



MARKET OUTLOOK Q4 2020

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INTRODUCTION

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RAKBANK has tied up with Principal Global Asset Allocation to produce periodical investment publications to update its clients of current investment market conditions, asset class performance and investment outlook. The objective of these publications is not to serve as investment advice but as an independent view on investment markets.

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OUR PROPRIETARY INDICATORS

Recovery stayed on track in Q3 2020

Fundamentals

- New COVID-19 cases are rising but we keep getting closer to a vaccine. Declining fatality rates are an added positive. Re-openings continue though at a reduced pace. Governments are likely to keep prioritizing re-openings over acceptable health risks in most countries.
- Economic recovery continued in Q3 2020. Global manufacturing outlook remained strong, industrial output recovered further, financial conditions were extremely easy, economic surprises were positive for five successive months, and earnings estimates are ticking up.

Valuations

- US Treasuries remained super expensive; IG and HY spreads were at fair value.
- Earnings cuts and price recovery in April-June made it a V-shaped valuation move for equities, pushing them well into the expensive zone.

Technicals

- Implied and realized cross-asset volatilities are at their long-term averages.
- After the correction in September, markets are no longer in an overbought zone based on most of our technical indicators.



INDICATOR		Sept. 2020	Aug. 2020	Dec. 2019	Read YTD
Macro and bottom up	1 PGAA Global Financial Conditions Index	0.61	0.64	0.44	↑
	2 PGAA Global Inflation Index ²	1.50%	1.50%	2.10%	↓
	3 PGAA Leading Industrial Production Indicator ¹	54.60	51.00	47.00	↑
	4 PGAA Global Manufacturing PMI Index	53.10	52.80	48.50	↑
	5 PGAA Global Economic Surprise Index ¹	0.24	0.33	0.29	↓
	6 PGAA Global 3-month Earnings Revision Ratio	0.51	0.47	0.41	↑
	7 PGAA Global 3-month EPS change (in USD)	2.00%	1.00%	-1.00%	↑
	8 Global 2020 EPS growth expectation	-21.00%	-21.00%	10.00%	↓
	9 Global Credit Rating Upgrade/Downgrade Ratio	0.14	0.13	0.43	↓
Valuations	10 PGAA Equity Valuation Composite (MSCI ACWI)	-2.00	-2.20	-0.90	↓
	11 PGAA 10-yr Treasury Valuation ³	-2.80	-2.90	-0.80	↓
	12 PGAA Investment Grade Spread ³	-0.10	-0.30	-1.40	↑
	13 PGAA High Yield Spread ³	-2.40	-2.50	-1.20	↓
Technicals	14 PGAA Cross Asset Volatility Index	74.00	74.00	52.00	↓
	15 PGAA Cyclical Risk Environment Index	-1.40	-1.30	-0.75	↓
	16 PGAA Reflation Positioning Indicator	0.23	-0.06	-0.20	↑

As of 30 September 2020. Source: Bloomberg/FactSet/PGAA. See important information section for further details. 13 month average as of prior month, 23 month average, 33 month time weighted average. 410 year rolling z score.



Risk assets overcome COVID and Sept swoon to rebound in Q3 2020

Global capital markets continued their recovery from an early 2020 fit of pique with global equity, credit, and risk investors achieving strong returns in Q3 2020 despite a September pause on the runaway enthusiasm. Growth recovered further, notably in global manufacturing where 18 out of 26 countries we monitor ended Q3 in expansion.

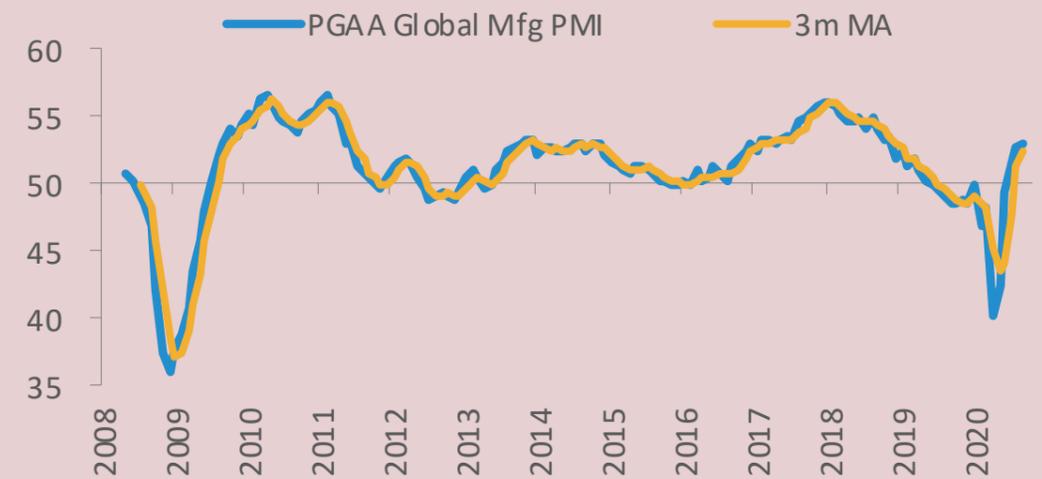
The extraordinary market performance of the second quarter extended into the late summer with the S&P500 reaching new record highs in mid-August, erasing all the desperate market havoc inflicted by the coronacrisis during the first few months of the year. Fueled by central bank liquidity and tech sector dominance, asset price gains continued to mount even in the face of record earnings declines and a concerning rise in US coronavirus cases, cultivating an air of market complacency against a backdrop of overbought conditions.

Within the September microcosm specifically, wise investors note the runaway equity market advance had been propelled by just a handful of companies – the tech giants – and investor discomfort had escalated, rendering markets increasingly vulnerable to a correction. Overbought conditions were apparent, and investors began to process a new larger list of threats to the outlook: fear of a new COVID-19 wave in Europe, a fading monetary policy impulse, reduced fiscal support, uncertainty into the US Presidential election, and a loss of economic momentum came increasingly into focus in September.

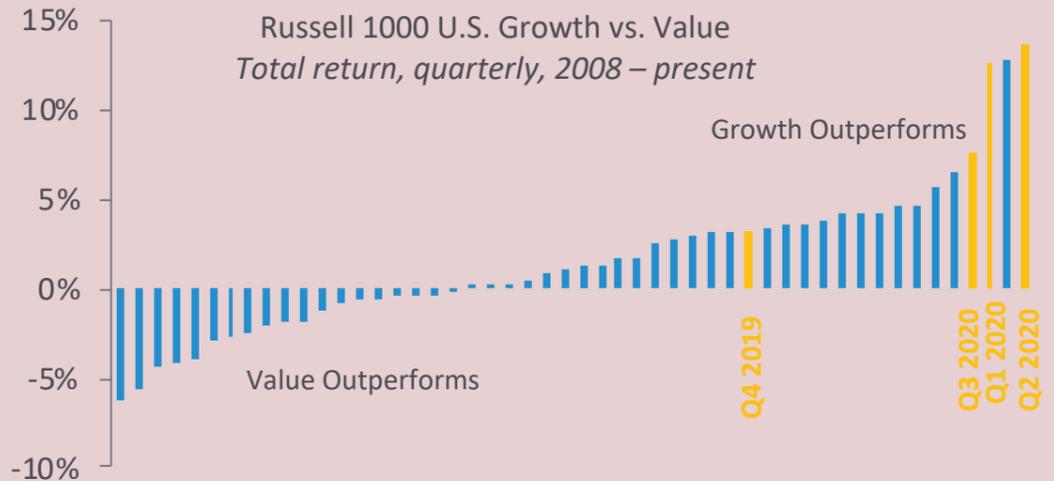
Having dominated the market rebound since March, technology also dominated the September market correction, prompting the NASDAQ 100 index to drop almost 11% in the space of just three days. Tech valuations had become increasingly stretched over the months, drawing comparisons to the late '90s dot com bubble, and extending the recent dominance of Growth style investing over Value in the era of low interest rates and easy financial conditions.

Q3 2020 was also notable in that the US Fed adopted a new framework based on average inflation, with tolerance for inflation modestly above 2% in coming years to make up for prior year shortfalls. Note that core and headline PCE inflation have averaged 1.65% each of the last ten years. We perceive the framework shift as useful in avoiding preemptive tightening cycles, such as began in 2015.

Global Manufacturing edged up in Q3

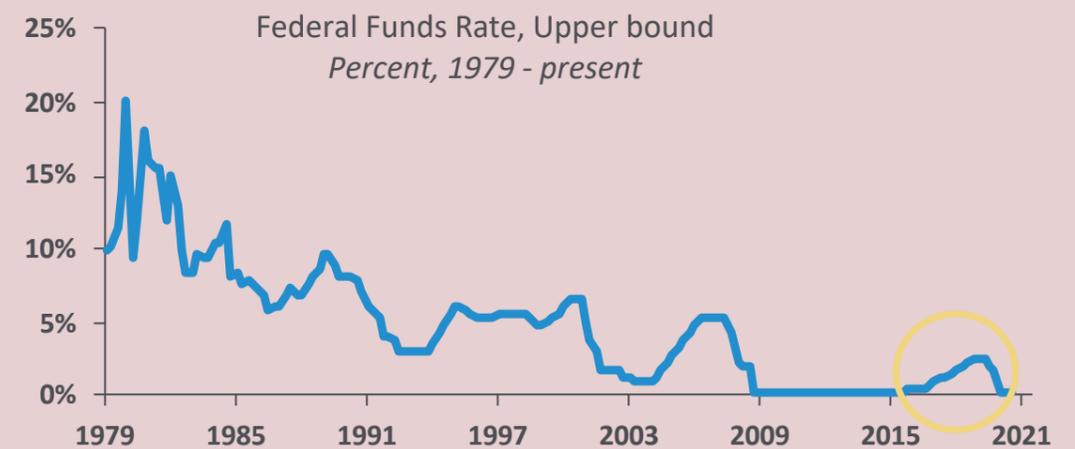


Growth outperformance at extremes



Source: As of 30 September 2020. Source: Bloomberg/FactSet/PGAA;

Pausing preemptive tightening; Fed addressing past missteps



Source: Federal Reserve Bank of St. Louis, Principal Global Asset Allocation. Data as of April 1, 2020

FOCUS ON MARKET DRIVERS, NOT HEADLINES



Monetary stimulus overwhelming COVID epidemic, high valuations, strained consumers, and election worries

While the technology and momentum-led sell-off removed some froth from overextended segments of equity markets, many investors have retained their concerns around the resilience of mega-cap tech and its outsized impact on US and Asian equity performance.

Yet, the economic backdrop continues to support a strong performance from technology. In the current environment of very low interest rates, high uncertainty and rapid digital disruption, the Technology sector offers attractive characteristics, including strong balance sheets and high profit margins, as well as the resilience of its cash flows and earnings.

Indeed, aided by lockdown effects, Big Tech has rolled out impressive earnings results as self-isolating consumers have replaced devices and devoured cloud computing services, spurring a new upgrade cycle and accelerating the digitalization of companies in the non-technology space. September's expectation reset called into question the premium to be paid for mega-cap growth's unique profile, but it did nothing to dent the fundamental case for the business group.

Looking outside of Tech (and its Consumer Discretionary cousins), more cyclical sectors may be beneficiaries as the economic recovery continues to solidify and a potential vaccine comes closer into focus, broadening out the market recovery in a healthier fashion. Investors should insist on detailed company-by-company evaluation of cyclical firms, however, given the increasingly binary winner/loser distinctions developing in those spaces.

What's behind the overall corporate optimism? Global corporate earnings are indeed forecast to grow by -21% in 2020, but the +28% 2021 bottom-up global earnings forecast (recently buoyed by an uptick in earnings revisions and based on a positive path for a COVID vaccine) is what's drawing the market's focus. 2021's improvement is clearly mostly heavily informed by remarkably easy financial conditions, not the potential downsides from COVID, sky-high equity valuations, high unemployment, and a protracted US election outcome.

Returns	Total return					
	1-month	3-month	1-year	3-year	5-year	
GLOBAL EQUITIES						
Developed (local currency)						
S&P500-US	USD	-4%	9%	15%	12%	14%
Nasdaq-US	USD	-5%	11%	41%	21%	21%
Russell 2000-US	USD	-3%	5%	0%	2%	8%
DAX-Germany	EUR	-3%	8%	10%	0%	7%
FTSE100-UK	GBP	-5%	0%	-14%	-5%	0%
CAC 40-France	EUR	-5%	2%	-7%	-1%	6%
ASX 200-Australia	AUD	-6%	4%	-4%	3%	9%
Nikkei 225-Japan	JPY	1%	7%	11%	9%	11%
Emerging (local currency)						
MSCI China	USD	-3%	12%	34%	8%	14%
Shanghai Composite	CNY	-4%	13%	19%	0%	2%
India-Sensex	INR	-2%	13%	-4%	4%	7%
Korea-Kospi	KRW	2%	13%	18%	0%	6%
Brazil-BOVESPA	BRL	-8%	-4%	-33%	-11%	8%
Russia-RTSI\$	USD	-6%	0%	-7%	8%	15%
MSCI: TR net (US\$)						
MSCI ACWI	USD	-3%	8%	10%	7%	10%
MSCI EAFE	USD	-3%	5%	0%	1%	5%
MSCI Europe	USD	-3%	5%	-1%	-1%	4%
MSCI AsiaPac xJ	USD	-2%	9%	14%	4%	10%
MSCI EM	USD	-2%	10%	11%	2%	9%
Change in rates from quarter-end	30 Sep '20	Change vs. quarter end				
		1-month	3-month	1-year	5-year	
GLOBAL FIXED INCOME						
Key policy rates						
US-Fed Funds	USD	0.25%	0.00%	0.00%	-1.75%	0.00%
UK Bank Rate	GBP	0.10%	0.00%	0.00%	-0.65%	-0.40%
ECB Ref Rate	EUR	0.00%	0.00%	0.00%	0.00%	-0.05%
China 7-day Rev Repo	CNY	2.20%	0.00%	0.00%	-0.35%	-0.15%
10 year sovereign yields (%)						
USA	USD	0.68%	-0.02%	0.03%	-0.98%	-1.35%
UK	GBP	0.23%	-0.08%	0.06%	-0.26%	-1.53%
Germany	EUR	-0.52%	-0.13%	-0.07%	0.05%	-1.11%
Japan	JPY	0.02%	-0.04%	-0.01%	0.23%	-0.34%
China	CNY	3.15%	0.12%	0.30%	0.01%	-0.12%
Brazil	BRL	7.59%	0.42%	0.64%	0.54%	-7.82%
Mexico	MXN	5.87%	0.00%	0.21%	-0.94%	-0.52%

As of 30 September 2020. Source: Bloomberg/FactSet/PGAA. Returns greater than one year are annualized. Index shown for comparison purposes only. It is not possible to invest directly in an index.

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WEAKER \$, RECOVERING COMMODITIES



Risk-on paves way for US\$ weakness

- Q3 2020 saw continuation of a weak \$ trend that started in Q2 2020. Reasons were risk-on sentiments propped by progress on COVID, massive doses of monetary and fiscal stimulus and plentiful \$ liquidity due to the Fed swap lines. Valuations supported a weaker \$, too.
- For Q3 2020, US\$ dropped against every single DM major, the largest of which came against EUR (-4%). In Asia, it performed the worst against CNY (-4%) and the best against Indonesian Rupiah (4%). Elsewhere, it zoomed 13% against Turkish Lira and 9% against Ruble (rising border tensions between Armenia and Azerbaijan are sucking up Turkey and Russia, given their support to opposing sides), while dropping -4% against the Mexican Peso.
- As of 30-Sep-2020, based on real effective exchange rates, Latin America and EEMEA were cheap & Asia-x-J-x-China neutral. US\$ & EUR were on the expensive side.
- Reduced carry, large twin deficits (trade and fiscal) and rich valuations make us believe that the \$ is headed lower in coming years but a pre-condition for that to play out is stronger ex-US growth. A risk-off move, however, will keep it supported.

Industrial Metals & Agri stole the show

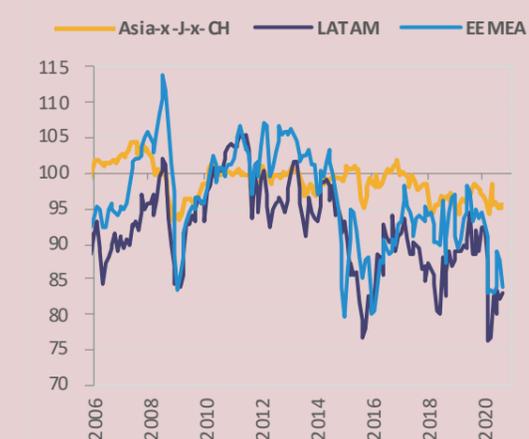
- Recovering global growth and tight supplies due to COVID-19-related output disruptions put Industrial metals in a sweet spot during Q3 2020. Most base metals rallied strongly to cap a strong quarter.
- Agricultural commodities were up smartly as storms in Iowa and arid and cold conditions across the Midwest impacted supplies. Crop yields will likely be lower than earlier anticipated.
- Oil prices were volatile, rising initially on improving demand-supply balance but failing to sustain gains in September due to concerns about returning Libyan output and a general market risk-off. We think oil is at fair value at current levels (September correction makes it on the cheaper side). Future price outlook hinges on speed of recovery and compliance with cuts. Overall, we remain in a consolidation phase.
- While precious metals have sold off from recent highs, expansionary budgets, deeply negative real rates and very low nominal rates keep us positive on the sector from a medium-term perspective.

Returns	30 Sep '20	Total return				
		1-month	3-month	1-year	5-year	
Currencies and commodities						
Currencies						
DXY Index	93.89	2%	-4%	-6%	-1%	
BB Asia \$ Index	105.38	0%	-2%	-2%	0%	
BB LatAm \$ Index	41.86	2%	0%	20%	9%	
USD/EURO	1.17	2%	-4%	-7%	-1%	
USD/GBP	1.29	2%	-4%	-5%	3%	
USD/AUD	0.72	3%	-4%	-6%	0%	
Yen/USD	105.48	0%	-2%	-2%	-3%	
CNY/USD	6.79	-1%	-4%	-5%	1%	
Commodities						
GS Commodity Index	USD	350.2	-2%	8%	-13%	-1%
Nymex Crude	USD/bl	40.2	-6%	2%	-26%	-2%
Brent Crude	USD/bl	41	-10%	0%	-33%	-3%
Gold	USD/toz	1,887.5	-4%	5%	29%	11%
Silver	USD/toz	23.5	-17%	27%	38%	10%
Copper	USD/T	6,675.5	0%	11%	17%	5%
Aluminum	USD/T	1,752.3	-2%	9%	2%	2%
Corn	USc/bu	379	9%	12%	-2%	0%
Soybean	USc/bu	1,023.5	8%	16%	13%	3%

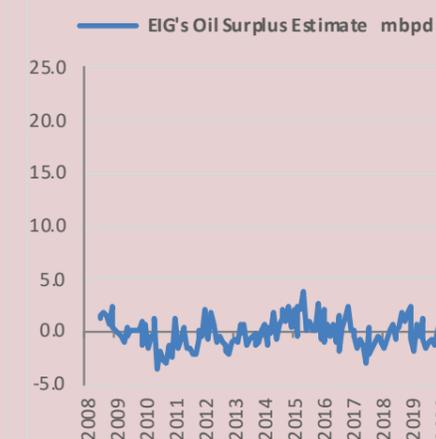
As of 30 Sep 2020. Source: Bloomberg/Factset/PGAA. Returns greater than one year are annualized. Index shown for comparison purposes only. It is not possible to invest directly in an index.

PPI-based Real Effective Exchange

Rates, Higher=Expensive



Oil: Balanced Demand-Supply



As of 30 September 2020. Source: Bloomberg/FactSet/PGAA; EIG=Energy Intelligence Group



US equities

September's swoon doesn't dampen a spectacular quarter for US equities

US equities continued their path back to record highs in Q3 2020, appending a +9% total return to Q2' 2020's +20.5% TR in the period, its best quarter since Q4'1998. Amazingly now, despite the SPX's -34% peak-to-trough decline at the onset of COVID and its associated lockdown, the index has posted +15% over the past 12 months.

- **Several established performance patterns held up in Q3**, wherein the large-cap stocks (Russell Top 200, +10%) outperformed mid-cap stocks (Russell MidCap, +7%), which outperformed small-cap stocks (Russell 2000, +5%). The same pattern holds over 1, 3, and 5yr horizons as the FAMANG impact on large-cap performance has led markets higher late in the post-GFC recovery.
- **Ten of eleven economic sectors posted positive return in Q3, led by Consumer Discretionary at +15%**. Five sectors posted double-digit gains, exacerbating the contrast with Energy's -20% collapse in the quarter and -45% TR over the past twelve months.
- **The performance of Growth factors pulled back in September's growth-trajectory re-rating, but remain the dominant force over the past year**. Momentum and Quality factors also continued to add value across a variety of cap sizes and sectors. "Earnings surprise" driven-equity strategies have potential to continue their performance revival amid the outburst of unexpected operating momentum
- **2020-2021 fundamentals should be joined at the hip**. Globally, investors are hard pressed to make sense of the quantum of fundamental change from 2020 to 2021. For example, US small caps are currently expected to see a -49% earnings decline this year, followed by a +91% 2021! We recommend a wholistic evaluation of the 24-month period to best inform fundamental investment decisions. 2021 EPS growth is being driven by a bounce in deep cyclical sector earnings.
- **Equity valuations remain stretched**. US equities increased in valuation over the quarter, with forward P/E ratios now averaging mid-20's multiples. Our valuation composite for US large-caps is approaching three standard deviations of expensiveness, validating our analysis that US equities have been cheaper ~99% of the time. Equity forward risk-adjusted return expectations appear advantaged vs. fixed income.

Returns	Total return					
	1-month	3-month	1-year	3-year	5-year	
GLOBAL EQUITIES						
United States						
S&P 500	USD	-4%	9%	15%	12%	14%
MSCI USA	USD	-4%	10%	16%	12%	14%
Russell 3000	USD	-4%	9%	15%	12%	14%
Russell Top 200	USD	-4%	10%	20%	14%	16%
Russell MidCap	USD	-2%	7%	5%	7%	10%
Russell 2000	USD	-3%	5%	0%	2%	8%
S&P 500 GICS sectors						
Info Technology	USD	-5%	12%	47%	28%	27%
Health Care	USD	-2%	6%	20%	11%	12%
Financials	USD	-3%	4%	-12%	0%	8%
Consumer Disc	USD	-4%	15%	29%	20%	17%
Comm Services	USD	-6%	9%	18%	9%	11%
Industrials	USD	-1%	12%	1%	5%	11%
Consumer Staples	USD	-1%	10%	8%	9%	9%
Energy	USD	-15%	-20%	-45%	-20%	-10%
Utilities	USD	1%	6%	-5%	8%	10%
Real Estate	USD	-2%	2%	-7%	7%	7%
Materials	USD	1%	13%	12%	6%	12%
MSCI US style factor returns		1-month	3-month	1-year	3-year	5-year
Momentum	USD	-4%	13%	25%	17%	18%
Value	USD	-2%	5%	-6%	2%	7%
Growth	USD	-5%	13%	41%	22%	20%
Quality	USD	-3%	10%	24%	18%	17%
Min Vol	USD	-2%	6%	1%	10%	12%
Fundamentals		Sales growth		Earnings growth		Dividend
		2020	2021	2020	2021	Yield-2020
S&P 500	USD	-4%	8%	-19%	26%	2%
MSCI USA Large Cap	USD	-5%	8%	-16%	22%	2%
MSCI USA Mid Cap	USD	-8%	7%	-23%	30%	2%
MSCI USA Small Cap	USD	-8%	7%	-49%	91%	2%
Valuations		Price to NTM EPS	Price to Book	Composite	Composite 3-month change	Composite % times cheaper
MSCI USA Large	USD	22.2	4.2	-2.8	-0.8	99%
MSCI USA Mid	USD	22.7	2.8	-1.3	-0.4	99%
MSCI USA Small	USD	27.8	2.1	-0.8	-0.2	95%

As of 30 Sep 2020. Source: Bloomberg/FactSet/PGAA. Returns greater than one year are annualized. Index shown for comparison purposes only. It is not possible to invest directly in an index.



Ex-US equities

Correlated with US equities

- US equities led the rally in July, but ex-US equities caught up somewhat in Aug-Sept. US still finished ahead both for Q3 2020 and YTD'2020 (MSCI USA delivered 9.5% & 6.8% vs 6.3% & -5.4% for MSCI ACWI ex USA).
- In Q3 2020, 18/40 markets gained with a median local currency return of -0.4%. Technology (Nasdaq and Korea topped the tables). For YTD'2020 too, Growth and Technology were dominant, with the top 2 spots taken by the tech-heavy Shenzhen & Nasdaq (25% each). Greece (-32%), Spain (-30%) and Hungary (-29%) were the worst. The median YTD'20 return was -11%, with only 8 markets clocking gains.
- Factors supporting the equity rally were recovering macro and micro economic growth, super easy financial conditions, promise of continuous fiscal support and rising hopes of a vaccine before the end-2020 and reducing fatality rates despite rising new cases.
- Momentum, Growth and Quality outperformed Value and Min Vol over both shorter and longer time periods. Market preference for secular winners stayed high in an environment of heightened uncertainty. Late cycle sectors like energy and financials remained challenged.
- 2020 EPS growth expectations are ticking higher from lows reached in early Q2 2020. MSCI AC World's expected EPS growth was at -21%yoy for 2020 and 28%yoy for 2021. In contrast, MSCI ACWI ex US earnings are likely to contract -31% in 2020 followed by a larger bounce (34%) in 2021. 2021 EPS growth is being driven by a bounce in deep cyclical sector earnings, the sectors that explained a bulk of the EPS decline for 2020.
- Markets were expensive on earnings-based measures. Several, however, were cheap on P/B, particularly in Emerging. US remained almost as expensive as it has ever been vs. ex-US markets (Europe, Japan, Asia & EMs). US Value remained cheap relative to Growth. Small and Mid-caps remained cheap relative to Large caps. Very low nominal and real rates can keep markets rich. Strategically, while lower than before, EQ returns should exceed fixed income returns over the next decade.
- Ex-US markets will require a noticeable pick-up in growth to outperform US markets. We keep a close eye on valuation differentials, inflation, global growth and US monetary/fiscal policy for cues about when to shift our preference from secular growth stories to more cyclical oriented exposures.

Returns	Total return					
	1-month	3-month	1-year	3-year	5-year	
GLOBAL EQUITIES						
Countries						
DAX-Germany	EUR	-3%	8%	10%	0%	7%
FTSE100-UK	GBP	-5%	0%	-14%	-5%	0%
CAC 40-France	EUR	-5%	2%	-7%	-1%	6%
ASX 200-Australia	AUD	-6%	4%	-4%	3%	9%
Nikkei 225-Japan	JPY	1%	7%	11%	9%	11%
MSCI China	USD	-3%	12%	34%	8%	14%
Shanghai Comp	CNY	-4%	13%	19%	0%	2%
India-Sensex	INR	-2%	13%	-4%	4%	7%
Korea-Kospi	KRW	2%	13%	18%	0%	6%
Brazil-BOVESPA	BRL	-8%	-4%	-33%	-11%	8%
Russia-RTSI\$	USD	-6%	0%	-7%	8%	15%
MSCI AC World ex-US	USD	-2%	6%	3%	1%	6%
Style factor returns						
		1-month	3-month	1-year	3-year	5-year
Europe style factors						
Momentum	USD	-1%	9%	18%	6%	9%
Value	USD	-5%	0%	-14%	-7%	0%
Growth	USD	-1%	9%	13%	6%	8%
Quality	USD	-1%	8%	13%	7%	8%
Min Vol	USD	-2%	6%	3%	3%	5%
Emerging market style factors						
Momentum	USD	-5%	11%	29%	9%	14%
Value	USD	-2%	5%	-6%	-3%	4%
Growth	USD	-1%	14%	28%	7%	13%
Quality	USD	-1%	11%	10%	3%	8%
Min Vol	USD	-2%	5%	-1%	1%	5%
Fundamentals						
		Sales growth		Earnings growth		Dividend
		2020	2021	2020	2021	Yield-2020
MSCI World ex USA	USD	-9%	6%	-31%	34%	3%
MSCI EM	USD	-7%	11%	-15%	32%	2%
MSCI AC Asia Pacific ex JP	USD	-4%	10%	-9%	24%	3%
MSCI Europe	EUR	-15%	7%	-37%	39%	3%
MSCI Japan	JPY	-10%	3%	-31%	31%	2%
Valuations						
		Price to NTM EPS	Price to Book	Composite	Composite 3-month change	Composite % times cheaper
MSCI World ex US		16.9	1.6	1.6	-0.5	87%
MSCI EM		14.4	1.7	1.7	-0.7	93%
MSCI AC Asia ex JP		15.1	1.7	1.7	-0.6	90%
MSCI Europe		16.7	1.7	1.7	-0.4	97%
MSCI Japan		17.7	1.3	1.3	-0.4	67%

As of 30 Sep 2020. Source: Bloomberg/FactSet/PGAAA. Returns greater than one year are annualized. Index shown for comparison purposes only. It is not possible to invest directly in an index.



US fixed income

Will ZIRP bring inflation

If there were any lingering questions surrounding the US Federal Reserve's intentions as it relates to ZIRP (zero interest rate policy), they were quickly put to rest with the release of their economic projections in September and commentary during the third quarter. The "dot plot" forecast was rolled forward one year and most project that ZIRP will continue well into 2023 to allow the economy to "run hot" in hopes that inflation will elevate above the 2% target to compensate for the last 10 years of below trend inflation in the US. We do not anticipate material inflation over the near-term until unemployment slack decreases and the economy begins growing.

These actions by the Fed have anchored the US Treasury curve, with the level and slope relatively unchanged over the past two quarters. Additionally, credit spreads (Option Adjusted Spread, "OAS") have also rallied since March resulting in strong performance across fixed income sectors in the US as investors search for income in a low rate environment. The search for income by investors and the stability provide by Central bank actions have supported access to capital markets by a broad range of corporations leading to record annual issuance only nine months into the year.

Fundamentals: security selection is key

With global government bond rates anchored near or below zero and credit spreads continuing to tighten, corporate fundamentals increase in their importance. Differentiating across industries and ratings categories as well as maturity (interest rate risk) should all be taken into consideration. We expect bankruptcies and ratings downgrades will continue and provide active managers with opportunities for alpha vs. a ~2.0% yield to worst from a passive approach as of quarter-end.

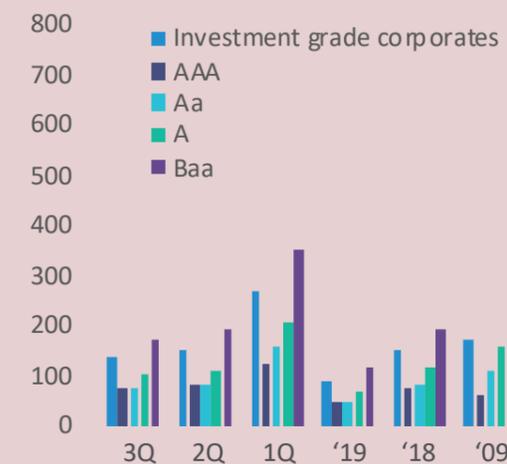
Corporate OAS, both Investment grade and high yield, continued to rally during the quarter and sit at long-term historical averages. The opportunity to ride a beta wave has materially diminished over the past 2 quarters. Given Central bank policies and low rates, we maintain a preference for corporate bonds versus government securities. Our near-term rate expectations are anchored at current levels.

We recommend an active approach in the corporate space with a duration underweight to hedge an inflation surprise as we expect near-term volatility to remain driven by ratings downgrades, bankruptcies, and concerns driven by pandemic and economic uncertainties.

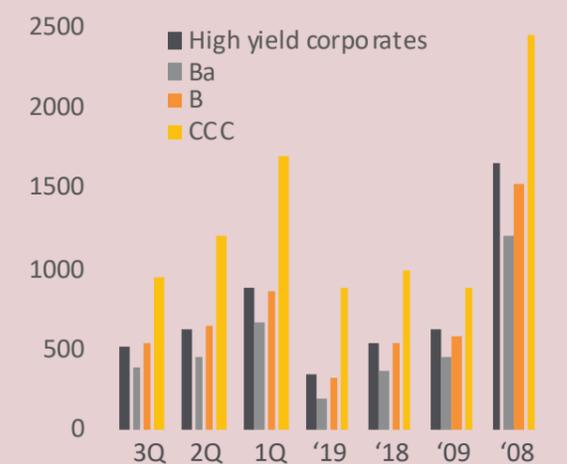
Returns		Total return					
		1-month	3-month	YTD	1-year	3-year	5-year
US FIXED INCOME							
US Aggregate	USD	0%	1%	7%	7%	5%	4%
US Treasuries	USD	0%	0%	9%	8%	6%	4%
US MBS Fixed Rate	USD	0%	0%	4%	4%	4%	3%
US \$ IG	USD	0%	2%	7%	8%	6%	6%
US \$ HY	USD	-1%	5%	1%	3%	4%	7%

US corporate spreads

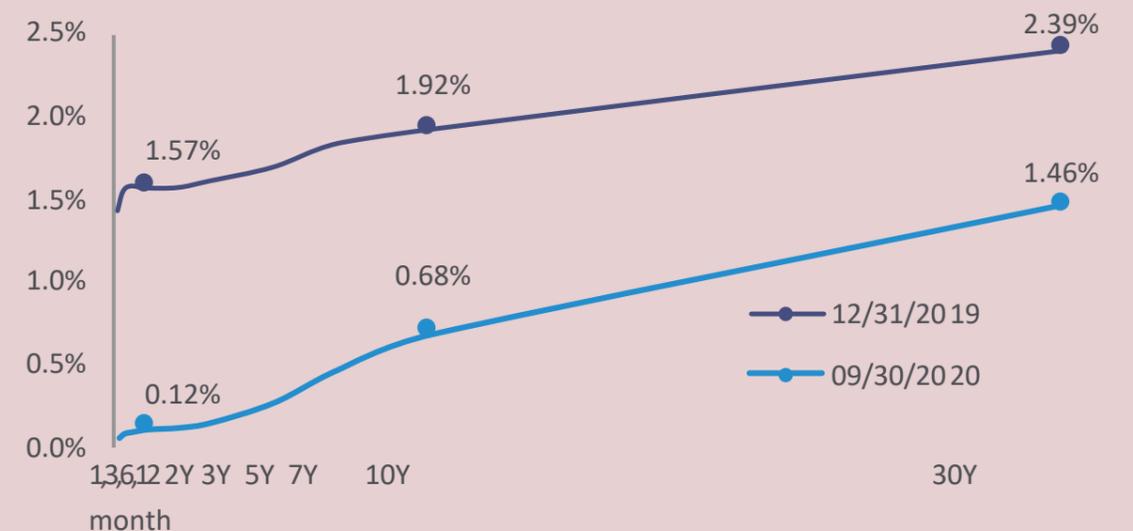
Investment grade



High yield



US Treasury yield curve: Bullish steepening



As of 30 September 2020. Source: Bloomberg/FactSet/PGAA. These are current views and opinions of Principal Global Asset Allocation. Returns greater than one year are annualized. Y=year.



Ex-US fixed income

Abundant issuance but scarce yield !

- The profusion of global debt, which got fresh legs as monetary and fiscal authorities stepped up significantly has resulted in plentiful bond issuance by all 3 categories: sovereigns, IG corporates and HY corporates. YTD'2020, International bond issuance has risen 48%yoy, HY issuance 20%yoy and even EM bond issuance 8%yoy. Yet, the yields available to investors are paltry due to financial repression being practiced by central banks. US IG yields 2%, EM IHG 2.4% (they've never yielded less historically). US HY yields 5.8% and EM HY 7.2% (lowest quartile).
- Policy rates remained abysmally low (PGAA's Global policy rate indicator was at 0.98%, with DMs at -0.01% and EMs at 2.58%). Global 10-yr yields were just 1.91%. Central banks are still cutting rates though at a slower pace. They are using balance sheets aggressively to keep term/risk premia suppressed. G3 balance sheets (Fed, ECB and BOJ) will rise from 37% of their GDP in 2019 to 59% in 2020 (US\$7.4 trillion).
- Ex-US yields declined more than US yields in Q3 2020. PGAA's DM-ex-US yield composite ended at just 0.08% vs. 0.68% for US. Our EM yield composite ended at just 4.1%.
- For Q3 2020, spread assets outperformed other categories and currency effects helped unhedged indices to outperform. YTD'2020 returns saw a completely different picture with long-dated US treasuries and Govt bonds leading, followed by IG. HY clocked negative returns.
- Rating downgrades dominated in Q3 2020 though momentum seemed to stabilize. September saw 324 such actions versus a monthly average of 637 till end-Aug. The ratio of global credit rating upgrades to total rating changes stabilized: 14% (overall), 21% (IG) and 11% (HY). Bankruptcy filings too seemed to stabilize much below the highs during GFC.
- Investors continued to pour money into fixed income assets. Bond funds and ETFs got almost \$500bn of inflow since Mar'2020.
- Spreads moved in a correlated fashion during the quarter, driven by macro cues (progress on COVID, monetary and fiscal policy). At the end of Sep'2020, spreads were in fair value zone for almost all IG categories. In HY, Asian HY widened sharply in September to present a decent carry opportunity (317bps relative to its 10-yr median). US and Europe were just outside their medians. We continue to like credit primarily for its defensive characteristic relative to EQ and its spread carry in an environment of very low yields.

Returns	Total return						
	30 Sep '20	1-month	3-month	1-year	3-year	5-year	
GLOBAL FIXED INCOME							
Markets							
Global Govt Bonds	USD	351	0%	3%	6%	4%	4%
Global Corp Bonds Investment Grade (IG)	USD	349	-1%	3%	8%	5%	5%
Global High Yield (HY)	USD	417	-1%	5%	4%	4%	7%
Asia \$ IG	USD	462	0%	2%	7%	6%	6%
Asia \$ HY	USD	689	-2%	3%	5%	4%	7%
EM \$ IG	USD	427	0%	3%	5%	5%	5%
EM \$ HY	USD	549	-2%	4%	6%	4%	8%
Spreads (bps)							
3m \$ LIBOR-OIS	USD	16	-1	-8	-18	2	1
NA CDX 5y IG CDS	USD	59	-6	-17	-1	4	-34
Europe 5y IG CDS	USD	60	5	-7	4	3	-31
Asia 5y IG CDS	USD	77	12	-6	1	-2	-83
JPM EMBI Index	USD	398	13	-35	61	91	-76

Option Adjusted Spreads (bps)								
Time Periods	US IG Corp	Euro IG Corp	Asia IG \$	EM IG \$	US HY Corp	Euro HY Corp	Asia HY \$	EM HY \$
30 Sep '20	144	118	179	187	541	472	865	689
1m change	8	4	6	-4	39	26	133	48
3m change	-16	-29	-30	-45	-103	-52	-23	-71
6m change	-161	-120	-102	-183	-336	-282	-511	-465
12m change	22	6	42	20	139	106	245	124
24m change	31	3	35	22	213	117	333	214
36m change	37	20	58	41	185	210	486	285
High	305	337	298	370	877	974	1376	1154
Low	91	75	111	127	328	233	321	320
Median	146	128	168	211	485	440	549	639
Current-Median	-2	-10	11	-24	56	33	317	51
Current-Low	53	43	68	60	213	239	544	369

As of 30 Sep 2020. Source: Bloomberg/FactSet/PGAA. *m*= month; Returns greater than one year are annualized. Index shown for comparison purposes only. It is not possible to invest directly in an index.



Asian fixed income

Carry advantage attractive for HY

Asian \$ bonds broadly retain their carry appeal. While we like the carry, total return will be determined by:

- Easy global financial conditions and continuation of support by central banks is key; an early retracement is probably the biggest of all risks.
- Chinese monetary policy: tight domestic conditions often causes offshore supply to shoot up, widening spreads.
- Support for its corporates by China, particularly large issuers in the property sector who form a big part of the IG and HY benchmarks.
- Progress on COVID-19 – the current spike in cases could slow down return-to-work strategies, putting corporate recovery at risk.
- Geo-political concerns, particularly US-China and China-India.

Investment Grade

- Asian IG spread is fair value relative to its own history and relative to US IG. At 35 bps over US IG, there is not a great deal of scope for it to compress further but we don't expect it to widen either.
- Given very low underlying sovereign yields, IG yields remain very low. The Asian IG \$ index (ICE BofAML Index) was yielding just 2.21% as of 9/30/2020 for a duration of 5.8 yrs and an average rating of A3.
- Asset concentration remains for Asian IG \$ index. China (47%) and BBBs (51%) form large parts of it. US IG also had 50% in BBBs.

High Yield

- Asian HY narrowed a tad during Q3 2020 despite widening considerably in September. Evergrande's woes in refinancing onshore bridge loans brought stress to the Chinese names, pushing its spread from 764bps in August to 916bps in September. Indonesian HY (5% weight) widened 120bps to 926bps on worsening COVID situation, while Indian HY (14% weight) narrowed -51bps to 708bps.
- A YTW of 8.9% for a duration of 2.7 years and B1 average rating, it offers a significant pick-up over US HY (YTW 5.8%, 3.9 years and B1) or Euro HY (YTW 4%, 3.8 years, BB3).
- China (60%) remained significant in the index as was Property (50%) so the Asian \$ HY space often swings with sentiment on China. We like Asian HY from a carry perspective but are cognizant of higher embedded volatility in the space.

Relative Option Adjusted Spreads (bps)

Time Periods	Asia IG - US IG	Asia HY- US HY	EM IG - US IG	EM HY - US HY
30 Sep 2020	35	324	43	148
1-month change	-2	94	-12	9
3-month change	-14	80	-29	32
6-month change	59	-175	-22	-129
12-month change	20	106	-2	-15
24-month change	4	120	-9	1
36-month change	21	301	4	100
High	67	499	135	454
Low	-24	-323	34	-16
Median	20	47	59	130
Current-Median	15	278	-16	19
Current-Low	59	647	9	164

Option Adjusted Spread vs. Government bonds in basis points



Source: Bloomberg/FactSet/PGAA. As of 30 Sep 2020. Spreads are from ICE BofAML fixed income indices. Index shown for comparison purposes only. It is not possible to invest directly in an index.

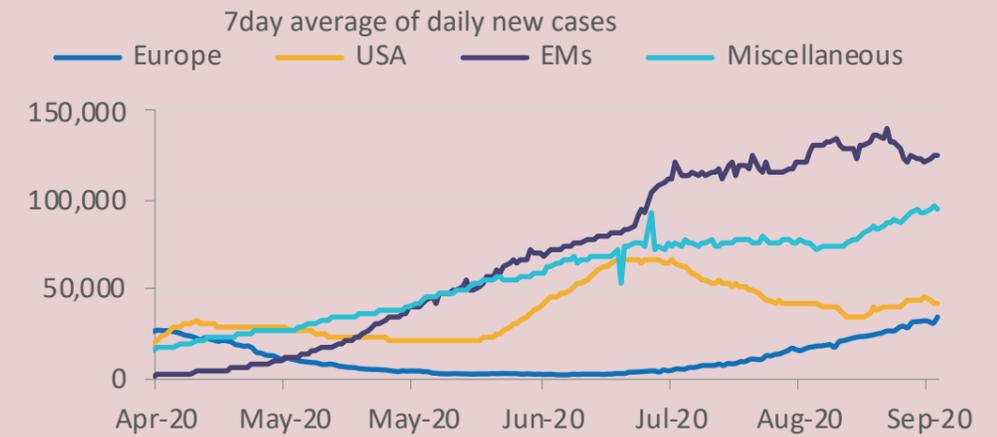


COVID-19

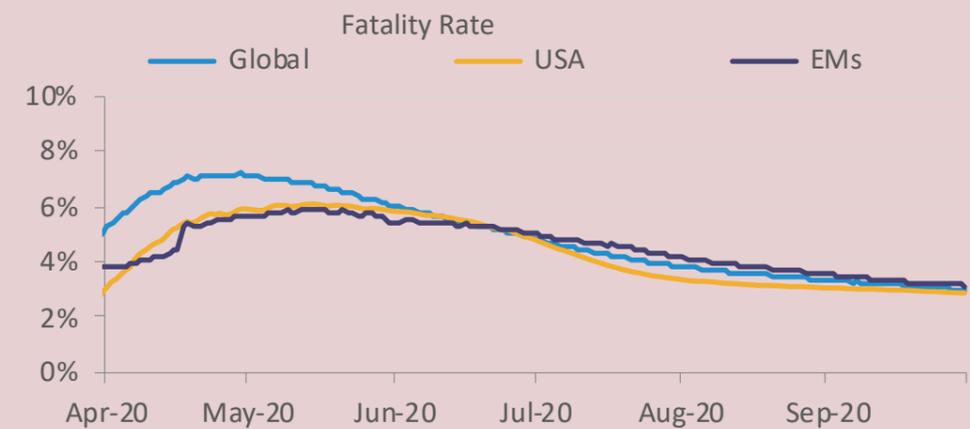
Rising cases but lower fatality rates

- Global infections rose 33% to 34 million at the end of September while the global infection rate eased two-tenths to 0.9%. The 7-day average of daily new cases rose to 300k from 253k driven by Europe (34k from 17k), US (43k from 41k) and countries outside the majors we track (95k from 76k). EMs (126k from 128k) were at 90% of its peak. Reasons for the spike were college re-openings, higher positivity rate, and more testing. Encouragingly, many of the cases were asymptomatic (younger generation), putting much less pressure on public health-care systems than the first wave.
- Global Fatalities rose 19% to 1 million, a much slower pace of increase than new infections. The mortality rate eased to 3% from 3.3%. Among populous countries, India's (1.6%) remained the lowest. Mexico & Malaysia (10.4% each) were the highest which could be due to under-reporting of cases. US was at 3% from 3.3% the month prior. Declining fatality rate remains a positive sign.
- Our Global Stringency Index that uses Oxford data, eased to 55 from 66 (100=highest stringency), and is down -20 points from its peak despite the rising number of new cases. EMs contributed the most, dropping to 55 from 79 and a peak of 81. US eased to 63 from 67 and Europe to 51 from 54, despite new cases rising the fastest in the region.
- **Medical Progress:** 8 vaccines are in Phase 3 trials despite the setback faced by AstraZeneca as one patient developed unanticipated effects. While its trial resumed in UK, the US Drug Administration is looking for more answers before allowing the company to resume trials in the US. On the other hand, countries continued to lock-in supplies for vaccines prior to their approval. EU's pre-order exceeds 1.1bn doses, US 800m, Japan 550m, UK 340m and Canada 190m.

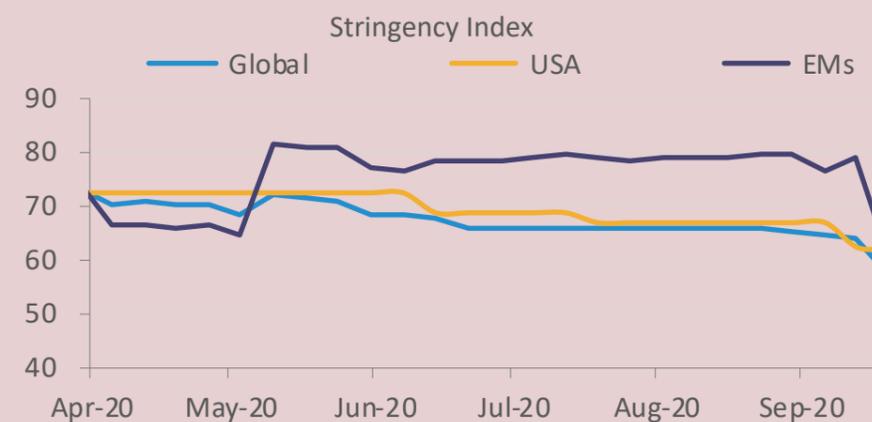
Rising new cases



Fatality rates continue to drop



Re-openings continued despite rising cases



Source: As of 30 Sep 2020. Source: Bloomberg/FactSet/PGAA; EMs=India, Brazil, Mexico, Chile, China, HKSAR, Malaysia, Singapore



LOOKING
AHEAD

Growth

The global economy continues to recover from the COVID-19 related shock. We expect the recovery process to advance in Q4 2020 but at a pace slower than in Q3 2020. Several sectors (travel, tourism, hoteling, commercial real estate) remain challenged as resurging COVID cases has slowed return-to-work strategies. Another critical component is expiring fiscal support measures, which will challenge growth recovery unless renewed in a timely manner, particularly in the US where political compulsions are coming in the way of the CARES 2 fiscal package.

In their base case, our US Economists expect US real GDP to grow 26.1%QoQ annualized in Q3 2020, slowing to 7.2% in Q4 2020 which implies a contraction of -4.1% in 2020 GDP. They expect it to grow 3.5% in 2021, implying a full recovery of the lost GDP sometime in H1 2022.

Inflation

The worst of the inflation decline is behind us. Our Leading Indicator predicts a gradual rise hereon, but nowhere near levels that can cause policy makers to turn hawkish. Structurally, inflation may get fresh legs if corporate consolidation leads to market share concentration (but that will happen only if weak hands are allowed to fail). Government policies that restrict international trade too can enable some pricing power to survivors.

Valuations

Anti-fragile assets like global safe-haven treasuries and gold remain expensive.

Equity valuations are rich. While extremely depressed safe-haven yields remain supportive of equities, we could be getting close to a phase where valuations normalize i.e. markets rise far less than the forthcoming earnings recovery.

Corporate spreads are in fair value zone, for both IG and HY. With help from monetary policy, they could tighten a tad but not a great deal. We don't expect a meaningful widening either.

On the Currency side of things, the \$ is still "expensive" based on purchasing power parity. A key condition for the US\$ to weaken is stronger growth recovery outside the US, which will move money into under-owned assets in EMs and ex-US developed markets. A risk-off move, however, will cause the greenback to get even more expensive.

Monetary policy & financial conditions

Central banks have delivered a lot but still seem "worried", which is good for asset markets. If anything, they will err on the side of caution i.e. overstimulating the economy, which will keep risk premiums compressed.

Market sentiment

At the end of August, markets were showing signs of euphoria which got corrected in September. Retail sentiment has become more subdued lately, and higher volatility implies the building froth in risk-parity and momentum strategies has ebbed. Markets are already pricing uncertainty due to a delay in announcement of US election results. Volatility implied by options on S&P 500 futures spikes up fairly steeply from 18% in early October to 27.5% in mid-December before tailing off to 23% in Dec'2023. Overall, the technical indicators look finely balanced.

Key market risks

A contested vote in US elections presents a serious risk for markets. A Democratic wave will almost certainly push up income taxes, though accompanied by a large infrastructure plan.

COVID-19 recurrence hurts return-to-work strategies and stymies the recovery.

Monetary/fiscal policy support is withdrawn too soon.

Prolonged unemployment payouts disincentivize workers, impacting potential labor supply.

Increased regulation of the technology sector.

Social stress caused by COVID-19 could manifest itself in bouts of unrest, dampening the recovery.



Global asset allocation

Investment Outlook from Principal

Asset Allocation: We dial up our overall risk preference from neutral Equities to a notch overweight, funded out of alternatives while fixed income stays at neutral. Reasons for our equity upgrade are continuing recovery in global growth and earnings expectations, extremely easy financial conditions with very low nominal and real rates, promise of another large US fiscal package irrespective of the election outcome, further progress on COVID-19 with increasing likelihood of a vaccine before the end of this year and reduced froth after the correction in September. We realize that valuations are stretched by traditional metrics like Price/Earnings ratio but the current macro-economic backdrop of recovering growth and easy financial conditions is likely to prolong the richness.

Within equities, our preference for the secular growth story of the last decade i.e. US, Large-Caps and Technology stays intact. To play the cyclical recovery, we are overweight Emerging markets which leaves Developed-ex-US as the funding source. Some of those markets remain structurally challenged and Brexit risks add to our discomfort on Europe. Japan is the one market within that block that we are relatively positive on (reasonable valuations and high sensitivity to global cyclical growth). Within Emerging markets, we still like Asia versus Latin America, with preference for China and South Korea, both of which give us exposures to a cyclical recovery as well as core technology-related exposure.

Within US fixed income, we are overweight risk through a preference for spread products (IG, HY and EM debt) relative to sovereigns. The investment grade credit story is simple – fair spread valuations, explicit support of central banks and abundant liquidity. They should outperform sovereigns without much incremental risk. HY and EM spreads are also in fair value zone and the additional carry they offer is handy in an environment of recovering growth but low yields.

Within Alternatives, we retain an underweight preference for risk reducers and return enhancers to fund real assets, given our view that inflation is bottoming out.



As of 30 September 2020. Alternatives asset classes include REITs, international real estate, MLPs, commodities, TIPS, multi-alternatives, and cash. Allocations across the investment outlook can be proportionately adjusted so magnitudes across categories do not have to net to neutral.

ASSET ALLOCATION	Investment Preference Less << Neutral >> More				
Equities	●	●	● →	●	●
Fixed Income	●	●	●	●	●
Alternatives	●	● ←	●	●	●
EQUITIES					
US	●	●	●	●	●
Developed ex-US	●	●	●	●	●
Emerging Markets	●	●	●	●	●
FIXED INCOME					
US	●	●	●	●	●
Government and Related	●	●	●	●	●
Corporates - IG and HY	●	●	●	●	●
Developed ex-US	●	●	●	●	●
Government and Related	●	●	●	●	●
Corporates - IG and HY	●	●	●	●	●
Emerging Markets	●	●	●	●	●
ALTERNATIVES					
Return Enhancing	●	●	●	●	●
Risk Reducing	●	●	●	●	●
Real Assets	●	●	●	●	●
Key: ● → ● indicates a change in preference from the previous quarter (light) to the current quarter (darker).					

BIOGRAPHIES



Todd Jablonski, CFA — Chief Investment Officer

Todd is the Chief Investment Officer at Principal Global Asset Allocation, a specialized investment boutique within Principal Global Investors that engages in the creation of asset allocation solutions. He is responsible for investment management, product development, and risk management across the boutique. Todd serves as a Co-Portfolio Manager on our target risk asset allocation suite as well as our active multi-asset high income ETF strategy. He joined Principal in 2010 and has been in the investment industry since 1998. Todd is a member of PGI's Operating Committee and helps to shape and execute the vision and strategic planning for the firm. Previously, he was an Executive Director and Portfolio Manager for UBS, and a Vice President and Portfolio Manager for Credit Suisse. He received an MBA from New York University with a concentration in quantitative finance and a bachelor's degree in economics from University of Virginia. Todd has earned the right to use the Chartered Financial Analyst designation.



Binay Chandgothia, CFA – Managing Director, Portfolio Manager and Head of Asia

Binay is a Hong-Kong based Managing Director, Portfolio Manager at Principal Global Asset Allocation, a specialized investment boutique within Principal Global Investors that engages in the creation of asset allocation solutions. His entire career spanning 27 years has been in portfolio management, encompassing asset allocation, fixed income, and equities. Previously, Binay served as Chief Investment Officer for Principal Global Investors (Hong Kong) and Principal Asset Management (Asia) where he was responsible for overseeing investments in the Hong Kong region. He joined the Principal Financial Group in 2000 in India and has been in the investment industry since 1993. While in India he was the Deputy Chief Investment Officer of Principal's Indian Mutual Fund operations before relocating to Hong Kong in 2005. Prior to that, he spent 7 years in various portfolio management roles with India's largest banking group, State Bank of India. Binay has a post-graduate diploma in business management, equivalent to an M.B.A., from Xavier Institute of Management and a bachelor's degree in commerce from St. Xavier's College. He holds a Financial Risk Manager certification from the Global Association of Risk Professionals and has earned the right to use the Chartered Financial Analyst designation.



Greg Tornga, CFA — Managing Director, Portfolio Manager

Greg is a Managing Director and Portfolio Manager at Principal Global Asset Allocation, an investment boutique within Principal Global Investors that engages in the creation of asset allocation solutions. He is responsible for co-managing our target risk asset allocation suite, our first active multi-asset high income ETF, our Global Diversified Income UCITS strategy, and our target risk model portfolios, including a digital advisor solution. He joined Principal in 2011 and has been in the investment industry since 2002. Greg has extensive expertise in the fixed income market and was previously Head of Fixed Income and a Portfolio Manager at Edge Asset Management, another investment boutique within Principal Global Investors. Prior to Principal, Greg was a Senior Vice President for Payden and Rygel Investment Management in Los Angeles, where he served as the Head of Investment Grade Credit Strategy. His background also includes corporate finance roles in the Technology and Communication industry with Texas Instruments and Covad Communications. He received an M.B.A. from the Argyros School of Business and Economics at Chapman University and a bachelor's degree from the University of Michigan. Greg has earned the right to use the Chartered Financial Analyst designation.

IMPORTANT INFORMATION

From RAKBANK

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