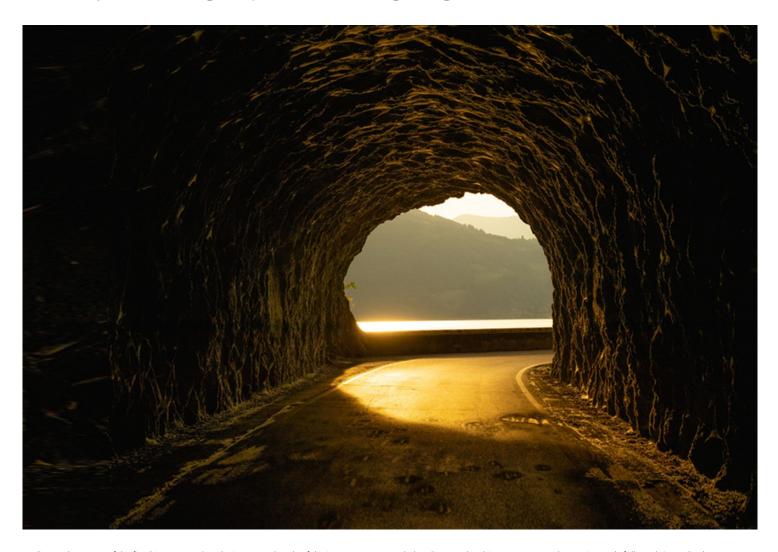
November 15, 2020 06:15 PM GMT

2021 Global Strategy Outlook

Keep Faith in the Recovery

A'V-shaped' recovery, greater clarity on vaccines and continued policy support point to early-cycle dynamics and a supportive outlook for risk assets. Keep the faith, trust the recovery, and overweight equities and credit against government bonds and cash.



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2021 Global Strategy Outlook

Keep Faith in the Recovery

It's a recovery - keep the faith: Rising COVID-19 cases are a risk, but keep the faith. We think this global recovery is sustainable, synchronous and supported by policy, following much of the 'normal' post-recession playbook. Overweight equities and credit against cash and government bonds, and sell USD. Be patient in commodities; we think that index-level returns will be back-loaded.

Global equities - strong growth, strong returns: Across regions, we see +25-30% EPS growth and double-digit total returns through end-2021. We are O/W cyclicals and U/W defensives across regions, and expect US small-caps to outperform large-caps. We think that EM/APxJ equities will lag DM slightly, but upgrade India to O/W. We see the S&P 500 at 3,900 by end-2021.

G10 rates – reflation versus liquidity: Duration will see a struggle between strong global growth and ample liquidity. We think the former ultimately wins out, raising yields above forwards and steepening curves. We like US 5s30 steepeners, long ACGB 10y versus NZGB 10y and long CAGB 10y versus UST 10y. We see UST 10yr at 1.45% by end-2021.

G10 FX – global recovery = USD weakness: Better global growth and the availability of a COVID-19 vaccine cause the DXY to weaken ~4% by end-2021 and that weakness to be frontloaded. NOK, SEK, NZD, AUD and EUR should outperform.

EM fixed income – modest upside: Recent gains have reduced upside in EM credit and local rates, and we'd be neutral. EMFX still offers value; top currencies include INR, IDR, RUB, ZAR and BRL.

Corporate credit – early-cycle crossroads: Across all regions, we favor HY over IG and position for compression themes across the ratings buckets, and favor leveraged loans over HY bonds. We forecast above-average excess returns across major cash indices.

Securitized credit - don't change the channel: With the Fed on hold until late 2023 and a continued V-shaped recovery, investors should follow the portfolio balance channel. We recommend investors go down in quality and up in risk across the securitized space; we expect higher-yielding, lower-rated sectors to outperform less risky assets. We like long CMBX.11 BBB- outright.

Commodities - macro versus fundamentals: Stronger growth, higher inflation and a weaker dollar are offset by bottom-up fundamentals that remain soft in most markets. Supply/demand dynamics are supportive in copper and natural gas, and more negative in oil and iron ore. 2021 may be a turning point for gold, and we revise our price forecast lower.

Global Asset Allocation	-	+
Equities		
Credit		
Government Bonds		
Commodities		
Cash		ш
Within these asset classes, our re	lative alloc	ations:
Equities	_	+
US		
Europe		
Japan		
EM		ш
Credit	-	+
US		
Europe		
EM		
Securitized		
Government Bonds	_	+
US		
Europe		
UK		
Japan		
EM Local		
FX	-	+
USD		
EUR		
GBP		
JPY		
EM		

For individual investors, our market outlook should be seen in the context of a long investment horizon that is underpinned by a comprehensive financial plan. Your clients' financial plan should reflect the goals they are looking to achieve over time and a disciplined approach to asset allocation, saving and withdrawals,



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What's changed

What's changed in our forecasts - economics

	OLD FORECASTS		NEW FOR	RECASTS	Δ from Last Forec	
	2020e	2021e	2020e	2021e	2020e	2021e
Real GDP						
Global (%Y)	-3.6	6.3	-3.5	6.4	0.1	0.1
G10 (%Q, SAAR)	-5.6	4.7	-5.4	5.1	0.2	0.4
US	-3.6	5.5	-3.5	5.9	0.1	0.4
Euro Area	-7.2	5.0	-7.2	5.0	0.0	0.0
Japan	-5.8	1.7	-5.2	2.4	0.6	0.7
UK	-11.7	4.4	-11.4	5.3	0.3	0.9
EM (%Y)	-2.2	7.4	-2.0	7.4	0.2	0.0
China	2.3	8.9	2.3	9.0	0.0	0.1
India	-5.0	9.5	-5.7	9.8	-0.7	0.3
Brazil	-4.5	3.6	-4.0	4.3	0.5	0.7
Russia	-4.8	3.3	-4.0	3.4	0.8	0.1

CPI (%Y)						
Global	2.3	2.6	2.2	2.1	-0.1	-0.5
G10	0.7	1.5	0.7	1.2	0.0	-0.3
US	1.1	2.2	1.2	1.8	0.1	-0.4
Euro Area	0.4	1.1	0.3	0.9	-0.1	-0.2
Japan	0.1	-0.2	0.1	-0.2	0.0	0.0
UK	8.0	1.6	0.8	1.3	0.0	-0.3
EM	3.4	3.4	3.3	2.8	-0.1	-0.6
China	2.9	3.1	2.6	1.6	-0.3	-1.5
India	6.1	4.4	6.5	4.5	0.4	0.1
Brazil	3.0	3.6	3.1	4.0	0.1	0.4
Russia	3.1	3.2	3.2	3.6	0.1	0.4

Source: Morgan Stanley Research forecasts; Note: Old forecasts refer to latest published forecasts, as of November 12, 2020.

What's changed in our forecasts - assets

Base Case Forecasts	OLD	NEW	Δ from last f'cas
	Q2 2021	Q4 2021	
Equities			
S&P 500	3,350	3,900	16%
MSCI Europe	1,610	1,730	7%
Topix	1,550	1,870	21%
MSCI EM	1,000	1,250	25%
FX			
USD/JPY	112	105	-6%
EUR/USD	1.20	1.25	4%
GBP/USD	1.25	1.32	6%
Rates (% percent)	** ***		(bp Δ)
UST 10yr	1.00	1.45	45
DBR 10yr	0.05	-0.20	-25
UKT 10yr	0.45	0.70	25
JGB 10yr	0.00	0.00	0
Credit (bps)			(bp Δ)
US IG	135	100	-35
US HY	550	350	-200
EUR IG	80	60	-20
EUR HY	400	350	-50
Italy 10yr	90	85	-5
EM Sovs	400	360	-40
US CMBS AAA	95	70	-25

Source: Morgan Stanley Research forecasts; Note: Old forecasts refer to latest published forecasts, as of November 12, 2020.

Cross-asset strategy: Keep faith in the recovery



Cross-Asset Strategy Team

Key investment ideas

- 2020 witnessed once-in-a-century swings in the economy, policy and markets.
 2021 will bring more normality. Trust the recovery, and the post-recession playbook.
- O/W global equities and credit, funded by an U/W in government bonds and cash. Commodities lag other risk assets, as mixed fundamentals drive dispersion. USD to weaken, volatility to fall.

Equities
Credit
Government Bonds
Cash



2020 was defined by abnormality. A global pandemic. A 31%Q drop in 2Q20 US real GDP. US\$7.3 trillion of G4 central bank balance sheet expansion year-to-date. Oil prices trading at -US\$37. Some of the fastest declines, and rallies, for markets on record.

We think that 2021, in contrast, will be defined by a return to more normal conditions. This feels odd to write, as the global pandemic rages and many lives remain disrupted. But we think that it will be true. The year ahead should see economic growth recover, control of the virus improve and uncertainty decline. Challenges remain, 'new normals' will materialize at the 'micro' level and we doubt that the recovery will be a smooth, one-way street. But we think that things will be better. Trust the recovery, keep the faith.

Similarities to 2010

2010 followed a terrible recession and an aggressive policy response. It dawned with a still-weak economy, the Fed at the zero lower bound and a significant outperformance of 'liquid' indices such as CDX IG and the S&P 500 relative to equity volatility or securitized credit. It saw a major growth scare and a 15%+ correction in global equities. But 2010 was ultimately a solid, above-average year for returns.

Exhibit 3:

Markets today versus 2010 – risk premiums and implied vol elevated then and now

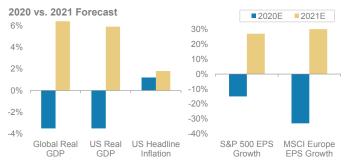
	Today	Jan '10	Jan '11	'10 Change
Global Equity ERP	5.8%	5.8%	3.6%	-2.2%
CDX IG (bp)	53	85	83	-2
CLO AAA (bp)	134	225	205	-20
Equity Vol (VIX, bp)	25	22	18	-4
Rate Vol (MOVE, bp)	40	108	106	-2
US 10Y Yield	0.8%	3.8%	3.3%	-0.5%
US 2s10s (bp)	67	270	274	4
US Unemployment	6.9%	9.9%	9.3%	-0.6%

Source: Bloomberg, Morgan Stanley Research; *Global Equity ERP is a market cap-weighted average of our US, Europe, Japan and EM long-term expected risk premium forecasts. CLO AAA is a new issue series.

The lesson from 2010, which we think also applies to 2021, is that the cycle usually wins out. We are strong believers that markets care more about 'rate of change' than level and, following a recession, these cyclical tailwinds are powerful. We forecast 6.4%Y global real GDP growth next year, 25-30% earnings growth across major markets and significant declines in corporate leverage. Yes, this is partly because these are coming off 'weak' levels, but we think that the effect will be powerful all the same.

Exhibit 4:

It gets better: Forecast change in global GDP, US GDP, earnings and US leverage



Source: Morgan Stanley Research forecasts; Note: We show real GDP and headline inflation here.

Our cycle model paints a similar picture. Data that are below-average but improving tend to support equities and credit doing somewhat better than their valuations would imply. Our economists' call for higher inflation gives a similar answer; inflation that is below trend, but rising, tends to support a compression of risk premium.

Exhibit 5:

Equities and credit do the best when data are below-average and improving ('repair' phase)

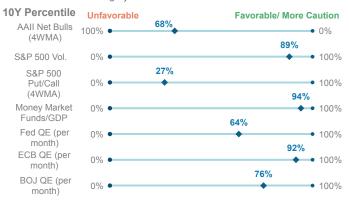
		/ledian Fwd 12	A Rtns vs LT Av	'g
	Downturn	Repair*	Recovery	Expansion
EQUITIES				
S&P 500	-2%	3%	3%	2%
MSCI Europe Local	-9%	3%	5%	5%
TOPIX	-7%	3%	7%	0%
MSCI EM	-7%	9%	-9%	1%
GOV'T BONDS				
UST 2Y	2%	-2%	-4%	0%
UST 10Y	0%	0%	-2%	-2%
Bunds 10Y	-1%	1%	1%	-2%
UST vs Bunds 10y	2%	-1%	-4%	0%
CREDIT				
US IG XS	-2%	3%	1%	0%
US HY XS	-8%	10%	4%	-1%
FX				
DXY	0%	-3%	3%	1%
EURUSD	-4%	2%	-4%	-2%
GBPUSD	2%	-5%	-4%	0%
JPYUSD	2%	8%	-4%	-4%

Source: Bloomberg, Morgan Stanley Research; Note: Based on our US cycle indicator. Data from 1985 where available. *Repair phase returns are based on forward returns in 'repair' phase, **post-trough**.

Post-recession, early-cycle environments also frequently benefit from favorable 'technicals'. And again, we think that this applies today. Uncertainty over public health and the political environment has helped to keep money 'on the sidelines'. Ongoing QE by global central banks continues to restrict net supply. The recent jump in sentiment *is* a little concerning, but ultimately we think that the other 'technicals' win out.

Exhibit 6:

Technicals remain largely favorable



Source: Bloomberg, Haver Analytics, Morgan Stanley Research

In short, we think that 2021 will see above-average risk-adjusted returns in equities and credit, and support a modestly above-average weighting (i.e., a modest overweight) to both. We think that it will generally favor reflationary, early-cycle strategies, and both our allocations and our top trade ideas attempt to reflect this.

We think that the *risks* for the year ahead are also similar to 2010: whether or not the recovery is sustainable, and whether markets are already priced for a better tomorrow. Let's address those next.

Debate #1: What about valuations?

Like 2010, we enter 2021 after a large post-recession rally. While this has compressed valuations, we think that these remain reasonable. **Exhibit 7** compares estimated risk premium relative to historical volatility for a number of risk assets. Most are still at or above the realized risk premium of the S&P 500 since 1929.

Exhibit 7:

Risk-adjusted valuations are reasonable



Source: Bloomberg, Morgan Stanley Research; Note: For equities we show our long-term expected risk premium forecasts, and for credit we show loss-adjusted spread. 10V vol is realized vol of monthly returns. The dotted line shows the annualized return for S&P 500 versus UST 10V since 1929 relative to realized vol of monthly returns over the same period.

Also like 2010, valuations are *uneven*. Stocks in Europe and Japan have trodden water for five years, while US small-caps and EM equities have trodden water for three. EMFX, NOK, CLOs, CMBS and equity volatility are just a few examples of assets where valuation looks cheap.

These distinctions matter. In 2010, liquid CDS indices ended the year unchanged while less-liquid credit tightened. US small-caps almost doubled the return of the S&P 500. Starting valuation is key.

Interest rates, in contrast, are in a very different place compared to the last cycle. While today's fed funds rate is the same as January 1, 2010, today's US 10-year yield is almost 300bp lower. US 6m10yr swaption volatility is ~80bp lower. That's night and day. While buying government bonds and selling rate volatility were fantastic post-recession trades in the last cycle, we think that this cycle will be different (in part) because the starting valuation is very different.

Exhibit 8:

Owning 'cyclicality' is cheap now



Source: Bloomberg, Morgan Stanley Research; Note: Commodity FX here is the average 15-year percentile of ALID, CAD, and NOK versus LISD.

Debate #2: The virus and a 'K-shaped' recovery

A second concern with echoes of 2010 is whether the recovery is sustainable. Following the GFC, worries centered on high levels of consumer and corporate debt, weakness in the labor market and whether the financial crisis had shifted behavior permanently. Today, worries center on a highly unequal recovery, high levels of government debt, weakness in the labor market and whether the pandemic has shifted behavior permanently.

Similar to 2010, we think that our economic forecasts see these challenges as serious, but surmountable. Fiscal and monetary stimulus have been larger than what followed the GFC, and so far the recovery has been faster. A successful vaccine will be important, but Morgan Stanley's biotechnology team is optimistic, especially with recent announcements. Rising COVID-19 cases suggest some slowing in 4Q20 and 1Q21, and could drive tactical weakness. But through the

end of next year, <u>our key economic call is that the global recovery will</u> <u>be sustainable</u>. Use near-term weakness to raise strategic exposures.

Allocations and key trades

Our strategic allocations are based on the combination of cycle-adjusted risk premiums and Morgan Stanley strategists' 12-month forecasts. Both suggest above-average risk-adjusted returns for equities and credit over the next 12 months. Conversely, we see yields rising and underperforming the forwards, and expect US duration to underperform first. We recommend that investors hold modest overweights in global equities and credit, and modest underweights in cash and government bonds (**Exhibit 47**). In currencies, we see modest USD weakness. We think that commodity prices rise, but our forecasts see this strength as back-loaded, and with high dispersion given an uneven supply/demand dynamic. For now, we prefer to allocate exposure towards equities and credit.

Equities: Improving earnings growth should offset modest de-rating across markets, a usual 'handoff' for equities following a recession. We prefer DM over EM and our sector and style preferences remain skewed to 'early-cycle', cyclical exposure. We like US small-caps over large-caps, India, and Australia over Taiwan.

Government bonds: Given how much dovishness is 'in the price', we think that US and EU yields can rise modestly and underperform the forwards as the economy improves. Long US 5s3Os steepeners and sell UST 3Oy versus Bunds and ACGBs 3Oy.

FX: Early-cycle recovery and hope for a vaccine should see USD weaken modestly by ~3% in 2021. EMFX and commodity currencies will likely see the biggest uplift. Long cyclical G10 FX (SEK, NZD. NOK) versus USD.

Credit: We think that we remain in a supportive, early-cycle environment for credit, and expect high yield outperformance as the economy heals. Sell protection in CDX HY versus CDX IG. We are also bullish on Asia credit.

Commodities: A benign macro backdrop of recovery and a weaker dollar is offset by bearish micro fundamentals like high inventories and oversupply, leading to a mixed picture for commodities overall. The one market where bottom-up demand-supply dynamics are aligned with the cycle is copper; long copper versus gold, sell Brent 3M calls.

Volatility: The gap between equity/credit and FX/rate volatility remains extreme, and we think that this can narrow as global economic conditions normalize.

Exhibit 9:Our framework likes equities and credit

		Top-Down Risk Premium	Cycle Boost/Drag	(A) Top-Down Expected Returns	(B) Bottom-Up 12M Outlook**	(C) Avg (A, B - Cash)	(D) (C)/ Vol	MS Asset Allocation vs Benchmark		
		Top Risk	Boo	Cycle-Adj Returns	MS Base Case Rtn Forecast	Forecast Excess Rtn	Framework Expected Rtn/ Vol			
Equities	US Europe Japan EM	△ △ △ O	• •	8.2% 11.9% 9.1% 14.0%	12.0% 13.3% 10.5% 7.9%	10.1% 13.0% 9.9% 10.9%	0.5 0.7 0.5 0.6	+1% +2% +1% +0%		
Bonds	Treasuries Bunds JGBs EM Local*	* * * * * *	△ ♦ -	1.2%	-2.7% -3.1% 0.5% -0.6%	-0.9% -0.5% 0.4% -0.7%	-0.2 -0.1 0.2 -0.1	-3% -1% +0% +0%		
=	US IG US HY	<u>^</u>	•	3.9% 9.1%	2.5% 5.9%	3.2% 7.5%	0.7 1.1	+1%		
Credit	EUR IG EUR HY	<u>^</u>	•	2.5% 9.7%	1.2% 4.8%	1.9% 7.3%	0.9 1.2	+2%		
	EM \$ Securitised^	-	-	6.8% <u>-</u> -	4.8% 1.1%	5.8% 1.1 %	0.8	+0% +1%		
	Commodities	-	-		0.6%	0.5%	0.0	+0%		
	Legend:									

Source: Morgan Stanley Research forecasts; Note: *EM Local is FX-hedged. ^Securitized is an average of Agency MBS, CLO AAA and CMBS AAA. 'Cycle-Adj Returns' shows cycle-adjusted long-term expected returns when US cycle is in post-trough 'repair' phase. All returns for credit are excess returns. 12m cash rate is for the respective region. 12m bottom-up numbers are annualized returns of December 2021 target levels.

The bull case – a vaccine and a large fiscal kicker

(Cyc): Phase with best returns for the asset

Our 'bull case' is a realistic (~20% likely) scenario that would drive even stronger growth and inflation. The catalysts would be three-fold: i) Multiple versions of a COVID-19 vaccine prove successful, accelerating roll-out; ii) The US executes larger, more proactive fiscal easing, as either Democrats gain control of the Senate in Georgia's special elections, or compromise is found on issues like infrastructure; and iii) The winter wave of COVID-19 isn't as severe as our base case expects.

We think that such a scenario would simply accelerate trends towards the market pricing in a more 'normal' recovery scenario.

The bear case – an air pocket, then austerity

The bear case is dominated by an immediate risk, and a lingering one.

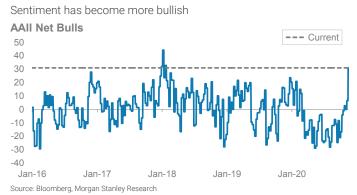
Immediately, it is the risk that the winter wave of COVID-19 is worse than expected. As of this writing, cases in the US and Europe are making new highs, and rising rapidly. A transition to a new US president could delay fiscal action in the face of such deterioration. And data over the next several months stall even in our base case.

Meanwhile, sentiment has become much more bullish, with the AAII survey moving to its highest level of 'net bulls' since January 2018. The result could be a near-term 'air pocket' for markets.

(Cyc): Phase with worst returns for the asset

Longer term, we worry about a return to austerity. Following the GFC, policy-makers placed too much emphasis on arbitrary debt/GDP targets, leading to a decline in public sector demand as private sector demand remained weak. This delayed the recovery and supported deflation. Our base case assumes that the same mistake isn't repeated. One can never be sure.

Exhibit 10:



Top trades across asset classes

Exhibit 13:

Top trades across asset classes

Asset Class	Trade	Level (L) / Target (T)	Rationale	Туре	Risks
1 Equities	Long Russell 2000 vs. S&P 500		We continue to believe that this cycle is more 'normal' than it seems, preferring to own exposure	Alpha	A deeper disruption from COVID-19 and fiscal disappointment.
2 Equities	Long US Financials	Target upside: 18.4%	Our US equity strategists view financials as a high-quality cyclical sector that should offer relative upside as an early-cycle outperformer. Coming out of a recession, we think it pays to buy stocks with lowest expectations. Financials is one of them. Relative forward earnings growth for financials is likely bottoming.	Beta	A deeper disruption from COVID-19 and regulatory risks.
3 Equities	Long European Equities	Target upside: 12.5%	A reflationary backdrop and the support from the recovery fund should continue to provide support for European assets. Europe also has most leverage to good news on the vaccine front as it has underperformed from the COVID-19 lockdown impact.	Beta	Relatively more policy support in the US attracts flows into the US, and away from Europe.
4 Equities	Long MSCI India vs. MSCI EM	Target upside: 13.7%	Our economists see a strong recovery for India amid favorable global/domestic financial conditions, with India positioned to pick up manufacturing FDI amid global value chain diversification, while structural reforms delivered through 2020 (including tax, land and labor reforms) leave our strategists more optimistic on corporate earnings/capex.	Alpha	COVID-19 disruption delays recovery.
5 Equities	Long Australia vs. Taiwan Equities	Target upside: 5.2%	Australia has underperformed Taiwan by 39% over the last 12 months (more than 2 standard deviations from the 20-year average) and its relative P/B is at 20-year lows. We are more cautious on Taiwan owing to its rich valuation, high NASDAQ correlation and elevated US-China tension risks.	Hedge	A broader correction and increased volatility in global markets.
6 Vol	Buy S&P 500 3m Put Spread Collars	Cost: 0%. Max Upside:5%	S&P 500 is at the high end of the range laid out by our US equity strategists. We see put spread collars being more attractive as tactical hedges, taking advantage of the steep skew and high volatility.	Hedge	Equities rally to new highs despite a second wave. Volatility fails to ease in a rally.
7 Vol	Sell VIX Feb-21 Futures vs. Buy Protection on on CDX IG [1:20]	UXG1: 25.7 CDX IG: 53bp	We expect realized volatility to resume the grind lower, typical of this stage in 'early-cycle' environments. S&P 500 realized vol should drop below 15% in the coming months going by past bear troughs. Following the rally post-election last week, and the vaccine headlines earlier this week, CDX IG is back to post-COVID-19 tights, leaving limited upside.	Alpha	CDX IG fails to widen much due to liquidity overhang.
8 Rates	Long US 5s30s Steepeners	L: 129bp T: 170bp	A combination of a continued V-shaped economic recovery aided by vaccines, modest fiscal support and a dovish Fed allows Treasury yields to move higher in 2021, led by the back end.	Alpha	A deeper disruption from COVID-19 and fear of a Fed response keep yields contained and curves in check.
9 Rates	Buy DBR 30y and ACGB 30y vs sell UST 30y	Target upside: 8%	Subdued euro area core inflation for the majority of 2021, in combination with the negative net supply dynamic, should moderate yield rises in Europe relative to the US. A combination of RBA purchases (in 2021) and foreign inflows should keep long-end ACGBs outperforming USTs.	Hedge	A deeper disruption from COVID-19 and fear of a Fed response keep yields contained and curves in check.
10 FX	Long Cyclical G10 FX (SEK, NZD, NOK) vs. USD	Target upside: 9.4%	Global growth picking up due to monetary accommodation and availability of a COVID-19 vaccine supports USD weakness. Commodify currencies should see the most benefit due to the global recovery, their historical sensitivity to risk assets and higher probability of seeing their local central banks turning hawkish.	Beta	Prolonged COVID-19 waves derail global growth.
11 FX	Long CNH/JPY	L: 15.9 T: 16.5	China will continue to see strong exports thanks to the demand for medical and electronic products during the pandemic. A combination of a trade surplus, reduced services deficit and strong portfolio inflows is in favor of CNY.	Alpha	The PBOC could push back against currency appreciation.
12 FX	Long EMFX (IDR, INR, BRL, MXN, ZAR) vs. CHF, JPY	Target upside: 5.8%	A global growth rebound should also favor EMFX, our preferred way to take EM exposures in fixed income. EMFX valuations are still reasonable amid a backdrop of strong global liquidity and a hunt for yield.	Beta	Prolonged COVID-19 waves derail global growth.
13 Credit	US Credit Compression (Long CDX HY vs. CDX IG)	HY/IG Ratio L: 6.3 T: 6.0	Barring a few COVID-19-sensitive tail names, many IC credit spreads have reverted to pre- COVID-19 levels. Our systematic factor model — CAST (Cross-Asset Systematic Trading strategy) — has the highest relative preference for US HY over IG since 2013 (out-of-sample period).	Hedge	A deeper disruption from COVID-19, resulting in more severe defaults.
14 Credit	Long CMBX BBB11	Target upside: 14%	We expect headline property prices to only fall 10-15% as dry powder cushions prices, compared to -30% during the GFC. CMBX.BBB11 has lagged the beta rally of the last month, and has higher-quality underwriting and limited near-term maturity risk.	Beta	A more severe COVID-19 wave drives deeper price falls than we expect.
15 Commodity	Long Copper vs. Gold	Target upside: 14.2%	Copper benefits from both strong fundamentals and a reflation-driven trade. Our metals strategists see copper ticking all the boxes for a bull market in 2021 – a persistent market deficit, low global inventory and a strong bid from investors – thanks to both the reflation trade and copper's use in green energy.	Beta	China-imported inventory and secondary supply recovery keep copper prices soft.
16 Commodity	Sell Brent 3m 25Delta Calls	L: 3.1%	Oil is an exception to our view that early-cycle, reflationary strategies will generally outperform. We prefer to express this view via the options market. Brent volatility remains above average. Selling 3m 50\$ strike calls (~25delta) earns about 3% yield (annualized ~12%).	Hedge	Demand recovery is even stronger than we expect, pushing oil beyond US\$50.

Source: Morgan Stanley Research; Note: These are our current trades. All previous trades from cross-asset strategy are considered closed. For trades #1, #2 and #4 we use the 75th percentile (i.e., above average level) of historical rolling 12m returns for the trade. Otherwise, levels are based on Morgan Stanley Research forecasts.

Global equities: Strong growth, strong returns



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Key investment ideas

- **Strong EPS rebound:** We expect global EPS growth of 25-30% next year as befits the start of a new cycle.
- **Double-digit upside across all DM regions:** Continued policy stimulus allows P/E ratios to remain high even as EPS recovers. We expect the S&P to reach 3900 in 2021.
- **DM** > **EM**: We continue to prefer DM to EM and model similar upside for US, Europe and Japan over the next 12 months. We expect China outperformance versus EM ex China to moderate (we continue to prefer A-shares) and upgrade India to O/W.
- **Recommendations:** O/W cyclicals (e.g., materials and reopening plays) and financials in the US and Europe; cautious on expensive defensive/growth names; downgrade Asia tech hardware to E/W.



EM



From late-cycle to early-cycle in 12 months...via a pandemic:

Looking back at what we wrote in our <u>2020 global equity outlook</u> last November highlights just how much the investment landscape has changed over the intervening 12 months. Last year our concerns about a late-cycle economic backdrop, elevated valuations and heightened investor optimism translated into materially below-consensus EPS expectations and subdued single-digit prospective returns. While we never predicted the subsequent pandemic, its consequences leave us in a very different place today. We believe that we have now transitioned to an early-cycle environment, which implies strong profit growth that we believe is not yet priced in to markets despite the sharp rally in the last two weeks (**Exhibit 14**).

25-30% global EPS growth likely in 2021: Whenever economies move out of recession, there is always concern about the speed and strength of recovery, but the degree of uncertainty here is arguably higher than normal, given the combination of an unprecedented pandemic against record monetary and fiscal stimulus. Although the ongoing increase in COVID-19 cases in Europe and the US may lead to some near-term weakness in economic activity, this is very unlikely

to derail a strong profit rebound over the next 12 months, in our opinion. Instead, strong nominal GDP growth next year implies a sizeable acceleration in revenue growth, which should be turbocharged by impressive operating leverage. As illustrated in **Exhibit 15**, our top-down EPS growth forecasts for all regions are 25-30% for next year, with further double-digit growth expected in 2022 too. Together, these estimates imply MSCI ACWI EPS growth of 27% for 2021, which would represent the second-best out-turn in 30 years (after 2010).

Exhibit 14:

We forecast solid equity returns across all DM regions over the next 12 months $\,$

Index	Current Price	New Target Pr (% from	ice - Decer current lev	Old Target Price - June 2021 (% from current levels)					
	FIICE	Bull	Base	Bear	Bull	Base	rent levels) se Bear 50 2,900 % -18% 80 1,280 6 -18% 550 1,200 % -30% 00 790		
S&P 500	3.537	4,175	3,900	3,375	3,700	3,350	2,900		
3&F 300	3,337	18%	10%	-5%	5%	-5%	-18%		
MSCI Europe	1,562	1,870	1,730	1,410	1,810	1,580	1,280		
MSCI Luiope		20%	11%	-10%	16%	1%	-18%		
TOPIX	1.726	2,000	1,870	1,300	1,830	1,550	1,200		
TUPIX	1,720	16%	8%	-25%	6%	-10%	-30%		
MSCI EM	1.182	1,400	1,250	900	1,300	1,000	790		
	1,182	18%	6%	-24%	10%	-15%	-33%		

Source: FactSet, Morgan Stanley Research forecasts

Exhibit 15:

We expect a strong recovery in EPS across all regions next year Morgan Stanley EPS Growth Forecast



Source: Morgan Stanley Research forecasts

Strong growth outlook not priced in: Although rising COVID-19 cases and recent geopolitical uncertainty can be unsettling for investors, they also have the benefit of muting investor sentiment and ensuring that the strong growth outlook that we envisage is not priced in to equity markets, in our opinion. For example, Exhibit 16 shows a close link over time between the year-on-year change in the global PMI and MSCI World, but the latter is currently lagging by an unusual amount — note the contrast with this time last year, when equities were running ahead of the PMI. This analysis becomes even more compelling when we measure the PMI against the relative 12-month return of stocks versus bonds (Exhibit 17); for the latter to catch up to the former would require c.35% outperformance. Alternatively, we can flip this logic around and say that asset markets are pricing in a sub-50 global PMI instead of the current 53.3.

Exhibit 16:

Source: MSCI, Markit, Morgan Stanley Research

Unusual lag between the YoY change in MSCI World and that of global PMI...



Exhibit 17:

...and the gap is even wider if we compare PMI trends to the relative return of stocks versus bonds



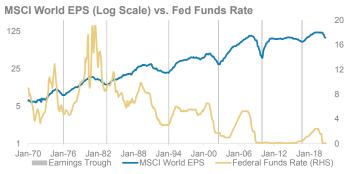
Source: MSCI, Markit, Morgan Stanley Research

Sustained policy support into the recovery... The unique cause of the 2020 recession has meant that policy-makers have been given unprecedented latitude to respond without meaningful pushback, whether that is record peacetime fiscal deficits or large-scale quantitative easing (G3 central banks have expanded their balance sheets by c.US\$7 trillion year-to-date). While this has proved critical in supporting asset markets through this year, what may also prove unique is its persistence into the recovery, with our economists expecting further fiscal and monetary stimulus during 2021. In their recent report, our bond strategists highlighted that DM central banks look set to add liquidity worth 0.76% of annual nominal GDP, on average, every month in 2021.

...suggests that P/E ratios may hold up even as EPS recovers: This desire from policy-makers to maintain substantial policy support into the recovery should allow early-cycle elevated equity valuations to remain higher for longer as the proverbial punchbowl is left in place even as growth recovers. Hence, although equity valuations look somewhat elevated in absolute terms, we expect these multiples to moderate only modestly over the next 12 months, given that: i) Central banks will not be tightening policy into the earnings recovery (as usually happens as per Exhibit 18); and ii) Equity valuations continue to look attractive versus bonds (Exhibit 19), and this should arguably provide even greater support to stocks at the beginning of a new cycle, when confidence about the subsequent EPS outlook is highest.

Exhibit 18:

In previous cycles, monetary policy tends to tighten post an EPS trough – unlikely to happen in 2021



Source: MSCI, Morgan Stanley Research

Exhibit 19:

MSCI ACWI's N12M earnings yield gap is exactly in line with its 10-year median



Risks skewed to the upside: We believe that risks around our base case lean in a positive direction, with **Exhibit 14** illustrating that the implied upside under our bull case assumptions is materially bigger than the downside in our bear case for the US and Europe. We believe that the most likely bear case narratives for equities revolve around either a COVID-19-related disruption having a longer-lasting impact on economies than currently expected or, in contrast, a more significant rise in bond yields that could drive a more significant valuation de-rating and style rotation. Upside risks could come from greater-than-expected operating leverage (pushing EPS growth even higher) or a further rise in equity valuations, perhaps prompted by an asset allocation shift into equities (as investors gain confidence in our early-cycle thesis), or an upturn in M&A given an encouraging backdrop of rising earnings, reasonable valuations and cheap and abundant liquidity.

Regional preferences: We prefer DM over EM. Within the former we see limited scope for regional alpha, with our top-down forecasts suggesting comparable upside across all three main regions, albeit with different drivers. For example: i) Strong ongoing price and earnings momentum should continue to support the US; and ii) Europe and Japan should benefit from our global reflation call, given their greater Value characteristics. Within Asia/EM we expect China outperformance versus EM ex China to moderate (we continue to prefer A-shares) and upgrade India to overweight.

Recommendations: As befits the start of a new cycle, we have a general preference for cyclicality across all regions, but especially in the US and Europe, where we are also overweight financials. The prospect of higher bond yields and strong earnings growth suggests that greater valuation discipline is needed than previously, so we are cautious on expensive defensive/growth stocks. We are overweight healthcare in most regions outside Europe, where relative valuations make it an underweight.

Exhibit 20:Morgan Stanley base case EPS and index price targets for 2021

ludev	Current Price	Current	Current	Dec-2021 Base Case	MS Base		-down Ba PS Foreca			sus EPS F oY Growt		MS Base Case N12M P/E	Current Consensus		
Index		Price Index Target (% Upside)	Case (Old)	2020	2021	2022	2020	2021	2022	Dec-2021	N12M P/E				
S&P 500	3,537	3,900	3,350	138	175	192	138	168	195	20.3	21.8				
S&P 500		10%	-5%	-15%	27%	10%	-15%	22%	16%		21.0				
MSCI Europe	1,562	1,730	1,580	67	87	105	68	93	109	16.5	17.1				
MSCI Europe	11%	11%	11%	11%	11%	11%	1%	-33%	30%	20%	-32%	37%	17%	10.5	17.1
TOPIX	1,726	1,870	1,550	76	98	117	76	99	121	16.0	17.8				
TOPIX		8%	-10%	-17%	29%	19%	-17%	30%	22%	16.0	17.8				
MOOL EM	1,182	1,250	1,000	62	78	89	63	83	96	44.0	44.0				
MSCI EM		6%	-15%	-8%	26%	14%	-7%	31%	16%	14.0	14.9				

Source: FactSet, MSCI, Morgan Stanley Research forecasts

Exhibit 21:Sector and style recommendations by region

Sector & Style Preferences	S&P 500	MSCI Europe	TOPIX	MSCI EM
	OW: Financials, Industrials, Materials, Healthcare	OW: Financials, Materials, Consumer Services, Utilities	OW: Comm. & W/Sale Trade, Pharma, Steel & Non-ferrous	OW: Discretionary, Materials, Healthcare, Internet
Sector Preferences	UW: Staples, Utilities	UW: Staples, Healthcare, Energy, Software	UW: Transport/Logistics, Energy, Electric Power & Gas	UW: Energy, Financials, Communic. Services
Style Preferences	OW Re-opening / Cyclicals . OW GARP UW Expensive Defensives and Expensive Growth	OW Cyclical Value as befits an early cycle set-up UW Expensive Quality OW Financials.	2) Self-Help Beneficiaries3) Quality and Cyclicals	APxJ-EM Best Business Models v8 Quality and GARP Cyclicals, FCF and Revisions

Source: Morgan Stanley Research

US

Show me the money: We see upside into 2021 on the back of robust earnings, not valuations. With nominal US GDP growth of ~7%Y and global GDP growth of ~9%Y, we expect the top line to rebound with powerful flow-through to earnings, given corporates' focus on costs. This recovery is no different from others and we'll pass peak earnings before peak sales as margins lead the way. Evidence for the rebound has been mounting, with most parts of the market outside of a few areas more directly impacted by COVID-19 already seeing a return to year-on-year operating profit growth as cost cuts have offset top-line declines. Our base case for additional fiscal stimulus even in a divided government scenario supports the consumer balance sheet and a path to reopening from the end of 1Q. As such, we think that earnings growth will be explosive and surprise to the upside. Higher back-end rates will be a headwind to valuation, but we expect a partial offset from falling equity risk premium. On net, we see upside as earnings growth exceeds multiple compression.

Higher conviction in the longer term: Normally, uncertainty rises with time, but today we have higher conviction in our 6-12-month view than our 3-month view. Near term, we think that the market will still need to work through COVID-19's second wave, doubts around fiscal stimulus and the US Senate race. Ultimately, we expect fiscal support to come through and see the size of support as correlated with the impact of the virus. In other words, we see a fiscal put around COVID-19's economic fallout and take 2020's lesson that concerted fiscal and monetary policy can be an effective support for the economy. In the near term, with markets fully valued and a seasonal gap in data points to confirm better earnings, we see the market as range-bound with risks skewed lower. We advise using pullbacks to add risk, particularly to assets with cyclicality.

Sector/style preferences: In line with our <u>recession playbook</u>, we retain our preference for small-caps over large-caps and cyclicals over defensives. High-quality and certain secular growth stocks

remain richly valued and are likely to re-rate relatively lower as interest rates rise at the back end. We continue to recommend a barbell of reasonably priced growth stocks with cyclicals that will flourish in the recovery. At the sector level, we are overweight financials, industrials, materials and healthcare. We are underweight staples and utilities.

Europe

Strong growth rebound: 2020 looks set to go down as the worst year for European relative performance since the 1980s, reflecting the region's materially weaker economic and profit growth out-turn as per **Exhibit 15**. However, poor performance this year should set Europe up for a strong 'bounce-back' next year and into 2022 as well – we forecast EPS growth of 30% in 2021 and 20% in 2022.

Catalysts to keep valuations at the top end of the historical

range: Given that COVID-19 has had a more significant impact on the European economy than elsewhere the region, it should be a relative beneficiary of positive vaccine news, while a further increase in the ECB's QE program should drive a further meaningful decline in Italian bond spreads. The EU recovery fund should also be formally signed off in due course, with proceeds starting to be distributed in 2H21 and supporting materially above-trend GDP growth in 2O22 and 2O23. Europe's relative valuation characteristics also mean that it is less vulnerable to a de-rating driven by higher global yields.

Cyclical Value > expensive Quality: Within Europe, we prefer cyclicals over defensives and selected Value sectors over expensive Quality stocks; reopening beneficiaries look attractive to us as a source of cheap cyclicality with an impending catalyst. We are overweight financials, materials and consumer services; we are underweight consumer staples, healthcare, energy and software. ESG should also remain an important theme and we remain overweight utilities in that regard.

Asia/EM & Japan

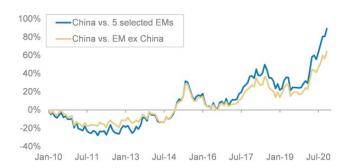
'Reversion to the mean' thinking is particularly dangerous in an era of profound and accelerating structural challenge including technological disruption, COVID-19/healthcare, climate change/ESG and the investment implications of a shift to a Multipolar World.

While we are making some important changes today — for example downgrading IT hardware to E/W and upgrading India to O/W — we are leaving several key core preferences unchanged. Most notably, we still expect Japan and China (specifically A-shares) to continue to outperform versus Asia/EM over the cycle, with energy and banks lagging. We think that Quality in the form of our Best Business Models approach will also continue to outperform other styles over the cycle.

Our 2021 outlook top trades are: 1) Continue to prefer China and Japan to EM ex China; 2) Upgrade India to O/W given structural reforms and a strong expected growth recovery; 3) Stay O/W Australia, Korea and Brazil versus U/W Taiwan; downgrade Singapore to E/W but move O/W Hong Kong; 4) Transition to late-cycle plays versus early-cycle plays in China and continue to prefer A-shares versus offshore China; 5) Stay O/W internet/software, discretionary, materials and industrials and remain U/W energy and financials; 6) Downgrade tech hardware and semiconductors to E/W, upgrade healthcare to O/W; 7) Maintain a balanced Growth/Value position but favor cyclicals over defensives; 8) We launch our APxJ-EM Best Business Models v8 list and generally favor Quality as a through-thecycle style preference; 9) In Japan, we reiterate our focus on Productivity and Innovation Leaders v2 launched in September.

Exhibit 22:

Performance of MSCI China versus EM ex China and 5 selected larger EMs* – we stay O/W China but expect a smaller extent of outperformance in 2021



Source: RIMES, MSCI, Morgan Stanley Research; Data as of October 28, 2020. *5 selected EMs refer to Brazil, Indonesia, Russia, South Africa and Mexico, on an equal-weighted basis. EM ex China is compiled on a market cap-weighted basis.

G10 rates: Reflation versus liquidity



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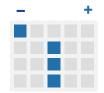
Morgan Stanley & Co. LLC

Key investment ideas

- We suggest a duration underweight in USTs; curve steepeners in the US versus flatteners in the euro area semi-core and periphery; neutrality on UKTs; long ACGBs versus NZGBs; and long CAGBs versus USTs.
- We look for long-maturity Bunds to outperform USTs cross-market, and a gradual tightening of periphery and semi-core spreads. Long-maturity BTPs should provide investors with the strongest total return in the euro area in 2021.
- We look for gilts to remain stuck between the US and euro area underperforming German Bunds, but outperforming US Treasuries. We remain constructive on JGBs and ACGBs relative to USTs and CAGBs.
- **Top trades:** UST 5s30s steepener; short UST 30y versus DBR 30y, ACGB 30y; BTP 5s30s flattener; long ACGB 10y versus NZGB 10y; long CAGB 10y versus UST 10y.

Government Bonds

US Europe UK Japan



In the US, we expect Treasury yields to move higher over the forecast horizon. We see 10-year Treasury yields trading slightly below 1.5% by the end of 2021, and continuing to move higher into 2022. A combination of a continued V-shaped economic recovery aided by vaccines, modest fiscal support and a dovish Fed allows Treasury yields to move higher in 2021, led by the back end. We see curve steepeners and breakeven wideners doing well in 1H21.

The news on the Pfizer COVID-19 vaccine, which showed a >90% efficacy in preventing cases, has prompted our pharmaceutical analysts to raise the probability of vaccine success from 65% to almost 100%, while also making it more likely that other vaccine candidates will succeed. A successful vaccine with high efficacy would continue to support the next leg of our V-shaped recovery narrative. We see Treasury yields rising in 1H21, as the vaccine starts to become widely available.

Through 1H21, we see two themes within the moves in Treasury yields – curves steepen alongside higher yields, and breakevens lead the move higher while real yields stay low – both themes reflective

of a dovish Fed. Consistent with the Fed's average inflation targeting approach, the Fed prefers to react to actual improvement in data, rather than expected improvement in data, particularly inflation. Within this reactive approach, our economists see a low likelihood that the Fed makes substantive changes its summary of economic projections until June 2021, allowing the yield curve to steepen and breakevens to head towards 200bp.

The role of fiscal policy takes a back seat in our Treasury yield fore-casts, given the relatively smaller fiscal stimulus expected under a likely divided government, as well as lowered needs for increasing coupon sizes in 2021, given the significant increases in coupon sizes in 2020. Moreover, our public policy strategists expect fiscal stimulus to be more reactive to economic or market weakness, rather than proactive, further lowering its impact on Treasury yields.

Yield moves in 2022 are more reflective of the Fed looking to dial down accommodation, as our economists expect the Fed to move towards a tapering of Treasury purchases in 1Q22. We see real yields starting to rise in 2022, while breakevens stabilize. 10y yields end 2022 at 1.85%.

In the euro area, we see Bund yields rising gradually above current market levels with a modest steepening bias to the DBR 2s10s and 5s30s curves in 2021 and into 2022. We look for Bunds to continue to outperform Treasuries cross-market, particularly in the longer-maturity parts of the curve.

Supply is likely to re-ramp in 1H21 across the euro area as sovereigns again look to front-load their issuance into the first half of the year. Additionally, the EU will continue to issue for SURE and eventually the NGEU, resulting in a greater amount of higher-rated paper hitting the market that could compete with core euro area issuance.

However, the rise in gross supply in core markets in 1H21 after the lull in 4Q20 will be more than offset by a significant amount of Eurosystem purchases from both PEPP and APP. This, in turn, will lead to a continuation of the pronounced negative net supply dynamic post-redemptions/Eurosystem purchases/EU funds in coupon ex bill issuance that has persisted since 2H2O.

We look for the ECB/NCBs to have approximately €800 billion of net purchasing power heading into next year before accounting for the €500 billion PEPP top-up our economists foresee in December 2020.

Our forecasts assume widespread distribution of a global vaccine by 2Q21, that the ECB will taper or end net purchase activity in PEPP by the end of 2O21, that TLTRO sweetened terms will expire by the end of the year and that the ECB strategy review will memorialize symmetry or some form of AIT that will keep the market from pricing any type of major increase in front-end yields.

Exhibit 23:



Subdued euro area core inflation for the majority of 2021, in combination with the negative net supply dynamic, will likely mean that any rise in Bund yields will have less to do with the euro area specifically and more to do with the prospect of US Treasury yields rising. However, a faster-than-expected distribution of a global vaccine could lead markets to question whether, first, the ECB continues with PEPP purchases for the entirety of the year and, second, whether core euro area countries pull back on fiscal expansion faster than expected.

For euro area sovereign spreads, we see two major storylines playing out in 2021 and into 2022. First, a gradual tightening of all spreads including the periphery and semi-core throughout the year, given the negative net supply dynamic from Eurosystem purchases/ EU disbursements; and second, a continued reach for yield that leads to a flattening of both 5s30s and 10s30s curves in the semi-core and periphery.

We forecast the 10y BTP/10y Bund spread to tighten below 100bp by the middle of 2021 and look for Italian yields to continue to tighten relative to Spanish yields. We think that longer-maturity BTPs will provide investors with the strongest total return in the euro area in 2021.

Front-loaded issuance from the periphery in the first two quarters of the year will not be as large as it would otherwise need to be, given the disbursement of SURE funds in 1H21 and eventually NGEU grant monies in 2H21 and into 2O22.

A global vaccine by 2Q21 could also accelerate the tightening and flattening dynamic to the extent it is seen as revitalizing tourism sectors in France, Portugal, Spain, Greece and Italy, leading to stronger tax revenue, faster budget and debt/GDP improvement and less issuance needs in the back half of the year.

Exhibit 24:

Issuance, net of redemptions and central bank purchases



Source: National Treasuries, national central banks, Morgan Stanley Research estimates

However, the better growth backdrop post the vaccine and view that the worst of the pandemic hit to growth is over may result in the ECB tapering/ending net purchases in PEPP and allowing the TLTRO III sweetened terms to expire by the end of 2021 (in line with our economists' view). At the margin, this slows sovereign spread tightening in 2022, but the impact from fewer Eurosystem net purchases is offset to some extent by larger NGEU grant disbursements, continued PEPP/APP reinvestments and lower overall net issuance needs in 2022 from most euro area sovereigns.

In the UK, the outlook for gilts is likely to remain highly uncertain given Brexit, questions about the BoE's willingness to cut Bank Rate into negative territory, ongoing lockdowns, the outlook for the budget/supply due to extended government furlough and assistance programs, the Scottish elections and, finally, the speed of BoE gilt purchases in 2021 after the recent QE top-up of £150 billion at the November 2020 MPC meeting. We think that the recent QE top-up will offset a considerable portion of supply in the first half of the calendar year, but the size of purchases by maturity bucket is still uncertain.

Currently, we forecast gilt yields to rise modestly in 2021 with a steepening bias to the UKT 2s10s and 5s30s curves. We look for gilts to remain stuck between the US and euro area, with underperformance versus German Bunds but outperformance relative to US Treasuries.

At the moment, we see our forecasts for the gilt market as subject to considerable uncertainty since they assume that the UK/EU successfully negotiate a trade deal, that a vaccine is in place for wide-scale disbursement by 2Q21, that the BoE reduces the size of weekly QE purchases throughout the year and that the Scottish election does not result in calls for an independence referendum. Given this, we have the lowest conviction in our UK forecasts relative to other global bond markets.

In Japan, although the continued global economic recovery will likely weigh on global bond markets, we continue to expect the BoJ's

strong commitment to YCC to prevent a large rise in yields. We expect 10y JGB yields to end 2021 at 0.00%. We maintain a constructive view on the long end, although we anticipate higher term premiums in response to the global V-shaped recovery and subsequently higher global bond yields.

We expect supply/demand dynamics to improve dramatically in 2021, given that: i) Additional JGB issuance will be less likely with the third supplementary budget; ii) Market issuance in FY21 will likely decrease by JPY 50-60 trillion versus the current issuance pace; and iii) Major Japanese lifers showed appetite to increase long-end JPY bond exposure to prepare for the economic-based capital requirement starting in 2025, according to major lifers' investment plan in 2HFY20. We expect 30y JGB yields to end 2021 at 0.55%. A key risk for our view is that another serious lockdown related to COVID-19 forces the government to implement another fiscal stimulus program.

In the dollar bloc, rates follow Treasuries higher, but local central banks matter too. We expect the correlation between US and dollar bloc yields to remain high, so the bear steepening in US rates we forecast should translate into steeper dollar bloc curves as well. However, we see scope for relative differentiation based on central bank action.

In Australia, front-end yields should remain well anchored by the RBA's yield curve control target (recently lowered to 10bp) and its clear forward guidance that rate hikes are unlikely through 2023. Long-end yields have scope to rise alongside global peers, though the combination of RBA purchases (in 2021) and foreign inflows should keep long-end ACGBs outperforming USTs.

We see scope for long-end **New Zealand** yields to catch up to Australian yields, both reaching 1.30% by 4Q22, as the RBNZ may surprise markets to the hawkish side in 2O21. The combination of market pricing for negative rates being overdone and the RBNZ continuing to front-load its asset purchases suggests that a pullback in stimulus in 2O21 should reverse the bull flattening we've witnessed in 2O20, particularly as local data (particularly housing) continue to outperform.

Canadian yields likely keep their tight link to US yields, though we see scope for underperformance around mid-2021 as the BoC tapers its asset purchases.

G10 FX: Global recovery = USD weakness



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Key investment ideas

- **USD** to weaken when risk markets perform: We forecast DXY to weaken by 4% by the end of 2021. The USD weakness is front-loaded in 1H21. Global growth picking up due to monetary accommodation and availability of a COVID-19 vaccine supports USD weakness.
- **Top trades:** Buy EUR/USD on dips down to 1.16; buy AUD/USD to target 0.77; sell EUR/SEK and EUR/NOK basket; sell GBP/NZD as a relative value trade. Commodity currencies to rally the most.

USD EUR GBP JPY



The US dollar topped in 2020 and we forecast it to weaken further in the coming year (-4% DXY, -3% broad USD). Liquidity from central banks is still ample and expanding, while supportive government fiscal spending should help risk assets to rise, particularly into 1H21. USD tends to weaken when global growth is strong, which we forecast too. US real yields are expected to stay low. Catalysts that will push USD weaker include continued announcements of successful COVID-19 vaccine trials and then the distribution of the vaccine (1H21); agreement of a Brexit trade deal (4Q20); EU recovery fund spending (2H21); and reiteration of low Fed rates even as economic growth picks up (2021).

The Fed cutting rates to the zero lower bound has changed the way risk is allocated in portfolios: First, we continue to see USD as acting as the best safe-haven currency in the G10, rising in times of risk-off and falling in times of risk-on. This is because, now that US nominal rates have converged to global peers, USD is likely to be used as the funding currency of choice for carry trades in FX or increasingly for corporate borrowing. Second, global investors that accumulated USD assets in the last 5-7 years may now choose to FX-hedge those assets as the cost to hedge is cheaper and USD is declining. We expect Japanese and eurozone investors to increase USD FX hedges in 2021. As EM economic growth picks up, EUR could start to be used as a funding currency, but we don't expect that it

would as much as in January/February 2020 as the Fed has made the USD rate nearly 2% cheaper than then.

Is USD in a multi-year downtrend? Since floating exchange rates began in the 1970s, there have been two full USD up and down cycles. The bearish cycles were on average 6-7 years in length, suggesting that if March 2020 was the peak in the DXY, 2021 will still be in the middle of that downtrend. We forecast that we are still in a downtrend but the journey may not be as smooth as it was in the late 1980s or early 2000s. Historical analysis of Fed rate cycles shows that big DXY USD peaks occurred around 1.5 years (20 months) after the market started to price in the rate-cutting cycle (via a peak in the 2y US yield). This pattern occurred again recently, with the US 2y yield peaking in November 2018 and DXY peaking 16 months later in March 2020.

The combination of fiscal and monetary easing has caused investors to question which will be more important in driving currency price action. Historically expansionary fiscal policy coupled with more austere monetary policy has been most currency-positive, with dovish monetary policy and tight fiscal policy the most currency-negative. In the end, we think that fiscal spending will be more important in 2021 as this has a more direct impact on growth. Markets will be most focused on whether the prospective new US administration can

deliver large fiscal support, which would be bullish for risk and bearish for USD. The size of the stimulus is dependent on whether the Democrats win the Georgia Senate seats on January 5. Globally fiscal stimulus is expected to continue but at a smaller pace than in 2020, while monetary policy is expected to remain accommodative.

Where are currency valuations? In the past year we have used shadow short rate differentials to assess FX valuations. These have been useful in determining the degree of monetary policy accommodation in one region relative to another. Assuming USD rates remain low due to the Fed keeping rates on hold, the USD shadow short rate should continue to fall in 2021, while ECB easing via QE but not rate cuts keeps the EUR shadow short rate low but not falling as aggressively. USD is generally overvalued versus G10 currencies using shadow short rate estimates. Longer-term BEER FX fair value estimates also suggest that USD is overvalued by ~10%. AUD, NZD and SEK are the most undervalued currencies on the BEER estimate.

Exhibit 25:



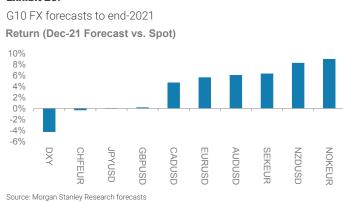
We forecast EUR/USD to rise to 1.25, with the bulk of the rally coming in 1H21 when the eurozone economies come out of lockdown and COVID-19 vaccine distribution boosts global travel. We expect the eurozone economy to contract in 4Q20, resulting in more ECB easing in December, so a near-term EUR/USD rally is likely to be more muted, mostly driven by risk markets and USD weakness. The ECB is likely to sound caution on EUR strength above 1.20 if economic activity has not yet picked up. The EU recovery fund needs to be agreed by national parliaments by April 2021, while distribution of funds is expected in 2H21. Foreign investors such as reserve managers could participate in this EUR debt issuance, but we estimate that the ECB will end up buying most of the debt issued.

Commodity currencies should see the most benefit due to the global recovery, their historical sensitivity to risk assets and higher probability of seeing their local central banks turning hawkish. We expect NZD, NOK, CAD and AUD to outperform other G10 currencies

in 2021, rising most in 1H21. NZD and NOK in particular benefit from relatively hawkish central banks.

The risks to our USD-bearish outlook mainly center on the path for global growth, which is impacted by the availability of an effective COVID-19 vaccine. After the positive outcome from the Pfizer vaccine, our biotech analysts expect other positive phase 3 trial news this month and distribution around March/April 2021. USD would strengthen if a vaccine isn't available next year and economies return to lockdowns. We also assume that the Federal Reserve will be tested on its average inflation targeting framework when the US economic outlook improves. Should some Fed members decide to talk about when to raise rates due to stronger inflation and employment then the USD weakness may not be as large as we forecast. Most DM countries are facing risks of high debt levels and unemployment due to the COVID-19 restrictions and lockdowns, so any developing worries about that after global travel resumes could be a worry for risk markets and bullish for USD.

Exhibit 26:



Currency-specific summaries

GBP: A Brexit UK-EU trade agreement this month should cause GBP/USD to rally as the pair is currently undervalued. The rally could last into 1Q21 as optimism reduces the GBP risk premium but then an underperformance in UK growth and the lowest real yields in the G10 make GBP an underperformer into the end of 2021.

JPY: USD/JPY should grind lower initially, led by further USD weakness. We expect USD/JPY to start to rise from 103 in 2H21 as Japanese investors buy foreign assets as the combination of a lower USD/JPY and higher US yields makes non-FX-hedged foreign bonds investment attractive.

AUD: We expect AUD to gain along with USD weakness and a global growth pick-up. The RBA has already eased but may get sufficiently concerned about AUD strength above 0.75 to slow the pace of appreciation. Ultimately, though, a positive global backdrop, economic linkages to Asia and high risk-adjusted carry should keep inflows on track and see AUD/USD rise to 0.77 by end-2021.

NZD: We expect NZD to outperform in 2021 as the RBNZ surprises markets to the hawkish side, perhaps as early as 1Q21 as negative rates remain overpriced, in our view. NZD gains are somewhat restrained by outflows from foreigners selling NZGBs, but not enough to prevent AUD/NZD from falling modestly to 1.04 by year-end.

CAD: The BoC tapers in 2Q, pushing USD/CAD below the fair value range to 1.23, but then it stabilizes near 1.25, the lower end of our 1.25-1.35 fair value range. CAD risks remain asymmetrically skewed to the upside as tailwinds from demographics and global growth remain.

NOK: We see a rally in line with risk sentiment (+9% versus EUR in 2021), global growth and a COVID-19 vaccine that benefits global travel. Norges Bank still buys NOK at a high pace to support fiscal spending which is at a smaller pace than in 2020, with the bank gearing up for a rate hike in 2022.

SEK: Strength to continue as the Riksbank is less concerned about SEK strength, its easing is focused on QE and we expect Sweden's current growth outperformance versus the eurozone to continue in 2021. Global risk sentiment continues to matter for SEK, with EUR/SEK falling 5%.

CHF: CHF gains as German bond yields remain low, helped by ECB easing. EUR/CHF tracks the money supply growth differential, which is growing faster for EUR. CHF gains versus USD and EUR, while the SNB is intervening less in markets, just smoothing volatility rather than actively targeting a specific FX level.

Thematic events to watch in 2021

2020 saw a big change in the way we live, interact and consume. Beyond the COVID-19-related government and monetary stimulus changes, we watch for two discussion points that are expected in 2021. The OECD has drafted a new way to tax international companies, where companies would pay taxes on profits in the region they were generated in. The rules could affect US tech companies and European luxury companies disproportionately, so it is not clear whether all countries will agree to this in 2021. More likely may be the evolution of the EU's proposed digital taxes, which could be implemented in 2021.

Second, central banks have rushed to talk about developing central bank digital currencies as a way to distribute money supply to the banks and even directly to the public. China's internal digital currency has already started to be distributed and will expand testing in 2021. The ECB is expected to announce a decision in late 2021 on whether it will put resources into developing a digital currency. Why is this important for FX trading? Should a major central bank launch a digital currency in the following years (2024+) distributing directly to the public, there is a chance of a rapidly expanding money supply which would impact currency valuations.

Global EM fixed income: Modest upside



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EM Fixed Income

EM FX
EM Local
EM Credit



Key investment ideas

- We anticipate moderate positive USD returns in EM given the recent rally and higher US yields: 8.1% for local bonds and 2.0% for credit by end-2021.
- In local markets, we like INR, IDR, RUB, ZAR and BRL. We like SAGBs, INDOGBs and payers in CNY NDIRS. We expect flattening in high-yielding Brazil and Colombia.
- In sovereign credit, we forecast moderate spread tightening, given the recent rally. With mid-tier and stronger single B credits outperforming, we suggest adding Egypt, Ukraine, Brazil and South Africa.

Overview

We expect next year to deliver reasonable returns for EM fixed income assets. We see 8.1% total returns in USD for local markets and 2.0% total return for credit, with gains to be front-loaded to the first half of the year. We see the returns for local markets being driven by FX, with bonds simply providing carry and no duration gains. In credit, spread compression is the driver, with UST yields expected to back up to 1.45%. We see three key drivers for this:

First, the economic outlook is good: Next year's economic outlook should be about reaping the benefits of the arrival of a vaccine against COVID-19, as well as the implications of a prospective Biden administration's economic and foreign policies. Both should be positive for emerging markets, and a key feature of the global economic outlook is the catch-up of EM ex China GDP growth with the rest of the world.

Second, liquidity remains ample: Interest rates remain around 0% in the world's major economies and there remains plenty of liquidity on the sidelines following the significant quantities of QE from the world's major central banks that continue to be injected into global markets. Appetite to deploy this cash will be high over the coming months in light of the reduced uncertainty following the arrival of a vaccine and a prospective Biden administration.

Third, valuations are still reasonable: Bond yields in EM are relatively high compared to their DM counterparts and should attract inflows. High-yielders should outperform, while low-yielders/IG will likely suffer on the back of rising UST yields. Morgan Stanley remains bearish on USD, which should help to unlock value in EMFX.

This rosy cyclical outlook is offset by ongoing structural concerns about EM fundamentals, such as debt sustainability and productivity growth, both of which weigh on the long-run GDP potential of EMs. We don't expect to see much progress in resolving these issues, which is why we have front-loaded the expected gains.

Global EM quarterly forecast returns for 2021

Exhibit 27:



Source: Morgan Stanley Research forecasts



Exhibit 28:



Local markets

In Asia, we expect the broad risk rally to support high-yielders in this region as investors add beta risks to the portfolio while low-yielders will benefit from a stronger CNY. We like short USD/IDR given Indonesia's better fundamentals and improving current account. We also recommend long INR because the RBI could tolerate some FX appreciation in order to reduce inflation pressure. We see 5% upside in CNH/JPY as the BoP is in favor of CNY and the PBOC would tolerate an orderly appreciation post-US election. KRW and TWD should also benefit from a stronger CNY, in addition to their recovering export sectors.

In rates, we pay **5yr CNY NDIRS** as we believe that a combination of solid growth and higher inflation in 2021 could prompt investors to price in tightening from the PBOC. In addition, a lack of foreign passive index buying in 1H21 and ongoing issuance should push yields higher. Meanwhile, we like 10 yr INDOGBs without FX hedge given its high real rates. A 5.5% fiscal deficit near year means that debt issuance will be challenging, but BI will stand by to purchase. We are concerned but the global bullish risk sentiment should outweigh such a concern. Hence, we expect that a stronger INR should push INDOGBs bond yields lower.

In **LatAm** local markets, we would expect high-beta to lead the rally in both FX and rates.

As we have previously laid out (see here and here), LatAm FX, including BRL, MXN and COP, should benefit the most from potential positive vaccine developments in the weeks to come, as their economies continue to be severely impacted by the virus relative to other regions. In addition, we expect economic policy uncertainty to decrease to more 'normal' levels, helping the EM investment narrative and potentially coinciding with better prospects for RoW growth. We expect CLP and PEN to lag but to perform well versus G3 currencies on the back of lower carry.

In rates, such a scenario should help curves to flatten in the region, especially in countries with more acute fiscal constraints – Brazil and Colombia – as we expect the fiscal risk premium to decline while growth continues to pick up. Most of the reduction in term premium will likely come from the long end rallying, as we do not expect central banks in the region to deliver much more relative to what is in the price in the short end.

In **CEEMEA**, we have a constructive outlook too. We expect CEE currencies to do well, especially in 1H21. Recent positive news around vaccine availability is good for countries in the region, which stand to benefit relatively more given the impact COVID-19 has had on the region. PLN remains our preferred currency to position for reflation, followed by CZK. HUF should underperform relatively if the NBH remains dovish and realigns the weekly deposit rate to the base rate, which is why we continue to like the long end of the curve.

We think that RUB will be one of the best-performing EM currencies in 2021. The political risk premium remains high while US elections are now behind us, with sanctions risk being exaggerated even in the case of a 'blue sweep'. Apart from that, the oil outlook will be important, where our strategists expect a more marginal appreciation to US\$50/bbl. We believe that USD/ZAR can reach 15.0 - and potentially overshoot temporarily – but this should more or less represent the trough. We stay long SAGB 2048s.

Sovereign credit

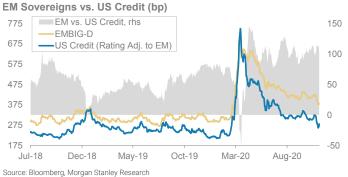
2021 set to deliver total returns of 2.0%: The external backdrop is supportive for EM sovereign credit, given a global synchronous recovery, broad-based fiscal consolidation (even though deficits remain wide versus history) and an anticipation of positive vaccine developments into 2021. At the same time, EM credit valuations still screen as cheap versus history and versus US credit, meaning that the asset class should attract inflows in an environment of still abundant liquidity, particularly if global flows start to favor EM versus DM, including via a weaker USD. From current levels of 380bp for the EMBI Diversified, we forecast spreads tightening to 365bp by 2Q21 before flattening out in 2H21 to reach 360bp by end-2021. Notably, this keeps the index wide versus the 340bp 10-year average and also lags the tightening forecast by our US credit strategists, which factors in the weaker EM credit fundamentals including the potential for further payment difficulties for lower-rated credits. While a breakeven-led rise in US Treasury yields should be manageable and contribute to seeing credit spreads tighter, it will reduce total returns. Adding our 10-year US Treasury forecasts of 1.30% by 2Q21 and 1.45% by 4Q21 leaves total returns at 0.6% by 2Q21 and 2.0% by 4Q21, with excess returns instead higher at 2.9% and 4.8%, respectively.

Exhibit 29:

We forecast tighter EM credit spreads... **EM Sovereign Credit Forecasts (bp)** Bear Case Base Case 750 700 Bull Case 650 600 575 550 500 450 365 360 360 400 350 325 300 250 Dec-20 Jun-21 Dec-21 Jun-19 Dec-19 Jun-20 Source: Bloomberg, Morgan Stanley Research forecasts

Exhibit 30:

...with room for EM to tighten versus US credit into early 2021



Moderate bullishness into early 2021 – turning neutral: Given that the recent tightening in credit spreads has brought spreads much closer to our forecast levels, we turn neutral on EM sovereign credit from our prior bullish view. While we still expect flows into the asset class to pick up, supply should also increase at current levels and provide a partial offset. This neutral stance also contrasts to the still bullish EMFX stance, where we see risk/reward as more attractive.

Stick with higher-beta credits yet avoid the stressed bucket:

Despite turning neutral, we still suggest allocating to the mid-tier credits and single Bs, including an overall preference for HY versus IG. This comes on the back of the anticipated spread tightening, which is likely to be beta-driven, in addition to HY being the key driver of the still cheap valuations while the high-quality credits (strong BBBs and above) have already in most cases returned to pre-COVID-19 spread levels. Expectations of higher UST yields also support reaching for higher spread credits (see How Would a UST Sell-Off Affect EM? November 2, 2020). **Our key likes to implement these views are Egypt, Ukraine, Brazil and South Africa.** Finally, the exception to our bullish view are the lowest-rated credits, including CCCs and weak single Bs, that we expect to remain under pressure given high financing needs and sometimes also solvency issues, meaning that they will benefit less from a beta move.

However, the bull/bear skew is negative: The challenged credit fundamentals skew the risk/reward wider. In a bull case, flows returns to pre-COVID-19 levels, including commodity, tourism and other flows, leaving EMFX and growth much stronger and in turn reducing credit risks materially, with HY issuers able to tap the market as needed. This sees spreads reach 325bp by end-2021. The bear scenario sees much wider spreads as it includes no vaccine, meaning that external funding needs will remain very high but with little market access, leading to calls for more significant private sector participation.

Global credit: Early-cycle crossroads



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Key investment ideas

- Reflation and revised rates expectations translate into a down-in-quality bias: Across all regions, we favor HY over IG and position for compression themes across the ratings buckets. Within leveraged credit, we favor leveraged loans over HY bonds. We also like playing for compression through CDS indices.
- Expect the early-cycle playbook to hold: As near-term liquidity challenges from the COVID-19 shock are addressed, we expect corporates to increasingly focus on balance sheet repair. Improving growth and earnings will help companies to manage the deleveraging process, particularly in the US and Europe.
- We forecast credit spreads to tighten and excess returns to match or exceed historical averages: While the price action over the past week eats into the potential upside, we expect credit spreads to tighten further into end-2021, translating into healthy excess returns across all regions.

Credit

US Europe Asia



Vaccine progress puts a return to pre-COVID-19 spread levels on the fast track: Over the forecast horizon, our central narrative is that of vaccine availability by 2Q21(potentially earlier, given the Pfizer headlines), easy monetary policy, further fiscal stimulus (if needed) in both the US and Europe, and a synchronized global economic recovery. The set-up bodes well for the performance of credit markets. We remain bullish and forecast above-average excess returns across all regions.

While progress on the vaccine reduces the need for proactive stimulus and may also ease concerns regarding the second wave of the virus, the tension between lockdowns 2.0 and further stimulus over the near term cannot be ignored completely. But to the extent that there is higher confidence around vaccine effectiveness, reopening and reflation are likely to become central to the 2021 view. Higher confidence around vaccine efficacy (and by extension economic reopening) has encouraged our rates colleagues to revise their bond yield forecasts for the US and Europe significantly higher. Even if some of the optimism fades, we do not expect a weaker fiscal impulse or a pre-vaccine increase in COVID-19 cases to undermine the bullish strategic outlook for credit.

Expect the early-cycle narrative to hold, but 2021 is when the rubber meets the road on corporate behavior: Looking beyond the macro themes, our views in credit remain anchored by an early-cycle playbook of balance sheet repair. Through the course of this year, corporate fundamentals have gone from weak to weaker, with issuers tapping bond markets at an unprecedented pace. However, the surge in issuance volumes across both the US and Europe has been dominated by defensive motivations, with companies shoring up cash buffers at a record pace. As the economic backdrop and earnings outlook improve, we expect these cash buffers to be deployed to manage down leverage and improve their ratings profile. In this context, we see the corporate management response function as an important ingredient of and a risk factor to our thesis for 2021.

Positioning for compression globally, favor down in quality over out the curve and loans over HY bonds: Across all regions, we expect COVID-19-impacted sectors and high yield credits to be prime beneficiaries of a return to 'normal' in 2021. The case for further compression and rotations down in quality is strong and we prefer HY over IG globally. Within IG, we favor BBBs over As in the US and

Europe, given the stronger incentive for repair in the former ratings bucket. In HY, BBs should benefit from yield buyer demand across the US and Europe. But for traditional HY buyers, we see Bs as the sweet spot but would also look to add more CCCs in the US. Higher conviction around the economic recovery and our revised rates forecasts also inform our shift to a overweight stance on leveraged loans versus HY bonds in the US and Europe. In Asia, our preferred pocket of value in HY is the China property sector, where single-name dispersion remains high.

Forecasting above-average excess returns globally: We summarize our 12-month global credit spread and return targets in **Exhibit** 31. Across all regions, we see excess returns above historical averages, but the US remains our preferred region. In absolute terms, we expect US HY to generate the highest excess returns within the corporate credit complex; however, on a risk-adjusted basis and on the total return measure, leveraged loans are likely to outperform. Our spread targets for end-2021 would still keep spreads across all regions comfortably off the pre-COVID-19 tights (**Exhibit 32**).

Exhibit 31: 2021 credit forecasts

Si	ore	ad	For	reca	st

	Current	Bull Case	Base Case	Bear Case
US Investment Grade	115	80	100	150
US High Yield	435	300	350	600
US Leveraged Loans	479	370	400	600
EUR IG	69	40	60	110
EUR HY	408	275	350	550
Asia	341	253	286	449
Excess Return Foreca	ast			

	Bull Case	Base Case	Bear Case
US Investment Grade	4.2%	2.5%	-1.9%
US High Yield	9.1%	5.9%	-4.2%
US Leveraged Loans	5.0%	3.8%	-1.9%
EUR IG	2.3%	1.2%	-1.5%
EUR HY	7.6%	4.8%	-3.3%
Asia	5.9%	4.5%	-1.4%

Source: Markit, Bloomberg, S&P LCD, Morgan Stanley Research forecasts; Note: Pricing as of November 12, 2020; US IG and HY spreads forecast for the Bloomberg Barclays US Corporate Bond and Bloomberg Barclays US Corporate High Yield Bond indices, respectively.

Exhibit 32:Global credit tights versus wides

Global Credit Sp		◆12 Nov 2020	♦02 Jan 2020	24M Wides
US IG	24M Tights 93 • • • 95 1	15		→ 373
US HY	315 40 331	435		→ 1100
US Lev Loans	366 ◆ ♦ 422	479		→ 1071
EU IG	55 ** * 61	69		→ 192
EU HY	333 ** 342	408		→ 778
Asia IG	144 + 149	196		→ 342

Source: IHS Markit, Bloomberg, S&P LCD, Morgan Stanley Research

Where we could be wrong: In addition to the risk of a near-term spike in virus case count, we see two main risks to our optimistic outlook. The first is the risk of more disruptive price action in credit on account of a spike in medium-to-long-term bond yields. While a reflation-driven rise in rates eventually is supportive of credit spreads, record-high duration in US and European investment grade credit could result in a near-term correction. The second key risk is our reliance on the early-cycle playbook. Insufficient emphasis or progress on voluntary deleveraging could bring balance sheet fundamentals and downgrade risks back to the fore.

US credit

We expect spreads to approach (especially in HY/loans) but not match pre-COVID-19 tights by end-2021: Our forecasts call for 15bp tightening in IG, and 80-85bp in HY and loans, which translates into excess return projections of 2.5%, 5.9% and 3.8%, respectively. This would take us back to within 10bp of pre-COVID-19 levels in IG, HY and loans. Our numbers imply a sharper trajectory back to the tights compared to prior post-recession bull markets. We think that this is justified given the nature of the recovery, and the extraordinary amount of liquidity still in the system. In addition, we think that the case for spreads in leveraged credit to approach pre-COVID-19 levels is much stronger, given a rapidly normalizing economy. On the other hand, while IG companies will benefit fundamentally from a healthier macro environment, the market will need to face the challenge of rising rates, from a short-term (outflows from fixed income) and medium-term (less need to reach for yield from overseas investors) perspective. Overall, while we predict tighter IG spreads over the forecast horizon, we think that the compression will be more measured compared to HY/loans on a risk-adjusted basis. In addition, the significant changes in index composition for IG over the course of the year - high duration, record dollar prices, high BBB exposure - all mean that the case for IG spreads to go back to pre-COVID-19 tights is slightly weaker than for HY/loans.

We expect the early-cycle theme to gain traction and play out more clearly in 2021: This dynamic matters specifically for lower-quality and COVID-19-exposed names where some fiscal uncertainty at the margin could help in this regard by keeping animal spirits at corporates contained. Most companies have 'over-issued' in 2020 to raise cash buffers in the event of another growth shock, taking leverage to all-time highs. As the economy continues to normalize, and rating agencies adopt a more traditional credit lens, the corporate incentive will shift towards proactively managing debt loads/leverage. This has fundamental implications, but also means that supply declines quite substantially. We will watch closely how the

record cash levels get deployed. A key risk to our bullish narrative is that corporates don't follow the traditional balance sheet repair post-recession, and low rates keep driving a continued erosion of credit quality to help shareholders.

Maintaining a down-in-quality bias: We are still calling for quality compression consistent with the early-cycle narrative. Slower/lower fiscal stimulus is likely to be offset by the revised expectations around the vaccine, as a result of which our rates colleagues expect a ~60bp increase in 10-year Treasury yields. For yield buyers in credit, we therefore see a stronger case for moving down in quality rather than moving out the duration curve. We still like BBB over As in IG and favor COVID-19-impacted sectors like travel and leisure, where risk premiums remain elevated. In leveraged credit, we like Bs over BBs and move to an overweight in loans over HY bonds. Fallen angels have compressed versus legacy BBs, and much of this trade has played out, which makes us comfortable being in single Bs. Long CDX HY versus CDX IG remains a top trade and an attractive expression of the down-in-quality view.

European credit

Near-term challenges ultimately offset by the continued recovery: Over the course of next year, we expect EUR IG and HY spreads to tighten by 9bp and 58bp, respectively, generating excess returns of 1.2% and 4.8%. While the near-term trajectory for spreads could be challenged given a renewed series of European lockdowns, we remain constructive on a 12-month horizon, informed in part by our economists' expectations for a growth rebound in the region from 2Q onwards. Additionally, we continue to expect ample support on both the monetary and fiscal fronts. The ECB is likely to expand PEPP by a further €500 billion in December, and maintain purchases throughout 2021, providing a credible backstop to credit markets. Meanwhile, national budgets are set to keep fiscal policy broadly at 2020 levels and the European recovery fund should begin making disbursements. Our base case assumes that corporate behavior remains creditor-friendly overall, reflective of early-cycle dynamics.

Focusing on carry in IG, sticking with single Bs in HY: We maintain our existing preferences in IG, namely staying down the ratings spectrum as well as capital structure. While cyclical premiums have compressed sharply since earlier in the year, we continue to view these as attractive. For excess return-driven investors, we also recommend moving out the curve. In HY, we roll over our preference for single Bs

over BBs, despite the near-term growth challenges in Europe, as loss-adjusted returns are more attractive over a one-year horizon in the former. Within BBs, we like extending duration in fallen angels. In derivatives, we position for a compression of the historically elevated spread between HY and IG by selling iTraxx Xover versus Main on a 5:1 ratio.

Asia credit

Our bullish view on Asia credit is driven by improving macro fundamentals... Our Asia economics team is expecting the Asia ex Japan (AXJ) region to enter into the 'Goldilocks' recovery phase. This recovery entails a combination of accelerating and above-trend year-on-year growth, rising but still benign inflation and big easing policies as global and domestic policy-makers stay accommodative. The past two previous AXJ 'Goldilocks' recovery phases saw broad-based deleveraging in Asia IG and Asia HY corporates, thanks to strong earnings growth. Both Asia HY and China HY default rates dropped significantly in the past two 'Goldilocks' periods. Our base case is that China onshore corporate bond defaults will be manageable, as onshore China financial conditions should remain easy in 2021 and marginal tightening in financial conditions is offset by stronger growth. However, we see the risk of idiosyncratic-driven defaults driving default rates higher.

...positive technicals and cheap valuations: On the technical front, we expect demand for Asia credit to remain strong and net supply to be lower after a bumper year of net issuance this year. The lower net supply is primarily driven by normalizing of net supply for Asia IG corporates, which this year hit a historical high due to a COVID-19-driven front-loaded refinancing. Although we expect demand to be weaker for China HY credit from yield-sensitive onshore China investors, we think that it would be offset by QE-driven demand of global investors (US and European investors). Valuation remains cheap for Asia credit, especially for Asia/China HY, which are trading above their fair spread levels. We expect Asia credit to tighten by 55bp, driven mainly by spread compression between Asia HY/China HY and Asia IG/China IG as the current spread differential is not pricing in the 'Goldilocks' recovery backdrop. Lastly, we think that it makes sense for investors to add risk through BB rated China HY property due to its strong technical support from global investors and it having further room to compress versus China IG property.

Global securitized products: Don't change the channel



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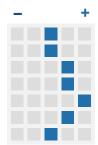
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Key investment ideas

- With the Fed on hold until late 2023 and a continued V-shaped recovery, investors should follow the portfolio balance channel. We recommend investors go down in quality and up in risk across the securitized space; we expect higher-yielding, lowerrated sectors to outperform less risky assets.
- The Fed will continue to buy mortgages at the current pace through early 2022, but high levels of supply and prepays make us recommend an overweight in IG credit versus MBS.
- We like going down the capital structure in securitized credit, though winter could be choppy as we continue to deal with COVID-19 uncertainty and any fiscal stimulus is likely to be reactive instead of proactive. Our favorite expressions of this are US CLO equity and CMBX.BBB-.11.

Securitized

US Agency MBS Index US Agency CMBS US Non-Agency CMBS US Resi Credit CLOs European ABS US Consumer ABS



Key themes for 2020

The presence of an accommodative Fed on hold through late 2023 and projected to continue buying Agency MBS and UST at the current pace through all of 2021 in conjunction with continued bank deposit growth and a robust economic recovery is a strong tailwind to securitized products, and gives us a base case positive outlook across most asset classes. A year from now, assuming our outlook on a vaccine is correct, we think that the story to look back on will be one of spread compression, though we recognize that winter may have some hiccups, given uncertainty around the timing and size of the fiscal response and delivery of a vaccine. Investors will have been paid to follow the portfolio balance channel and move down in quality and out the credit spectrum to pick up yield.

We go into more detail on these expressions of down in quality later, but **our favorite expression of this is US CLO equity,** who are long a number of options including LIBOR floors and callability of the debt tranches, many of which we expect to be in the money given the broader macro environment. Similarly, **we also see opportunities in EU CLO non-IG and secondary equity.** Other variations of our expectation of higher-beta assets outperforming include **long**

CMBX.BBB.-11 outright, as it is trading cheap to HY and higher-quality underwriting, **along with pre-COVID-19 M2s and post-COVID-19 B1s in CRT.** Finally, we recommend the most liquid portfolio rebalance channel trade, **overweight IG credit versus MBS**, given concerns about supply and prepays on the Agency side, while our corporate strategists are bullish on the outlook for corporate spread compression.

We expect home price growth to remain positive in 2021, but slow to +2-3% while headline commercial real estate prices fall 10-15%:

Demographics continue to provide structural support for the demand for shelter broadly, and we believe that the preference for single-family housing (both ownership and rentership) that has emerged during the onset of the COVID-19 pandemic will not simply evaporate with a vaccine in 1H21. In addition to robust demand, the supply environment remains historically tight. On the other hand, the more reactive stimulus environment and the expiration of forbearance plans in 2Q/3Q21 should lead to an increase in delinquencies, and tight lending standards should act to mute the gains in transaction volumes and home prices this environment would otherwise engender. Difficult year-over-year comps given the steep run-up in home prices expected through the end of 2020 should lead to the rate of growth slowing in 2021 to +2-3%. The commercial real estate market is at the eye of the

COVID-19 storm as a K-shaped recovery emerges with pronounced bifurcation between property types that are beneficiaries and casualties, but headline property prices only fall 10-15% as dry powder is a safety net compared to -30% during the GFC.

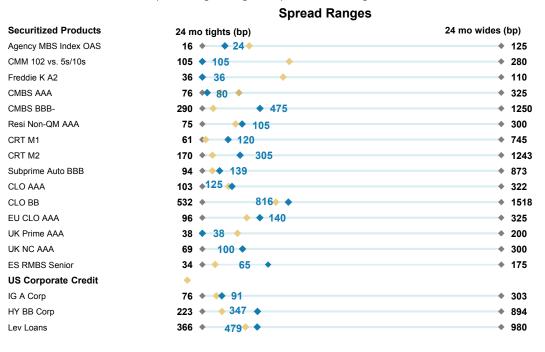
Exhibit 33:The IG Index looks wide to MBS Index valuations



Our best ideas across products

Within Agency MBS, we expect 2021 to be a battle about what's known and in the price versus what's unknown and how much investors think is priced in. On the known positive front, the Fed will continue to buy MBS at a rate of US\$40 billion/month likely through the beginning of 2022, and banks should continue to grow their deposits and put much of that to work in the MBS market. On the known negative side, originators will continue to add capacity, causing the primary-secondary spread to come down and prepays to remain elevated. These dynamics should cause lower-coupon mortgages to finance quite well, offering money managers an attractive opportunity to outcarry the index, but not necessarily attractive absolute valuations. On the other hand, uncertainty about the duration of the prepay wave, how many borrowers will either refinance or get bought out when exiting forbearance, and the magnitude of further mortgage fintech improvements make higher-coupon mortgages more challenging to value. The natural trade is for investors to look for carry and be down in coupon in 2021, owning bonds the Fed is buying for carry while underweighting higher coupons for more attractive opportunities in resi credit or IG, but those who agree with our outlook for higher rates, a steeper curve and risk-on should buy mortgage derivatives very lightly hedged.

Exhibit 34:Current levels and 24-month spread range, along with spot 12 months ago



A Year Ago

Agency CMBS should benefit from being one of the few asset classes with highquality duration and some spread, along with continued Fed support and apartment fundamentals that remain on solid footing outside major markets. However, much of this is arguably in the price as spreads are at all-time tights. In our base case, we don't see much room for spread tightening but do see opportunity for carry. However, risk/ reward is towards widening.

Source: Bloomberg, Yield Book, TRACE, Morgan Stanley Research; Data as of November 12, 2020.

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Current

In **resi credit**, our constructive view on US housing bodes well for fundamental performance both in the form of elevated prepayment speeds and lower delinquencies. That said, approximately 3.7% of the CRT market and 5.3% of the non-Agency market remain in forbearance, with the maximum 12-month extensions set to expire throughout 2Q and 3Q21. We expect healing to continue – over 50% of borrowers that have entered forbearance have already come back current or prepaid – but acknowledge that the possibility of a more reactive stimulus could lead to somewhat choppy performance in the first few months of 2021. While issuance volumes have the potential to increase substantially in the CRT market if the CAS program returns, an outcome that we believe to be more likely with a Democratic president, non-QM volumes are expected to come in shy of 2019 levels, given tighter lending standards. Considering our view that prepayment speeds will remain elevated, we think that this leaves the technical environment constructive. Over the 12-month horizon, we think that spreads are going to be tighter across resi credit products. Given the potential for near-term volatility, we prefer to stay in more liquid profiles such as pre-COVID-19 CRT M2s, but think there is also value in post-COVID-19 B1s, given that our expected prepayment speeds throughout 2021 should shorten these profiles meaningfully.

In the **US CLO** market, we think that the broader macro environment presents opportunities across the capital structure. Our corporate credit team has lowered its leveraged loan default forecast to 3% over the course of 2021. This more sanguine turn in CLO-specific fundamentals will likely benefit the entire capital structure and lead to compression both in index-level spreads between ratings buckets and in the top-tier/lower-tier basis within those ratings buckets. AAAs continue to offer attractive carry at the top of the capital structure, but we see the potential for significant shadow supply through the refi/reset mechanism; about 96% of the currently outstanding CLO universe will be callable by the end of 2021, placing a soft cap on spreads. On the other hand, CLO equity investors own those call options and therefore have the ability to monetize those basis compressions. CLO equity will also receive additional excess interest payments through the LIBOR floor mechanic. Taken together, these facts make CLO equity one of our favorite trades across securitized products.

The **commercial real estate** market is at the eye of the COVID-19 storm as a K-shaped recovery emerges with pronounced bifurcation between property types that are beneficiaries and casualties, but headline property prices only fall 10-15% as dry powder is a safety net compared to -30% during the GFC. CMBS issuance rises to US\$60-70

billion across conduit, SASB and CRE CLOs as the market wins market share of the US\$430 billion of maturing CRE mortgages in 2021, but rising loss expectations magnify quality tiering and create a bond pickers' market. A positive technical backdrop boosts demand for AAAs, leading to spread compression for excess return-based investors, but relative value to IG corps is only fair and we favor seasoned LCF AAAs with shorter durations versus new issue for total return investors, given our strategists' expectations for rising rates. The best relval in the new issue space can be found in AS and AA bonds. With secondary market trading opportunities limited in seasoned CMBS BBB-, we focus on selective opportunity in new issue CMBS BBB- bonds as underwriting improves, but property quality is an unknown factor, thereby limiting our enthusiasm. Alpha can be generated in SASB deals, where investors can analyze a single property versus the 50-70 required in a conduit deal. Our favorite beta opportunity is in going long CMBX.BBB-.11 outright, which is 2 standard deviations cheap to HY as it has lagged the rally, and CMBX.11 has higher-quality underwriting and limited near-term maturity risk.

We are constructive on both **European ABS and CLO** markets for three reasons. First, helped by dovish central banks and a supportive fiscal stance from governments, we expect a strong rebound for the euro area and mild rebound in the UK from 2Q21. Positive recent newsflow on a vaccine development further supports our view. Second, while we expect a slight pick-up in arrears, consumer balance sheets are less leveraged than during the GFC and lower rates support finances. On the CLO front we think that the worst is behind us and the EU ABS and CLO universe is robust enough to withstand a moderate pick-up in stress. Third, technicals are strong as primary activity should be below 2018/19 levels and both new capital raised and ECB purchase programs are supportive. The key risk to our upbeat view is that the path to recovery to the end of 2021 is likely to be bumpy and risks are front-loaded.

Exhibit 35:Morgan Stanley 4Q21 spread and excess return forecasts across securitized products

1	Spreads			Excess Returns			
Product	Current	Bull	Base	Bear	Bull	Base	Bear
YoY HPA Forecast	5.5%	5.9%	2.9%	-1.4%			
Agency MBS Index OAS	24	15	25	45	0.7%	0.1%	-0.8%
CRT M1	120	90	105	180	1.5%	1.3%	0.6%
CRT M2	305	250	275	400	4.5%	3.8%	0.5%
CRT B1	505	400	450	700	10.3%	7.8%	-4.7%
CMBS AAA	80	55	70	115	3.3%	1.8%	-2.7%
CMBS BBB-	475	350	400	750	17.3%	12.3%	-22.8%
Agency CMBS	36	32	40	50	0.8%	0.1%	-0.8%
US CLO AAA	125	115	125	150	1.6%	1.3%	0.5%
US CLO BB	816	725	775	1100	14.7%	11.1%	-12.2%
EU CLO Senior	140	115	125	165	2.7%	2.2%	0.2%
UK Prime Senior	38	30	35	70	0.6%	0.5%	-0.6%
UK NC Senior	100	70	80	140	2.1%	1.7%	-0.4%
Spanish Senior	65	40	50	100	1.5%	1.2%	-0.6%

Source: Bloomberg, Yield Book, TRACE, CMA, Morgan Stanley Research forecasts; Data as of November 12, 2020.

Munis: Healing is a process



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Key investment ideas

- A bumpy ride on the V-shaped recovery: Munis tend to underperform on volatile moves higher in UST rates, as negative total returns undermine mutual fund flows. Such a move would be consistent with the continued sharp recovery our economists anticipate. Hence, munis are at risk of underperforming in 1H21.
- A game of two halves: A tough 1H would leave munis with a strong performance outlook for the back half of the year. Better economic growth and a strong vaccine limiting the risks of population density should feature in a positive trajectory for market fundamentals. We would start the year defensively: neutral on duration, up-in-quality, a preference for enterprise credit.

In our view, these are the cross-currents affecting the muni market in 2021:

- Negative a higher UST yield trajectory could initially challenge total returns and fund inflows: To restate the first principle of muni investing, 'you're more macro investor than you think' and munis are 'a credit market with a rates problem'. When yields reset higher, and total returns become negative, history suggests an elevated risk that household investors liquidate their muni investments at a more rapid pace. This process may already be in motion, given the move in UST 10-year and 30-year yields since the summer, and an increasingly supportive macro backdrop for GDP growth. This includes the V-shaped economic recovery that was already in motion, supported by positive data on COVID-19 vaccine trials and the potential for more fiscal stimulus.
- Positive a supportive macro backdrop should limit the fundamental risk of lingering COVID-19 issues: Positive vaccine data underscore a macro backdrop that is supportive of muni fundamentals in three ways: i) A clearer path for the V-shaped economic recovery to continue; ii) A shorter period of potential renewal of COVID-19-related stress for key sectors like transportation and hospitals; and iii) A path towards the restoration and normalization of urban population density. The latter is particularly important, in

- our view. A widely available, highly effective vaccine, which our colleagues expect late in 2Q21, could allay concerns about key GO credits permanently losing population and transportation credits permanently losing ridership. This gives us more confidence that, even if a second round of state and local aid is not approved by Congress, the vast majority of the muni market can manage through to 'herd immunity' with its credit downside bounded by negative rating actions rather than substantive jump-to-default concerns. Further underscoring this view is the Fed's Municipal Liquidity Facility (MLF), which we think will be extended as needed and whose capacity exceeds our estimated revenue shortfall for states through 2021, an estimate that may be conservative, given state reports showing a more modest-than-expected 9% decline in revenues.
- Positive risks skewed towards higher taxes, tax value: To the extent that there are tax changes in the next four years, we think that they are far more likely to be higher than lower, increasing the allure of the tax-exempt coupon. Even if Democrats are not able to take control of the Senate by winning both runoff elections in Georgia on January 5, thereby closing off their path to tax increases before 2022, there are other avenues to tax increases. In particular, effective corporate tax rates are set to increase upon expiry of key TCJA provisions in 2022 and 2023. While it's worth watching the risk of a tax cap on munis, as proposed by the Biden team (our prior research about how a cap in theory impacts muni valuation is summarized here), we don't rate the potential for it to come to fruition highly. Even if Democrats were to take control of the Senate with 50 seats, we expect at least one Democratic Senator to side with state and local governments and try to preserve the full muni tax exemption.

Putting it all together, we see munis ending 2021 with higher yields, but tighter risk premia, both reflections of the positive macro backdrop and increased prospects for tax hikes: Additionally, we think that our yield ratio forecast may be conservative, as it reflects a level that meets three criteria: i) It's above the historical average, consistent with prior observations of low rate environments, which typically generate higher ratio volatility; ii) It represents a decline in ratios that is common in low rate environments; and iii) It would result in a muni index spread to Treasuries that is nearly unchanged.

Exhibit 36:

4Q21 bull/base/bear forecasts

	Bull	Base	Bear
Tsy:	1.00%	1.45%	1.75%
New Ratio:	105%	90%	85%
Exp. TR	-0.01%	-2.24%	-3.79%
Excess Return	0.10%	1.57%	2.37%

Source: Bloomberg, S&P Indices, Morgan Stanley Research forecasts

Still, we'd start the year positioned neutral on duration and with a weighting away from state and local credit, to prepare for an emerging risk opportunity: Early in the year, we expect fundamental questions on state and local credit health to linger, while higher rates and outflows could drive ratio and spread curve steepening. During this period, we prefer most enterprise sectors, notably airports and essential service utilities, which in our view price in more COVID-19-related risk than general governments. However, we expect that this would become an opportunity to add muni risk across the spectrum – down in credit quality, longer in duration.

What are the key risks to our view?

- Vaccine delays, a more aggressive federal response to COVID-19 spread and/or a failure to pass another COVID-19 stimulus could lengthen and deepen GO credit risks.
- The same would be true for hospitals, where expected acute but short-term cash flow stresses could lengthen and leave lasting damage to balance sheets.
- Supply could be substantial this year. While we generally <u>dismiss</u> <u>concerns</u> about supply exerting lasting pressure on returns, this year could be relatively unprecedented in terms of the coincident degree of rise in UST rates and supply, the latter driven by the availability of savings through taxable refunding and the desire for issuers to monetize it, given lingering COVID-19-related budget issues.

Commodities: Macro versus fundamentals



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Key investment ideas

- Macro and micro pulling in opposite directions: Synchronous economic recovery, a weaker dollar and the rise of inflation are macro tailwinds. However, these are offset by bottom-up fundamentals that remain soft in most markets.
- Prefer copper and natural gas over oil and iron ore: Supply/ demand dynamics are supportive in copper and natural gas, while oil features soft demand and large inventory overhangs, and iron ore is tracking back into a surplus market.
- Turning point for gold: We revise our gold price forecast lower as the global economic recovery brings an end to the bull market conditions. Downside risks build with rising real rates through 2021.

Commodities have enjoyed strong performance since the April low as economic growth has surprised positively, the US dollar has weakened and inflation expectations have risen. As discussed elsewhere in this report, this set of factors is likely to remain in place, providing a tailwind for the commodity asset class going into 2021.

Yet, from a bottom-up perspective, few commodity markets are tight. Demand has generally been slow to recover, especially outside China. Inventories are high, and some markets (e.g., aluminium) are considerably oversupplied.

Over the next several months, we expect commodity prices to be pulled in opposite directions, continuing a fragile equilibrium between bullish macro factors but, for most commodities, bearish micro fundamentals.

The MS RADAR, our main index for commodities, is likely to trade sideways to mid-2021. On a relative basis, we are more upbeat on copper and natural gas, but more bearish about oil, gold and iron ore specifically.

Energy

Crude oil

Oil prices face a series of headwinds. Averaging forecasts from the IEA, EIA, OPEC and others suggests that the market should be undersupplied by 3-3.5 mb/d in 4Q. However, observed inventory draws are not confirming this: during August and September, global inventories drew 1.5-2 mb/d but this has slowed to below 1 mb/d since the start of 4Q and, over the last few weeks, inventories are starting to build again (Exhibit 37).

Although OPEC production is still ~5 mb/d lower than last year, demand is down by roughly the same amount and slow to recover. Data from the UK show that road fuel sales have started to fall again following the country's new lockdown. By the last week of October, UK road fuel sales were already down 9% from the recent peak. Correlating this to mobility data from Apple and Google, and extrapolating this to other European countries using similar data, European oil demand could see a renewed decline of ~0.5 mb/d in the coming months.

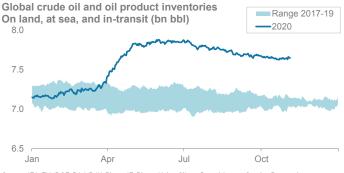
Elsewhere, the demand recovery is far from strong too and seasonal trends are also turning unfavorable at this time of year, meaning that oil demand is likely to remain flat at ~95 mb/d throughout 4Q20, 1Q21 and 2Q21. At the same time, Libya's production is ramping up sharply at the moment, from ~0.1 mb/d as recently as mid-September to 0.8-1 mb/d at the moment.

All the while, OPEC+ is scheduled to unwind 2 mb/d of its production cut at the start of January. At the moment, the oil market is not in a position to absorb this easily. Hence, we expect that OPEC+ will delay this production increase by 2-3 months to prevent inventories from building again. However, this risks giving a boost to drilling in the US, where the oil-directed rig count has already increased by 47 rigs over the last seven weeks.

The outlook for the oil market could start to look better in 2H21. By then, COVID-19 vaccines should allow a more meaningful recovery in mobility and transportation, and seasonal headwinds for oil demand become seasonal tailwinds. However, for the next few months, risks to oil prices are likely skewed to the downside.

Exhibit 37:

Observable inventories were drawing at 1.5-2 mb/d during August/ September, but these have slowed down to <1 mb/d since the start of 4Q. The last few weeks have even started to show some inventory builds



Source: IEA, EIA/DOE, PAJ, PJK, Platts, IE, Platts, Kpler, ClipperData, Morgan Stanley Research

Natural gas

Global gas/LNG prices have bounced from 2Q troughs in all key markets: European spot prices (TTF day ahead) increased from ~US\$1 to US\$4.8/mmbtu, Asian LNG from US\$1.9 to US\$6.7/mmbtu and US Henry Hub from US\$1.4 to US\$2.6/mmbtu. This rally was triggered by the reduced supply, mostly due to US LNG cargoes cancellations.

In Europe, exports from Russia, Europe's single-largest gas supplier, have also declined. Meanwhile, demand has remained resilient. For example, gas consumption in the European key markets had recovered to levels comparable to history already by June.

Going forward, in the short term some volatility in prices, particularly during the summer season, cannot be ruled out. However, we expect the global gas market to tighten further over the next four years after most FIDs were delayed. For example, in Europe we expect 2022 gas prices to reach US\$5.8/mmbtu on average, which implies a 15% premium to the forward curve levels.

Metals & bulks

Precious metals

We see August 2020 as the peak for the gold price in this cycle, and no longer expect the market to retest highs above US\$2,000/oz. As the global macroeconomic recovery gathers pace, risk to gold is increasingly to the downside and we cut our price forecast to US\$1,825/oz on average in 2021 (from US\$1,950/oz). While negative real rates and a weakening US dollar remain key supports for investment demand, the steady trend higher in long-dated real yields increasingly outweighs dollar weakness through 2021, and as stimulus tapers towards the end of the year, downside risk for gold builds. We forecast spot to move to US\$1,825/oz by 4Q21, followed by a further drop to US\$1,750/oz in 1H22 as investor buying wanes. Added to the weakening investment drivers is the risk of further selling by central banks, which turned net sellers in 3Q21 for the first time since 2010. A positive offset will be a recovery in fabrication demand for gold, but this is likely to be offset by recovering supply, and a rapid rebound in jewelry markets is unlikely given the still-high gold price and lingering impact of COVID-19 in key markets such as India. For more details, see Commodity Matters: Gold – not immune.

Base metals

Copper is our preferred base metal through 2021, as it benefits from a reflation trade, weakening US dollar and a tight global market. Thanks to strong buying by China and severe disruption to mine supply, the market will end 2020 with global inventories at less than three weeks' consumption. In 2021 weaker China buying will be offset by the ex China recovery from 2Q onwards, and although mine supply will lift versus this year's lows, growth rates will be tepid due to the backlog of maintenance at mines, keeping supply still below 2018's level and the market in persistent deficit. We forecast price to track to highs of US\$3.50/lb (US\$7,716/t) by 4Q21. For the other base metals, price risk is also to the upside on macroeconomic drivers, but the fundamental driver is weaker: Nickel is finely balanced, with a strong recovery in stainless steel production increasingly met by strong growth in output of nickel pig iron from Indonesia. Aluminium features a large overhang of global inventory that is growing as the market remains in persistent surplus, while zinc's market is set to return to surplus once current restocking comes to an end. While a reflation trade can outweigh more bearish fundamentals to drive prices higher for some time into next year, downside risks are more pronounced in these markets versus copper.

Iron ore

We are iron ore bears in 2021, on lower growth in China's steel output and a further recovery of supply from Brazil. Given China's dominance in this market (76% of seaborne demand), iron ore has been a proxy for China's strong infrastructure-focused stimulus in 2020. However, tightening credit availability for China's property developers is likely to weigh on steel demand in 2021 – and together with greater use of scrap for steel production, this is likely to drive China's iron ore consumption lower next year. On the supply side, shipments from Brazil's Vale – the second-largest iron ore producer – have recovered strongly since May, tipping the iron ore market back into surplus. With Vale looking to return production capacity that was suspended after the 2019 tailings dam disaster in 2021, we expect its production to expand by 60Mt to 360Mt, driving the market into a 44Mt surplus. We expect the iron ore price to move lower through next year as a result, and forecast it to average US\$81/t in 2021, falling to US\$70/t by 4Q21 (versus US\$117/t spot).

Global volatility: Moving to a lower-vol regime



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Key investment ideas

- Moving to a lower-vol regime: Global monetary easing and fiscal stimulus limit downside volatility and the COVID-19 overhang and expensive valuations in asset classes should cap upside volatility. Experience of 20+ bear market recoveries suggests that S&P realized vol should fall below 15% next year.
- A bias to be short volatility: Implied vols will be slower to drop below historical medians, keeping vol carry persistently high through the year to the benefit of vol sellers. We have a short vol bias across asset classes, and like selling VIX futures against buying CDX IG protection.

Moving to a lower-vol regime: The election-induced premium for vol had disrupted the normal cyclical decline in vols in the aftermath of bear market troughs. With elections largely out of the way, markets should move to a lower-vol regime as is typical at this point in the recovery phase. For the S&P 500, this means that realized vols should spend the majority of 2021 below 15% versus current 3m variance swap levels of ~30%.

Policy easing and stimulus should underpin markets and dampen downside volatility a year from the equity market trough, and expensive valuations and a COVID-19 overhang should serve to constrain upside volatility.

Exhibit 38:

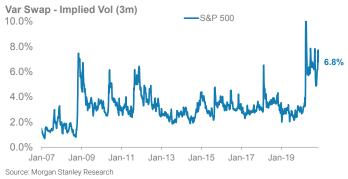
S&P realized vols should drop below 15% a year from bear market troughs



Source: Bloomberg, Morgan Stanley Research; Note: Based on 29 bear markets since the 1920s

Exhibit 39:

Tails are overpriced: Premium for OTM options versus ATM options is very high in equities and credit



Volatility carry will likely remain high: However, implied vols should be slow to follow through, given the overhang from COVID-19 and fiscal policy uncertainty, especially given the already large reset lower post-election. The combination of falling realized vols and reluctant implied vols means that volatility carry will be stubbornly high through the year. A slow grind lower in implieds actually plays to the benefit of vol sellers, sustaining more premium for longer. We expect returns to selling volatility to be consistent and steady, rather than large and lumpy after the post-election reset in volatility.

'Japanification' of vol: Even in the scenario where fiscal policy disappoints or recovery is mediocre, the central bank reaction function (rates at the lower bound and the risk of QE) should put a ceiling on volatility. Before the positive vaccine news arrived, the rates market was de facto pricing for 'Japanification' of volatility, with 1y5y making new record lows and even longer-dated tenor vol falling sharply.

Tails are overpriced and skew is an important source of return:

Tails are overpriced and an important source of return. Skew remains extremely high in equities and credit, e.g., S&P 500 variance swap pays 6 vol points over ATM vol! Skew in rates/FX is less extreme and coming in fast, but still some premium persists, e.g., butterfly pricing is still elevated and not fully normalized in some EMFX/cyclical currencies.

Global quant: Riding the recovery



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Key investment ideas

- With the economic recovery currently under way and expected to continue into 2021, we favor pro-cyclical equity factors across most regions.
- In the US, we like Size and Earnings Revisions, while we are cautious on Growth, Quality and Low Vol. In Europe, we are positive on Value, Size (Small over Large) and Total Yield, and negative on Low Vol. In Asia/EM, we look for Undisrupted Value and High-Quality Cyclicals, while remaining neutral on the broader Value versus Growth performance.
- The accelerated COVID-19 investment cycle also offers potential opportunities for **quantitative investment strategy portfolio tilts.** We see opportunities in High Yield versus Investment Grade compression, credit curve steepener and equity volatility-harvesting strategies. Stable market trends should be supportive of trend-following strategies.
- We also like strategies such as Commodity Pair Value, and a combination of Equity Quality with Value, which have worked well in the initial recovery phase and are expected to continue holding their ground as the recovery strengthens.

Our quant outlook is largely shaped in the Morgan Stanley economic and strategy forecasts for 2021. We highlight our views on the underlying equity market dynamics, expressed via factors, and emphasize several quantitative cross-asset investment strategies that can help investors to leverage the global economic recovery currently under way.

US equity factors

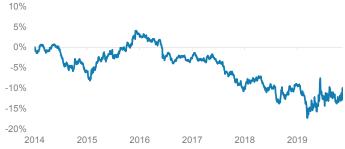
In the US, we like Size (Small Caps) and Earnings Revisions, while we are cautious on Growth and defensive factors such as Low Vol and Quality.

Strong economic recovery favors pro-cyclical stocks, and we have seen cyclicals outperform defensive equities since March this year (**Exhibit 40**). We expect this outperformance to continue into 2021. At the factor level, the V-shaped economic recovery and cyclical rally should help smaller-cap stocks, which bore the brunt of the beating from the COVID-19 recession.

Exhibit 40:

Cyclical stocks have been outperforming defensive stocks in the US since March this year

Relative Performance of US Cyclical vs Defensive Stocks



Source: Morgan Stanley Research; Note: Data as of November 11, 2020.

Our US equity strategists expect above-consensus earnings growth over the next year, and believe that 2021 will be about who can deliver on earnings. As such, we think that the Earnings Revision factor, which focuses on the magnitude and breadth of analyst revisions, would be a good metric to identify potential outperformers over the next year.

We are cautious on Growth, and defensive factors such as Low Vol and Quality: Low Vol and Quality tend to underperform in periods of economic recovery and strong equity rallies. These factors, together with Growth, are also sensitive to rates, and tend to underperform in rising rate environments. Given our house view of above-trend inflation over the next few years, we see an elevated risk of higher rates, which could put further pressure on these factors.

European equity factors

favoring Value and Size (Small Caps) against Low Vol, Momentum or Quality: The accelerating economic recovery is supportive for Value and Size, as valuations remain extremely cheap at its second percentile for Value (**Exhibit 41**), and the announcements related to a

The macro backdrop in Europe supports pro-cyclical exposure,

centile for Value (**Exhibit 41**), and the announcements related to a COVID-19 vaccine are particularly favorable. We maintain our negative view on Low Vol due to its very high valuation and its sharp negative skew to recoveries. Lastly, we remain positive on Total Yield due to its positive exposure to inflation and high correlation with Value.

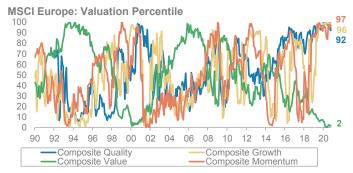
We think that the recent reversal of Value against Momentum in Europe can continue as the recovery pushes on, with the potential support from further stimulus and the remaining extreme valuation gap between Value and Momentum/Growth/Quality. However, **a final Brexit deal could impact Value in Europe,** as most Value factors are still strongly positively tilted to the UK. A positive outcome would be supportive for Value, while a bad exit could penalize Value performance.

Cyclicals at a reasonable price: Our European equity strategy team favors cyclical stocks to take advantage of the economic recovery, but aggregate cyclical valuations do not look especially attractive given the strong rally since April this year. Hence, we propose a quantitative 'cyclicals at a reasonable price' strategy that cross-references our Cyclical versus Defensive factor against several valuation metrics and identifies relatively cheap cyclical stocks with positive Morgan Stanley analyst ratings (see European Quantitative Strategy: Quant Lens on Cyclober 23, 2020, for more details).

Our long-short 'cyclical factor' allows us to consider cyclicality across all sectors rather than the usual 'cyclical' ones — this consists of: i) Fundamental component — the correlation of a stock's profitability with the economic cycle; and ii) Risk component — this measures beta, earnings volatility and dispersion. The performance of this indicator matches economic indicators closely and performs best in a recovering economic regime.

Exhibit 41:

European Value factor valuations are near multi-decade lows, while Growth, Quality and Momentum are trading near record rich levels



Source: Morgan Stanley Research; Note: Valuation percentile represents average median FP/E and P/B of 10 versus 50.

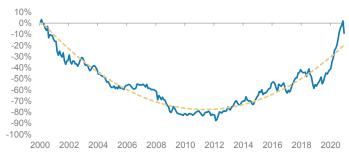
Asian/EM equity factors

Look for Undisrupted Value in Asia/EM: We expect the super-cycle of e-commerce/digitalization era to continue to drive structural outperformance of Growth in Asia/EM, which is referring to the decadelong backdrop where companies being able to lift earnings growth by new technology tend to outperform (**Exhibit 42**). However, we also do not eliminate the risk of tactical Value rallies amid positive news of vaccine developments and cyclical economic recovery, given that the recent outperformance of Growth had deviated significantly from the long-term trend of relative performance. As such, we recommend to stay neutral on Value versus Growth into 2021, and focus on relatively inexpensive companies that stand to benefit from the e-commerce super-cycle.

For structural opportunities in Asia/EM we recommend **High-Quality stocks with selective cyclical economic exposures.** Our empirical analysis shows that cyclical stocks do not necessarily mean Value, and it is dangerous to simply look for laggards with Value exposure. **To capture cyclical economic exposures, we suggest to select stocks with high FCF Yield as a Value proxy, and own names with largest consensus earnings revisions.**

Exhibit 42:

Relative performance of MSCI EM Growth over Value since March 2000 **MSCI EM Growth vs. Value**



Source: MSCI, FactSet, Morgan Stanley Research; Note: Trend line is fitted with two degree of polynomial equation; R^2 of the trend line is 88%; data as of November 11, 2020.

Quantitative investment strategies (QIS)

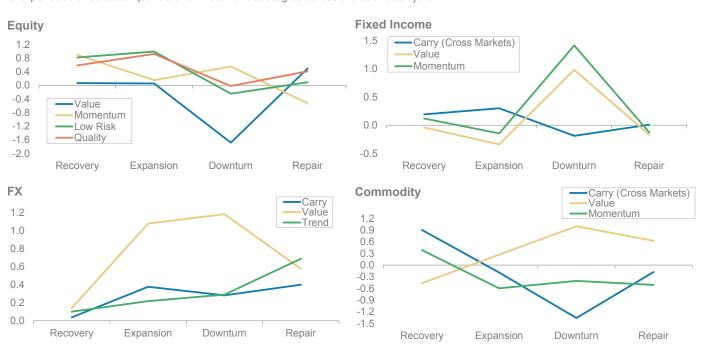
For our quantitative investment strategy universe, an accelerated COVID-19 investment cycle offers opportunities for careful tactical portfolio tilts: The pandemic and its consequences dominate news and the economic outlook, and we expect this to last well into 2021. This environment may lead to extraordinary amplitudes in the business cycle in the upcoming year and suggests a continued need for broad diversification across quantitative investment strategies. While a stable allocation across strategies is key, we introduced a two-stage framework for modest strategy tilts in Turmoil Begets Opportunity, March 30, 2020. Stage one started right after the market correction when volatility was high and fiscal/monetary policy responded to COVID-19. Currently we are moving to a more established stage two as monetary/fiscal policy supports economic recovery and a COVID-19 vaccine is within reach — even though this move is not fully synchronized across asset classes.

Stage two strategies are geared towards benefiting from a normalization of the economy... With the normalization of markets expected by our strategists in 2021, companies that were particularly affected by COVID-19 are expected to benefit disproportionately.

This should be supportive of a compression of yields between high yield and investment grade, benefitting our High Yield versus Investment Grade compression strategy. Furthermore, the normalization of the credit term structure offers an attractive carry and rolldown to a credit curve steepener strategy. After the US election, implied volatility levels have come down but remain elevated today, offering a supportive environment for volatility carry strategies in equities. Finally, we highlight that the emergence of stable market trends should be supportive of trend-following strategies.

...but this does NOT mean that stage one strategies will underperform: While catalysts for stage one strategy tilts are weakening, the respective quantitative (i.e., systematic) investment strategies remain important parts of a strategic asset allocation due to their strong fundamental rationale. Commodity Pair Value is such a strategy which has illustrated a strong performance over the past few years, and we continue to expect the risk premium to last in the long term. Among the stage one strategies, the Defensive Trend strategy is replaced by a symmetric trend-following approach in 2021. Equity Quality is a strategy which has a defensive profile but it continues to thrive in the current market environment. A combination of this strategy with Equity Value — which is usually showing

Exhibit 43:Sharpe ratios of selected quantitative investment strategies across the business cycle



Source: Morgan Stanley Research

strong performance post-correction — and Equity Low Risk may provide a good balance between a defensive profile and a recovery play in a post-COVID-19 world. Thus, this trio of equity quantitative investment strategies should also be highlighted in the context of stage two. While the equity Low Vol factor discussed earlier is related to this equity Low Risk strategy, it differs in signal design and through the beta neutrality of the quantitative investment strategy, leading to different return dynamics.

Over 2021 we expect to move beyond the outlined two post-COVID-19 stages into a general recovery playbook: COVID-19 is expected to fade from the headlines after the roll-out of a vaccine. Furthermore, the US election outcome to date does not appear to impact our scenarios adversely. Thus, our stage two strategies remain central but evolve as the recovery takes further hold. The highlighted combination of Value, Quality and Low Risk may benefit from rotating to a fully diversified multi-strategy equity portfolio including Momentum. While quantitative FX investment strategies tend to be flat in a recovery (Exhibit 43), they gain on average performance in an expansion, and investors should have an eye on them particularly towards 2H21. In the rates quantitative investment strategy space, results are expected to be mixed in a recovery and expansion scenario.

In summary, the outlined scenarios are important concepts to keep in mind when constructing quantitative investment strategies portfolios, but it is key to size tactical tilts modestly. Diversification remains an important concept, and the challenges to strategy tilting mean that any overweights or underweights have to be done with care.

Alpha strategies expected to benefit from dispersion among equity returns: The swiftly evolving economic environment leads to dispersion across equity returns which can only be fully understood by combining insights about top-line economic changes with thorough bottom-up equity research. This environment provides opportunities for our <u>Risk-Reward strategy</u> capturing the information content in price target revisions by our analysts for individual equities and the sentiment captured in their bull and bear case price forecasts.

What we debated



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This year-ahead outlook involved intense discussions with the entire Morgan Stanley global economic and strategy teams. Here's what we debated:

Will we see further fiscal support?

The US election appears to have delivered divided government (subjected to Georgia Senate elections on January 5) and, in doing so, has complicated the outlook for further easing. Divided government in 2011-12 was not good for the market, and there is genuine uncertainty over what will be possible with such narrow margins in the US House and Senate.

Our economists' base case is that we will see the US deficit running at 11% of GDP next year. Importantly, we think that this easing is *reactive*, coming as a result of slowing data and worse COVID-19 trends over the winter. But there was significant disagreement around this point, and concern that a shift in focus back to 'austerity' (as we saw in 2011) could mean that the figure for further easing is effectively zero. Indeed, a **credible bear case for 2021 is the same as the last cycle** – policy-makers, fearing a rise in debt/GDP ratios, hit the brakes too soon, and hamstring the recovery.

How high will yields go?

Our yield forecasts went through several reversions over the last several weeks as events unfolded, declining after a 'blue sweep' failed to materialize, and rising after recent vaccine headlines. There remains a healthy amount of internal debate on how yields weather the competing forces of on-hold central banks and high 2021 nominal GDP, but we feel comfortable with forecasts that are now well *above* the forwards.

Tactics versus strategy

The outlook for the next 12 months is positive. But risks for the year ahead appear front-loaded — specifically, rapidly increasing COVID-19 cases across the US and Europe that threaten more restrictive measures, control of US Congress hinging on January 5 elections, a still-unresolved outcome for Brexit, and economic forecasts that call for some slowing over 4Q20 and 1Q21. We debated whether or not a more cautious message was appropriate as a result.

In the end, we felt that the market would ultimately be forward-looking. This is also a reason why we enter 2021 with a modest O/W across equities and credit, rather than a large one, as we'd like some flexibility to raise exposure into weakness caused by the risks above.

Regions and commodities

Some outlooks produce strong regional preferences. This one didn't, with expected risk-adjusted return pretty similar across major equity and credit markets. We saw no reason to 'force' a story that isn't in our numbers. Commodities were also notable: 'top down', our narrative would appear ideal, given forecasts for stronger global growth, higher inflation and a weaker USD. But we have fundamental concerns in many key markets, and ultimately believed these would win out.



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Where do our forecasts diverge most from historical relationships?

Cross-Asset Strategy Team

To better understand where Morgan Stanley strategists are out of consensus, or where we are forecasting unusual moves versus history, the cross-asset team runs an exercise every outlook process, examining whether our 12-month price targets are consistent with each other, and historical moves.

We run simple multi-variable linear regressions for every forecast market, using all other markets' performance as variables. For example, our model would look at whether the S&P next 12-month forecast price change is roughly in line with, say, what our FX strategists are expecting for USD/JPY, where our rates team sees UST yields going, or what our credit colleagues believe to be the right level for US HY spreads. If the expected 12-month return for one asset diverges significantly from what's forecast for other markets, there could be two possibilities: i) The price target is inconsistent with Morgan Stanley Research's outlook, and where we are most likely to be wrong; or ii) Our strategists are expecting moves which are unusual compared to history, for good reason. It's the second category that interests us the most here.

Exhibit 44:

Forecast face-off model – how do our price targets compare to each other and history?

			MSe		Model-Implied	Diverge from Model?
Equities	As of Nov 12, 2020	4Q21 Target	Xasset Face-off	12M Chg	± 1σ Range	
S&P 500	3537	3900	3884	10.3%		
MSCI Europe	1562	1730	1619	10.7%	-	Y
TOPIX	1726	1870	1868	8.3%	•	
MSCI EM	1182	1250	1423	5.7%	1 -	Y
FX						
USDJPY	105	105	107	-0.1%	•	
EURUSD	1.18	1.25	1.21	5.9%	-	Y
GBPUSD	1.31	1.32	1.39	0.6%	+	Y
AUDUSD	0.72	0.77	0.73	6.5%	-	Y
Rates (%)						
UST 10Y	0.88	1.45	1.32	0.57	•	
Bunds 10Y	-0.54	-0.20	-0.11	0.34	1 •	
UKT 10Y	0.34	0.70	0.72	0.36	1 •	
JGB 10Y	0.03	0.00	0.00	-0.03	•	
Credit (bps)						
US IG	115	100	105	-15	-1	
US HY	435	350	356	-85	•	
EUR IG	69	60	50	-9		
EUR HY	408	350	310	-58	•	Y
BTP 10y	122	85	125	-37	- 1	Y
EM Sovs	380	360	372	-20	-1	
Commodities						
Brent	44	50	52	14.9%	•	
Gold	1875	1825	1813	-2.7%	-1	

Source: Bloomberg, Morgan Stanley Research; Note: Our 'model' numbers are based on linear regressions, using the last 15 years of history to examine cross-asset relationships. The model flags a divergence if the magnitude of move predicted by our strategists falls outside the model's 1 standard deviation range.

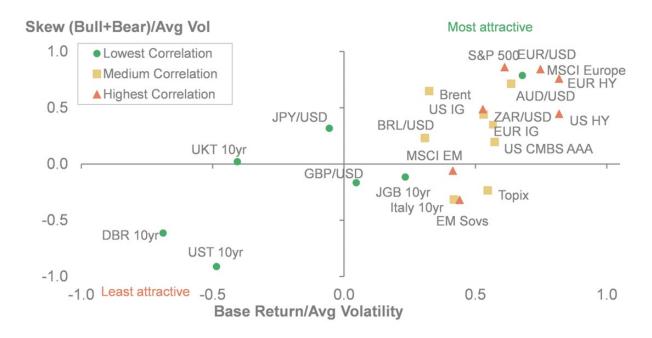
Our forecast face-off model suggests that behavior of the assets below is likely going to deviate the most from the historical patterns over the next 12 months:

European equities and EUR: As in our last outlook from June, our strategists' expected returns for European assets stand out as being stronger than what history would suggest, given other teams' expectations for risk assets and rates. In particular, our 12-month targets calling for stronger European equities and a stronger EUR imply a deviation from past correlations. We think this makes sense given the catalysts we see for the region – clarity on a vaccine should benefit Europe more given the significant impact it's had on the region, while further increases in the ECB QE program and the expected sign-off on the EU recovery fund – both without precedent in prior cycles, at least not on this scale – should serve as guard rails for liquidity and growth.

EM equities: Also similar to the last outlook, our strategists are projecting much weaker performance for EM equities than our projections for a weaker USD, buoyant forecasts for US and European equities, and stronger global growth. The cautious EM return target is also in contrast to what our own cross-asset cycle model would suggest – that EM stocks should outperform when the economy is in recovery. Our Asia/EM equity team argues that this time it's different for EM equities, given what it sees as accelerating structural challenges that impact the regional and sectoral make-up of the EM market.

Expected returns and risk/reward

Global asset classes - expected 12-month return vs. risk



Source: Morgan Stanley Research. Note: 'Expected returns' based on Morgan Stanley Strategy 2Q21 forecasts and current market prices. Correlation is 10Y relative to global equities (MSCI ACWI). Credit returns are excess returns. Low correlations include negative correlations. Volatility is the average of long-term average and option implied where available.

Exhibit 45:

Morgan Stanley key market forecasts

	As of Nov	Q4 2021 Forecast		
	12, 2020	Bear	Base	Bull
Equities				
S&P 500	3,537	3,375	3,900	4,175
MSCI Europe	1,562	1,410	1,730	1,870
Topix	1,726	1,300	1,870	2,000
MSCI EM	1,182	900	1,250	1,400
FX				
USD/JPY	105	99	105	108
EUR/USD	1.18	1.15	1.25	1.30
GBP/USD	1.31	1.21	1.32	1.40
AUD/USD	0.72	0.70	0.77	0.80
USD/INR	74.6	69.1	72.0	77.0
USD/ZAR	15.6	14.8	15.0	16.9
USD/BRL	5.46	5.10	5.30	5.90
Rates (% percent)				
UST 10yr	0.88	1.75	1.45	1.00
DBR 10yr	-0.54	0.05	-0.20	-0.90
UKT 10yr	0.34	1.00	0.70	-0.15
JGB 10yr	0.03	0.15	0.00	0.00
Credit (bps)				
US IG	115	150	100	80
US HY	435	600	350	300
EUR IG	69	110	60	40
EUR HY	408	550	350	275
Italy 10yr	122	250	85	55
EM Sovs	380	575	360	325
US CMBS AAA	80	115	70	55
Agency MBS	24	45	25	15
Commodities				
Brent	43.5	40.0	50.0	60.0
Copper	3.1	3.0	3.5	4.2
Gold	1,875	1,606	1,825	2,190

Exhibit 46:

12m return and risk forecasts

		12m F	Return	Vola	Return/Risk		
Asset	Bear Case	Base	Case	Bull Case	Option Implied	LT Average	Base case Return/Vol
Equities							
S&P 500	-3%		1 2.0%	20%	21%	18%	0.61
MSCI Europe	-7%		1 3.39	% 22%	19%	17%	0.75
Topix	-23%	10.5%	-	18%	18%	20%	0.55
MSCI EM	-22%	7.9%		21%	22%	16%	0.41
FX							
JPY/USD	-3%	-	-0.4%	6%	7%	9%	-0.06
EUR/USD	-3%		5.0%	9%	6%	8%	0.68
GBP/USD	-8%	0.4%	+	7%	9%	9%	0.05
AUD/USD	-3%		• 6.39	6 10%	9%	10%	0.64
INR/USD	1%		₹.9%	12%	7%	7%	1.15
ZAR/USD	-3%	8	.5%	10%	16%	16%	0.53
BRL/USD	-5%	5.2%		9%	18%	16%	0.31
Rates							
UST 10yr	-6%	-2.7%	-	1%	5%	6%	-0.49
DBR 10yr	-6% -3	3.1%		3%	4%	5%	-0.69
UKT 10yr	-5% -2	2%		5%	5%	5%	-0.41
JGB 10yr	-1%	0.5%		0%	2%	2%	0.23
Credit (Excess Re	eturn)						
US IG	-2%	2.5%		4%	6%	3%	0.53
US HY	-4%	5.9%	-	9%	8%	6%	0.81
EUR IG	-2%	1.2%		2%	2%	2%	0.57
EUR HY	-3%	4.8%		8%	7%	5%	0.82
Italy 10yr	-10%	4.4%		7%	10%	10%	0.42
EM Sovs	-12%	4.8%		8%	14%	7%	0.44
US CMBS AAA	-3%	1.8%	-	3%	4%	2%	0.57
Agency MBS	-0.8%	0.1%		0.7%	2%	1%	0.06
Commodities							
Brent	-11%		11.6%	34%	36%	36%	0.32
Copper	-6%		10.9%	32%	21%	21%	0.52
Gold	-16%	-	14.9%	14%	19%	16%	-0.27

Source: Bloomberg, Morgan Stanley Research forecasts; Note: We show total returns based on December 2021 targets. Commodity returns are versus futures to adjust for carry.

Source: Markit, MSCI, Bloomberg, The Yield Book, Morgan Stanley Research forecasts

Exhibit 47:Current Morgan Stanley asset allocations

MS Asset Allocation Views	O/W vs. Benchmark	Change vs. Last Month
Equities	+4%	+3%
us	+1%	+1%
Europe	+2%	
Japan	+1%	+1%
EM	0%	+1%
Govt. Bonds	-4%	
us	-3%	
Europe	-1%	+1%
Japan	0%	-1%
EM Local (FX-hedged)	0%	
Credit	+4%	
US Corp.	+1%	
EU Corp.	+2%	
EM Sov.	0%	
Securitised	+1%	
Cash	-4%	-3%
Commod.	0%	

Source: Morgan Stanley Research Note: Text in grey represents the change vs. previous allocation.

Exhibit 48:

What's in our benchmarks?

Asset	Sub-Asset	Weight	Returns Index	Sub- Weights
	US Equities	25%	SPX Index	25%
Equities	European Equities	10%	MSCI Europe	10%
Equilies	Japan Equities	5%	TOPIX	5%
	EM Equities	10%	MSCI EM	10%
	US Rates	10%	UST 10yr	10%
Rates	European Rates	10%	DBR 10yr	10%
Rates	Japan Rates	5%	JGB 10yr	5%
	EM Local	5%	MS EM Local Index*	5%
	US Corporates	6%	US BIG Corp index (Yield Book)	4%
	US Corporates	070	US HY Market (Yield Book)	2%
	European Corporates	3%	iBoxx EUR IG Corporate Index	2%
	European Corporates	370	iBoxx EUR HY Index	1%
Credit	EM Sovereigns	3%	EMBI Global Index	3%
			Agency MBS	0.75%
	Securitized Credit	3%	Non-Agency MBS	0.75%
	Securitized Credit	370	CLO	0.75%
			CMBS	0.75%
Other	Commodities	2%	Bloomberg Commodity Index	2%
Other	Cash	3%	US Libor 1m	3%

Source: Bloomberg, Morgan Stanley Research forecasts; Note: * MS constant-weighted basket of 10yr Local bonds.

Morgan Stanley key economic forecasts

Exhibit 49:

Morgan Stanley key economic forecasts

						Qua	rterly							Annual	
		20	20			20	21			20	22		2020E	2021E	2022E
Real GDP (%Q, SAAR)	1Q	2Q	3QE	4QE	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE			
Global	-12.7	-16.6	37.1	6.9	5.5	7.3	5.0	5.1	4.6	3.5	3.4	3.7	-3.5	6.4	4.4
G10	-7.8	-35.3	42.1	-0.4	4.3	8.8	6.0	4.6	3.3	2.7	2.3	2.1	-5.4	5.1	3.9
US	-5.0	-31.4	33.1	4.8	4.5	8.6	5.8	5.3	3.6	2.9	2.4	2.0	-3.5	5.9	4.1
Euro Area	-14.1	-39.5	60.5	-8.7	4.2	10.0	6.4	4.6	3.2	2.3	2.3	2.2	-7.2	5.0	3.9
Japan	-2.3	-28.1	20.8	3.0	1.4	4.2	3.3	2.5	2.4	2.0	1.2	1.2	-5.2	2.4	2.4
UK	-9.7	-58.7	78.0	-11.5	6.6	16.5	10.8	4.5	4.1	3.6	3.6	3.6	-11.4	5.3	5.5
EM (%Y)	-1.9	-6.9	-1.2	1.8	8.2	12.5	6.2	4.6	4.7	4.7	4.8	4.8	-2.0	7.4	4.7
China (%Y)	-6.8	3.2	4.9	6.1	19.6	8.0	6.4	5.0	5.0	5.3	5.5	5.5	2.3	9.0	5.4
India (%Y)	3.1	-23.9	-6.0	3.5	4.2	27.9	7.0	5.0	5.4	5.5	6.5	6.4	-5.7	9.8	6.0
Brazil (%Y)	-0.3	-11.4	-3.7	-0.4	1.8	13.0	3.5	0.1	1.7	2.2	2.9	3.8	-4.0	4.3	2.7
Russia (%Y)	1.6	-8.0	-4.6	-4.4	-3.2	7.5	4.4	4.7	4.5	3.5	2.8	2.2	-4.0	3.4	3.2
Consumer price inflation (%Y)															
Global*	3.2	1.9	2.1	1.5	1.6	2.4	2.1	2.3	2.4	2.5	2.6	2.6	2.2	2.1	2.5
G10	1.6	0.3	0.6	0.4	0.6	1.6	1.3	1.5	1.7	1.8	1.9	1.9	0.7	1.2	1.8
US	2.1	0.4	1.3	1.0	1.1	2.5	1.8	2.0	2.3	2.5	2.6	2.6	1.2	1.8	2.5
Euro Area	1.1	0.2	0.0	-0.3	0.2	8.0	1.0	1.4	1.4	1.5	1.5	1.4	0.3	0.9	1.4
Japan**	0.5	0.1	0.2	-0.4	-0.4	0.0	-0.5	-0.1	0.0	0.2	0.5	0.5	0.1	-0.2	0.3
UK	1.7	0.6	0.6	0.4	0.5	1.5	1.3	1.7	1.8	1.6	1.7	1.8	0.8	1.3	1.7
EM*	4.5	3.2	3.2	2.4	2.3	3.1	2.8	2.9	2.9	3.0	3.1	3.1	3.3	2.8	3.0
China	5.0	2.7	2.3	0.4	0.7	1.9	1.6	2.2	2.2	2.2	2.1	2.1	2.6	1.6	2.2
India	6.7	6.6	6.9	5.9	5.2	5.2	4.3	3.3	3.6	4.1	4.8	5.3	6.5	4.5	4.5
Brazil	3.8	2.1	2.6	3.7	3.5	4.7	4.4	3.4	3.5	3.7	3.9	3.7	3.1	4.0	3.7
Russia	2.4	3.1	3.5	3.7	3.7	3.2	3.5	3.9	4.0	4.1	4.0	4.1	3.2	3.6	4.1
Monetary policy rate (% p.a.)															
US	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
Euro Area#	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
Japan	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
UK	0.75	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
China^^	1.83	1.99	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
India	4.40	4.00	4.00	4.00	4.00	4.00	4.00	4.25	4.50	5.00	5.25	5.75	4.00	4.25	5.75
Brazil	3.75	2.25	2.00	2.00	2.00	2.00	2.00	3.00	4.00	5.00	5.00	5.00	2.00	3.00	5.00
Russia	6.00	4.50	4.25	4.25	4.25	4.25	4.50	4.75	4.75	5.00	5.00	5.00	4.25	4.75	5.00

Source: IMF, Morgan Stanley Research forecasts; Note: Global and regional aggregates for GDP growth are GDP-weighted averages, using PPP weights; Japan policy rate is the interest rate on excess reserves; CPI numbers are period average. Global* and EM* Consumer Price Inflation Aggregates exclude Argentina. ^^China's policy rate refers to the 7-day repo rate. **Japan CPI includes VAT and free child education impact. #Euro area policy rate refers to depo rate.

Morgan Stanley global currency forecasts

Exhibit 50:

Morgan Stanley FX forecasts – click <u>here</u> for custom cross forecasts

		20	21			2022				
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q		
EUR/USD	1.20	1.23	1.24	1.25	1.24	1.23	1.22	1.21		
USD/JPY	103	103	104	105	105	105	105	105		
GBP/USD	1.33	1.35	1.32	1.32	1.32	1.32	1.32	1.32		
USD/CHF	0.88	0.87	0.88	0.87	0.88	0.90	0.91	0.93		
USD/SEK	8.25	7.97	7.82	7.68	7.68	7.68	7.68	7.68		
USD/NOK	8.58	8.13	8.06	7.88	7.98	8.08	8.19	8.29		
USD/CAD	1.26	1.23	1.24	1.25	1.26	1.27	1.29	1.30		
AUD/USD	0.74	0.75	0.76	0.77	0.77	0.77	0.77	0.77		
NZD/USD	0.70	0.72	0.73	0.74	0.74	0.74	0.74	0.74		
EUR/JPY	124	127	129	131	130	129	128	127		
EUR/GBP	0.90	0.91	0.94	0.95	0.94	0.93	0.93	0.92		
EUR/CHF	1.06	1.08	1.09	1.09	1.10	1.11	1.12	1.13		
EUR/SEK	9.90	9.80	9.70	9.60	9.53	9.46	9.39	9.32		
EUR/NOK	10.30	10.00	10.00	9.85	9.90	9.96	10.01	10.07		
USD/CNY	6.55	6.50	6.45	6.40	6.38	6.37	6.36	6.35		
USD/HKD	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75		
USD/IDR	13,800	13,600	13,550	13,500	13,500	13,500	13,500	13,500		
USD/INR	73.00	72.50	72.30	72.00	72.10	72.10	72.20	72.20		
USD/KRW	1090	1085	1080	1075	1082	1090	1097	1105		
USD/MYR	4.05	4.00	3.95	3.90	3.90	3.90	3.90	3.90		
USD/PHP	47.30	47.10	46.80	46.50	46.80	47.10	47.30	47.60		
USD/SGD	1.32	1.32	1.31	1.31	1.31	1.31	1.31	1.31		
USD/TWD	28.20	28.10	28.00	27.90	28.30	28.70	29.20	29.60		
USD/THB	30.10	30.00	29.80	29.50	29.50	29.50	29.50	29.50		
USD/BRL	5.25	5.10	5.30	5.30	5.17	5.04	4.90	4.77		
USD/MXN	20.00	19.75	20.00	20.00	20.00	20.00	20.00	20.00		
USD/ARS	97	103	110	130	135	140	145	150		
USD/CLP	735	725	750	770	766	762	758	754		
USD/COP	3,550	3,600	3,550	3,600	3,518	3,436	3,353	3,271		
USD/PEN	3.53	3.49	3.50	3.50	3.48	3.47	3.45	3.44		
USD/ZAR	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0		
USD/TRY	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75		
USD/ILS	3.42	3.43	3.43	3.43	3.43	3.43	3.44	3.44		
USD/RUB	75.0	74.4	73.5	73.0	70.1	67.3	64.4	61.5		
EUR/PLN	4.45	4.42	4.40	4.38	4.35	4.32	4.28	4.25		
EUR/CZK	26.2	26.0	26.0	26.0	26.3	26.5	26.8	27.0		
EUR/HUF	355	352	350	350	347	345	342	340		
DXY Index	91	89	89	89	89	90	90	91		
Fed's Broad USD	112	111	111	111	111	112	112	112		
ECB EUR TWI	99.2	100.4	101.0	101.3	100.8	100.4	99.9	99.4		

Source: Morgan Stanley Research forecasts

Morgan Stanley government bond yield/ spread forecasts

Exhibit 51:

Morgan Stanley government bond yield/spread forecasts - base cases

	2-Year		5-Y	'ear	10-	r ear	30-	Year
	2Q21	4Q21	2Q21	4Q21	2Q21	4Q21	2Q21	4Q21
US	0.35	0.40	0.65	0.70	1.30	1.45	2.20	2.40
Germany	-0.60	-0.55	-0.60	-0.50	-0.35	-0.20	0.15	0.35
Japan	-0.15	-0.15	-0.10	-0.10	0.00	0.00	0.55	0.55
UK	0.00	0.10	0.20	0.30	0.55	0.70	1.05	1.20
Australia	0.10	0.10	0.30	0.40	1.10	1.20	2.15	2.30
New Zealand	0.10	0.10	0.25	0.40	0.85	1.10	n/a	n/a
Canada	0.30	0.35	0.60	0.70	1.00	1.15	1.60	1.75
Austria*	0	0	5	5	10	5	25	20
Netherlands*	0	0	0	0	5	5	5	5
France*	5	5	5	5	20	15	40	30
Belgium*	5	5	5	5	15	10	40	30
Ireland*	10	5	10	5	25	15	40	30
Spain*	15	10	35	25	60	50	95	80
Italy*	30	20	70	60	95	85	135	115
Portugal*	15	10	30	20	55	45	80	70

Source: Morgan Stanley Research forecasts. Note: *Yield spread to Bunds.

Exhibit 52:

Morgan Stanley government bond yield/spread forecasts - bull, bear, base cases

10 year	В	ull	Ва	ise	Ве	ear
10-year	2Q21	4Q21	2Q21	4Q21	2Q21	4Q21
US	0.80	1.00	1.30	1.45	1.40	1.75
Germany	-0.80	-0.90	-0.35	-0.20	-0.15	0.05
Japan	0.00	0.00	0.00	0.00	0.10	0.15
UK	-0.05	-0.15	0.55	0.70	0.80	1.00
Australia	0.70	0.70	1.10	1.20	1.15	1.50
New Zealand	0.40	0.45	0.85	1.10	1.00	1.40
Canada	0.55	0.60	1.00	1.15	1.00	1.25
Austria*	5	0	10	5	35	45
Netherlands*	0	-5	5	5	30	40
France*	10	5	20	15	55	80
Belgium*	10	5	15	10	50	75
Ireland*	15	10	25	15	70	100
Spain*	35	25	60	50	125	175
Italy*	75	55	95	85	200	250
Portugal*	30	25	55	45	130	180

Source: Morgan Stanley Research forecasts; Note: *Yield spread to Bunds.

Valuation methodology and risks

Exhibit 53:

FX trades

Trade	Entry date	Entry level	Rationale	Risks
Long AUD/ USD	15-Nov-20	0.7236	AUD should gain along with USD weakness and a global growth pick-up. The RBA might get concerned with AUD strength above 0.75 but a positive global backdrop, economic linkages to Asia and high risk-adjusted carry should keep inflows on track.	RBA easing more aggressively than expected, risk sentiment weakening substantially.
Short GBP/ NZD	15-Nov-20	1.9302	A relative value play as NZD outperforms on the back of the RBNZ continuing to surprise to the hawkish side. Meanwhile, the underperformance in UK growth and the UK having the lowest real yields in G10 make GBP an underperformer in 2021.	RBNZ turning significantly more dovish and easing further in 2021. UK growth outperforming, perhaps on the back of a better- than-expected EU-UK trade deal.
Long EUR/ USD	15-Nov-20	1.1814	EUR/USD should rise to 1.25 by end-2021, with the bulk of the rally coming in 1H21 when the eurozone economies come out of lockdown and the COVID-19 vaccine distribution boosts global travel. The eurozone economy contracting in 4Q20, resulting in more ECB easing in December, could provide a dip-buying opportunity.	COVID-19 vaccine is not readily available in 2021, with eurozone economies returning to lockdowns.
Long SEK and NOK basket versus EUR	15-Nov-20	100	Improving global risk sentiment and stronger growth profiles compared to the eurozone allow SEK and NOK to rise against EUR. The Riksbank is less concerned about SEK strength, focusing its easing on QE rather than a rate cut, while Norges Bank starts gearing up for a rate hike in 2022.	Global risk sells off and euro- zone and global growth con- cerns return, prompting the Riksbank and Norges Bank to ease policy further.

Source: Morgan Stanley Research

Exhibit 54:

Rates trades

Trade	Entry date	Entry level	Rationale	Risks
5s30s curve steepeners (Dv01 weight 1:1)	6-Nov-20	124bp	We convert our duration shorts to steepeners, to add some rolldown and carry and also add some protection in case the Fed looks to push back against the timing of the first rate hike.	Increasing weakness in economic data or lockdowns could lead to lower yields and flatter curves.
Long Germany 30y versus short US 30y	15-Nov-20	176bp	Negative net supply, slower growth and slower inflation keep the German long end supported while in the US supply remains ample in the long end net of QE purchases, growth and inflation return faster and the Fed's AIT approach encourages steepeners.	Risks include more German long-end supply than anticipated and a faster return to growth/inflation in the euro area that leads the ECB to taper sooner than expected. Additional risk includes the Fed putting in place yield curve control measures.
BTPs 5s30s flattener	15-Nov-20	143bp	Continued reach for yield in the euro area bond markets as the ECB maintains a strong pace of QE and EU monies replace a portion of primary market issuance in the periphery.	Vaccine developments and a resurgence in economic growth lead to a faster taper and faster return of inflation that results in longer-maturity bond yields climbing as front-ends remain pegged.
Long 2051 ACGB versus short US 30y Treasury	16-Oct-20	ACGB at 1.67% versus UST at 1.53%	Australian yields are likely to remain pinned should RBA easing take place, while US yields may be more likely to rise amid potentially greater fiscal spending in the US.	The RBA fails to ease, enabling higher Australian yields, or US fiscal expansion fails to transpire.
Long 10y CAGB versus short 10y UST	15-Nov-20	17bp	Canadian yields are unlikely to outpace US yields to the upside. While both long ends tend to co-move, we see less scope for higher Canadian yields, in line with their historical beta. As a result, we think that higher US yields will partially translate into higher Canadian yields. Moreover, the BoC has been shifting its asset purchases increasingly into longer-dated CAGBs, which should further limit their yield increases.	The BoC tapers its asset purchase program sooner than we expect, leading to long-end CAGB weakness.
Long 10y ACGB versus short 10y NZGB	15-Nov-20	5.75bp	We think that NZGBs will underperform ACGBs this year. Both yields are likely to rise but we think that Australian yield increases will be limited by the combination of continued RBA purchases and inflows into Australian fixed income. New Zealand yields have more scope to rise as we see risks that the RBNZ will continue to surprise markets to the hawkish side.	The RBNZ eases policy further, perhaps in response to a global or local shock, putting downward pressure on NZGB yields.

Source: Morgan Stanley Research

Exhibit 55:

EM trades and stances

Trade	Entry date	Entry level	Rationale	Risks
Pay 5y CNY NDIRS	19-Oct-20	2.73	We believe the next leg of China rates would be higher, given the economic recovery, a trough in inflation, a possibly more hawkish PBOC, fewer index inflows early near year and ongoing bond issuance. 5yr NDIRS moved higher post Golden Week and we like to pay rates and target 3%.	A slower recovery in China.
Long 10y INDOGBs	23-Oct-20	6.59	A stronger IDR would help drive IDR duration stronger. Foreign positioning in INDOGBs is still light. The Finance Ministry sold a record high of IDR 28.7 trillion of government bonds in the latest auction, further affirming the recent strong demand trend. As for BI, our economists expect no further rate cut, and with inflation staying within BI's target range, the real yields of Indonesia should continue to be attractive to global investors.	Global risk sell-off and a weaker IDR.
Buy SAGB 8 ³ / ₄ 02/28/48	24-Jun-20	11.30	Scaleback of issuance tenor, more aggressive drawdown of cash balances and higher T-bill issuance resulting in lower SAGB supply versus expectations and envisaged expenditure cuts should bode well for SAGBs. We remove the FX hedge in line with the stance move to bullish on EMFX.	Execution risks and worsening broader EM sentiment.
Short USD/ INR 3m NDF	8-Sep-20	74.54	The RBI is facing a dilemma: i) Growth will likely remain weak; ii) The government is still prudent on fiscal policy; and iii) The RBI would like to cut rates but inflation doesn't allow it to deliver that. Hence, to solve this, the RBI would tolerate some appreciation in INR, in our view, as it would not affect the export sector but just catch up with the broad USD weakness.	More FX intervention from the RBI.
Short USD/ IDR 3m NDF	11-Nov-20	14310	Foreign inflows have been particularly strong after the approval of the new omnibus law. In terms of valuation IDR so far has been the worst-performing local currency YTD, despite a narrower current account deficit since late last year. We see IDR further catching up with other high-yielders as we turn bullish on EMFX.	A global risk-off sentiment and stronger USD.
Like Ukraine Hard Currency Bonds	5-Oct-20	NA	Ukraine valuations now look fair, leaving any further outperformance dependent on broader credit spreads rallying, while at the same time their stronger credit fundamentals mean they can avoid any debt standstill talks. The GDP warrant now offers the best risk/reward when compared to bonds	IMF negotiations break down completely.
Like Brazil Hard Currency Bonds	3-Aug-20	NA	Other than valuations, which now favor Brazil, Brazil should also lead the race from the bottom in terms of growth, external balances are performing better and there is a renewed reform momentum.	Spending cap is removed in Brazil without offsetting measures.
Like Egypt Hard Currency Bonds	19-Jun-20	NA	IMF program should support the BoP position. FX flexibility is also positive.	Prolonged recovery in tourism.
Like South Africa Hard Currency Bonds	23-Oct-20	NA	Even though debt dynamics remain unfavorable, progress is beginning to unfold around land, energy and telecommunications reform as well as law enforcement. Momentum in these reform measures should help to improve the balance of risks itself, which should be seen positively amid lack of eurobond issuance by the sovereign.	Unfavorable debt dynamics and a larger-than-expected fiscal deficit.

Source: Morgan Stanley Research

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Exhibit 56:

Credit trades and stances

Trade	Entry date	Entry level	Rationale	Risks
Sell iTraxx Xover versus 5x iTraxx Main	15-Nov-20	35bp	IG spreads have retraced more of their COVID-19-induced widening than HY. Going forward, we believe the ongoing economic recovery continues to favor a down-in-quality bias, with more potential upside in HY relative to IG.	If progress on dealing with COVID-19 takes longer than cur- rently envisioned in our base case, HY is likely to underperform.
Long CDX HY versus CDX IG	15-Nov-20	6.4x	IG spreads have retraced more of their COVID-19-induced widening than HY. Going forward, we believe the ongoing economic recovery continues to favor a down-in-quality bias, with more potential upside in HY relative to IG.	If progress on dealing with COVID-19 takes longer than cur- rently envisioned in our base case, HY is likely to underperform.

Source: Morgan Stanley Research

Exhibit 57:

History of recommendation for cross-asset trades

	Sell Brent Crude 3m 50\$ Call									
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
Brent Crude 1y Long 1 \$45 Call vs Short 2 \$53 Call	1Y	Buy Brent 1yr 45\$/53\$ 1x2 Call Spreads	14-Jun-20	0.00%	08-Sep-20	1.70%				CO12 Comdty
Brent Crude 1y Long 1 \$45 Call vs Short 2 \$53 Call	1y	Buy Brent 1yr 45\$/53\$ 1x2 Call Spreads	14-Jun-20	0.00%	10-Sep-20	1.70%				CO12 Comdty
Brent Crude 3m 50\$ Call	3m	Sell Brent Crude 3m 50\$ Call	8-Sep-20	3.50%	15-Nov-20	3.50%				CO12 Comdty

Buy D	Long US 5s30s Steepeners Buy DBR 30y and ACGB 30y vs sell UST 30y									
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
US Government Bonds 5 Yr Yield	5y	UST 5s30s Steepener	20-May-20	108	14-Jun-20	115.00				USGG5YR Index
US Government Bonds 30 Yr Yield	30y	UST 5s30s Steepener	20-May-20	108	14-Jun-20	115.00				USGG30YR Index
US Government Bonds 7 Yr Yield	7Y	UST 7s30s Steepener	14-Jun-20	97	24-Jul-20	84.10				USGG7YR Index
US Government Bonds 30 Yr Yield	30Y	UST 7s30s Steepener	14-Jun-20	97	24-Jul-20	84.10				USGG30YR Index

Long EMF	Long EMFX (IDR, INR, BRL, MXN, ZAR) vs. CHF, JPY									
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
USD/ZAR	-	Long EMFX Basket (RUB, ZAR, IDR, INR, HUF)@SD/ZAR Spot	14-Jun-20	16.6841	22-Jun-20	17.30				USDZAR Curncy
USD/IDR	12m	Long EMFX Basket (RUB, ZAR, IDR, INR, HUF)@SD/IDR 12m NDF	14-Jun-20	15219	22-Jun-20	14969.00				IHN+12M Curncy
USD/INR	12m	Long EMFX Basket (RUB, ZAR, IDR, INR, HUF)@SD/INR 12m NDF	14-Jun-20	78.8	22-Jun-20	79.40				IRN+12M Curncy
USD/HUF	-	Long EMFX Basket (RUB, ZAR, IDR, INR, HUF)@SD/IDR Spot	14-Jun-20	302.6	22-Jun-20	309.40				USDHUF Curncy
USD/MXN	12m	Worse-of Basket: MXN/BRL/COP Oct 2021 Call (5% OTMS, Cost: 0.61%)	29-Sep-20	0.61%	23-Oct-20	0.61%			10m	USDMXN Curncy
USD/BRL	12m	Worse-of Basket: MXN/BRL/COP Oct 2021 Call (5% OTMS, Cost: 0.61%)	29-Sep-20	0.61%	23-Oct-20	0.61%				USDBRL Curncy
USD/COP	12m	Worse-of Basket: MXN/BRL/COP Oct 2021 Call (5% OTMS, Cost: 0.61%)	29-Sep-20	0.61%	23-Oct-20	0.61%				USDCOP Curncy
USD/MXN	12m	Worse-of Basket: MXN/BRL/COP Oct 2021 Call (5% OTMS)	14-Oct-20	0.56%	11-Nov-20	1.00%				USDMXN Curncy
USD/BRL	12m	Worse-of Basket: MXN/BRL/COP Oct 2021 Call (5% OTMS)	14-Oct-20	0.56%	11-Nov-20	1.00%				USDBRL Curncy
USD/COP	12m	Worse-of Basket: MXN/BRL/COP Oct 2021 Call (5% OTMS)	14-Oct-20	0.56%	11-Nov-20	1.00%				USDCOP Curncy
USD/JPY	12m	Buy USD/JPY 12-month 40 delta put at 2.35%, strike 106.50	26-Nov-18	2.35%	29-Nov-19					JPY12M Curncy
USD/JPY	12m	Long USD/JPY 1y 25D puts	25-Nov-18	1.43%	17-Nov-19					USDJPY Cunrcy

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
IBEX 35 Index	-	Long Spain and Italy vs. EM Equity	14-Jun-20	7292	08-Sep-20	6953.00				IBEX Index
FTSEMIB Index	-	Long Spain and Italy vs. EM Equity	14-Jun-20	18888	08-Sep-20	19377.00				FTSEMIB Index
MSCI Emerging Markets Index	-	Long Spain and Italy vs. EM Equity	14-Jun-20	987	08-Sep-20	1095.00				MXEF Index

Sell VIX Feb-2	1 Futures vs. B	uy Protection on CDX IG[1:20]								
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
CDX IG	1Y	Long CDX IG 5s10s Flattener (Duration Neutral)	9-Jun-19	48.00	17-Nov-19					IBOXUMAE Index
CDX IG	5Y	Long 10Y CDX IG32 vs. short 5Y CDX IG32	10-Jun-19	54.00	10-Dec-19					IBOXUMAE Index
CDX IG	10Y	Long 10Y CDX IG32 vs. short 5Y CDX IG32	10-Jun-19	101.00	10-Dec-19					IBOXUMAE Index
CDX IG	7Y	Long 7Y CDX IG32 vs. short 5Y CDX IG32	18-Jul-19	83.00	18-Jan-20					IBOXUMAE Index
CDX IG	5Y	Long 7Y CDX IG32 vs. short 5Y CDX IG32	18-Jul-19	54.66	18-Jan-20					IBOXUMAE Index
CDX IG	1.5Y	Short 5Y CDX IG27	18-Jul-19	28.00	18-Jan-20					IBOXUMAE Index
CDX IG	1.5Y	Long 10Y CDX IG27	18-Jul-19	86.00	18-Jan-20					IBOXUMAE Index
CDX IG	4m	Long CDX IG September 70/90 Payer Spreads	9-Sep-19	64.40	17-Nov-19					IBOXUMAE Index
Iboxx USD AxJ IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	161.00	17-May-20					IBXXAX90 Index
CDX IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	51.48	17-May-20					IBOXUMAE Index
CDX IG	1Y	Long CDX IG 5s10s Flattener (Duration Neutral)	17-Nov-19	47.00	17-Mar-20	124.70				IBOXUMAE Index
CDX IG	3m	Buy CDX IG Dec-19 60/75 Payer Spreads	1-Nov-19	0.00	02-Dec-19					IBOXUMAE Index
CDX IG	4m	Buy CDX IG March 60/75 Payer Spreads	17-Nov-19	0.00	10-Jan-20	0.00				IBOXUMAE Index
CDX HY33 BB	5Y	Short BB CDS vs Long CDX IG	18-Nov-19	126.46bp	18-May-20	0.00				IBOXHYSE Index
CDX IG	5Y	Short BB CDS vs Long CDX IG	18-Nov-19	52.42bp	18-May-20					IBOXUMAE Index
CDX IG31 0-3%	5Y	Short CDX IG31 0-3% Tranche vs. Long CDX IG 31 Delta-adjusted	18-Nov-19	859bp	18-May-20					IBOXUMAE Index
CDX IG 31	5Y	Short CDX IG31 0-3% Tranche vs. Long CDX IG 31 Delta-adjusted	18-Nov-19	40.7bp	18-May-20					IBOXUMAE Index
ITRX EUR32	5Y	Long iTraxx Main vs. Short CDX IG	18-Nov-19	48.6bp	18-May-20					ITRXEBE Index
CDX IG 33	5Y	Long iTraxx Main vs. Short CDX IG	18-Nov-19	52.42bp	18-May-20					IBOXUMAE Index
CDX IG	3m	Buy CDX IG Mar-20 60/75 Paver Spreads	2-Dec-19	0.10%	17-Jan-20	0.01%				IBOXUMAE Index
CDX IG	3m	Buy CDX IG March 60/75 Payer Spreads	10-Jan-20	0.00	17-Mar-20	124.70				IBOXUMAE Index
CDX IG	16-Mar-20	Buy CDX IG Mar-20 55/70 Payer Spreads	17-Jan-20	0.00	25-Feb-20	114.70				IBOXUMAE Index
CDX IG	20-May-20	Buy CDX IG May-20 65/85 Payer Spreads	25-Feb-20	0.00	25-Mar-20					IBOXUMAE Index
CDX IG	20-May-20	Buy CDX IG May-20 1x2 Receiver Spreads (45D/25D)	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index
CDX IG	5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index
CDX HY	5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.00	30-Apr-20					IBOXHYSE Index
CDX IG	20-May-20	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index
CDX IG	20-Jun-20	Buy CDX IG June-20 1x2 Receiver Spreads (45D/25D)	15-Apr-20	0.00%	20-May-20	2.00%				IBOXUMAE Index
CDX IG	20-Jun-20	Sell CDX IG June 90bp Strike Straddle	30-Apr-20	1.00%	04-Jun-20	1.00%				IBOXUMAE Index
CDX IG	2m	Buy CDX IG 2m Bullish Risk Reversals (70/90)	4-Jun-20	0.00%	30-Jun-20	0.00				IBOXUMAE Index
CDX IG	5Y	Buy Protection on CDX IG33 Mezz Tranche (7-15%)	14-Jun-20	100bp	24-Jul-20	88bp				IBOXUMAE Index
CDX IG 7-15%	5Y	Short 7-15% vs. Index delta-adjusted	14-Jun-20	76bp	31-Jul-20					IBOXUMAE Index
CDX IG	6m	Buy CDX IG 6m Bullish Risk Reversals	30-Jun-20	0.00%	04-Aug-20	0.20%				IBOXUMAE Index
CDX IG	3m	Sell CDX IG 3m 30D Puts	30-Jun-20	0.26%	04-Aug-20	0.10%				IBOXUMAE Index
CDX IG	6m	Buy CDX IG 3m Put Spread Collar	4-Aug-20	0.06%	14-Oct-20	0.10%				IBOXUMAE Index
CDX IG	3m	CDX IG Covered Shorts (Buy CDX IG Protection, Sell CDX IG 3m 30D Puts)	10-Sep-20	68bp	14-Oct-20	54bp				IBOXUMAE Index
CDX IG	18-Dec-20	Buy CDX IG35 Dec-20 1x2 Payer Spreads (50D/30D)	14-Oct-20	-0.05%	11-Nov-20	0.00%				IBOXUMAE Index
CDX IG	18-Dec-20	Buy CDX IG35 Dec-20 1x2 Payer Spreads (50D/30D)	14-Oct-20	0.00	11-Nov-20	0.00				IBOXUMAE Index
Iboxx USD AxJ IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	161.00	15-Nov-20	220.14				IBXXAX90 Index
CDX IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	51.48	15-Nov-20	52.98				IBOXUMAE Index
CDX IG	5Y	Long CDX IG 3s5s Steepener	20-May-20	9.00	15-Nov-20	16.00				IBOXUMAE Index

	Long Russell	2000 vs S&P 500								
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
S&P 500 Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					SPX Index
Eurostoxx Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					SX5E Index
Nikkei 225	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					NKY Index
HSCEI Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					HSCEI Index
Nasdaq 100 Index	N/A	Short Nasdaq vs S&P 500	9-Sep-19	7853.00	17-Nov-19	8263.00				NDX Index
S&P 500 Index	N/A	Short Nasdaq vs S&P 500	9-Sep-19	2979.00	17-Nov-19	3091.00				SPX Index
KOSPI 200 Index	1Y	Buy Kospi Variance vs S&P 500 Variance	9-Sep-19	0.25%	17-Nov-19					KOSPI2 Index
S&P 500 Index	1Y	Buy Kospi Variance vs S&P 500 Variance	9-Sep-19	0.25%	17-Nov-19					SPX Index
KOSPI 200 Index	1Y	Buy Kospi 1yr Variance vs. S&P 500 1yr Variance	2-Dec-19	-1.80%	16-Mar-20					KOSPI2 Index
S&P 500 Index	1Y	Buy Kospi 1yr Variance vs. S&P 500 1yr Variance	2-Dec-19	-1.80%	16-Mar-20					SPX Index
CDX HY	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	0.43%	16-Mar-20					IBOXHYSE Index
S&P 500 Index	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	1.15%	16-Mar-20					SPX Index
Russell 2000 Index	-	Short Russell 2000 vs S&P 500	17-Nov-19	1589.00	17-Mar-20	1037.00				RTY Index
S&P 500 Index	-	Short Russell 2000 vs S&P 500	17-Nov-19	3091.00	17-Mar-20	2386.00				SPX Index
Nasdaq 100 Index	-	Short Nasdaq vs S&P 500	17-Mar-20	7020.00	15-Apr-20					NDX Index
S&P 500 Index	-	Short Nasdaq vs S&P 500	17-Mar-20	2386.00	15-Apr-20					SPX Index
S&P 500 Index	3m	Sell 3m ATM Straddle on S&P 500	18-Mar-20	0.03	25-Mar-20					SPX Index
S&P 500 Index	3m	Sell S&P 500 25D Strangle	25-Mar-20	7.50%	30-Apr-20					SPX Index
S&P 500 Index	-	Buy S&P 500	13-Mar-20	2480.65	14-Jun-20	3190.00				SPX Index
S&P 500 Index	3m	Sell S&P 500 25D Strangle	17-Mar-20	9.40%	24-Jul-20	3.50%				SPX Index
Russell 2000 Index	3m	Sell Russell 2000 3m variance	8-Sep-20	40.00%	15-Nov-20	31.40%				RTY Index

Source: Morgan Stanley Research

Exhibit 58:

History of recommendation for cross-asset trades (continued)

	Long Russell 2	2000 vs S&P 500								
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
S&P 500 Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					SPX Index
Eurostoxx Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					SX5E Index
Nikkei 225	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					NKY Index
HSCEI Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					HSCEI Index
Nasdaq 100 Index	N/A	Short Nasdaq vs S&P 500	9-Sep-19	7853.00	17-Nov-19	8263.00				NDX Index
S&P 500 Index	N/A	Short Nasdaq vs S&P 500	9-Sep-19	2979.00	17-Nov-19	3091.00				SPX Index
KOSPI 200 Index	1Y	Buy Kospi Variance vs S&P 500 Variance	9-Sep-19	0.25%	17-Nov-19					KOSPI2 Index
S&P 500 Index	1Y	Buy Kospi Variance vs S&P 500 Variance	9-Sep-19	0.25%	17-Nov-19					SPX Index
KOSPI 200 Index	1Y	Buy Kospi 1yr Variance vs. S&P 500 1yr Variance	2-Dec-19	-1.80%	16-Mar-20					KOSPI2 Index
S&P 500 Index	1Y	Buy Kospi 1yr Variance vs. S&P 500 1yr Variance	2-Dec-19	-1.80%	16-Mar-20					SPX Index
CDX HY	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	0.43%	16-Mar-20					IBOXHYSE Index
S&P 500 Index	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	1.15%	16-Mar-20					SPX Index
Russell 2000 Index	-	Short Russell 2000 vs S&P 500	17-Nov-19	1589.00	17-Mar-20	1037.00				RTY Index
S&P 500 Index	-	Short Russell 2000 vs S&P 500	17-Nov-19	3091.00	17-Mar-20	2386.00				SPX Index
Nasdag 100 Index	-	Short Nasdag vs S&P 500	17-Mar-20	7020.00	15-Apr-20					NDX Index
S&P 500 Index	-	Short Nasdag vs S&P 500	17-Mar-20	2386.00	15-Apr-20					SPX Index
S&P 500 Index	3m	Sell 3m ATM Straddle on S&P 500	18-Mar-20	0.03	25-Mar-20					SPX Index
S&P 500 Index	3m	Sell S&P 500 25D Strangle	25-Mar-20	7.50%	30-Apr-20					SPX Index
S&P 500 Index	-	Buy S&P 500	13-Mar-20	2480.65	14-Jun-20	3190.00				SPX Index
S&P 500 Index	3m	Sell S&P 500 25D Strangle	17-Mar-20	9.40%	24-Jul-20	3.50%				SPX Index
Russell 2000 Index	3m	Sell Russell 2000 3m variance	8-Sep-20	40.00%	15-Nov-20	31.40%				RTY Index

	Buy S&P 500 I	Put Spread Collar								
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
S&P 500 Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					SPX Index
Eurostoxx Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					SX5E Index
Nikkei 225	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					NKY Index
HSCEI Index	6m	Buy Best-of-Put (Dec-19 ATM) on Global Index Basket	29-May-19	11.50%	02-Dec-19					HSCEI Index
Nasdaq 100 Index	N/A	Short Nasdaq vs S&P 500	9-Sep-19	7853.00	17-Nov-19	8263.00				NDX Index
S&P 500 Index	N/A	Short Nasdaq vs S&P 500	9-Sep-19	2979.00	17-Nov-19	3091.00				SPX Index
KOSPI 200 Index	1Y	Buy Kospi Variance vs S&P 500 Variance	9-Sep-19	0.25%	17-Nov-19					KOSPI2 Index
S&P 500 Index	1Y	Buy Kospi Variance vs S&P 500 Variance	9-Sep-19	0.25%	17-Nov-19					SPX Index
KOSPI 200 Index	1Y	Buy Kospi 1yr Variance vs. S&P 500 1yr Variance	2-Dec-19	-1.80%	16-Mar-20					KOSPI2 Index
S&P 500 Index	1Y	Buy Kospi 1yr Variance vs. S&P 500 1yr Variance	2-Dec-19	-1.80%	16-Mar-20					SPX Index
CDX HY	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	0.43%	16-Mar-20					IBOXHYSE Index
S&P 500 Index	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	1.15%	16-Mar-20					SPX Index
Russell 2000 Index	-	Short Russell 2000 vs S&P 500	17-Nov-19	1589.00	17-Mar-20	1037.00				RTY Index
S&P 500 Index	-	Short Russell 2000 vs S&P 500	17-Nov-19	3091.00	17-Mar-20	2386.00				SPX Index
Nasdaq 100 Index		Short Nasdag vs S&P 500	17-Mar-20	7020.00	15-Apr-20					NDX Index
S&P 500 Index	-	Short Nasdaq vs S&P 500	17-Mar-20	2386.00	15-Apr-20					SPX Index
S&P 500 Index	3m	Sell 3m ATM Straddle on S&P 500	18-Mar-20	2.90%	25-Mar-20					SPX Index
S&P 500 Index	3m	Sell S&P 500 25D Strangle	25-Mar-20	7.50%	30-Apr-20					SPX Index
S&P 500 Index	-	Buy S&P 500	13-Mar-20	2480.65	14-Jun-20	3190.00				SPX Index
S&P 500 Index	3m	Sell S&P 500 25D Strangle	17-Mar-20	9.40%	24-Jul-20	3.50%				SPX Index
S&P 500 Index	1Y	Sell S&P 500 (110 * spot) Strike Calls	22-Apr-20	5.70%	15-Nov-20	6.80%				SPX Index
S&P 500 Index	3m	Buy S&P 500 Put Spread Collar	24-Jul-20	0.00%	15-Nov-20	-0.10%				SPX Index

US C	redit Compress	ion (Long US HY vs. IG)								
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
CDX IG	1Y	Long CDX IG 5s10s Flattener (Duration Neutral)	9-Jun-19	48.00	17-Nov-19					IBOXUMAE Index
CDX IG	5Y	Long 10Y CDX IG32 vs. short 5Y CDX IG32	10-Jun-19	54.00	10-Dec-19					IBOXUMAE Index
CDX IG	10Y	Long 10Y CDX IG32 vs. short 5Y CDX IG32	10-Jun-19	101.00	10-Dec-19					IBOXUMAE Index
CDX HY	5Y	Long CDX HY 32 vs. Short HY March TRS	10-Jun-19	368	10-Dec-19					IBOXHYSE Index
CDX HY	5Y	Short CDX HY 15-25% vs. Index	10-Jun-19	409.4	10-Dec-19					IBOXHYSE Index
CDX HY	5Y 5Y	Short CDX HY 15-25% vs. Index Short CDX HY 32 vs. Long 4x CDX IG32	10-Jun-19 10-Jun-19	368.27 368.272	10-Dec-19 10-Dec-19					IBOXHYSE Index IBOXHYSE Index
IBOXIG	5Y	Short CDX HY 32 vs. Long 4x CDX IG32 Short CDX HY 32 vs. Long 4x CDX IG32	10-Jun-19	63.74	10-Dec-19					IBOXIG Index
CDX IG	1.5Y	Long 10Y CDX IG27	18-Jul-19	86.00	18-Jan-20					IBOXUMAE Index
CDX IG	7Y	Long 7Y CDX IG32 vs. short 5Y CDX IG32	18-Jul-19	83.00	18-Jan-20					IBOXUMAE Index
CDX IG	5Y	Long 7Y CDX IG32 vs. short 5Y CDX IG32	18-Jul-19	54.66	18-Jan-20					IBOXUMAE Index
CDX HY	3Y	Long CDX HY 32 5Y vs. Short HY32 3Y	18-Jul-19	274	18-Jan-20					CDX HY
CDX HY	5Y	Long CDX HY 32 5Y vs. Short HY32 3Y	18-Jul-19	332	18-Jan-20					IBOXHYSE Index
CDX IG	1.5Y	Short 5Y CDX IG27	18-Jul-19	28.00	18-Jan-20					IBOXUMAE Index
CDX IG	4m	Long CDX IG September 70/90 Payer Spreads	9-Sep-19	64.40	17-Nov-19					IBOXUMAE Index
CDX HY CDX IG	2m	Buy CDX HY Dec-19 50D Payers (Delta-Hedged)	1-Nov-19 1-Nov-19	0.70%	02-Dec-19 02-Dec-19					IBOXHYSE Index
CDX IG CDX IG	3m 4m	Buy CDX IG Dec-19 60/75 Payer Spreads Buy CDX IG March 60/75 Payer Spreads	17-Nov-19	0.00	10-Jan-20	0.00				IBOXUMAE Index IBOXUMAE Index
Iboxx USD AxJ IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	161.00	17-May-20	0.00				IBXXAX90 Index
CDX IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	51.48	17-May-20					IBOXUMAE Index
Iboxx USD AxJ IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	161.00	11-Nov-20	220.14				IBXXAX90 Index
CDX IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	51.48	11-Nov-20	52.98				IBOXUMAE Index
CDX IG	1Y	Long CDX IG 5s10s Flattener (Duration Neutral)	17-Nov-19	47.00	17-Mar-20	124.70				IBOXUMAE Index
CDX HY	6M	Buy 50D HY Payer vs. Sell 5X IG Payer ATM	18-Nov-19	2c	18-May-20	0.00				IBOXHYSE Index
IBOXIG	6M	Buy 50D HY Payer vs. Sell 5X IG Payer ATM	18-Nov-19	1.7c	18-May-20	0.00				IBOXIG Index
ITRX EUR32	5Y	Long iTraxx Main vs. Short CDX IG	18-Nov-19	48.6bp	18-May-20					ITRXEBE Index
CDX IG 33 CDX HY33 BB	5Y 5Y	Long iTraxx Main vs. Short CDX IG Short BB CDS vs Long CDX IG	18-Nov-19 18-Nov-19	52.42bp 126.46bp	18-May-20 18-May-20					IBOXUMAE Index IBOXHYSE Index
CDX IG	5Y	Short BB CDS vs Long CDX IG	18-Nov-19	52.42bp	18-May-20					IBOXUMAE Index
CDX HY	5Y	Short CDX HY excluding 10 widest names	18-Nov-19	249bp	18-May-20					IBOXHYSE Index
CDX HY31 15-25%	5Y	Short CDX HY31 15-25% Tranche	18-Nov-19	307.91bp	18-May-20					IBOXHYSE Index
CDX HY	5Y	Short CDX HY33 15-100% Tranche	18-Nov-19	96.52bp	18-May-20					IBOXHYSE Index
CDX IG31 0-3%	5Y	Short CDX IG31 0-3% Tranche vs. Long CDX IG 31 Delta-adjusted	18-Nov-19	859bp	18-May-20					IBOXUMAE Index
CDX IG 31	5Y	Short CDX IG31 0-3% Tranche vs. Long CDX IG 31 Delta-adjusted	18-Nov-19	40.7bp	18-May-20					IBOXUMAE Index
CDX HY CDX IG	2m 3m	Buy CDX HY Jan-20 50D Payers (Delta-Hedged) Buy CDX IG Mar-20 60/75 Payer Spreads	2-Dec-19 2-Dec-19	0.60%	17-Jan-20 17-Jan-20	0.20%	1		-	IBOXHYSE Index IBOXUMAE Index
CDX IG	3m	Buy CDX IG March 60/75 Payer Spreads	10-Jan-20	0.00	17-Jan-20 17-Mar-20	124.70				IBOXUMAE Index
CDX HY	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	0.43%	16-Mar-20	124.70				IBOXHYSE Index
S&P 500 Index	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	1.15%	16-Mar-20					SPX Index
CDX IG	16-Mar-20	Buy CDX IG Mar-20 55/70 Payer Spreads	17-Jan-20	0.00	25-Feb-20					IBOXUMAE Index
CDX IG	20-May-20	Buy CDX IG May-20 65/85 Payer Spreads	25-Feb-20	0.00	25-Mar-20					IBOXUMAE Index
CDX IG CDX IG	20-May-20	Buy CDX IG May-20 1x2 Receiver Spreads (45D/25D)	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index IBOXUMAE Index
CDX IG	5Y 5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20 25-Mar-20	0.00	30-Apr-20 30-Apr-20					IBOXUMAE Index
CDX IG	20-May-20	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index
CDX IG	5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.10%	30-Apr-20					IBOXUMAE Index
CDX HY	5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.10%	30-Apr-20					IBOXHYSE Index
CDX IG	20-May-20	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.10%	30-Apr-20					IBOXUMAE Index
CDX IG	20-Jun-20	Buy CDX IG June-20 1x2 Receiver Spreads (45D/25D)	15-Apr-20	0.00%	20-May-20	2.00%	1	1	 	IBOXUMAE Index
CDX HY CDX IG	20-Jul-20 20-Jun-20	Buy CDX HY July 1x2 Call Spreads (50D/33D) Sell CDX IG June 90bp Strike Straddle	30-Apr-20 30-Apr-20	0.00% 1.00%	04-Jun-20 04-Jun-20	0.00% 1.00%	1	 	1	IBOXHYSE Index IBOXUMAE Index
CDX HY	20-Jun-20	Buy CDX HY July-20 1x2 Receiver Spreads (45D/25D)	20-May-20	0.00%	14-Jun-20	0.50%				IBOXHYSE Index
CDX IG	5Y	Long CDX IG 3s5s Steepener	20-May-20	9.00	11-Nov-20	16.00				IBOXUMAE Index
CDX HY	20-Sep-20	Buy CDX HY 3m 1x2 Call Spreads (50D/33D)	4-Jun-20	0.00%	30-Jun-20	0.80%				IBOXHYSE Index
CDX IG	2m	Buy CDX IG 2m Bullish Risk Reversals (70/90)	4-Jun-20	0.00%	30-Jun-20	0.00				IBOXUMAE Index
CDX HY	20-Jun-20	Sell CDX HY33 Super Senior (35-100%) Protection	4-Jun-20	1.17%	10-Sep-20	0.90%	-	-	-	IBOXHYSE Index
CDX HY CDX HY	20-Jun-20	Sell CDX HY33 Super Senior (35-100%) Protection	4-Jun-20 14-Jun-20	1.17% 4c	10-Sep-20 31-Jul-20	0.90%	1	-	1	IBOXHYSE Index IBOXHYSE Index
CDX HY	20-Sep-20 3m	Buy CDX HY 3m 1x2 Call Spreads (100.5/103) Buy CDX HY 3m 1x2 Receiver Spreads (45D/25D)	14-Jun-20 14-Jun-20	0.04%	24-Jul-20	0.50%	1	 	 	IBOXHYSE Index
CDX IG	5Y	Buy Protection on CDX IG33 Mezz Tranche (7-15%)	14-Jun-20	100bp	24-Jul-20 24-Jul-20	88bp				IBOXUMAE Index
CDX IG 7-15%	5Y	Short 7-15% vs. Index delta-adjusted	14-Jun-20	76bp	31-Jul-20			1	1	IBOXUMAE Index
CDX IG	6m	Buy CDX IG 6m Bullish Risk Reversals	30-Jun-20	0.00%	04-Aug-20	0.20%				IBOXUMAE Index
CDX IG	3m	Sell CDX IG 3m 30D Puts	30-Jun-20	0.26%	04-Aug-20	0.10%				IBOXUMAE Index
CDX HY	3m	Buy CDX HY 3m 1x2 Put Spreads	4-Aug-20	0.65%	10-Sep-20	0.00%				IBOXHYSE Index
CDX IG	6m	Buy CDX IG 3m Put Spread Collar	4-Aug-20	0.06%	14-Oct-20	0.10%	1	1	1	IBOXUMAE Index
CDX IG CDX HY	3m 18-Dec-20	CDX IG Covered Shorts (Buy CDX IG Protection, Sell CDX IG 3m 30D Puts) Buy CDX HY35 Dec-20 Bullish Risk Reversals	10-Sep-20 14-Oct-20	68bp 0.00	14-Oct-20 15-Nov-20	54bp 0.00	1	1	 	IBOXUMAE Index IBOXHYSE Index
CDX IG	18-Dec-20	Buy CDX IG35 Dec-20 Bullish Risk Reversals Buy CDX IG35 Dec-20 1x2 Payer Spreads (50D/30D)	14-Oct-20	-0.05%	15-Nov-20	0.00%	1	1		IBOXUMAE Index
CDX IG	18-Dec-20	Buy CDX IG35 Dec-20 1x2 Payer Spreads (50D/30D)	14-Oct-20	0.00	15-Nov-20	0.00				IBOXUMAE Index

Exhibit 59:

History of recommendations for rates trades

Lo	ng German 30y	vs UST 30Y								
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
OBL 0.000 10/18/2024	18-Oct-24	Bund/Germany 5s30s Steepener	6-Sep-19	-0.88%	28-Feb-20	-0.78%				DE0001141802
DBR 0.000 08/15/2050	15-Aug-50	Bund/Germany 5s30s Steepener	6-Sep-19	-0.08%	28-Feb-20	-0.14%				DE0001102481
OBL 0.000 10/18/2024	18-Oct-24	Bund/Germany 5s30s Steepener	6-Sep-19	-0.88%	17-Mar-20	-0.73%				DE0001141802
DBR 0.000 08/15/2050	15-Aug-50	Bund/Germany 5s30s Steepener	6-Sep-19	-0.08%	17-Mar-20	-0.17%				DE0001102481
DBR 0.000 08/15/2050	15-Aug-50	Buy 30y Bunds against 30y US Treasuries and 30y UK Gilts	25-Sep-20	-0.10%	16-Oct-20	-0.21%			1 unit	DE0001102481
UKT 0.650 10/22/2050	22-Oct-50	Buy 30y Bunds against 30y US Treasuries and 30y UK Gilts	25-Sep-20	0.73%	16-Oct-20	0.72%			0.5 unit	GB00BMBL1F74
T 1.375 08/15/2050	15-Aug-50	Buy 30y Bunds against 30y US Treasuries and 30y UK Gilts	25-Sep-20	1.49%	16-Oct-20	1.50%			0.5 unit	US912810SP49
DBR 0.000 08/15/2050	15-Aug-50	Long 30y Bund vs 30y UST	16-Oct-20	-0.21%	06-Nov-20	-0.22%				DE0001102481
T 1.375 08/15/2050	15-Aug-50	Long 30y Bund vs 30y UST	16-Oct-20	1.51%	06-Nov-20	1.59%				US912810SP49
KSA CDS USD SR 5Y D14	20-Jun-25	Sell KSA 5y CDS, Sell ARAMCO 49	17-Aug-20	-1.25%	02-Oct-20	-1.47%	-155.00	-100.00	8.2X1.8	KSA CDS USD SR 5Y D14 Corp
ARAMCO 4.375 04/16/2049	16-Apr-49	Sell KSA 5y CDS, Sell ARAMCO 49	17-Aug-20	-1.25%	02-Oct-20	-1.47%	-155.00	-100.00	8.2X1.8	XS1982116136
T 1.375 08/15/2050	15-Aug-50	Sell KSA 5y CDS, Sell ARAMCO 49	17-Aug-20	-1.25%	02-Oct-20	-1.47%	-155.00	-100.00	8.2X1.8	US912810SP49
DBR 0.000 08/15/2050	15-Aug-50	Short 30yr Gilts vs. 30yr DBRs	9-Sep-20	-0.07%	19-Oct-20	-2.03%				DE0001102481
UKT 0.650 10/22/2050	22-Aug-50	Short 30yr Gilts vs. 30yr DBRs	9-Sep-20	0.81%	19-Oct-20	0.73%				GB00BMBL1F74
DBR 0.000 08/15/2050	15-Aug-50	Short UKT 30y vs long DBR 30y	14-Aug-20	2.00%	16-Oct-20	-0.21%				DE0001102481
UKT 0.650 10/22/2050	22-Aug-50	Short UKT 30y vs long DBR 30y	14-Aug-20	0.79%	16-Oct-20	0.72%				GB00BMBL1F74

Source: Morgan Stanley Research

Exhibit 60:

History of recommendations for credit trades

	Long Xover v									
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
iTraxx XO	5Y	Short iTraxx Crossover versus 4x Main	30-Sep-19		17-Nov-19				1x	ITRXEXE Index
iTraxx Main	5Y	Short iTraxx Crossover versus 4x Main	30-Sep-19		17-Nov-19				4x	ITRXEBE Index
iTraxx XO	5Y	Buy protection on iTraxx XO vs 4x iTraxx Main	7-Oct-19	22.00	22-Nov-19	35.00				ITRXEXE Index
iTraxx Main	5Y	Buy protection on iTraxx XO vs 4x iTraxx Main	7-Oct-19	22.00	22-Nov-19	35.00				ITRXEBE Index
iTraxx Senior Financials	5Y	Short iTraxx Senior Financials versus iTraxx Main	30-Sep-19		17-Nov-19				1x	ITRXESE Index
iTraxx Main	5Y	Short iTraxx Senior Financials versus iTraxx Main	30-Sep-19		17-Nov-19				1x	ITRXEBE Index
iTraxx Main	5Y	5s10s flatteners in iTraxx Main (DV01 neutral)	30-Sep-19		17-Nov-19	No Deal			1.74x	ITRXEBE Index
iTraxx Main	10Y	5s10s flatteners in iTraxx Main (DV01 neutral)	30-Sep-19		17-Nov-19	No Deal			1x	ITRXEBE Index
ITRX EUR32	5Y	Long iTraxx Main vs. Short CDX IG	18-Nov-19	48.6bp	18-May-20					ITRXEBE Index
CDX IG 33	5Y	Long iTraxx Main vs. Short CDX IG	18-Nov-19	52.42hn	18-May-20					IBOXUMAE Index

	Long CDX HY ve	ersus CDX IG	Ī							
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
CDX IG	1Y	Long CDX IG 5s10s Flattener (Duration Neutral)	9-Jun-19	48.00	17-Nov-19					IBOXUMAE Index
CDX IG	5Y	Long 10Y CDX IG32 vs. short 5Y CDX IG32	10-Jun-19	54.00	10-Dec-19					IBOXUMAE Index
CDX IG	10Y	Long 10Y CDX IG32 vs. short 5Y CDX IG32	10-Jun-19	101.00	10-Dec-19					IBOXUMAE Index
CDX HY	5Y 5Y	Long CDX HY 32 vs. Short HY March TRS	10-Jun-19 10-Jun-19	368 409.4	10-Dec-19 10-Dec-19					IBOXHYSE Index IBOXHYSE Index
CDX HY	5Y 5Y	Short CDX HY 15-25% vs. Index Short CDX HY 15-25% vs. Index	10-Jun-19 10-Jun-19	409.4 368.27	10-Dec-19 10-Dec-19					IBOXHYSE Index
CDX HY	5Y	Short CDX HY 32 vs. Long 4x CDX IG32	10-Jun-19	368.272	10-Dec-19					IBOXHYSE Index
IBOXIG	5Y	Short CDX HY 32 vs. Long 4x CDX IG32	10-Jun-19	63.74	10-Dec-19					IBOXIG Index
CDX IG	1.5Y	Long 10Y CDX IG27	18-Jul-19	86.00	18-Jan-20					IBOXUMAE Index
CDX IG	7Y	Long 7Y CDX IG32 vs. short 5Y CDX IG32	18-Jul-19	83.00	18-Jan-20					IBOXUMAE Index
CDX IG	5Y	Long 7Y CDX IG32 vs. short 5Y CDX IG32	18-Jul-19	54.66	18-Jan-20					IBOXUMAE Index
CDX HY	3Y	Long CDX HY 32 5Y vs. Short HY32 3Y	18-Jul-19	274	18-Jan-20					CDX HY
CDX HY	5Y	Long CDX HY 32 5Y vs. Short HY32 3Y	18-Jul-19	332	18-Jan-20					IBOXHYSE Index
CDX IG	1.5Y	Short 5Y CDX IG27 Long CDX IG September 70/90 Payer Spreads	18-Jul-19	28.00 64.40	18-Jan-20 17-Nov-19					IBOXUMAE Index IBOXUMAE Index
CDX IG	4m 2m	Buy CDX HY Dec-19 50D Payers (Delta-Hedged)	9-Sep-19 1-Nov-19	0.70%	02-Dec-19					IBOXUMAE Index
CDX IG	3m	Buy CDX IG Dec-19 60/75 Payer Spreads	1-Nov-19	0.00	02-Dec-19					IBOXUMAE Index
CDX IG	4m	Buy CDX IG March 60/75 Payer Spreads	17-Nov-19	0.00	10-Jan-20	0.00				IBOXUMAE Index
Iboxx USD AxJ IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	161.00	17-May-20					IBXXAX90 Index
CDX IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	51.48	17-May-20					IBOXUMAE Index
Iboxx USD AxJ IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	161.00	11-Nov-20	220.14				IBXXAX90 Index
CDX IG	5Y	Long Asia IG corporates vs Short CDX IG	17-Nov-19	51.48	11-Nov-20	52.98				IBOXUMAE Index
CDX IG	1Y	Long CDX IG 5s10s Flattener (Duration Neutral)	17-Nov-19	47.00	17-Mar-20	124.70				IBOXUMAE Index
CDX HY IBOXIG	6M 6M	Buy 50D HY Payer vs. Sell 5X IG Payer ATM Buy 50D HY Payer vs. Sell 5X IG Payer ATM	18-Nov-19 18-Nov-19	2c 1.7c	18-May-20 18-May-20	0.00				IBOXHYSE Index IBOXIG Index
ITRX EUR32	5Y	Long iTraxx Main vs. Short CDX IG	18-Nov-19 18-Nov-19	48.6bp	18-May-20	0.00				ITRXEBE Index
CDX IG 33	5Y	Long iTraxx Main vs. Short CDX IG	18-Nov-19	52.42bp	18-May-20					IBOXUMAE Index
CDX HY33 BB	5Y	Short BB CDS vs Long CDX IG	18-Nov-19	126.46bp	18-May-20					IBOXHYSE Index
CDX IG	5Y	Short BB CDS vs Long CDX IG	18-Nov-19	52.42bp	18-May-20					IBOXUMAE Index
CDX HY	5Y	Short CDX HY excluding 10 widest names	18-Nov-19	249bp	18-May-20					IBOXHYSE Index
CDX HY31 15-25% CDX HY	5Y 5Y	Short CDX HY31 15-25% Tranche Short CDX HY33 15-100% Tranche	18-Nov-19 18-Nov-19	307.91bp 96.52bp	18-May-20 18-May-20					IBOXHYSE Index IBOXHYSE Index
CDX HY CDX IG31 0-3%	5Y	Short CDX HY33 15-100% Iranche Short CDX IG31 0-3% Tranche vs. Long CDX IG 31 Delta-adjusted	18-Nov-19 18-Nov-19	96.520p 859bp	18-May-20					IBOXHYSE Index
CDX IG 31	5Y	Short CDX IG31 0-3% Tranche vs. Long CDX IG 31 Delta-adjusted Short CDX IG31 0-3% Tranche vs. Long CDX IG 31 Delta-adjusted	18-Nov-19	40.7bp	18-May-20					IBOXUMAE Index
CDX HY	2m	Buy CDX HY Jan-20 50D Payers (Delta-Hedged)	2-Dec-19	0.60%	17-Jan-20	0.20%				IBOXHYSE Index
CDX IG	3m	Buy CDX IG Mar-20 60/75 Payer Spreads	2-Dec-19	0.10%	17-Jan-20	0.01%				IBOXUMAE Index
CDX IG	3m	Buy CDX IG March 60/75 Payer Spreads	10-Jan-20	0.00	17-Mar-20	124.70				IBOXUMAE Index
CDX HY	3m	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put	17-Jan-20	0.43%	16-Mar-20					IBOXHYSE Index
S&P 500 Index	3m 16-Mar-20	Buy 3 CDX HY 3m 25D Puts, Sell 1 S&P 500 3m 25D Put Buy CDX IG Mar-20 55/70 Payer Spreads	17-Jan-20 17-Jan-20	1.15%	16-Mar-20 25-Feb-20					SPX Index IBOXUMAE Index
CDX IG	20-May-20	Buy CDX IG May-20 65/85 Payer Spreads	25-Feb-20	0.00	25-Mar-20					IBOXUMAE Index
CDX IG	20-May-20	Buy CDX IG May-20 1x2 Receiver Spreads (45D/25D)	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index
CDX IG	5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index
CDX HY	5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.00	30-Apr-20					IBOXHYSE Index
CDX IG	20-May-20	Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20	0.00	30-Apr-20					IBOXUMAE Index
CDX IG CDX HY	5Y 5Y	Credit Decompression Hedged with CDX IG May 150 Strike Puts Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20 25-Mar-20	0.10% 0.10%	30-Apr-20 30-Apr-20	-				IBOXUMAE Index IBOXHYSE Index
CDX HY CDX IG	20-May-20	Credit Decompression Hedged with CDX IG May 150 Strike Puts Credit Decompression Hedged with CDX IG May 150 Strike Puts	25-Mar-20 25-Mar-20	0.10%	30-Apr-20 30-Apr-20	-				IBOXHYSE Index
CDX IG	20-Jun-20	Buy CDX IG June-20 1x2 Receiver Spreads (45D/25D)	15-Apr-20	0.00%	20-May-20	2.00%				IBOXUMAE Index
CDX HY	20-Jul-20	Buy CDX HY July 1x2 Call Spreads (50D/33D)	30-Apr-20	0.00%	04-Jun-20	0.00%				IBOXHYSE Index
CDX IG	20-Jun-20	Sell CDX IG June 90bp Strike Straddle	30-Apr-20	1.00%	04-Jun-20	1.00%				IBOXUMAE Index
CDX HY	20-Jun-20	Buy CDX HY July-20 1x2 Receiver Spreads (45D/25D)	20-May-20	0.00%	14-Jun-20	0.50%				IBOXHYSE Index
CDX IG CDX HY	5Y	Long CDX IG 3s5s Steepener	20-May-20 4-Jun-20	9.00	11-Nov-20	16.00				IBOXUMAE Index
CDX HY CDX IG	20-Sep-20 2m	Buy CDX HY 3m 1x2 Call Spreads (50D/33D) Buy CDX IG 2m Bullish Risk Reversals (70/90)	4-Jun-20 4-Jun-20	0.00%	30-Jun-20 30-Jun-20	0.80%				IBOXHYSE Index IBOXUMAE Index
CDX HY	20-lun-20	Sell CDX HY33 Super Senior (35-100%) Protection	4-Jun-20	1.17%	10-Sep-20	0.90%				IBOXHYSE Index
CDX HY	20-Jun-20	Sell CDX HY33 Super Senior (35-100%) Protection	4-Jun-20	1.17%	10-Sep-20	0.90%				IBOXHYSE Index
CDX HY	20-Sep-20	Buy CDX HY 3m 1x2 Call Spreads (100.5/103)	14-Jun-20	4c	31-Jul-20					IBOXHYSE Index
CDX HY	3m	Buy CDX HY 3m 1x2 Receiver Spreads (45D/25D)	14-Jun-20	0.04%	24-Jul-20	0.50%				IBOXHYSE Index
CDX IG	5Y	Buy Protection on CDX IG33 Mezz Tranche (7-15%)	14-Jun-20	100bp	24-Jul-20	88bp	-	l		IBOXUMAE Index
CDX IG 7-15% CDX IG	5Y 6m	Short 7-15% vs. Index delta-adjusted Buy CDX IG 6m Bullish Risk Reversals	14-Jun-20 30-Jun-20	76bp 0.00%	31-Jul-20 04-Aug-20	0.20%				IBOXUMAE Index IBOXUMAE Index
CDX IG	ът 3m	Sell CDX IG 3m 30D Puts	30-Jun-20 30-Jun-20	0.26%	04-Aug-20 04-Aug-20	0.20%				IBOXUMAE Index
CDX HY	3m	Buy CDX HY 3m 1x2 Put Spreads	4-Aug-20	0.65%	10-Sep-20	0.10%			1	IBOXHYSE Index
CDX IG	6m	Buy CDX IG 3m Put Spread Collar	4-Aug-20	0.06%	14-Oct-20	0.10%				IBOXUMAE Index
CDX IG	3m	CDX IG Covered Shorts (Buy CDX IG Protection, Sell CDX IG 3m 30D Puts)	10-Sep-20	68bp	14-Oct-20	54bp				IBOXUMAE Index
CDX HY	18-Dec-20	Buy CDX HY35 Dec-20 Bullish Risk Reversals	14-Oct-20	0.00	15-Nov-20	0.00				IBOXHYSE Index
CDX IG CDX IG	18-Dec-20	Buy CDX IG35 Dec-20 1x2 Payer Spreads (50D/30D)	14-Oct-20	-0.05%	15-Nov-20	0.00%	ļ	-		IBOXUMAE Index IBOXUMAE Index
CDX IG	18-Dec-20	Buy CDX IG35 Dec-20 1x2 Payer Spreads (50D/30D)	14-Oct-20	0.00	15-Nov-20	0.00	L	L		IDUXUMAE INDEX

Source: Morgan Stanley Research

Exhibit 61:

History of recommendations for EM trades

	Shor	t USD/IDR 3m NDF								
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
USD/IDR	3m	Short KRW vs IDR 3m NDFs	30-Mar-20	13.63	03-Jun-20	12.00	12.00	12.60	\$10m	IHN+3M Curncy
USD/KRW	Spot	Short KRW vs IDR 3m NDFs	30-Mar-20	13.63	03-Jun-20	12.00	12.00	12.60	\$10m	KRW Curncy
USD/IDR	3m	Short KRW vs IDR 3m NDFs	19-Jun-20	12.01	29-Jun-20	12.10	11.50	12.10	\$10m	IHN+3M Curncy
USD/KRW	Spot	Short KRW vs IDR 3m NDFs	19-Jun-20	12.01	29-Jun-20	12.10	11.50	12.10	\$10m	KRW Curncy
USD/IDR	3m	Short KRW vs IDR 3m NDFs	30-Mar-20	13.63	03-Jun-20	12.00	12.00	12.60	\$10m	IHN+3M Curncy
USD/KRW	Spot	Short KRW vs IDR 3m NDFs	30-Mar-20	13.63	03-Jun-20	12.00	12.00	12.60	\$10m	KRW Curncy
USD/IDR	3m	Short KRW vs IDR 3m NDFs	19-Jun-20	12.01	29-Jun-20	12.10	11.50	12.10	\$10m	IHN+3M Curncy
USD/KRW	Spot	Short KRW vs IDR 3m NDFs	19-Jun-20	12.01	29-Jun-20	12.10	11.50	12.10	\$10m	KRW Curncy
USD/IDR	3m	Short USD/IDR 3m NDF	23-Ort-20	14804	09-Nov-20	14200	14200	15200	\$10m	IHN+3M Curncy

Short USD vs INR 3m NDFs										
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
USD/INR	3m	Sell USD/INR 3m NDF	18-Sep-19	72.18	18-Dec-19	N/A	69.7	73.3	10m	IRN+3M Curncy
USD/INR	3m	Sell USD/INR 3m NDF	13-Jan-20	71.91	24-Feb-20	71.91	69.36	72.6		IRN+3M Curncy
LISD/INR	3m	Short USD/NR 3m NDF	11-Feh-20	71 91	17-Mar-20	75.75				IRNA3M Curney

Source: Morgan Stanley Research

Exhibit 62:

History of recommendations for EM stances

History of recommendations for Brazil Hard Currency Bonds								
Trade Entry Date Exit Date								
Like Brazil Hard Currency Bonds	17-Nov-19	11-Mar-20						
Dislike Brazil Hard Currency Bonds	30-Mar-20	4-May-20						

History of recommendations for Egypt Hard Currency Bonds							
Trade	Entry Date	Exit Date					
Like Egypt Hard Currency Bonds	7-Nov-19	12-May-20					

History of recommendations for Ukraine Hard Currency Bonds								
Trade Entry Date Exit Date								
Dislike Ukraine Hard Currency Bonds	2-Aug-19	17-Nov-19						
Dislike Ukraine Hard Currency Bonds	4-Mar-20	6-Apr-20						
Dislike Ukraine Hard Currency Bonds	18-May-20	19-Jun-20						

Source: Morgan Stanley Research

Important note regarding economic sanctions. This research references country/ies which are generally the subject of selective sanctions programs administered or enforced by the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the European Union and/or by other countries and multi-national bodies. Users of this report are solely responsible for ensuring that their investment activities in relation to any sanctioned country/ies are carried out in compliance with applicable sanctions.

Appendix: Definition of terms

Buy/Long: The analyst expects the total or excess return (depending on the nature of the recommendation) of the instrument or issuer that is the subject of the investment recommendation to be positive over the relevant time period.

Sell/Short: The analyst expects the total or excess return (depending on the nature of the recommendation) of the instrument or issuer that is the subject of the investment recommendation to be negative over the relevant time period.

Selling protection or Buying Risk: The analyst expects that the price of protection against the event occurring will decrease over the relevant time period.

Buying protection or Selling Risk: The analyst expects the price of protection against the event occurring will increase over the relevant time period.

Pay: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will increase.

Receive: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will decrease.

Like: Based on current market conditions as of the date of this report the analyst expects that the relevant securities of the issuer that is subject of the recommendation will perform favorably over the relevant time period as compared to the overall market of comparable securities by other issuers. This is not intended to be, nor should it be interpreted as a formal fundamental rating of the issuer or its creditworthiness.

Dislike: Based on current market conditions as of the date of this report the analyst expects that the relevant securities of the issuer that is subject of the recommendation will perform unfavorably over the relevant time period as compared to the overall market of comparable securities by other issuers. This is not intended to be, nor should it be interpreted as a formal fundamental rating of the issuer or its creditworthiness.

Unless otherwise specified, the time frame for recommendations included in the Morgan Stanley Fixed Income Research reports is 6-12 months and the price of financial instruments mentioned in the recommendation is as at the date and time of publication of the recommendation.

When more than one issuer or instrument is included in a recommendation, analyst expects one part of the trade to outperform the other trade or combination of other trades included in the recommendation on a relative basis.

For important disclosures related to the proportion of all investment recommendations over the past 12 months that fit each of the categories defined above, and the proportion of issuers corresponding to each of those categories to which Morgan Stanley has supplied material services, please see the Morgan Stanley disclosure at https://ny.matrix.ms.com/eqr/article/webapp/239d90ea-0d60-11eb-b2d4-b2b7a3e572d4?ch=rpint&sch=ar

Strategy Risk Factors

Buying calls or call spreads: Investors who buy call options risk loss of the entire premium paid if the underlying security finishes below the strike price at expiration. Investors who buy call spreads (buy a call and sell a further OTM call) also have a maximum loss of the entire up-front premium paid. The maximum gain from buying call spreads is the difference between the strike prices, less the upfront premium paid.

Buying puts or put spreads: Investors who buy put options risk loss of the entire premium paid if the underlying security finishes above the strike price at expiration. Investors who buy put spreads (buy a put and sell a further OTM put) also have a maximum loss of the upfront premium paid. The maximum gain from buying put spreads is the difference between the strike prices, less the upfront premium paid.

Selling calls: Investors who sell covered calls (own the underlying security and sell a call) risk limiting their upside to the strike price plus the upfront premium received and may have their security called away if the security price exceeds the strike price of the short call. Additionally, the investor has full downside exposure that is only partially offset by the upfront premium taken in. Investors short naked calls (i.e. sold calls but don't hold underlying security) risk unlimited losses of security price less strike price. Investors who sell naked call spreads (i.e. sell a call and buy a farther out-of-the-money call with no underlying security position) have a maximum loss of the difference between the long call strike and the short call strike, less the upfront premium taken in, if the underlying security finishes above the long call strike at expiration. The maximum gain is the upfront premium taken in, if the security finishes below the short call strike at expiration.

Selling puts: Put sellers commit to buying the underlying security at the strike price in the event the security falls below the strike price. The maximum loss is the full strike price less the premium received for selling the put. Put sellers who are also long a lower dollar-strike put face a maximum loss of the difference between the long and short put strikes less the options premium received.

Buying strangles: The maximum loss is the entire premium paid (put + call), if the security finishes between the put strike and the call strike at expiration.

Selling strangles or straddles: Investors who are long a security and short a strangle or straddle risk capping their upside in the security to the strike price of the call that is sold plus the upfront premium received. Additionally, if the security trades below the strike price of the short put, the investor risks losing the difference between the strike price and the security price (less the value of the premium received) on the short put and will also experience losses in the security position if he owns shares. The maximum potential loss is the full value of the strike price (less the value of the premium received) plus losses on the long security position. Investors who are short naked strangles or straddles have unlimited potential loss since if the security trades above the call strike price, the investor risks losing the difference between the strike price and the security price (less the value of the premium received) on the short call. Additionally, they are obligated to buy the security at the put strike price (less upfront premium received) if the security finishes below the put strike price at expiration. Strangle/straddle sellers risk assignment on short put positions that become in the money. Additionally, they risk having stock called away from short call positions that become in the money.

Options Disclaimer

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The risk of exercise in a spread position is the same as that in a short position. Certain investors may be able to anticipate exercise and execute a "rollover" transaction. However, should exercise occur, it would clearly mark the end of the spread position and thereby change the risk/reward ratio. Due to early assignments of the short side of the spread, what appears to be a limited risk spread may have more risk than initially perceived. An investor with a spread position in index options that is assigned an exercise is at risk for any adverse movement in the current level between the time the settlement value is determined on the date when the exercise notice is filed with OCC and the time when such investor sells or exercises the long leg of the spread. Other multiple-option strategies involving cash settled options, including combinations and straddles, present similar risk.

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By selling an option, the seller receives a premium from the option purchaser, and the purchase receives the right to exercise the option at the strike price. If the option purchaser elects to exercise the option, the option seller is obligated to deliver/purchase the underlying shares to/from the option buyer at the strike price. If the option seller does not own the underlying security while maintaining the short option position (naked), the option seller is exposed to unlimited market risk.

Spreading may entail substantial commissions, because it involves at least twice the number of contracts as a long or short position and because spreads are almost invariably closed out prior to expiration. Potential investors should carefully review tax treatment applicable to spread transactions prior to entering into any transactions.

Multi-legged strategies are only effective if all components of a suggested trade are implemented.

Investors in long option strategies are at risk of losing all of their option premiums. Investors in short option strategies are at risk of unlimited losses.

There are special risks associated with uncovered option writing which expose the investor to potentially significant loss. Therefore, this type of strategy may not be suitable for all customers approved for options transactions. The potential loss of uncovered call writing is unlimited. The writer of an uncovered call is in an extremely risky position, and may incur large losses if the value of the underlying instrument increases above the exercise price.

As with writing uncovered calls, the risk of writing uncovered put options is substantial. The writer of an uncovered put option bears a risk of loss if the value of the underlying instrument declines below the exercise price. Such loss could be substantial if there is a significant decline in the value of the underlying instrument.

Uncovered option writing is thus suitable only for the knowledgeable investor who understands the risks, has the financial capacity and willingness to incur potentially substantial losses, and has sufficient liquid assets to meet applicable margin requirements. In this regard, if the value of the underlying instrument moves against an uncovered writer's options position, the investor's broker may request significant additional margin payments. If an investor does not make such margin payments, the broker may liquidate stock or options positions in the investor's account, with little or no prior notice in accordance with the investor's margin agreement.

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For combination writing, where the investor writes both a put and a call on the same underlying instrument, the potential risk is unlimited.

If a secondary market in options were to become unavailable, investors could not engage in closing transactions, and an option writer would remain obligated until expiration or assignment.

The writer of an American-style option is subject to being assigned an exercise at any time after he has written the option until the option expires. By contrast, the writer of a European-style option is subject to exercise assignment only during the exercise period.

Disclosure Section

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(as of October 31, 2020)

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Coverage Universe			Inve	estment Banking Clien	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	1358	40%	361	45%	27%	597	40%
Equal-weight/Hold	1462	43%	357	44%	24%	681	45%
Not-Rated/Hold	4	0%	1	0%	25%	3	0%
Underweight/Sell	539	16%	85	11%	16%	220	15%
Total	3,363		804			1501	

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.

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