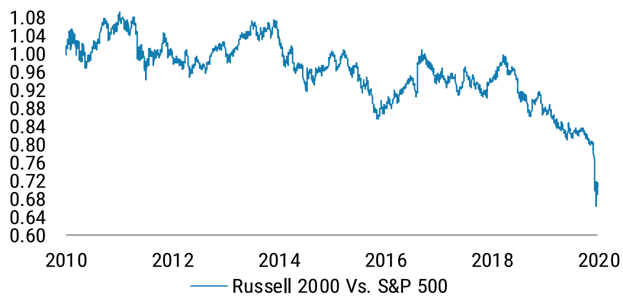


Source: Bloomberg, FactSet, Morgan Stanley Research. As of April 3, 2020.

Exhibit 28: US Small Cap Equities







Source: FactSet, Morgan Stanley Research. Top Right: As of Mar 31 2020. Top Left and Bottom: As of Apr 2, 2020

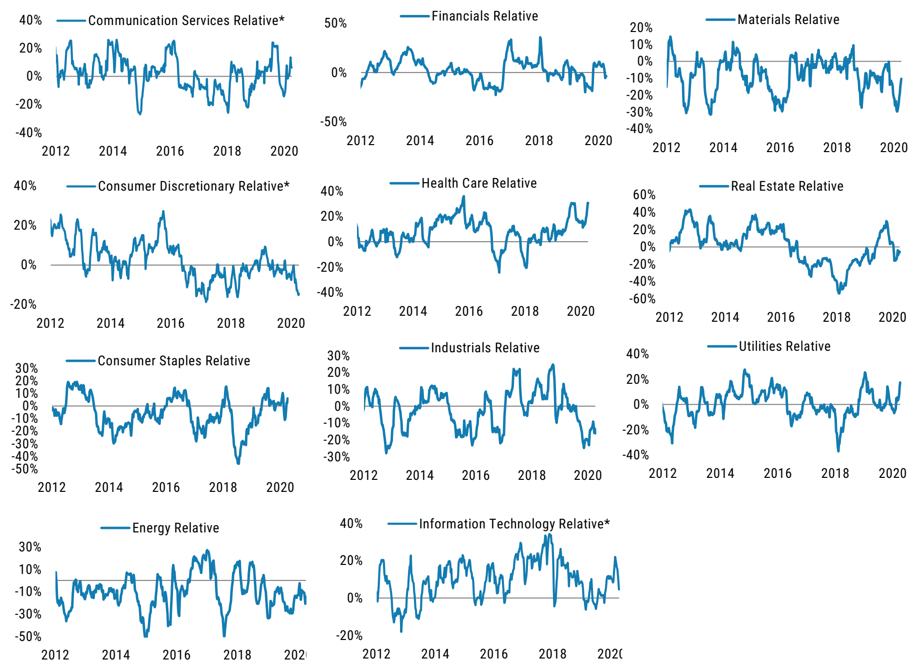
Exhibit 29: We Have a Price Target of $3000

Morgan Stanley S&P 500 Price Target: Year End 2020

Landscape	Earnings	Multiple	Price Target	Upside / Downside
Bull Case	$170	17.5x	3,000	18.7%
Base Case	$159	17.0x	2,700	6.9%
Bear Case	$156	15.5x	2,400	-5.0%
Current S&P 500 Price as of:		4/2/2020	2,527	

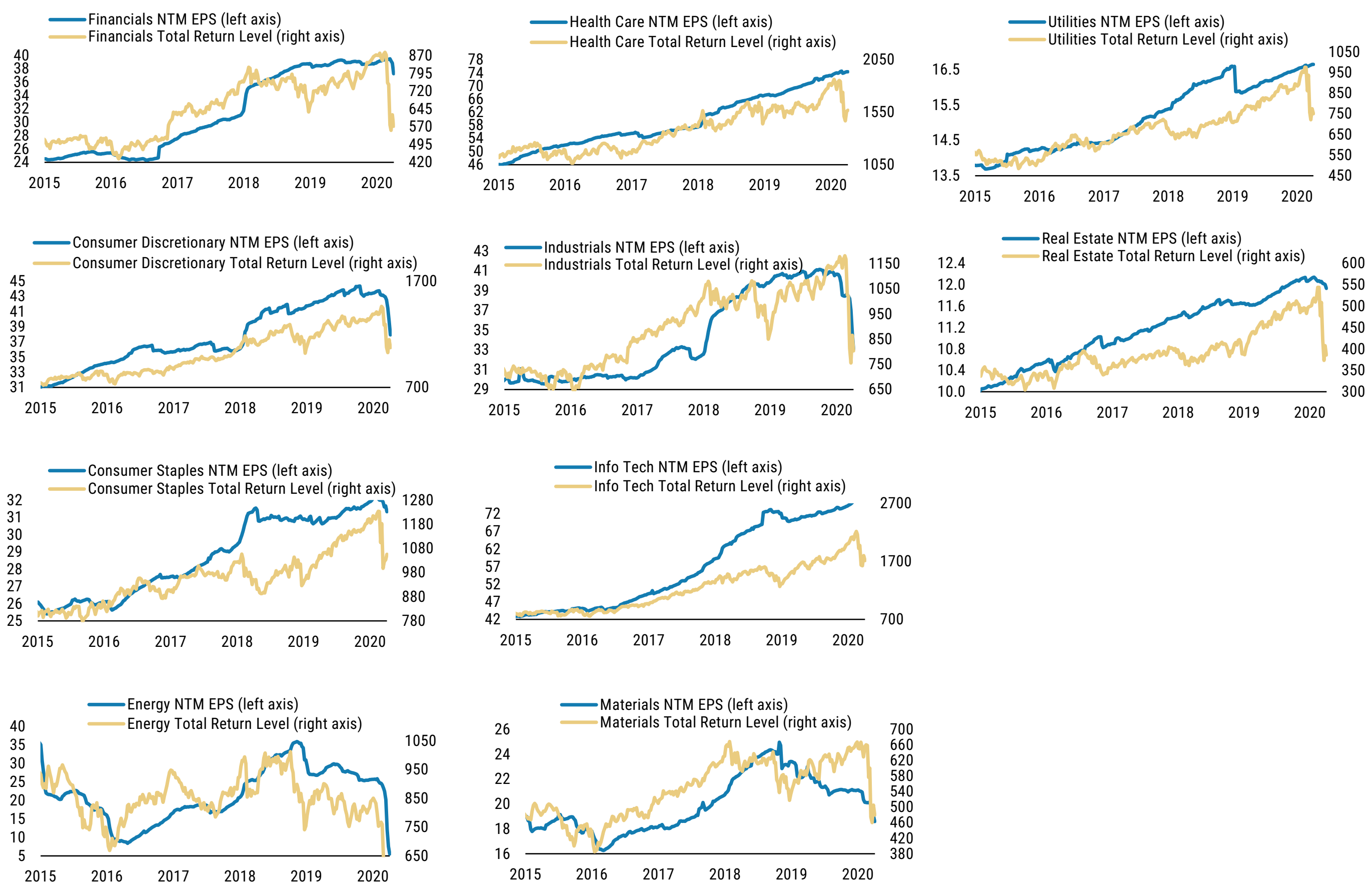
Source: Morgan Stanley Research.
Note: We apply a forward PE multiple to 2021 EPS estimates.

Exhibit 30: Earnings Revisions Breadth



Source: FactSet, Morgan Stanley Research. As of Apr 1, 2020. Sectors with * use current, fixed constituents.

Exhibit 31: US Sector NTM EPS vs. Total Return Level



Source: FactSet, Morgan Stanley Research as of Apr 2, 2020.

For valuation methodology and risks associated with any price targets referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Andrew B Pauker; Adam Virgadamo, CFA; Michelle M. Weaver; Michael J Wilson.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictpolicies. A Portuguese version of the policy can be found at www.morganstanley.com.br

Important Regulatory Disclosures on Subject Companies

The analyst or strategist (or a household member) identified below owns the following securities (or related derivatives): Andrew B Pauker - Southwest Airlines(common or preferred stock).

As of February 28, 2020, Morgan Stanley beneficially owned 1% or more of a class of common equity securities of the following companies covered in Morgan Stanley Research: Adobe Systems, Airbus SE, Alstom, Amazon.com Inc, Automatic Data Processing Inc, Ball Corporation, Baxter International, Berkeley Group Holdings PLC, BlackRock Inc., Boeing Co., Booking Holdings Inc, Bouygues SA, Bunzl PLC, Carnival Corp., Cellnex Telecom SA, Coca-Cola Co., Crown Castle Corp., Dexus, Dominos Pizza Inc., Emerson Electric Co, ESSILORLUXOTTICA AMERICAN DEPOSITARY REC, EssilorLuxottica SA, Estee Lauder Companies Inc, Gaming and Leisure Properties Inc, Host Hotels & Resorts, Inc., Itau Unibanco Holding S.A., KINROSS GOLD CORP, Kinross Gold Corp, Lululemon Athletica Inc., MasterCard Inc, Moody's Corp, Naspers, Naspers Ltd, NextEra Energy Inc, Nike Inc., Northern Star Resources, Palo Alto Networks Inc, Persimmon PLC, Philip Morris International Inc, Ramsay Health Care, Regency Centers Corp, Royal Caribbean Cruises, Saint-Gobain, SHOPIFY A, Shopify Inc, South32 Ltd, Splunk Inc, Square Inc, TAL Education Group, Twitter Inc, Unibail-Rodamco-Westfield, Veeva Systems Inc, Veolia, Veolia Environnement SA, ViacomCBS Inc, Visa Inc., Vivendi, Walt Disney Co, Xilinx, Zillow Group Inc.

Within the last 12 months, Morgan Stanley managed or co-managed a public offering (or 144A offering) of securities of Akamai Technologies, Inc., Alibaba Group Holding, American Airlines Group Inc, Apple, Inc., Ball Corporation, Baxter International, BlackRock Inc., Boeing Co., Broadcom Inc., Caterpillar Inc., Cellnex Telecom SA, Cigna Corp, CNH Industrial NV, Coca-Cola Co., Comcast Corporation, Crown Castle Corp., Delta Air Lines, Inc., Eaton Corporation PLC, Eli Lilly & Co., Entergy Corp, Equinix Inc., Ford Motor Company, General Electric Co., General Motors Company, Home Depot Inc, Host Hotels & Resorts, Inc., Humana Inc, Interpublic Group, JetBlue Airways, Kansas City Southern, MasterCard Inc, MFA Financial Inc, MGM Resorts International, Motorola Solutions Inc, Naspers, Naspers Ltd, NextEra Energy Inc, Nordstrom, Olympus, Procter & Gamble Co., Quest Diagnostics Inc., S&P Global Inc, SHOPIFY A, Shopify Inc, Stanley Black & Decker, Stryker Corporation, Textron Inc., Twitter Inc, United Airlines Holdings, Inc., UnitedHealth Group Inc, Ventas Inc, VF Corp, ViacomCBS Inc, Walmart Inc, Walt Disney Co, Westinghouse Air Brake Technologies Corp, WPP Group Plc, Zillow Group Inc.

Within the last 12 months, Morgan Stanley has received compensation for investment banking services from Akamai Technologies, Inc., Alexion Pharmaceuticals, Alibaba Group Holding, Alphabet Inc., American Airlines Group Inc, Analog Devices Inc., AP Moller - Maersk AS A, AP Moller-Maersk, Apple, Inc., Automatic Data Processing Inc, Ball Corporation, Baxter International, BlackRock Inc., Boeing Co., Boston Scientific, Broadcom Inc., Cellnex Telecom SA, Cigna Corp, CNH Industrial NV, Coca-Cola Co., Comcast Corporation, Continental AG, Crown Castle Corp., Cummins Inc., Dell Technologies Inc., Delta Air Lines, Inc., Eaton Corporation PLC, Eli Lilly & Co., Entergy Corp, Equinix Inc., Ford Motor Company, General Electric Co., General Motors Company, Hilton Worldwide Holdings Inc, Home Depot Inc, Host Hotels & Resorts, Inc., Humana Inc, Interpublic Group, JetBlue Airways, Kansas City Southern, Komatsu, MasterCard Inc, MFA Financial Inc, MGM Resorts International, Naspers, Naspers Ltd, NextEra Energy Inc, Nordstrom, Old Dominion Freight Line Inc, Olympus, Parker-Hannifin Corp, Procter & Gamble Co., Quest Diagnostics Inc., Royal Caribbean Cruises, S&P Global Inc, Saint-Gobain, Scout24, SHOPIFY A, Shopify Inc, South32 Ltd, Stanley Black & Decker, Stryker Corporation, Textron Inc., Twitter Inc, United Airlines Holdings, Inc., UnitedHealth Group Inc, Ventas Inc, VF Corp, ViacomCBS Inc, Vivendi, VMware Inc, W.W. Grainger Inc., Walmart Inc, Walt Disney Co, WPP Group Plc, Zillow Group Inc.

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Adobe Systems, Advance Auto Parts Inc, Advanced Micro Devices, Agnico Eagle Mines Ltd, Air Products and Chemicals Inc., Airbus SE, Akamai Technologies, Inc., Alexion Pharmaceuticals, Alibaba Group Holding, Allegion PLC, Alphabet Inc., Alstom, Amazon.com Inc, Ambev SA, American Airlines Group Inc, Analog Devices Inc., Anheuser-Busch InBev SA, AP Moller - Maersk AS A, AP Moller-Maersk, Apple, Inc., Applied Materials Inc., Aptiv Plc, Automatic Data Processing Inc, AutoZone Inc., Axel Springer SE, Ball Corporation, Baxter International, Beiersdorf AG, Best Buy Co Inc, BlackRock Inc., Boeing Co., Booking Holdings Inc, Booz Allen Hamilton Holding Corporation, Boston Scientific, Bouygues SA, Broadcom Inc., Bruker Corp, Bureau Veritas SA, Burlington Stores Inc, Cardinal Health Inc, Caterpillar Inc., Cellnex Telecom SA, Cigna Corp, Citigroup Inc., CNH Industrial NV, Coca-Cola Co., Comcast Corporation, Continental AG, Crown Castle Corp., Cummins Inc., Daiichi Sankyo, Darden Restaurants Inc., Deere & Co., Dell Technologies Inc., Delta Air Lines, Inc., Dexus, DISH Network, Dollar Tree Inc, Dominos Pizza Inc., Dover, East West Bancorp, Inc., Eastman Chemical Co, Eaton Corporation PLC, Eli Lilly & Co., Emerson Electric Co, Entergy Corp, Equifax Inc, Equinix Inc., ESSILORLUXOTTICA AMERICAN DEPOSITARY REC, EssilorLuxottica SA, Estee Lauder Companies Inc, Exact Sciences Corp, Expedia Inc., Fastenal Co., Federal Realty Investment Trust, Fiserv Inc., FMC Corporation, Ford Motor Company, Fortinet Inc., Freeport-McMoRan Inc, Gaming and Leisure Properties Inc, General Electric Co., General Motors Company, Gilead Sciences Inc., GPT Group, Hilton Worldwide Holdings Inc, Home Depot Inc, Host Hotels & Resorts, Inc., Humana Inc, Hyatt Hotels Corporation, Infineon Technologies AG, Intel Corporation, Interpublic Group, Itau Unibanco Holding S.A., JetBlue Airways, Johnson & Johnson, Kansas City Southern, KINROSS GOLD CORP, Kinross Gold Corp, KLA Corp, Komatsu, Kosmos Energy Ltd, Lam Research Corp, Lear Corporation, Leidos Holdings Inc, Lowe's Companies Inc, Lululemon Athletica Inc., MAGNA INTERNATIONAL, Marriott International Inc., Masimo Corp., MasterCard Inc, McCormick & Co Inc, MFA Financial Inc, MGM Resorts International, Microchip Technology Inc., Microsoft, Mid-America Apartment Communities, Inc., Molson Coors Beverage Company, Moody's Corp, Motorola Solutions Inc, Muenchener Rueckver AG-REG, Naspers, Naspers Ltd, NetApp Inc, Newmont Mining Corp., NextEra Energy Inc, Nike Inc., Nordstrom, Northern Star Resources, Northrop Grumman Corp., NortonLifeLock Inc, NVIDIA Corp., Old Dominion Freight Line Inc, Olympus, Palo Alto Networks Inc, Parker-Hannifin Corp, Paychex Inc, PBF Energy Inc, Persimmon PLC, Polyus Gold, Procter & Gamble Co., PVH Corp., Qorvo Inc, Quest Diagnostics Inc., Ramsay Health Care, Regency Centers Corp, Royal

Caribbean Cruises, S&P Global Inc, Sabre Corp, Saint-Gobain, Schneider Electric, Scout24, SEGRO, Sherwin-Williams Co., SHOPIFY A, Shopify Inc, Skechers USA Inc., Skyworks Solutions Inc, Smiths Group, Sonic Healthcare Limited, South32 Ltd, Southwest Airlines, Splunk Inc, Square Inc, Stanley Black & Decker, Stryker Corporation, Sun Hung Kai & Co, Sun Hung Kai Properties, SunPower Corp, SYNNEX Corp., Sysco Corp, T-Mobile US, Inc., T. Rowe Price Group, Inc., TAL Education Group, TAPESTRY INC, Target Corp, Telefonaktiebolaget LM Ericsson, Textron Inc., TJX Companies Inc., Toro Co., Twitter Inc, Umicore SA, Unibail-Rodamco-Westfield, United Airlines Holdings, Inc., UnitedHealth Group Inc, UPM-Kymmene Oyj, Vail Resorts, Inc, Veeva Systems Inc, Ventas Inc, Veolia, Veolia Environnement SA, VF Corp, ViacomCBS Inc, Visa Inc., Vivendi, VMware Inc, W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Western Union Co, Westinghouse Air Brake Technologies Corp, Whirlpool Corporation, WPP Group Plc, Xilinx, Xylem Inc., Yara International ASA, Zillow Group Inc.

Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from Adobe Systems, Advance Auto Parts Inc, Advanced Micro Devices, Airbus SE, Akamai Technologies, Inc., Alibaba Group Holding, Alphabet Inc., Alstom, Amazon.com Inc, American Airlines Group Inc, Analog Devices Inc., Anheuser-Busch InBev SA, AP Moller - Maersk AS A, AP Moller-Maersk, Applied Materials Inc., Aptiv Plc, Automatic Data Processing Inc, Ball Corporation, BlackRock Inc., Booking Holdings Inc, Boston Scientific, Broadcom Inc., Burlington Stores Inc, Cardinal Health Inc, Caterpillar Inc., Cigna Corp, Citigroup Inc., CNH Industrial NV, Coca-Cola Co., Comcast Corporation, Continental AG, Crown Castle Corp., Dell Technologies Inc., Delta Air Lines, Inc., DOLLARAMA, Dominos Pizza Inc., Dover, East West Bancorp, Inc., Eastman Chemical Co, Eaton Corporation PLC, Eli Lilly & Co., Entergy Corp, EQT Corp., Equinix Inc., ESSILORLUXOTTICA AMERICAN DEPOSITARY REC, EssilorLuxottica SA, Expedia Inc., Fiserv Inc., FMC Corporation, Ford Motor Company, Fortinet Inc., Freeport-McMoRan Inc, General Electric Co., General Motors Company, Gilead Sciences Inc., Hilton Worldwide Holdings Inc, Home Depot Inc, Humana Inc, Hyatt Hotels Corporation, Infineon Technologies AG, Intel Corporation, Interpublic Group, Itau Unibanco Holding S.A., JetBlue Airways, Johnson & Johnson, Kansas City Southern, KINROSS GOLD CORP, Kinross Gold Corp, Lear Corporation, Leidos Holdings Inc, LKQ Corp, Lowe's Companies Inc, Marriott International Inc., MasterCard Inc, MFA Financial Inc, MGM Resorts International, Microsoft, Molson Coors Beverage Company, Moody's Corp, Motorola Solutions Inc, Muenchener Rueckver AG-REG, Naspers, Naspers Ltd, NetApp Inc, Newmont Mining Corp., NextEra Energy Inc, Nordstrom, Northrop Grumman Corp., NortonLifeLock Inc, Old Dominion Freight Line Inc, Palo Alto Networks Inc, Parker-Hannifin Corp, Paychex Inc, PBF Energy Inc, Procter & Gamble Co., PVH Corp., Quest Diagnostics Inc., Rentokil Initial PLC, Royal Caribbean Cruises, S&P Global Inc, Sabre Corp, Saint-Gobain, Schneider Electric, Scout24, Smiths Group, Sonic Healthcare Limited, South32 Ltd, Southwest Airlines, Stanley Black & Decker, Stryker Corporation, Sun Hung Kai Properties, Sysco Corp, T-Mobile US, Inc., T. Rowe Price Group, Inc., Telefonaktiebolaget LM Ericsson, Textron Inc., Umicore SA, Unibail-Rodamco-Westfield, United Airlines Holdings, Inc., UnitedHealth Group Inc, Ventas Inc, Veolia, Veolia Environnement SA, VF Corp, Vivendi, W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Western Union Co, Whirlpool Corporation, WPP Group Plc, Xylem Inc..

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Adobe Systems, Advance Auto Parts Inc, Advanced Micro Devices, Agnico Eagle Mines Ltd, Air Products and Chemicals Inc., Airbus SE, Akamai Technologies, Inc., Alexion Pharmaceuticals, Alibaba Group Holding, Allegion PLC, Alphabet Inc., Alstom, Amazon.com Inc, Ambev SA, American Airlines Group Inc, Analog Devices Inc., Anheuser-Busch InBev SA, AP Moller - Maersk AS A, AP Moller-Maersk, Apple, Inc., Applied Materials Inc., Aptiv Plc, Automatic Data Processing Inc, AutoZone Inc., Axel Springer SE, Ball Corporation, Baxter International, Beiersdorf AG, Best Buy Co Inc, BlackRock Inc., Boeing Co., Booking Holdings Inc, Booz Allen Hamilton Holding Corporation, Boston Scientific, Bouygues SA, Broadcom Inc., Bruker Corp, Bureau Veritas SA, Burlington Stores Inc, Cardinal Health Inc, Caterpillar Inc., Cellnex Telecom SA, Cigna Corp, Citigroup Inc., CNH Industrial NV, Coca-Cola Co., Comcast Corporation, Continental AG, Crown Castle Corp., Cummins Inc., Daiichi Sankyo, Darden Restaurants Inc., Deere & Co., Dell Technologies Inc., Delta Air Lines, Inc., Dexus, DISH Network, Dollar Tree Inc, Dominos Pizza Inc., Dover, East West Bancorp, Inc., Eastman Chemical Co, Eaton Corporation PLC, Eli Lilly & Co., Emerson Electric Co, Entergy Corp, Equifax Inc, Equinix Inc., ESSILORLUXOTTICA AMERICAN DEPOSITARY REC, EssilorLuxottica SA, Estee Lauder Companies Inc, Exact Sciences Corp, Expedia Inc., Fastenal Co., Federal Realty Investment Trust, Fiserv Inc., FMC Corporation, Ford Motor Company, Fortinet Inc., Freeport-McMoRan Inc, Gaming and Leisure Properties Inc, General Electric Co., General Motors Company, Gilead Sciences Inc., GPT Group, Hilton Worldwide Holdings Inc, Home Depot Inc, Host Hotels & Resorts, Inc., Humana Inc, Hyatt Hotels Corporation, Infineon Technologies AG, Intel Corporation, Interpublic Group, Itau Unibanco Holding S.A., JetBlue Airways, Johnson & Johnson, Kansas City Southern, KINROSS GOLD CORP, Kinross Gold Corp, KLA Corp, Komatsu, Kosmos Energy Ltd, Lam Research Corp, Lear Corporation, Leidos Holdings Inc, Lowe's Companies Inc, Lululemon Athletica Inc., MAGNA INTERNATIONAL, Marriott International Inc., Masimo Corp., MasterCard Inc, McCormick & Co Inc, MFA Financial Inc, MGM Resorts International, Microchip Technology Inc., Microsoft, Mid-America Apartment Communities, Inc., Molson Coors Beverage Company, Moody's Corp, Motorola Solutions Inc, Muenchener Rueckver AG-REG, Naspers, Naspers Ltd, NetApp Inc, Newmont Mining Corp., NextEra Energy Inc, Nike Inc., Nordstrom, Northern Star Resources, Northrop Grumman Corp., NortonLifeLock Inc, NVIDIA Corp., Old Dominion Freight Line Inc, Olympus, Palo Alto Networks Inc, Parker-Hannifin Corp, Paychex Inc, PBF Energy Inc, Persimmon PLC, Polyus Gold, Procter & Gamble Co., PVH Corp., Qorvo Inc, Quest Diagnostics Inc., Ramsay Health Care, Regency Centers Corp, Royal Caribbean Cruises, S&P Global Inc, Sabre Corp, Saint-Gobain, Schneider Electric, Scout24, SEGRO, Sherwin-Williams Co., SHOPIFY A, Shopify Inc, Skechers USA Inc., Skyworks Solutions Inc, Smiths Group, Sonic Healthcare Limited, South32 Ltd, Southwest Airlines, Splunk Inc, Square Inc, Stanley Black & Decker, Stryker Corporation, Sun Hung Kai & Co, Sun Hung Kai Properties, SunPower Corp, SYNNEX Corp., Sysco Corp, T-Mobile US, Inc., T. Rowe Price Group, Inc., TAL Education Group, TAPESTRY INC, Target Corp, Telefonaktiebolaget LM Ericsson, Textron Inc., TJX Companies Inc., Toro Co., Twitter Inc, Umicore SA, Unibail-Rodamco-Westfield, United Airlines Holdings, Inc., UnitedHealth Group Inc, UPM-Kymmene Oyj, Vail Resorts, Inc, Veeva Systems Inc, Ventas Inc, Veolia, Veolia Environnement SA, VF Corp, ViacomCBS Inc, Visa Inc., Vivendi, VMware Inc, W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Western Union Co, Westinghouse Air Brake Technologies Corp, Whirlpool Corporation, WPP Group Plc, Xilinx, Xylem Inc., Yara International ASA, Zillow Group Inc.

Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: Adobe Systems, Advance Auto Parts Inc, Advanced Micro Devices, Air Products and Chemicals Inc., Airbus SE, Akamai Technologies, Inc., Alibaba Group Holding, Alphabet Inc., Alstom, Amazon.com Inc, American Airlines Group Inc, Analog Devices Inc., Anheuser-Busch InBev SA, AP Moller - Maersk AS A, AP Moller-Maersk, Apple, Inc., Applied Materials Inc., Aptiv Plc, Automatic Data Processing Inc, Ball Corporation, Baxter International, Beiersdorf AG, BlackRock Inc., Boeing Co., Booking Holdings Inc, Boston Scientific, Broadcom Inc., Burlington Stores Inc, Cardinal Health Inc, Caterpillar Inc., Cellnex Telecom SA, Cigna Corp, Citigroup Inc., CNH Industrial NV, Coca-Cola Co., Comcast Corporation, Continental AG, Crown Castle Corp., Daiichi Sankyo, Deere & Co., Dell Technologies Inc., Delta Air Lines, Inc., DOLLARAMA, Dominos Pizza Inc., Dover, East West Bancorp, Inc., Eastman Chemical Co, Eaton Corporation PLC, Eli Lilly & Co., Emerson Electric Co, Entergy Corp, EQT Corp., Equinix Inc., ESSILORLUXOTTICA AMERICAN DEPOSITARY REC, EssilorLuxottica SA, Expedia Inc., Fiserv Inc., FMC Corporation, Ford Motor Company, Fortinet Inc., Freeport-McMoRan Inc, Garmin Ltd, General Electric Co., General Motors Company, Gilead Sciences Inc., Hilton Worldwide Holdings Inc, Home Depot Inc, Humana Inc, Hyatt Hotels Corporation, Infineon Technologies AG, Intel Corporation, Interpublic Group, Itau Unibanco Holding S.A., JetBlue Airways, Johnson & Johnson, Kansas City Southern, KINROSS GOLD CORP, Kinross Gold Corp, Lear Corporation, Leidos Holdings Inc, Linde PLC, LKQ Corp, Lowe's Companies Inc, Marriott International Inc., MasterCard Inc, MFA Financial Inc, MGM Resorts International, Microchip Technology Inc., Microsoft, Molson Coors Beverage Company, Moody's Corp, Motorola Solutions Inc, Muenchener Rueckver AG-REG, Naspers, Naspers Ltd, NetApp Inc, Newmont Mining Corp., NextEra Energy Inc, Nordstrom, Northrop Grumman Corp., NortonLifeLock Inc, NVIDIA Corp., Old Dominion Freight Line Inc, Palo Alto Networks Inc, Parker-Hannifin Corp, Paychex Inc, PBF Energy Inc, Procter & Gamble Co., PVH Corp., Quest Diagnostics Inc., Rentokil Initial PLC, Royal Caribbean Cruises, S&P Global Inc, Sabre Corp, Saint-Gobain, Schneider Electric, Scout24, Sherwin-Williams Co., Smiths Group, Sonic Healthcare Limited, South32 Ltd, Southwest Airlines, Stanley Black & Decker, Stryker Corporation, Sun Hung Kai & Co, Sun Hung Kai Properties, SunPower Corp, Sysco Corp, T-Mobile US, Inc., T. Rowe Price Group, Inc., TAL Education Group, Telefonaktiebolaget LM Ericsson, Textron Inc., TJX Companies Inc., TSMC, Twitter Inc, Umicore SA, Unibail-Rodamco-Westfield, United Airlines Holdings, Inc., UnitedHealth Group Inc, Ventas Inc, Veolia,

Veolia Environnement SA, VF Corp, ViacomCBS Inc, Visa Inc., Vivendi, VMware Inc, W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Western Union Co, Whirlpool Corporation, WPP Group Plc, Xilinx, Xylem Inc., Zillow Group Inc.
An employee, director or consultant of Morgan Stanley is a director of Caterpillar Inc., Estee Lauder Companies Inc, General Motors Company, Royal Caribbean Cruises, Walmart Inc. This person is not a research analyst or a member of a research analyst's household.
Morgan Stanley & Co. LLC makes a market in the securities of Adobe Systems, Advance Auto Parts Inc, Advanced Micro Devices, Agnico Eagle Mines Ltd, Air Products and Chemicals Inc., Akamai Technologies, Inc., Alexion Pharmaceuticals, Alibaba Group Holding, Allegion PLC, Alphabet Inc., Amazon.com Inc, Ambev SA, American Airlines Group Inc, Analog Devices Inc., Anheuser-Busch InBev SA, Apple Hospitality Reit Inc, Apple, Inc., Applied Materials Inc., Aptiv Plc, Automatic Data Processing Inc, Ball Corporation, Baxter International, Best Buy Co Inc, Boeing Co., Booz Allen Hamilton Holding Corporation, Boston Scientific, Broadcom Inc., Bruker Corp, Burlington Stores Inc, Cardinal Health Inc, Carnival Corp., Caterpillar Inc., China Mobile Limited, Cigna Corp, Cintas Corp, Citigroup Inc., Coca-Cola Co., Comcast Corporation, Crown Castle Corp., Cummins Inc., Darden Restaurants Inc., Deere & Co., Dell Technologies Inc., Delta Air Lines, Inc., DISH Network, Dollar Tree Inc, Dover, East West Bancorp, Inc., Eastman Chemical Co, Eaton Corporation PLC, Eli Lilly & Co., Emerson Electric Co, Entergy Corp, EQT Corp., Equifax Inc, Estee Lauder Companies Inc, Exact Sciences Corp, Expedia Inc., Fastenal Co., Fiserv Inc., FMC Corporation, Ford Motor Company, Fortinet Inc., Freeport-McMoRan Inc, Gaming and Leisure Properties Inc, Garmin Ltd, General Electric Co., General Motors Company, Gilead Sciences Inc., Hilton Worldwide Holdings Inc, Home Depot Inc, Host Hotels & Resorts, Inc., Hyatt Hotels Corporation, Intel Corporation, Interpublic Group, Itau Unibanco Holding S.A., JetBlue Airways, Johnson & Johnson, Kansas City Southern, KINROSS GOLD CORP, Kinross Gold Corp, KLA Corp, Kosmos Energy Ltd, L Brands Inc, Lam Research Corp, Lear Corporation, Leidos Holdings Inc, LKQ Corp, Lowe's Companies Inc, Lululemon Athletica Inc., MAGNA INTERNATIONAL, Marriott International Inc., MasterCard Inc, McCormick & Co Inc, MFA Financial Inc, MGM Resorts International, Microchip Technology Inc., Microsoft, Mid-America Apartment Communities, Inc., Minerals Technologies Inc., Molson Coors Beverage Company, Moody's Corp, Motorola Solutions Inc, NetApp Inc, Newmont Mining Corp., NextEra Energy Inc, Nike Inc., Nordstrom, Northrop Grumman Corp., NortonLifeLock Inc, NVIDIA Corp., Old Dominion Freight Line Inc, Palo Alto Networks Inc, Parker-Hannifin Corp, Paychex Inc, PBF Energy Inc, Philip Morris International Inc, Procter & Gamble Co., PVH Corp., Qorvo Inc, Quest Diagnostics Inc., Regency Centers Corp, Ross Stores Inc., Royal Caribbean Cruises, S&P Global Inc, Sabre Corp, Sherwin-Williams Co., SHOPIFY A, Shopify Inc, Skechers USA Inc., Skyworks Solutions Inc, Southwest Airlines, Splunk Inc, Square Inc, Stanley Black & Decker, Stryker Corporation, SunPower Corp, SYNNEX Corp., Sysco Corp, T-Mobile US, Inc., T. Rowe Price Group, Inc., TAL Education Group, TAPESTRY INC, Target Corp, Telefonaktiebolaget LM Ericsson, Textron Inc., TJX Companies Inc., Toro Co., TSMC, Twitter Inc, United Airlines Holdings, Inc., UnitedHealth Group Inc, Veeva Systems Inc, Ventas Inc, VF Corp, ViacomCBS Inc, Visa Inc., VMware Inc, Walmart Inc, Walt Disney Co, Western Digital, Western Union Co, Westinghouse Air Brake Technologies Corp, Whirlpool Corporation, Xilinx, Xylem Inc., Zillow Group Inc.
The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.
Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.
Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of March 31, 2020)
The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm.
For disclosure purposes only (in accordance with FINRA requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
STOCK RATING CATEGORY	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
Overweight/Buy	**1228**	**38%**	**306**	**44%**	**25%**	**543**	**37%**
Equal-weight/Hold	**1437**	**45%**	**322**	**46%**	**22%**	**702**	**48%**
Not-Rated/Hold	**2**	**0%**	**0**	**0%**	**0%**	**2**	**0%**
Underweight/Sell	**543**	**17%**	**72**	**10%**	**13%**	**212**	**15%**
TOTAL	**3,210**		**700**			**1459**	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.
Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.
Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Important Disclosures for Morgan Stanley Smith Barney LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at www.morganstanley.com/online/researchdisclosures. For Morgan Stanley specific disclosures, you may refer to www.morganstanley.com/researchdisclosures.
Each Morgan Stanley Equity Research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval is conducted by the same person who reviews the Equity Research report on behalf of Morgan Stanley. This could create a conflict of interest.

Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of Adobe Systems, Advanced Micro Devices, Air Products and Chemicals Inc., Airbus SE, Akamai Technologies, Inc., Alibaba Group Holding, Alphabet Inc., Alstom, Amazon.com Inc, American Airlines Group Inc, Analog Devices Inc., Anheuser-Busch InBev SA, AP Moller - Maersk AS A, AP Moller-Maersk, Apple, Inc., Aptiv Plc, Automatic Data Processing Inc, AutoZone Inc., Ball Corporation, Baxter International, Best Buy Co Inc, BlackRock Inc., Boeing Co., Booking Holdings Inc, Boston Scientific, Bouygues SA, Broadcom Inc., Cardinal Health Inc, Carnival Corp., Caterpillar Inc., Cellnex Telecom SA, Cigna Corp, Citigroup Inc., CNH Industrial NV, Coca-Cola Co., Comcast Corporation, Continental AG, Crown Castle Corp., Darden Restaurants Inc., Deere & Co., Delta Air Lines, Inc., Dover, Eastman Chemical Co, Eli Lilly & Co., Emerson Electric Co, Entergy Corp, Equinix Inc., Exact Sciences Corp, Expedia Inc., Fiserv Inc., Ford Motor Company, Freeport-McMoRan Inc, General Electric Co., General Motors Company, Gilead Sciences Inc., Home Depot Inc, Humana Inc, Infineon Technologies AG, Intel Corporation, Interpublic Group, JetBlue Airways, Johnson & Johnson, Kansas City Southern, KINROSS GOLD CORP, Kinross Gold Corp, Komatsu, L Brands Inc, Lam Research Corp, Lamb Weston, Linde PLC, Lowe's Companies Inc, Marriott International Inc., MasterCard Inc, MGM Resorts International, Microchip Technology Inc., Microsoft, Molson Coors Beverage Company, Motorola Solutions Inc, Muenchener Rueckver AG-REG, NetApp Inc, Newmont Mining Corp., NextEra Energy Inc, Nike Inc., Nordstrom, Northrop Grumman Corp., NVIDIA Corp., Palo Alto Networks Inc, Parker-Hannifin Corp, Philip Morris International Inc, Procter & Gamble Co., Quest Diagnostics Inc., Rentokil Initial PLC, Royal Caribbean Cruises, S&P Global Inc, Saint-Gobain, Schneider Electric, Sherwin-Williams Co., Smiths Group, South32 Ltd, Southwest Airlines, Splunk Inc, Square Inc, Stanley Black & Decker, Stryker Corporation, T-Mobile US, Inc., TAPESTRY INC, Target Corp, Telefonaktiebolaget LM Ericsson, Textron Inc., TJX Companies Inc., Twitter Inc, Unibail-Rodamco-Westfield, United Airlines Holdings, Inc., UnitedHealth Group Inc, Veolia, Veolia Environnement SA, VF Corp, ViacomCBS Inc, Visa Inc., Vivendi, VMware Inc, W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Western Digital, Western Union Co, Whirlpool Corporation, Zillow Group Inc.
As of April 5, 2020, BlackRock Inc. beneficially owned 5% or more of a class of common equity securities of Morgan Stanley.
Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions.
Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.
Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.
Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.
Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (http://www.morganstanley.com/terms.html). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (http://www.morganstanley.com/terms.html). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html).
If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.
Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary

because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A. located at Av. Brigadeiro Faria Lima, 3600, 6th floor, São Paulo - SP, Brazil; and is regulated by the Comissão de Valores Mobiliários; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V which is regulated by Comision Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Asia International Limited, Hong Kong Branch; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Asia International Limited, Singapore Branch (Registration number T11FC0207F); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Indonesia by PT. Morgan Stanley Sekuritas Indonesia; in Canada by Morgan Stanley Canada Limited, which has approved of and takes responsibility for its contents in Canada; in Germany and the European Economic Area where required by Morgan Stanley Europe S.E., regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and A2X (Pty) Ltd. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia , and is directed at Sophisticated investors only.

Morgan Stanley Hong Kong Securities Limited is the liquidity provider/market maker for securities of Alibaba Group Holding, China Mobile Limited, Sun Hung Kai Properties listed on the Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: http://www.hkex.com.hk.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The following companies do business in countries which are generally subject to comprehensive sanctions programs administered or enforced by the U.S.