DBS Live more, Bank less

CIO Insights 1Q20

New Wine, New Skin

FOMO and TINA to support equities
The "fear of missing out" on a continued bull market and that "there is no alternative" given ultra-low bond yields are tailwinds for equities.

New world, New game
With a third of equity market capitalisation under siege from disruption, seek winners through a Barbell Strategy. Overweight income-generating assets and beneficiaries of the new world.

Capture income from dividend stocks and bonds
Focus on Singapore REITs, China banks, Europe oil majors, and Europe bank AT1s. We continue to like BBB/BB-rated bonds with 4-5 year duration.

Grab growth in secular trends
Seek opportunities in companies that capitalise on digitalisation, an ageing population, and the rise of China's middle class.

Source: Unsplash


Source: Unsplash

Contents

Note: Unless otherwise stated, data is as of end November 2019


Source: Unsplash

Foreword

Ladies and gentlemen,

Led by our Chief Investment Office and a team of over 100 research analysts, I am pleased to bring you 1Q2020's CIO Insights, your all-in-one investment guide as you ride the wave of our changing world. This quarterly report covers our latest asset allocation models, as well as our top investment calls across different asset classes.

Thanks to your support, DBS's wealth management business now makes up 20% of the Group's total income, and I am excited at what lies ahead for us in Asia.

Asia is on the cusp of an unprecedented intergenerational transfer of wealth, where USD2.7 trillion is expected to change hands in the next decade or two. Succession planning is a key area of interest. Sustainability is also a major and growing theme among Asian investors, and a priority for us at DBS. Amid these trends, we look forward to partnering with you as a "one-stop" provider for your personal and corporate business needs.

One area we are investing in is our cognitive banking capabilities – leveraging technology and data to tailor products and services to meet clients' wealth management goals. As digitalisation redefines the investment landscape, our vision is to employ the likes of artificial intelligence, analytics, and automation to be able to engage you at the right time, with the right insights and right solution.

As a part of this journey, we rethought and redesigned the DBS iWealth app so that you can have total control and convenient access to your banking and wealth management accounts, in the simplest, safest way possible. With this, you can see your portfolio, find what you need, monitor market movements, and invest anytime, anywhere. I encourage you to download the app and start using it, if you have not done so.

But even as we embrace technology, we hold close to us the importance of the human touch. Our promise is to continue to work hand-in-hand with other business units to enhance the overall customer experience and meet our clients' finance needs and more.

We look forward to serving you in this new technology-driven era of banking. Thank you for being on this transformational journey with us!

Sim S. Lim
Group Head
Consumer Banking &
Wealth Management

Executive Summary

Dear valued clients,

Last year, global equities gained 23%, despite being confronted with recession fears from the global trade war.

We also saw the 11th year of the US bull market, the longest on record. This has been the "most unloved" bull as persistent investor scepticism has led to portfolios staying under-invested. Should the market stay resilient, portfolios that are sitting on excess cash levels may have little choice but to get back in.

This brings the "fear of missing out", or FOMO in short, into play. At the same time, given ultra-low rates and bond yields today, "there is no alternative" – TINA in short – to equities as an asset class.

Barring a full-blown trade war – which is not our base-case scenario – both FOMO and TINA will support equities.

But we must also be cognisant the world is changing. In ancient times, new wine would never be stored in old wineskins as fermentation would burst the skin. Therefore, we need to implement a new strategy today to capture the opportunities brought about by this changing world.

How then should investors position their portfolios in 2020?

We continue to advocate the Barbell strategy that overweights income-generating assets, as well as equities that are beneficiaries of a digital economy, an ageing population, and a growing China middle class.

This strategy has served us well. In 2019, Singapore REITs rallied 22% while US Technology registered a whopping 45% return.

In 1Q20's CIO Insights, we also introduce new themes – e-Sports and Semiconductors – that fit well in the Barbell portfolio.

Do enjoy the read, and let us toast to a fruitful year of investing in 2020!

Hou Wey Fook
Chief Investment Officer


Source: Unsplash

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Asset Allocation | 1Q20

Rational optimism

Macro Outlook

Monetary Policy
2020 to mark a pause in monetary easing across the G-3 economies amid signs of pushback against overly flat yield curves and ultra-low rates.

Economic Growth
2020 will be a tug-of-war between resilient domestic consumption and cautious investment growth in the US. Eurozone growth to stay sub-par.

Geopolitics
The US-China trade war will remain an ongoing concern in 2020. The Brexit situation in UK and the Hong Kong unrest are the other geopolitical risk factors.

Inflation
Inflation is showing signs of bottoming out. Prevailing food and base metals trends suggest the low likelihood of disinflation.

Fiscal Policy
The policy mix will shift towards fiscal spending as monetary easing reaches its limits. All eyes will be on Germany.

Market Outlook

Equities
Equities remain an uncrowded trade and rising bond yields augur well for its trajectory. Stay Overweight on US given its earnings superiority.

Currencies
$ € ¥

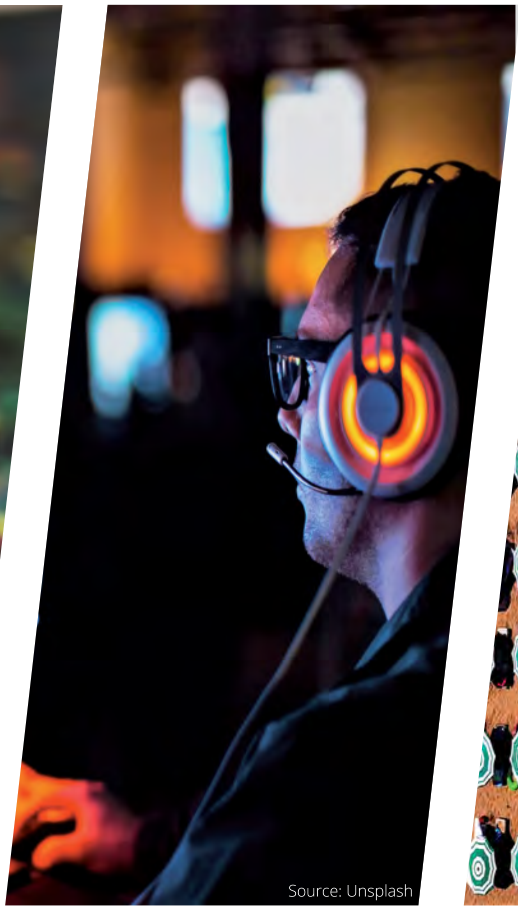
DXY uptrend to stay intact amid monetary policy divergence. Concerted policy easing needed to weaken JPY given its safe-haven status.

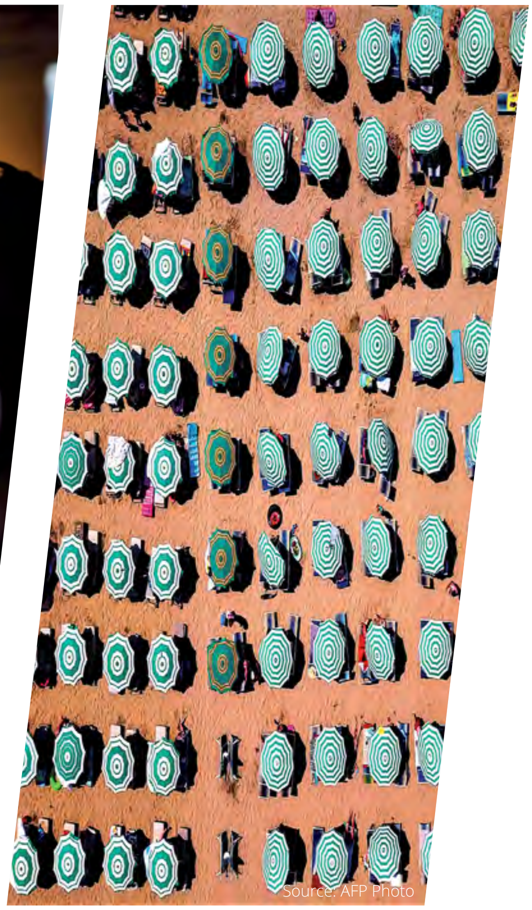
Rates
Modest bear steepening across G-3 yield curves. Short-term rates to remain stable while improvement in growth dynamics to drive long-term rates moderately higher.

Credit
BBB/BB-rated credits offer best value. Overweight EM bonds on further yield spread compression.

Thematics
Digitalisation will drive demand for semiconductors. e-Sports to see exponential growth given the rise of live streaming.


Source: Unsplash


Source: Unsplash


Source: AFP Photo

New theme: Semiconductors

Semiconductors have massively changed our world. An effective angle to ride the digitalisation wave is to invest in upstream semiconductor ecosystems. As the backbone of digitalisation, upstream technology's future is bright, driven by the rising use of AI, IOT, and 5G.

New theme: e-Sports

e-Sports, short for "electronic sports", refers to multiplayer video games played competitively by professional gamers. It has seen exponential growth in popularity with the onslaught of live streaming and the game is now widely perceived as a professional sport. e-Sports is on track to overtake major traditional sports in the coming years.

Ongoing theme: Bond proxies

As the trend of ever-lowering bond yields continues, other higher-yielding asset classes have risen to be the next "bond proxies". Given that central banks are unlikely to hike rates in the near future, this premium yield obtained from dividend stocks is a strong proposition for this asset class to be the next "bond proxy". Within our Barbell Strategy, Singapore REITs, China large banks, Europe oil majors, and Europe bank AT1s are favoured as "bond proxies".

Asset Allocation

Hou Wey Fook, CFA | Chief Investment Officer
Dylan Cheang | Strategist

In our inaugural issue of CIO Insights in 1Q18, we said "The Bull Ain't Done". We said the environment of stable growth, weak inflation, and sustained corporate earnings momentum will underpin further upside for risk assets. We also said US Technology stocks offer opportunities. True to expectations, the S&P 500 Index has rallied another c.16% since then while US Technology stocks also notched another c.37% in gains.

The resilience of the S&P 500 in such turbulent times is remarkable as the past two years have been punctuated by escalating US-China trade tensions and rising concerns over recession. As the 11th year anniversary of the US equity bull market beckons, we conduct a "sanity check" in our latest issue of CIO Insights to ascertain if an impending market correction is on the cards.

For this purpose, we constructed a CIO "Bull-Bear" checklist covering six key categories:

1) Macro Conditions
2) Corporate Fundamentals
3) Equity Valuation
4) Credit Fundamentals
5) Sentiments & Flows
6) Monetary & Financial Conditions

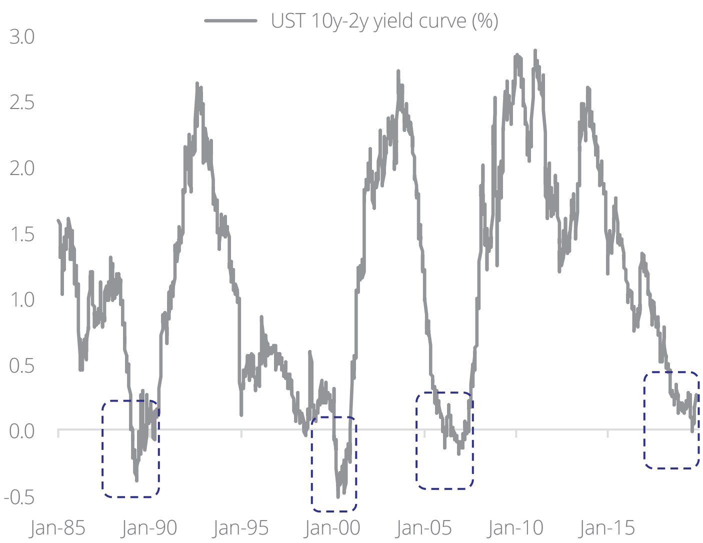
In our analysis, we compare prevailing market conditions with those of previous bear markets, namely the dot-com bubble back in 2000 and the subprime crisis in 2008. A rating is assigned to each sub-category, with "green" denoting "positive development", "yellow" denoting "neutral development", and "red" denoting "negative development".

It is clear from Table 1 that the typical setup of conditions commonly associated with impending bear markets is not currently evident. Out of 17 sub-categories, current conditions notched 12 "green" boxes and only two "red" boxes. In contrast, there were six "red" boxes during both 2000 and 2007 periods, while the number of "green" boxes was lower at six and eight, respectively.

Figure 1: Wall of Worries I – Recurring trade war uncertainties

Source: Bloomberg, DBS

Figure 2: Wall of Worries II – Recession fears



Source: Bloomberg, DBS

Table 1: CIO "Bull-Bear" checklist

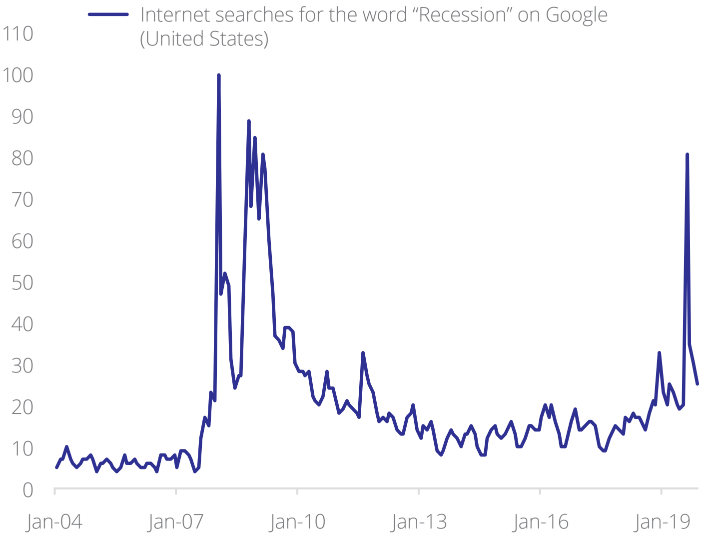
	Feb-2000	Sep-2007	Present
Macro Conditions			
Composite PMI	55.8	53.8	48.3
Unemployment rate	4.1%	4.7%	3.6%
Change in oil price (vs 6-mth prior)	38%	24%	-15%
Corporate Fundamentals			
Actual earnings growth (6-mth average)	12%	12%	8%
Forward earnings growth (6-mth average)	14%	9%	3%
Operating margins	13%	13%	13%
Return on equity	18%	16%	15%
Equity Valuation			
Forward P/E (x)	23.6	16.2	18.5
Equity risk premium	-	3.5%	5.9%
Dividend yield	1.2%	1.8%	1.9%
Credit Valuation & Fundamentals			
US average spread (bps)	122	145	110
US HY corporate spread (bps)	497	405	392
Net debt to EBITDA	3.9	4.3	1.9
Sentiments & Flows			
Upside to analysts' target price	13.5%	4.5%	-2.8%
Fund flows (USDb, trailing 12 months)	-	-41.4	-165.1
Monetary & Financial Conditions			
Change in policy rates (trailing 6 months)	+50 bps	-50 bps	-75 bps
Change in financial conditions index (vs 6-mth prior)	+0.5	-2.2	-0.7

Source: DBS

Macro Conditions: Recession fears have spiked after the recent yield curve inversion. In fact, Internet searches for the word "recession" have reached levels last seen during the subprime crisis (see Figure 3). However, amid prevailing pessimism, sentiment need not necessarily reflect reality with our analysis of key economic indicators painting a different picture.

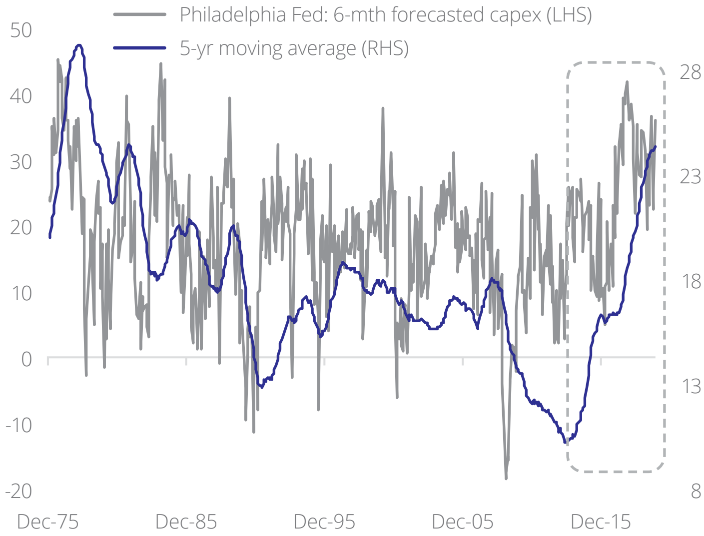
At 48.3, the composite PMI today is substantially lower than its levels back in 2000 and 2007. But this is partly attributed to the US-China trade war which is weighing on economic activities. Corporates' capex plans in the US, meanwhile, remain firm and this is evident from both the Philadelphia Fed capex forecast as well as the NFIB small business capex plans data (Figure 4 and Figure 5). Unemployment rate remains at a low of 3.6% (Figure 6) and this augurs well for US domestic consumption.

Figure 3: Google searches for the word "recession" have spiked



Source: Google Trends

Figure 4: US corporate capex plans remain robust despite trade uncertainties



Source: Bloomberg, DBS

Corporate Fundamentals: Current earnings momentum is not as robust as 2000 and 2007. Again, we attribute this bout of weakness to the US-China trade war. A reversal of the trade situation will also bring about an improvement in earnings momentum. The operating margin for US corporates, meanwhile, remains similar to previous periods (at 13%) while the ROE is also broadly similar in the range of 15-18%.

Equity Valuation: We see no signs of significant froth in terms of valuations. On forward P/E basis, the current level of 18.5x is somewhere between the levels seen in 2000 (23.6x) and 2007 (16.2x). On equity risk premium, the current level of 5.9% is substantially higher than 2007's level of 3.5%. The prevailing dividend yield of 1.9% is also higher than previous periods.

Credit Valuation & Fundamentals: Corporate credit spreads are widely seen as predictors of future economic conditions. A thin credit spread signals strong confidence on the business outlook while a wide credit spread signals otherwise.

Currently, the spreads for both US corporates and US high yield (at 110 bps and 392 bps, respectively) are lower than past episodes and this suggests that bond investors are sanguine on the medium-term macroeconomic outlook. Credit fundamentals have similarly improved as net debt-to-EBITDA stands at the current level of 1.9 (vs 3.9 in 2000 and 4.3 in 2007).

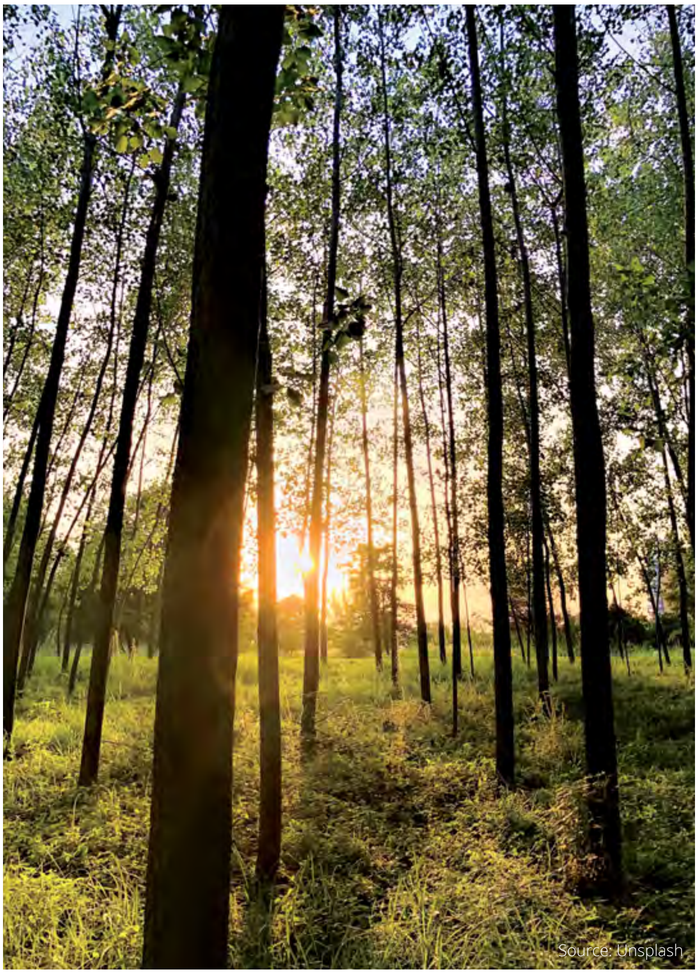
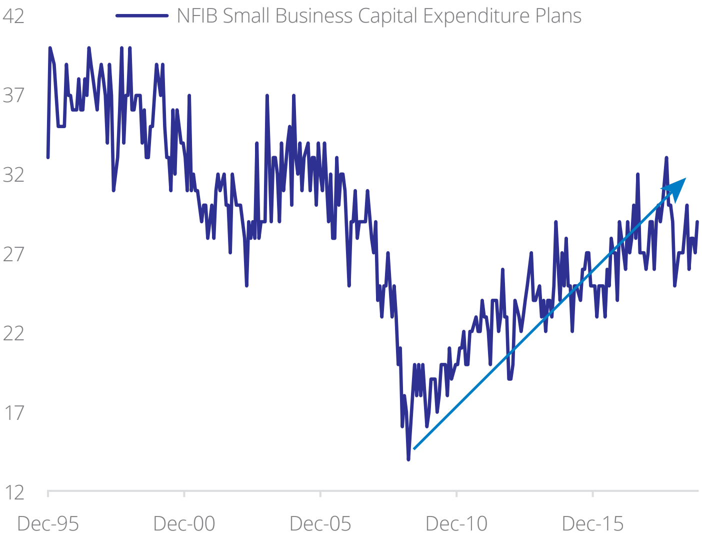
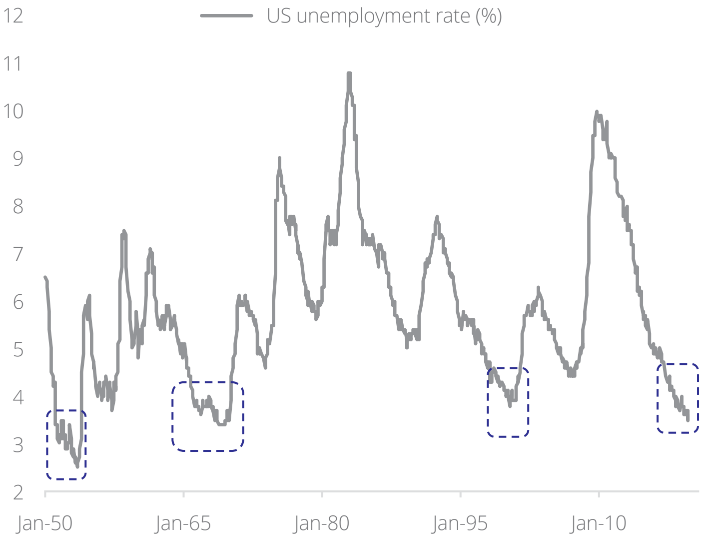


Figure 5: US corporate capex plans on an uptrend



Source: Bloomberg, DBS

Figure 6: US unemployment near historical lows

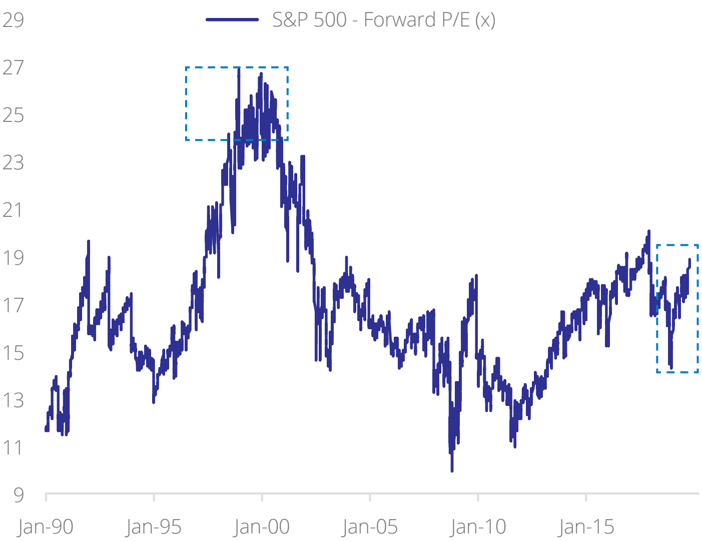


Source: Bloomberg, DBS

Sentiments & Flows: To gauge the prevailing level of investors' "exuberance" in the market, we looked at the amount of upside implied in the forecast for the S&P 500 Index. Based on current forecast, the street is expecting the index to correct c.2.8% as opposed to gaining 13.5%, as was the case in 2000, and 4.5% back in 2007 (Figure 9). While the current forecast suggests the absence of exuberance, recent fund flows data from EPFR Global also subscribe to the same view. A total of USD165b has exited the US equity market in the past 12 months – 299% higher than 2007's level.

Monetary & Financial Conditions: Unlike the case back in 2000 that saw the Fed hiking its policy rates, the reverse has happened this time around – the US central bank cut its policy rate by 75 bps. That said, financials conditions have tightened moderately in recent months.

Figure 7: Current US equity valuation is markedly lower than 2007's

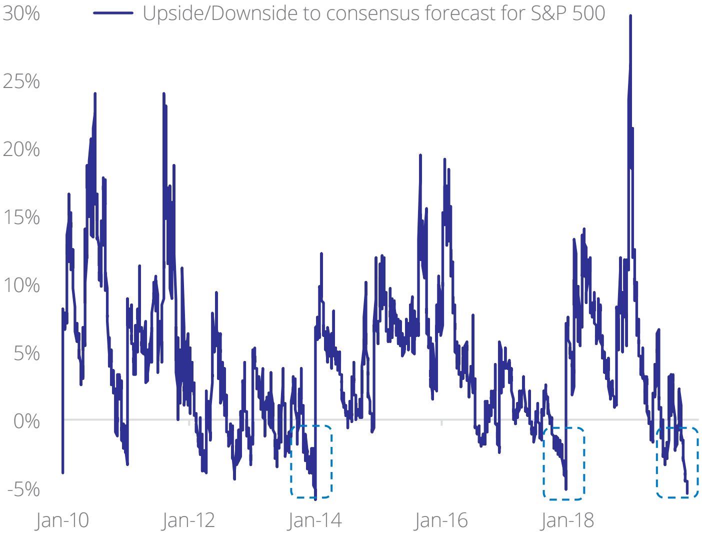


Source: Bloomberg, DBS

Figure 8: Prevailing corporate bond spreads suggest investors remain sanguine on the macro outlook

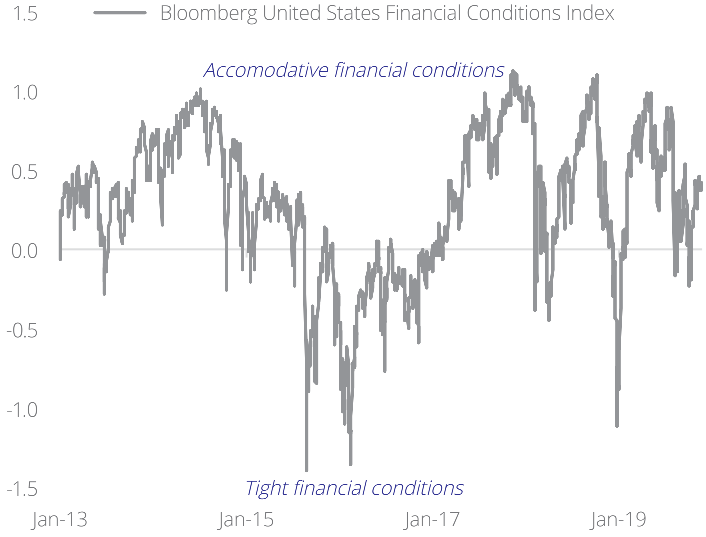
Source: Bloomberg, DBS

Figure 9: Pessimism on the outlook of S&P 500 among professional forecasters is near historical high



Source: Bloomberg, DBS

Figure 10: US financial conditions have tightened moderately



Source: Bloomberg, DBS

Global risk assets: Following the path of least resistance

The mood swings in global financial markets have been in overdrive since the US embarked on a trade war with China. Distortions in the pricing of risk assets as a result of trade uncertainties is well manifested in the UST 10-year yield. Indeed, back in late-2018, the market narrative was focused on whether the 10-year yield will breach 3.5% and beyond – a view which did not resonate with us given sub-par wages and subdued inflation in the US. But sentiment swung to the other extreme in 2019 as the 10-year yield dipped to levels below 1.5% – historical lows last seen in 2012 and 2016.

One often-cited reason for this downshift is rising recession risks, with the recent UST yield curve inversion (albeit briefly) the epitome of this fear. However, we have maintained that the US is not on the cusp of a recession given robust domestic consumption. Instead, we viewed the plunge in UST yields as a reflection of lingering uncertainties on the trade front – the recent rebound in UST yields validated this point. The 10-year yield has surged from 1.46% in early-September to the current level of c.1.82% despite subdued incoming macro data. Instead, bond investors are gradually pricing in an easing of US-China trade tensions.

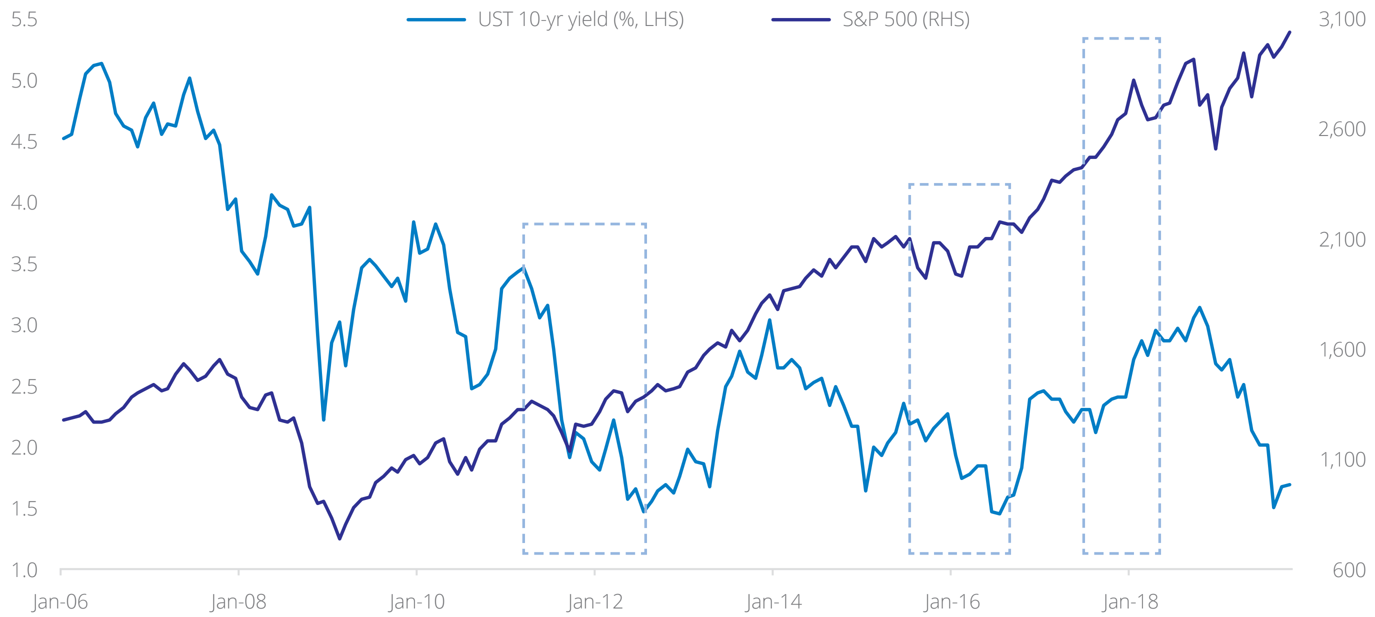
So, what's next? Rising yields augur well for the outlook of S&P 500. As Figure 11 shows, the S&P 500 has historically displayed a close correlation with the UST 10-year yield and the key observations are:

- A sharp pullback in UST yields is associated with range-bound US equities (albeit on the upside).
- A troughing and subsequent rebound of the UST 10-year yield is associated with a robust rally in the subsequent months.

<u>April 2011 to July 2012</u>: The UST 10-year yield fell 200 bps to 1.4679% during this period and coincided with a flat US equity market. After the UST 10-year yield troughed in July 2012, it rebounded 156 bps to peak at 3.0282% and this up-move also corresponded with a 34.0% rally in the S&P 500.

<u>July 2015 to July 2016</u>: The UST 10-year yield fell 90 bps to 1.4531% during the period where US equities saw an up-move of 5.4%. After hitting the trough in July 2016, the UST 10-year yield rebounded 169 bps to peak in October 2018 and this coincided with a 24.8% rally seen in the US equity market.

Figure 11: Rebounding UST yields are historically associated with gains in the S&P 500



Source: Bloomberg, DBS

November 2018 to August 2019: In the latest bout of risk aversion, the UST 10-year yield fell 165 bps from a peak of 3.1435% in October 2018 to trough at 1.4961% in August 2019. The S&P 500 Index similarly range-traded and gained by a slight 7.9%.

On a consolidated basis, Table 2 shows that the UST 10-year yield corrected 152 bps on average during periods of significant bond yield downtrend and this coincided with slight gains of the S&P 500 Index averaging 6.7%. But it was during periods of significant bond yield uptrend that the most substantial rallies for US equities were triggered. During the 2012-13 and 2016 -18 periods, the UST 10-year yield surged an average of 163 bps and this coincided with gains of 29.4% for the S&P 500 Index.

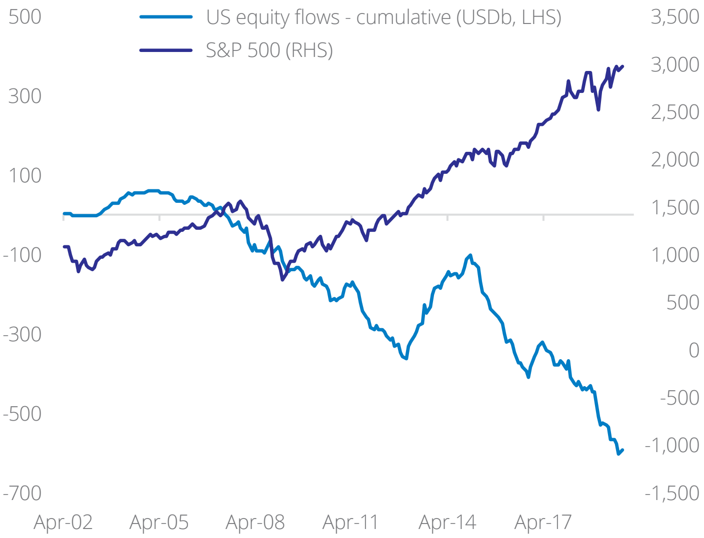
These data tie in with our view that rising yields are positive for the equity markets as the former connotes higher investor confidence in the economy.

Table 2: The Performance of S&P 500 during periods of falling and rising yields

Downtrend in bond yields	Change in UST 10Y yield	Change in S&P 500 Index	Subsequent uptrend in bond yields	Change in UST 10Y yield	Change in S&P 500 Index
April 2011 to July 2012	-200 bps	+4.0%	August 2012 to December 2013	+156 bps	+34.0%
July 2015 to July 2016	-90 bps	+5.4%	August 2016 to October 2018	+169 bps	+24.8%
November 2018 to August 2019	-165 bps	+7.9%	-	-	-
Average	**-152 bps**	**+6.7%**	**Average**	**+163 bps**	**+29.4%**

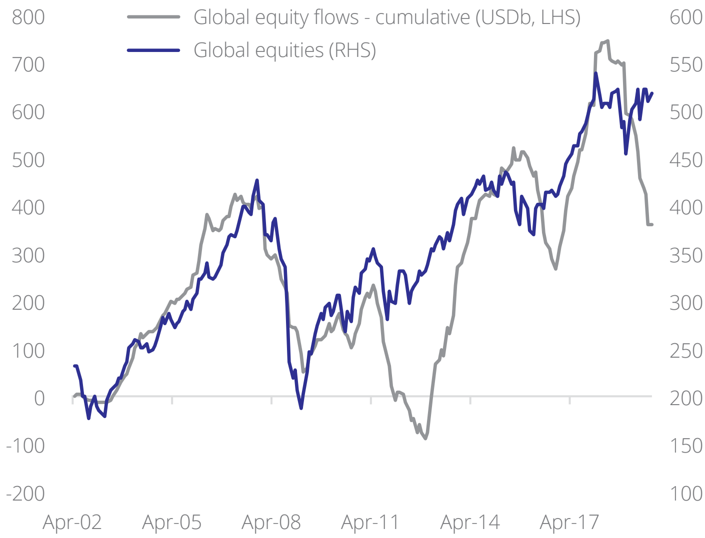
Source: DBS

Figure 12: Participation rate in the US equity rally has been low....



Source: EPFR Global, Bloomberg, DBS

Figure 13: ....despite generally robust interest in global equities



Source: EPFR Global, Bloomberg, DBS

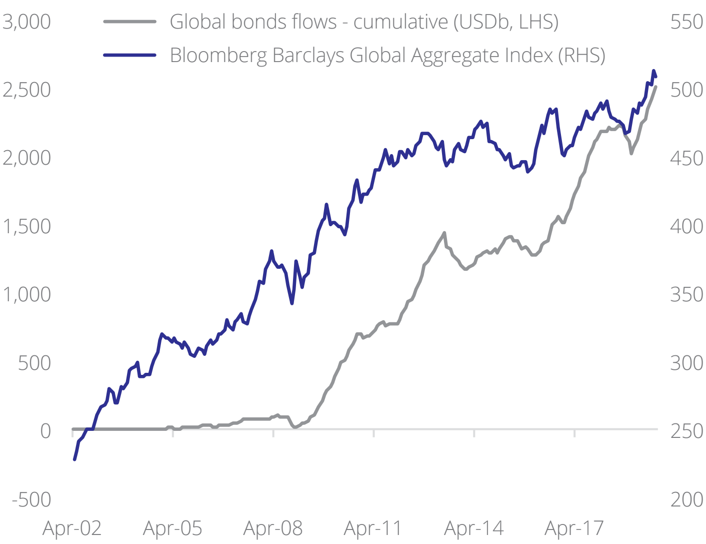
Food for Thought: How can this be the end of the US equity rally when participation rate is so low? A common narrative among investors is that the global equity rally – particularly that of the US market – is nearing its final stages. And a commonly cited reason is that the rally has crossed the proverbial "seven-year mark" and therefore, a correction is forthcoming. But our analysis of long-term fund flows data suggests otherwise.

To put things in perspective: Since April 2002, the S&P 500 Index has rallied c.159%. However, investors have not participated well in this rally. EPFR Global data show that over the same period, a total of USD599b has cumulatively exited from the US market (Figure 12). In contrast, global equities have rallied 116% and this ties in nicely with cumulative inflows of USD365b into the asset class.

The same can be said for global bonds. The Bloomberg Barclays Global Aggregate Index has rallied 129% since 2002 and this rally coincides with the huge inflows of USD2.5t into the segment (Figure 14).

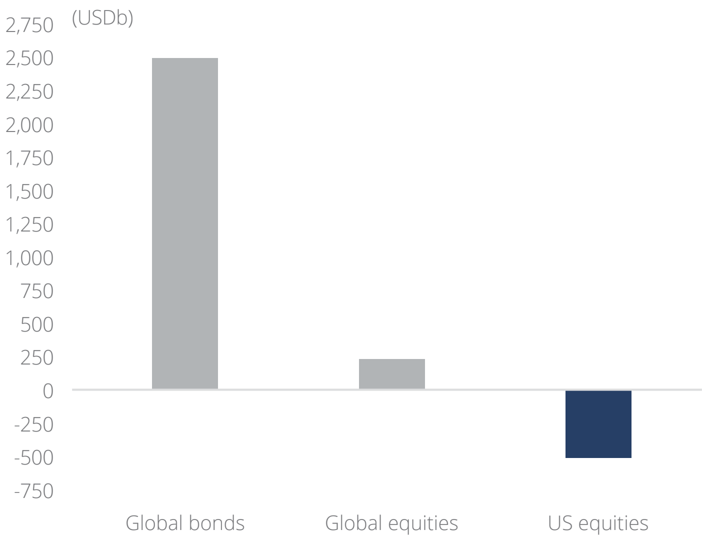
The actual "crowded trade": It is in bonds, not equities. From the above data, it is evident that the Subprime Crisis of 2008 changed investors' psyche and the dynamics of investment flows. Our observations are:

Figure 14: The rally in global bonds has been backed by strong funds inflow



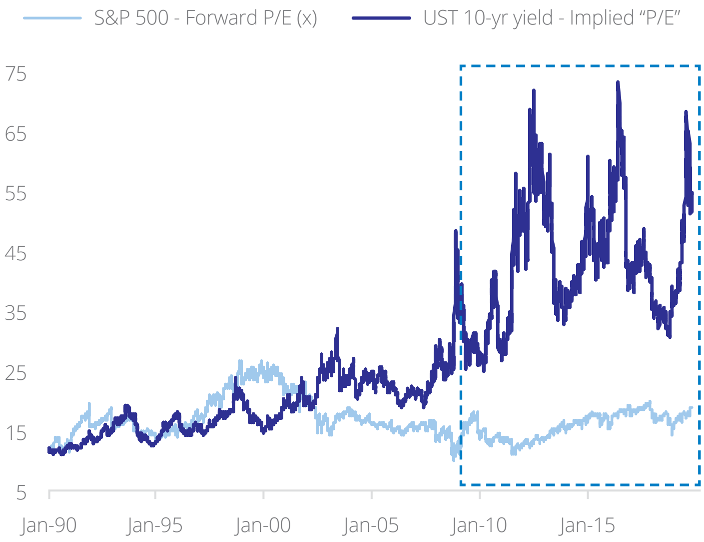
Source: EPFR Global, DBS

Figure 15: The Loved and the Unloved: US equities saw net outflows despite broad inflows into global bonds and equities



Source: EPFR Global, DBS

Figure 16: Bonds are trading at a huge valuation premium to equities



Source: Bloomberg, DBS

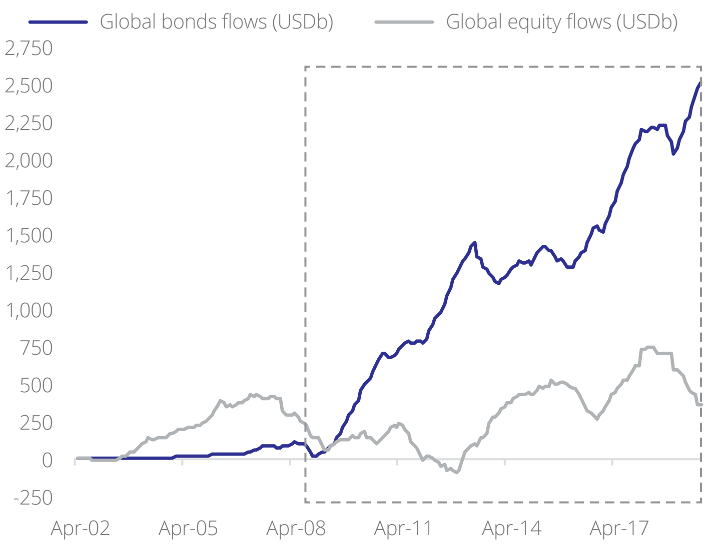
- There is a clear flight to safety after the crisis as cumulative inflows to global bonds superseded global equities by 10 times since 2009 (USD2.5t vs USD221b). This suggests that the actual "crowded trade" lies in the global bonds space, not equities.

- Within equities, there is a clear preference for non-US markets after the crisis. While equities as an asset class registered cumulative net inflows, a total of USD516b exited from the US during the post-crisis period (Figure 15).

Bonds are significantly more expensive than equities. Another argument why equities are significantly more attractive than bonds centres around the valuation premium. For comparison purpose, we computed an "implied P/E" for the UST 10-year yield and compared that with the S&P 500 Index.

As Figure 16 shows, bonds had previously traded at an average discount of 11% to equities from 1990-2001. But from 2002 till August 2008, bonds traded at an average premium of 44% to equities. The ensuing subprime crisis and the eventual launch of QE measures by the US Federal Reserve changed the investment landscape drastically. Since then, the average bond/equity P/E premium has surged to 175%, coinciding with the robust flow of funds into global bonds as compared to equities (Figure 17).

Figure 17: The flight to safety since the subprime crisis has driven huge funds inflow into bonds



Source: EPFR Global, DBS

Broadening equity rally: a healthy development. US "value" stocks have been underperforming "growth" stocks since early-2007. This is partly due to the disruption of traditional industries, which resulted in portfolio allocators cutting back on their "value" exposure (such as Energy and Financials) in favour of "growth". However, this trade has recently taken a breather. Since late-August, "value" has started to outperform "growth" as a result of robust performance in the Financials and Industrials sectors. This, in our view, is a sign that the equity rally is broadening.

Figure 18: US "value" stocks have been underperforming "growth" since early-2007

Source: Bloomberg, DBS

Figure 19: But there is a reversal since late-August and this signals a broadening of the equity rally

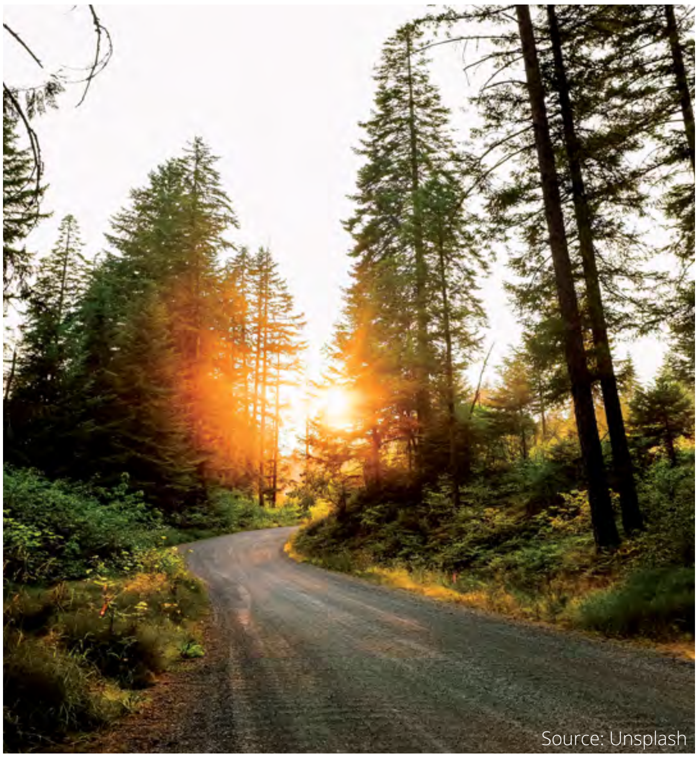
Source: Bloomberg, DBS

1Q20 Asset Allocation: Equities – still the only game in town

Table 3: 1Q20 CIO Asset Allocation (CAA) Framework

Categories	Indicators	Score Range	Equities				Bonds		
			US	Europe	Japan	AxJ	DM Govt	DM Corp	EM Bonds
Fundamentals	PMI	-1 to +1	0	-1	1	1	0	0	0
	Economic surprise	-1 to +1	0	0	0	0	0	0	0
	Inflation	-1 to +1	0	0	0	-1	0	0	0
	Monetary policies	-1 to +1	0	0	0	0	0	0	0
	Forecasted EPS growth	-2 to +2	1	-1	0	0	-	0	0
	Earnings surprise	-2 to +2	1	-1	0	0	-	0	0
Valuation	Forward P/E	-2 to +2	0	0	0	1	-	-	-
	P/B vs ROE	-2 to +2	0	0	-1	0	-	-	-
	Earnings yield - 10Y yield	-2 to +2	1	1	1	2	0	-	-
	Free cashflow yield	-2 to +2	2	-1	0	1	-	-	-
	Credit spread	-2 to +2	-	-	-	-	-	0	0
Momentum	Fund flows	-2 to +2	-1	-1	1	1	0	1	0
	Volatility	-1 to +1	0	0	0	0	0	-	-
	Catalysts	-2 to +2	-1	-1	0	-2	0	-1	0
Raw Score			3	-5	2	3	0	0	0
Adjusted Score*			0.14	-0.24	0.10	0.14	0.00	0.00	0.00

*Note: The "Adjusted Score" is calculated using the "Raw Score" divided by the maximum attainable score for each category. Source: DBS



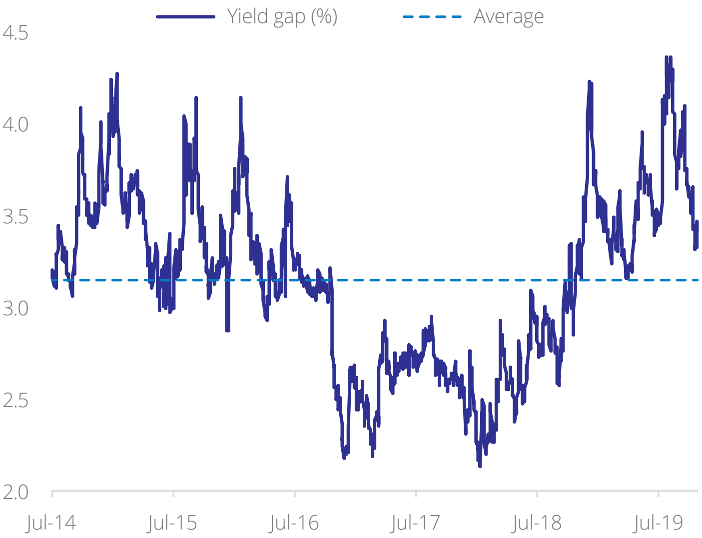
Cross Assets: Risk-reward for bonds remains unattractive. From a cross-assets perspective, we maintain a preference for equities over bonds. In our CAA Framework, equities garnered a higher composite score of 0.14, as compared to zero for bonds.

Fundamentals: The downtrend in global macro momentum has troughed and a rebound is on the cards as the US-China trade tension takes a breather. The PMI outlook for Japan and Asia ex-Japan has improved while the US corporate earnings outlook remains more positive than Europe.

Valuation: On a cross-asset basis, the gap between earnings yields and Treasury yields has narrowed markedly given the recent rebound in interest rate. But that said, the current yield gap of c.3.3% is still slightly above the long-term average (Figure 20). No change in our preference for equities over bonds.

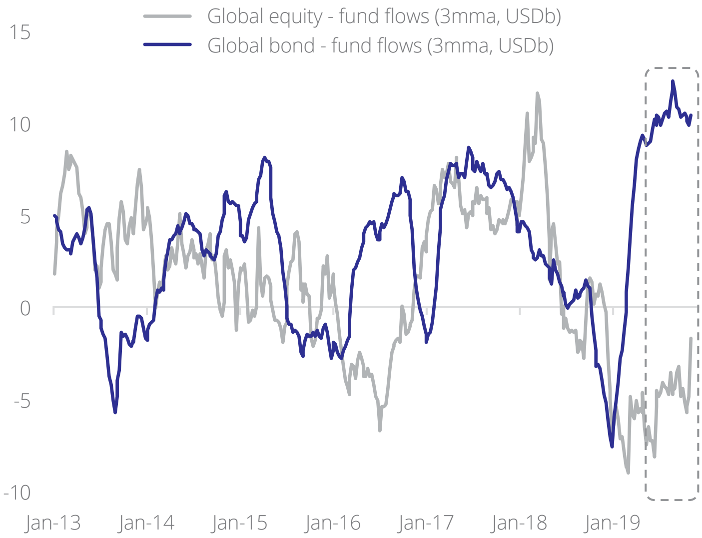
Momentum: On cross-asset flows, USD215b exited from global equities funds during the January-October period this year while USD408b entered bonds. This is in stark contrast to the same

Figure 20: Bond-equity yield gap has narrowed, but stays above long-term average



Source: Bloomberg, DBS

Figure 21: 2019 has been marked by sharp funds rotation from equity to bonds

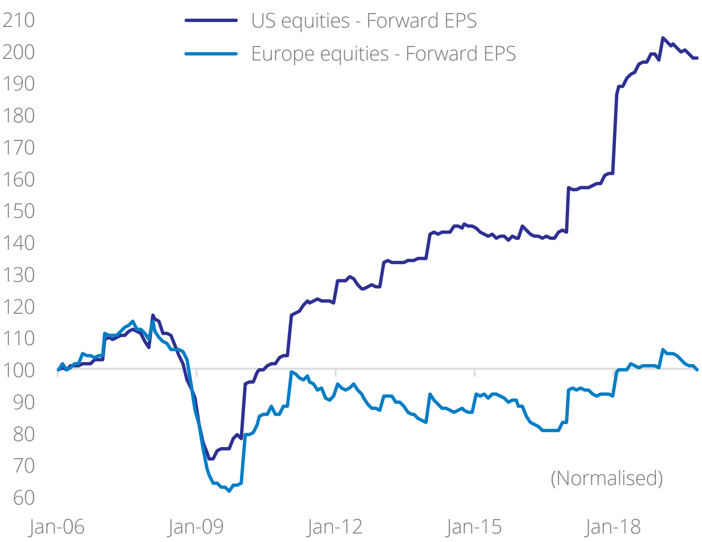


Source: EPFR Global, DBS

period in 2018, which saw USD114b entering the equity space while only USD24b went to bonds. The sharp outflows in equities suggests that investors remain cautious on the outlook of risk assets on the back of lingering geopolitical uncertainties.

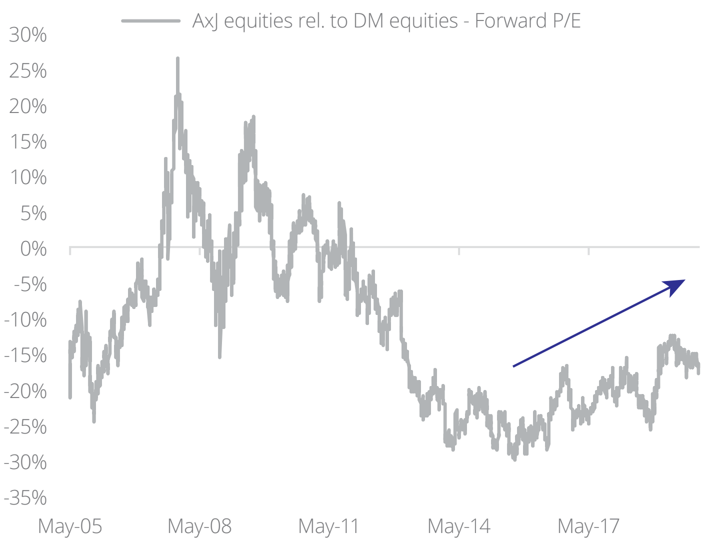
Equities: US and Asia ex-Japan remain our preferred markets in 2020. In DM, our preference for US equities over Europe stays unchanged as the former demonstrates relatively more attractive earnings momentum and free cashflow. In the recent reporting season, US corporates' "earnings surprise", standing at c.79%,

Figure 22: US earnings has undergone sharp spike since 2018



Source: Bloomberg, DBS

Figure 23: The discount gap between Asia ex-Japan and DM is narrowing



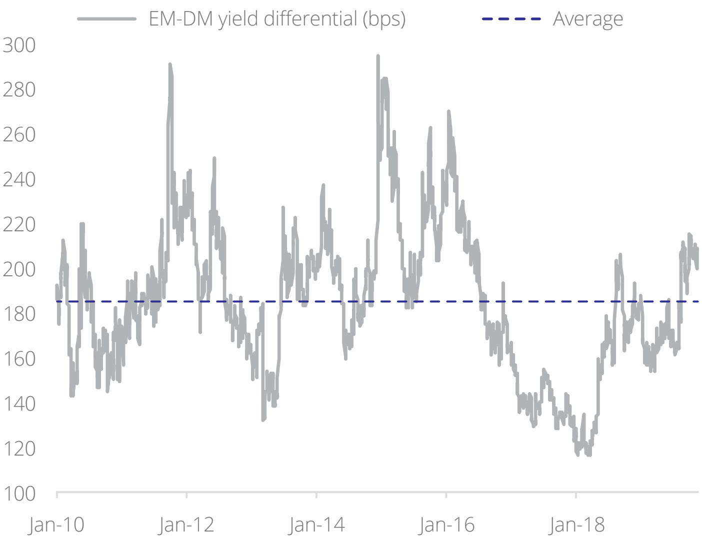
Source: Bloomberg, DBS

Figure 24: The up-move in UST yields will be capped as a result of lacklustre inflation expectations

Source: Bloomberg, DBS

was marginally higher than that of Europe's. Based on consensus forecast, US equities are expected to register c.12% EBITDA growth in 2020 (vs 10% for Europe). We expect the US's earnings superiority over Europe to persist given heavy concentration of technology-related companies in its index.

Figure 25: EM-DM yield differential is above long-term average

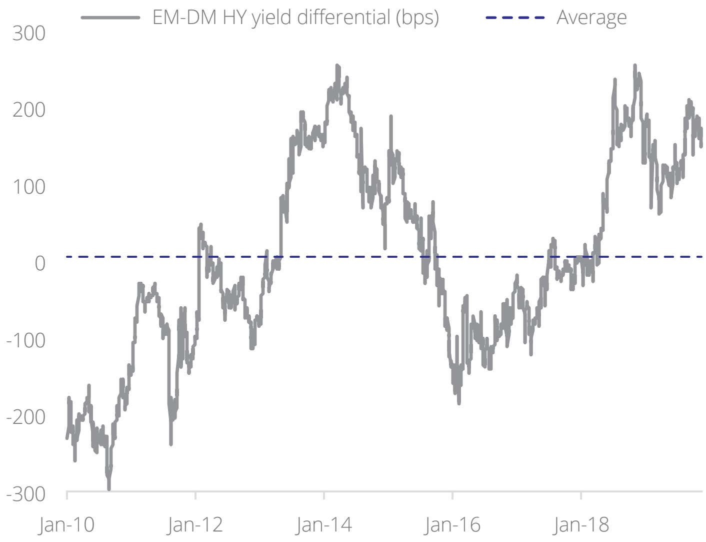


Source: Bloomberg, DBS

Asia ex-Japan, meanwhile, remains a value-play relative to the developed world. And indeed, the region trades at a c.18% discount to DM and the gap has been narrowing since 2016. We expect this to persist and the catalysts include:

1. Momentum in North Asia technology companies as the demand for chipsets grows, fuelled by developments in 5G, AI, and cloud computing industries.
2. Domestic consumption in China remains robust and this is manifested by the strong momentum in domestic Consumer Discretionary and Consumer Staples shares.

Figure 26: The EM-DM HY yield differential is also markedly above the long-term average

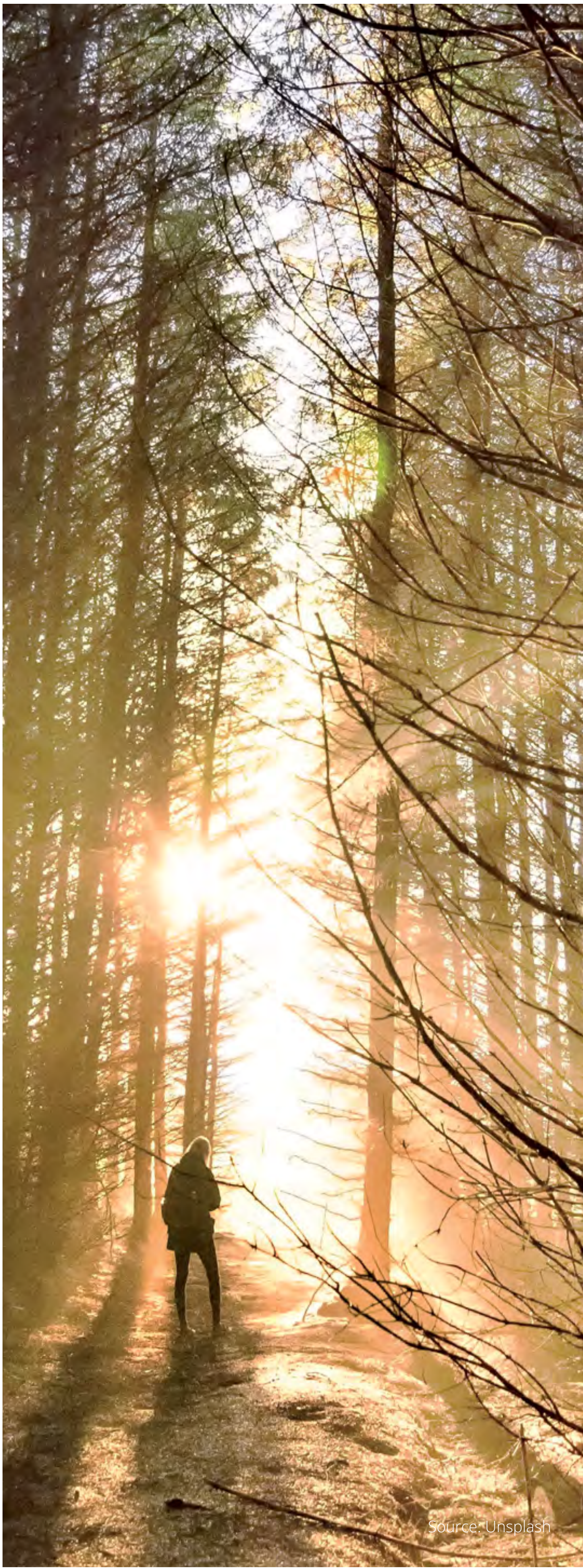


Source: Bloomberg, DBS

Bonds: Range-trading UST yields; Opportunities in selective credit space. Since 2012, the UST 10-year yield has been ranging broadly between 1.5% to 3.0%. Based on past trends, it might be tempting to presume that rates will eventually trend towards the 3% mark in the current rebound. But we think otherwise. The lingering US-China trade tensions, coupled with weak US inflationary expectations, will keep UST yields at bay (Figure 24). In fact, based on our forecast, the 10-year UST yield will be capped at 2.2% for 2020.

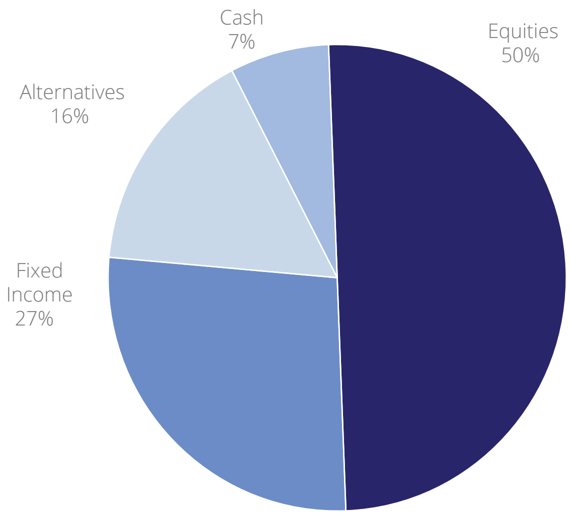
In the credit space, EM bonds offer relative value over DM. Using the Bloomberg Barclays US Aggregate Corporate Bond Index as a proxy for DM, the EM-DM yield differential currently stands at c.208 bps and this is modestly above the long-term average (Figure 25). The yield divergence is even higher in the HY segment (Figure 26) as a result of sharp spread widening for EM HY bonds in the first 10 months of 2019. For the coming year, we maintain a preference for EM (in particular Asia) given:

a) Resilient Asian corporate earnings
b) Rebounding macro momentum in Asia
c) Policy support in China



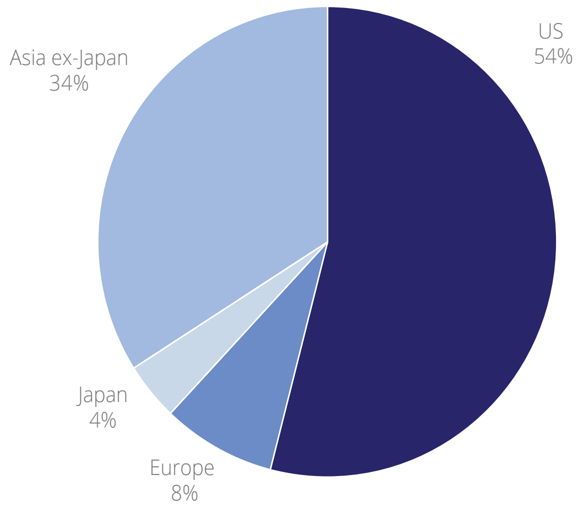
Source: Unsplash

Figure 27: TAA breakdown by asset class (Balanced Profile)



Source: DBS

Figure 28: TAA breakdown by geography within equities (Balanced Profile)



Source: DBS

Table 4: 1Q20 Global Tactical Asset Allocation (TAA)

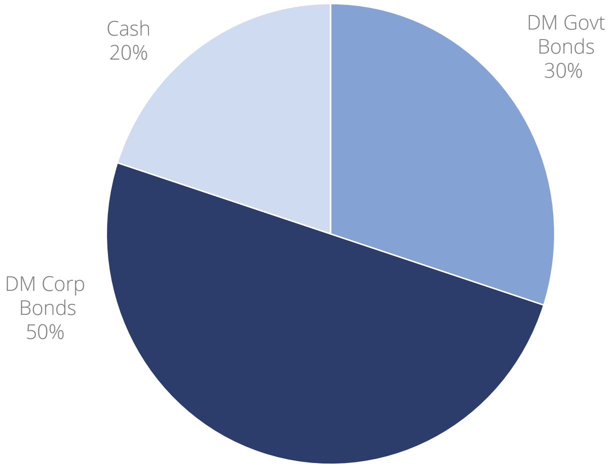
Asset Class		
	Three-Month Basis	12-Month Basis
Equities	**Neutral**	**Neutral**
US Equities	Overweight	Neutral
Europe Equities	Underweight	Underweight
Japan Equities	Underweight	Neutral
Asia ex-Japan Equities	Overweight	Overweight
Fixed Income	**Underweight**	**Underweight**
Developed Markets (DM) Government Bonds	Underweight	Underweight
Developed Markets (DM) Corporate Bonds	Underweight	Neutral
Emerging Markets (EM) Bonds	Overweight	Neutral
Alternatives	**Overweight**	**Overweight**
Gold	Overweight	Neutral
Hedge Funds	Overweight	Overweight
Cash	**Overweight**	**Neutral**

Source: DBS

Conservative

	TAA	SAA	Active
Equities	0.0%	0.0%	
US	0.0%	0.0%	
Europe	0.0%	0.0%	
Japan	0.0%	0.0%	
Asia ex-Japan	0.0%	0.0%	
Fixed Income	80.0%	80.0%	
Developed Markets (DM)	80.0%	80.0%	
DM Government Bonds	30.0%	30.0%	
DM Corporate Bonds	50.0%	50.0%	
Emerging Markets (EM)	0.0%	0.0%	
Alternatives	0.0%	0.0%	
Gold	0.0%	0.0%	
Hedge Funds*	0.0%	0.0%	
Cash	20.0%	20.0%	

*Only P4 risk rated UCITs Alternatives

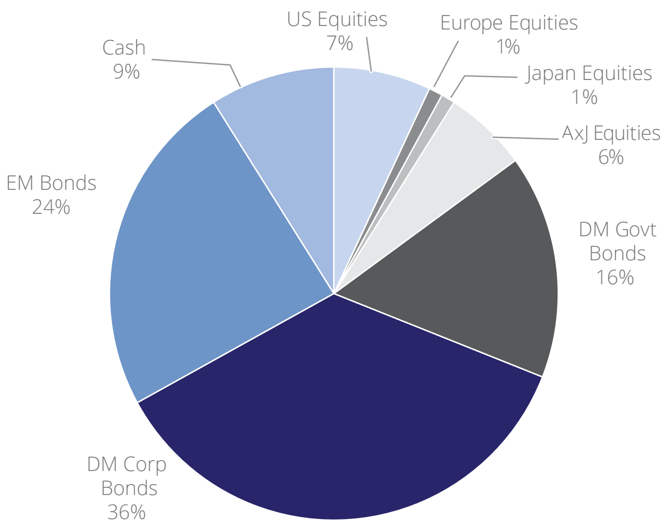


Source: DBS

Moderate

	TAA	SAA	Active
Equities	15.0%	15.0%	
US	7.0%	6.0%	1.0%
Europe	1.0%	4.0%	-3.0%
Japan	1.0%	2.0%	-1.0%
Asia ex-Japan	6.0%	3.0%	3.0%
Fixed Income	76.0%	80.0%	-4.0%
Developed Markets (DM)	52.0%	60.0%	-8.0%
DM Government Bonds	16.0%	20.0%	-4.0%
DM Corporate Bonds	36.0%	40.0%	-4.0%
Emerging Markets (EM)	24.0%	20.0%	4.0%
Alternatives	0.0%	0.0%	
Gold	0.0%	0.0%	
Hedge Funds*	0.0%	0.0%	
Cash	9.0%	5.0%	4.0%

*Only P4 risk rated UCITs Alternatives

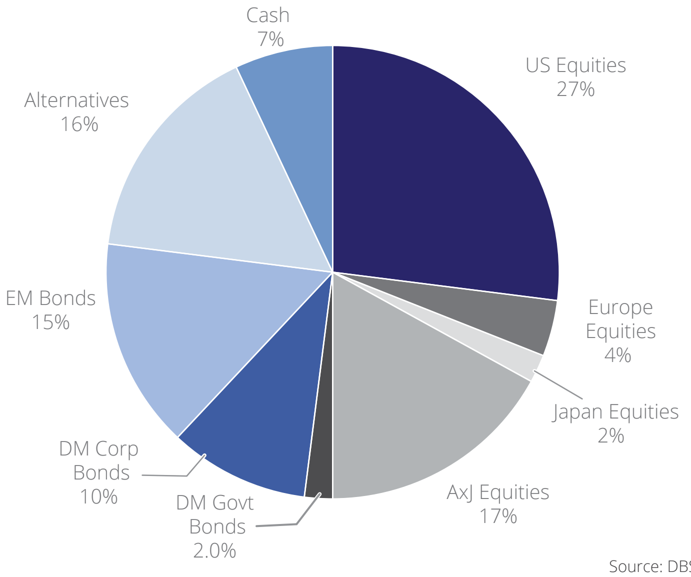


Source: DBS

Balanced

	TAA	SAA	Active
Equities	50.0%	50.0%	
US	27.0%	25.0%	2.0%
Europe	4.0%	10.0%	-6.0%
Japan	2.0%	5.0%	-3.0%
Asia ex-Japan	17.0%	10.0%	7.0%
Fixed Income	27.0%	35.0%	-8.0%
Developed Markets (DM)	12.0%	25.0%	-13.0%
DM Government Bonds	2.0%	10.0%	-8.0%
DM Corporate Bonds	10.0%	15.0%	-5.0%
Emerging Markets (EM)	15.0%	10.0%	5.0%
Alternatives	16.0%	10.0%	6.0%
Gold	9.0%	5.0%	4.0%
Hedge Funds*	7.0%	5.0%	2.0%
Cash	7.0%	5.0%	2.0%

*Only P4 risk rated UCITs Alternatives

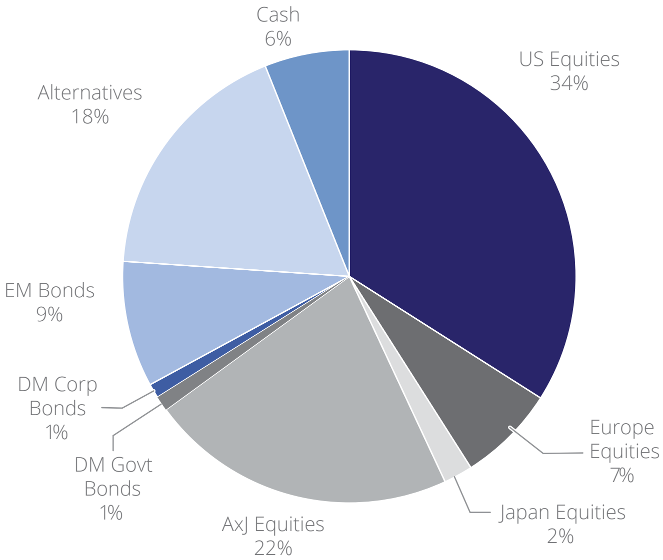


Source: DBS

Aggressive

	TAA	SAA	Active
Equities	65.0%	65.0%	
US	34.0%	30.0%	4.0%
Europe	7.0%	15.0%	-8.0%
Japan	2.0%	5.0%	-3.0%
Asia ex-Japan	22.0%	15.0%	7.0%
Fixed Income	11.0%	15.0%	-4.0%
Developed Markets (DM)	2.0%	11.0%	-9.0%
DM Government Bonds	1.0%	4.0%	-3.0%
DM Corporate Bonds	1.0%	7.0%	-6.0%
Emerging Markets (EM)	9.0%	4.0%	5.0%
Alternatives	18.0%	15.0%	3.0%
Gold	7.0%	5.0%	2.0%
Hedge Funds*	11.0%	10.0%	1.0%
Cash	6.0%	5.0%	1.0%

*Only P4 risk rated UCITs Alternatives



Source: DBS

Notes:
1. The above are based on three-month views.
2. Asset allocation does not ensure a profit or protect against market loss.
3. "TAA' refers to "Tactical Asset Allocation". "SAA" refers to "Strategic Asset Allocation".
4. Based on the SAA model, the Aggressive model has the highest risk, followed by Balanced, Moderate, and Conservative, with Conservative being the least risky.
5. The investor type classification for the portfolio has no direct relationship with the Financial Needs Analysis customer risk profile types and the portfolios are not assigned any product risk rating based on the bank's proprietary risk rating methodology.

Macroeconomics | 1Q20

Deceleration mode

Global Macroeconomics

Taimur Baig, Ph.D. | Chief Economist
Radhika Rao | Economist
Ma Tieying | Economist
Suvro Sarkar | Analyst

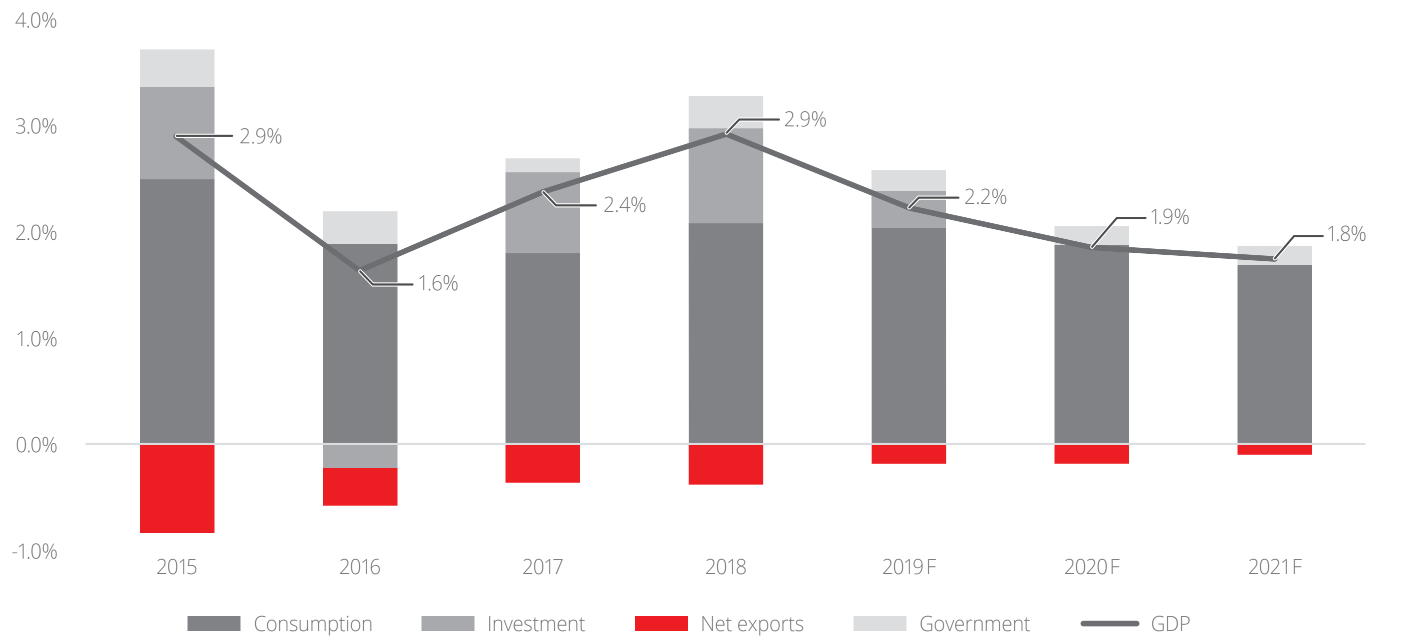
United States

2019 has been characterised by trade tension and political polarisation on one hand, strong labour markets, low inflation, and low interest rates on the other. Among other contrasting themes, investment has weakened but housing has been strong, manufacturing and agriculture sectors have been weak but the retail sector has been stable. Asset markets have rallied, liquidity is ample, and despite a sharp rise in corporate leverage, spreads have narrowed over the course of the year. Similarly, in the sovereign space, record fiscal deficits have not gotten in the way of the bond market rally. One longstanding concern, the rapid expansion of the collateralised loan obligations market, has yet to cause any systemic problems.

We doubt if any of these factors will fade substantially in 2020, although there are telltale signs of the US economy losing momentum. Consumption is likely to hold up, but if investment remains in doldrums and policy support space is limited, it will be very challenging for the US to print a higher-than-2% real GDP growth outturn in 2020. As the politicians and markets come to terms with this eventuality, the risk is this will impact politics (the populism factor) and asset prices.

While there were plenty of words, posturing, and investigations through 2017, the trade war officially began in February 2018 when the US imposed tariffs on the import of washing machines and solar panels. This was soon followed up with steel tariffs, and after this US protectionism on trade, technology transfer,

Figure 1: US GDP and its components



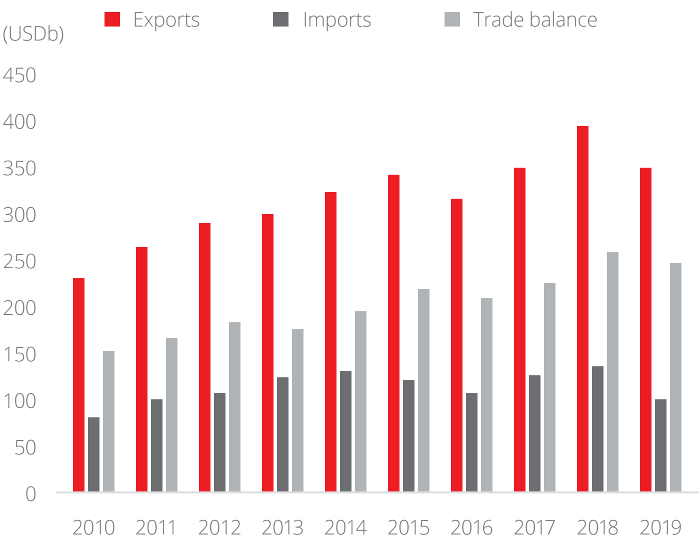
Source: CEIC, DBS

and cyber security became increasingly China-centric. Since then, through last year, and so far this year, targeted goods have been put on various lists, further tariffs have been imposed (and occasionally postponed). A phase-one trade deal may be forthcoming, but trade tensions and overall rivalry with China are unlikely to dissipate in 2020.

What has been the impact of the trade war on the US so far? During January-October 2019, China's exports to the US were down 12% y/y as importers looked for alternative markets to avoid tariffs. But at the same time, China's imports from the US were down 25% y/y, primarily driven by a sharp reduction in purchases of agricultural goods. Consequently, the US-China trade deficit has corrected by only 4% y/y, while remaining considerably worse than 2017. Meanwhile, China's total trade surplus with the entire world remains healthy, up by 0.7% of GDP through the first three quarters of 2019.

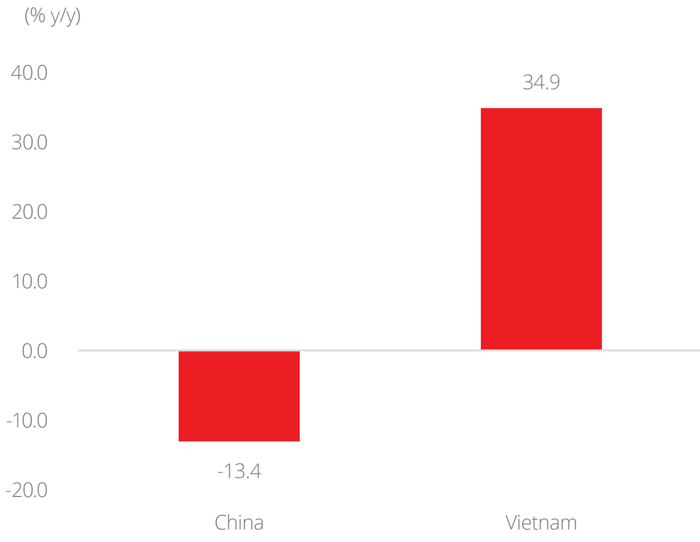
Assuming some trade-related progress but no major breakthroughs in 2020, it will be challenging for businesses to ignore lingering political uncertainties and embrace new capital expenditure. Even though rates are low, corporate leverage and asset valuations are high, which would act as a cyclical impediment to investment fatigue in any case.

Figure 2: China's trade with the US



Source: CEIC, DBS

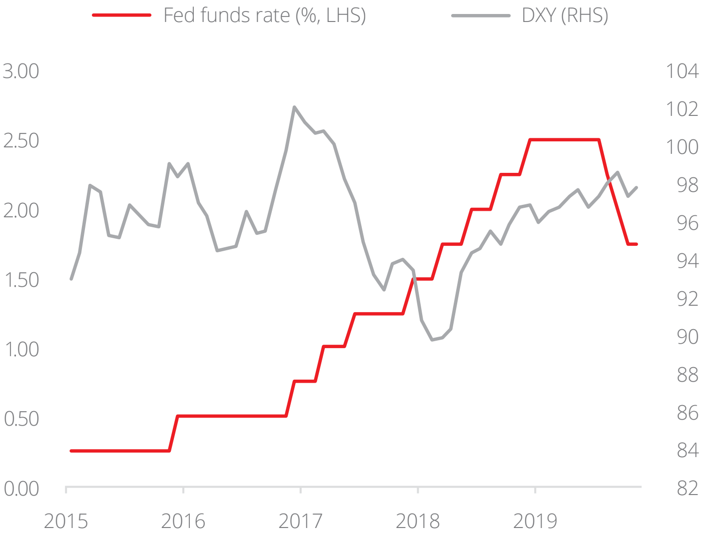
Figure 3: US imports (January-September 2019)



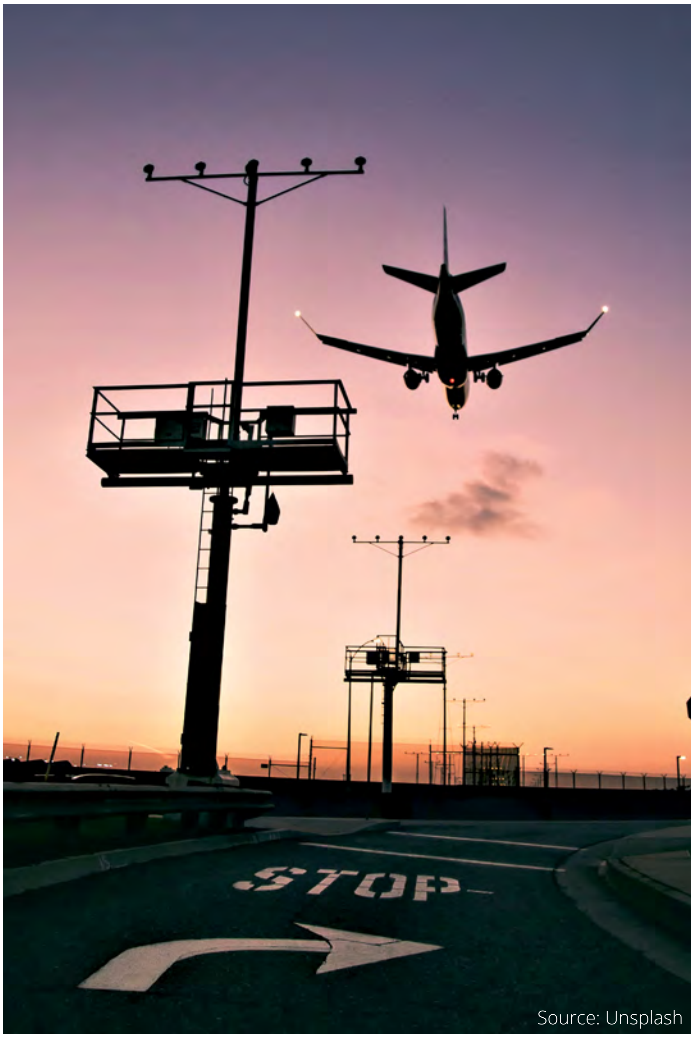
Source: CEIC, DBS

A weaker dollar may go in some way to offset the cost of higher tariffs and restore competitiveness, but the US currency's reserve status worldwide limits the room for depreciation, in our view. If US economic growth slows, it also leads to an increase in global slowdown worries. Then, even Federal Reserve rate cuts cannot guide the dollar down as global risk aversion causes the dollar to benefit from flight to safety, as evidenced by the opposite directionality of the Fed funds rate and the DXY Index in 2019. Instead, a bottom in the electronics cycle and recovery in EM growth could help, as could a trade deal with China. The best way to get a weaker dollar is for the US to engage constructively with the rest of the world; that is the narrative we would hope to see play out in 2020.

Figure 4: DXY vs Fed funds rate



Source: CEIC, DBS



Source: Unsplash

Eurozone

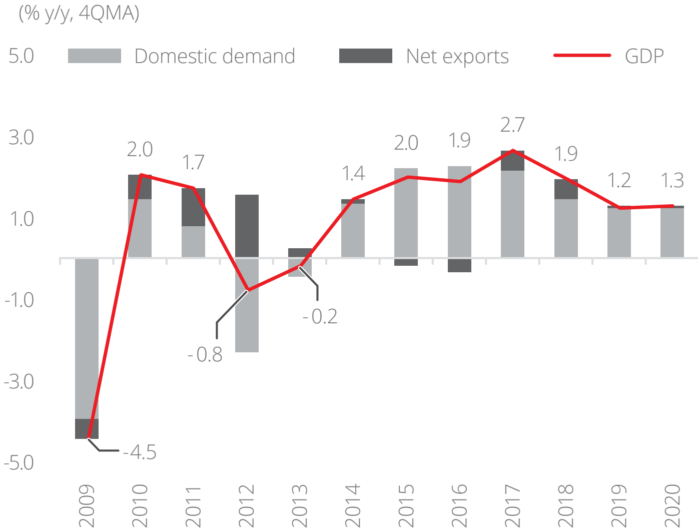
3Q19's GDP numbers pointed to a stabilisation in Eurozone growth, albeit at lows. Headline growth at 1.1% y/y was the weakest since late 2013. Preliminary numbers also saw Germany narrowly avert a recession but continue to endure economic stagnation. From a revised forecast of 1.2% y/y in 2019, the bloc is expected to expand 1.3% in 2020, still below the five-year average of 2%.

The uncertain external environment remains a key risk for the bloc heading into 2020, notwithstanding a weaker EUR. Together with a slowdown in global trade volumes, hard/no-deal Brexit, and further protectionist measures by the US, this could translate into a second year of decline in the zone's exports.

Encouragingly, domestic demand, particularly consumption, remains an effective counterweight. Unemployment remains at the lowest in a decade, even as divergence between countries remains wide. Wage growth continues to firm up, which along with benign inflation is supportive of real purchasing power.

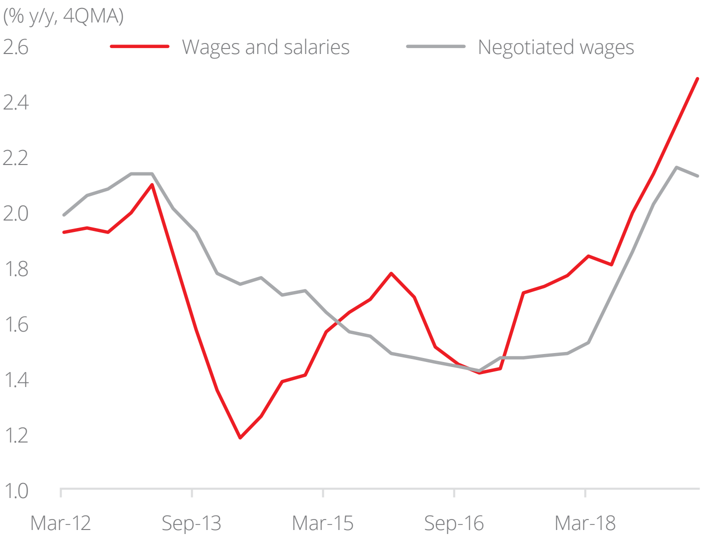
Christine Lagarde replaced ECB President Mario Draghi in November, taking office at a time of soft growth, muted inflation, and dovish policy bias. She also inherits a divided Governing Council – the decision to restart QE and push the deposit facility rate deeper into negative was not unanimous.

Figure 5: Growth to stay sub-trend



Source: CEIC, DBS

Figure 6: Wage growth strengthens further



Source: CEIC, DBS

With little by way of fresh guidance, we expect the new ECB chief to keep the policy ship steady rather than introduce further radical changes. This would leave policy in ultra-accommodative mode, with the main refinancing rate at 0%, deposit facility rate at -0.5%, cheap financing programme that is underway, and a EUR20b/month open-ended QE. In a year's time, the ECB might revisit pre-reset thresholds over purchase of a single-sovereign purchases.

With monetary policy in easing mode, all eyes are on the fiscal stance to take a growth-supportive stance. The German government made affirmative noises on the available room to prime the pump, but have announced little so far in terms of expansionary policies. The weakness of the ruling coalition implies there is little urgency to undertake large-scale stimulus, as unemployment remains low and wage growth is up, even as a tougher trade environment poses risks to growth.

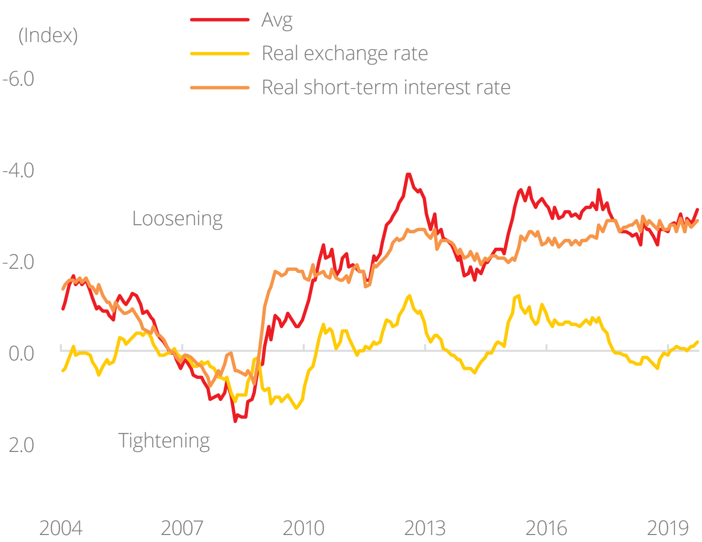
That said, after more than six years of mending fiscal balances, a modest 20-30 bps slippage in the cumulative fiscal deficit might not antagonise the European Commission. ECB policy action has also left borrowing costs at rock-bottom levels, providing room for individual countries to undertake a looser fiscal policy, if deemed necessary.

Politics is unlikely to be the centre of focus next year, but an eye will be on the uneasy German ruling coalition, risks of a hard Brexit, Catalan independence protests in Spain etc, which might turn into a matter of concern if the bloc fails to stay resilient or the global environment turns more challenging.

Japan

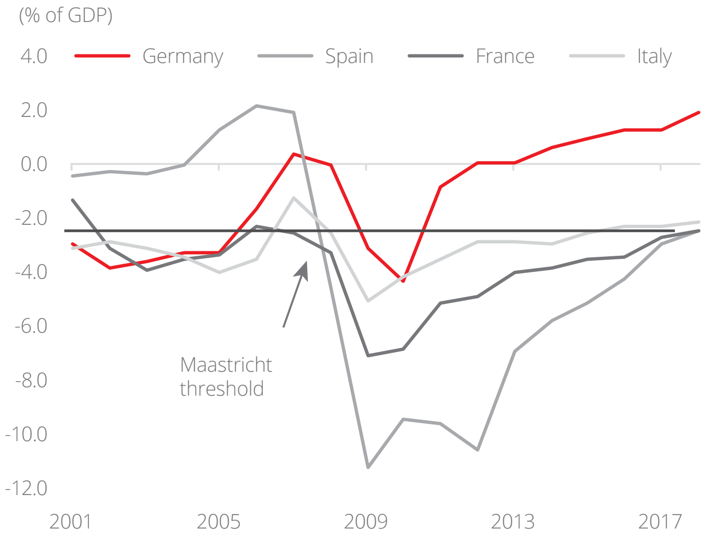
We expect the Japanese economy to grow 0.5% in 2020, a slower rate than 2019's 0.7%, mainly due to technical reasons. The sales tax hike implemented in October 2019 will likely continue to

Figure 7: Monetary conditions index in loosening territory



Source: European Commission, DBS

Figure 8: Budget balances have been on the mend since the debt crisis



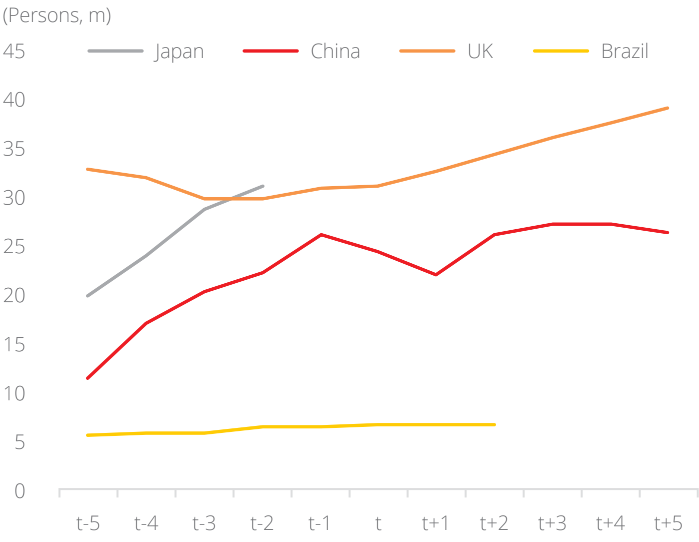
Source: Bloomberg, DBS

weigh on the y/y growth in the first half of 2020. The q/q growth profile, however, is expected to improve modestly from 1Q20 onwards.

An important event in Japan next year is the Tokyo Summer Olympics Games, which is expected to boost inbound tourism and domestic consumer confidence. The number of foreign visitors to Japan has been rising steadily in the last several years due to the easing of visa requirements and the weakening of the yen. It is well on track to achieve 35m in 2020, exceeding the 31m seen in UK during the 2012 London Olympics.

Meanwhile, the Tokyo Olympics is set to showcase Japan's innovation capabilities and market its high-tech industry. The cutting edge technologies to be used in the games include robots, 5G, AI, and virtual reality, among others.

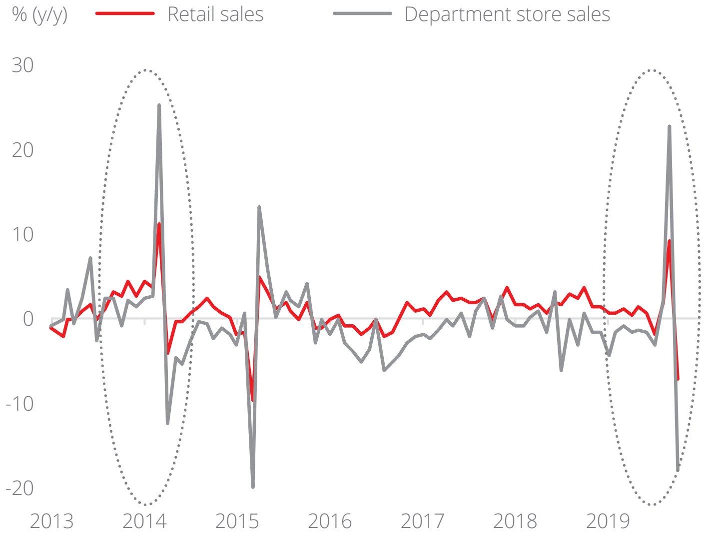
Figure 9: Visitor arrivals to rise during the Olympics year



Source: CEIC, DBS

From the cyclical perspective, growth should improve next year as consumption is revived and exports bottom out. It may not take as long as in 2014 for consumption to recover from the sales tax shock, given the relatively strong labour market conditions this time. Meanwhile, exports may not worsen next year, given the stabilisation in global economic conditions, the rise of 5G, and

Figure 10: Consumption to recover from the sales tax hike



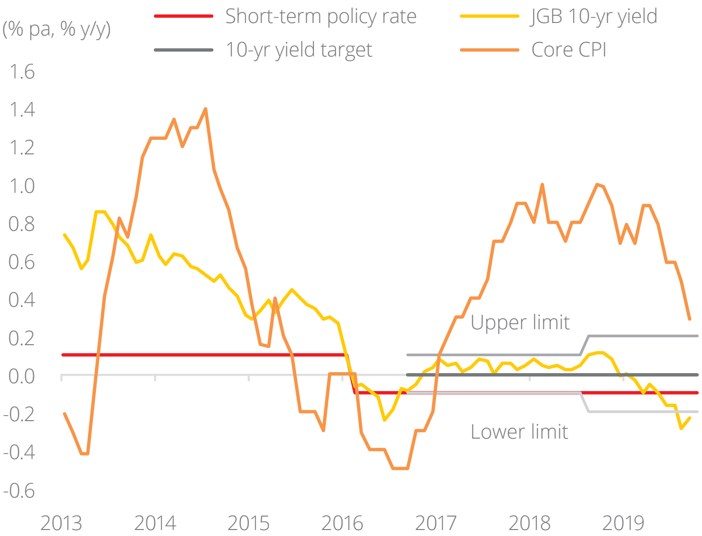
Source: CEIC, DBS

the related demand for semiconductors and other electronics components (assuming status quo in South Korea-Japan and US-China trade relations).

From the policy perspective, mini stimulus could be expected next year, providing some support for consumption and investment. Prime Minister Shinzo Abe's government has delivered its promise of raising the sales tax in two steps from 5% to 10% to fix public finances. No further tax hikes are scheduled for 2020. Meanwhile, the government has announced a fiscal stimulus package worth JPY13t (supplementary budget: JPY4t), to help the economy recover from the worst typhoon in decades.

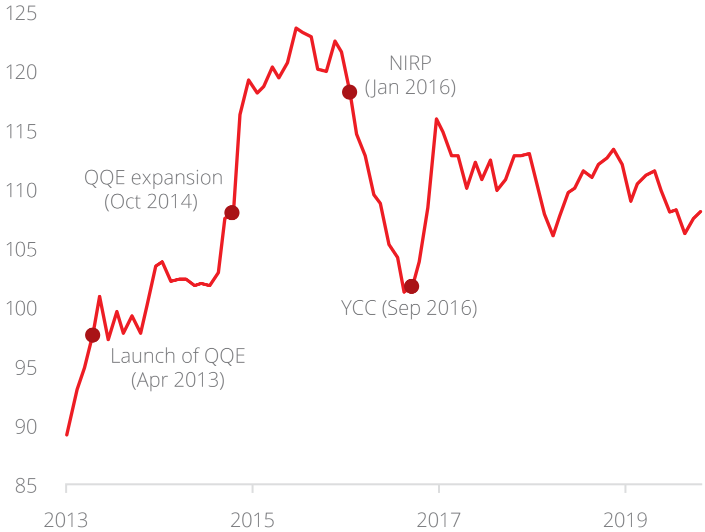
The BOJ has sent a strong signal about monetary easing. The central bank revised the forward guidance at the October 2019 meeting, saying that it expects the short- and long-term interest rates to remain at "the present or lower levels". This would be for as long as it is necessary to pay close attention to the possibility that the momentum towards achieving the price stability target would be lost. We have pencilled in a 10 bps cut into our forecast, which will take the short-term policy rate to -0.2% in the next three months from -0.1% presently.

Figure 11: Short-term rates have room to fall further



Source: CEIC, DBS

Figure 12: USD/JPY remains range bound



Sources: CEIC, DBS

Mainland China

For the world in general and Asia in particular, the trajectory of China's growth path is a critical determinant of the economic cycle. The issue facing China is not about whether the authorities can hold real GDP growth rate at 6% next year. Achieving our projected 5.8% growth rate next year neither safeguards the fragility of smaller banks nor the stability of exchange rate (conditional primely on the dynamics of US-China relationship).

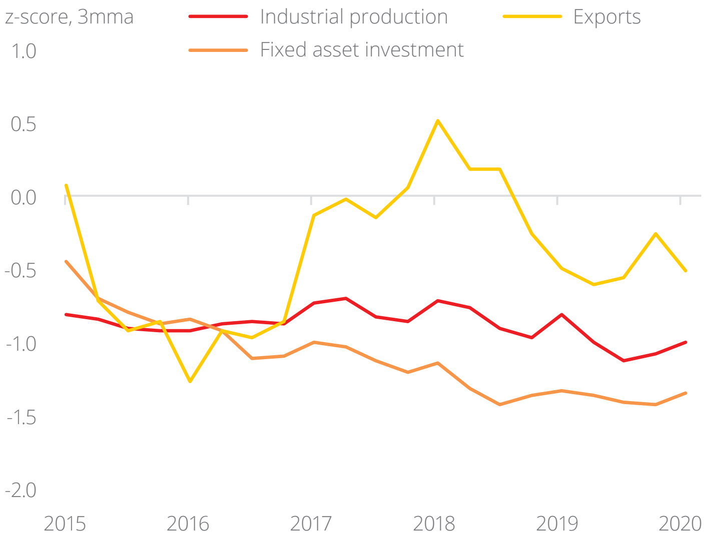
Given the tremendous coverage of China macroeconomics, all the risks are well known and thoroughly analysed. The challenge is to imagine the "unknown unknown". The US subprime crisis taught the world that a highly leveraged economy coupled with a banking sector that concentrates on one asset class is a blend ripe for eruption when fundamentals worsen.

One key area of concern is China's absolute total debt level reached 303% of GDP in 1Q19. The main assets of Chinese banks are loans to households and SOEs. Household balance sheets are still lowly leveraged. Mortgages made up of 21.4% of total outstanding loans as of 3Q19. This is far below c.75% in the US in 2008 (The US figure included a substantial portion of securitised mortgages).

As far as loans to corporates are concerned, they represent a whopping 60% of total loans in 2019. According to earlier Global Financial Stability Report (GFSR), around 15.5% of total loans extended to corporates are potentially at risk. The total is around USD1.3t, compared to about USD1.7t in bank Tier 1 capital. This asset class is China's Achilles heel.

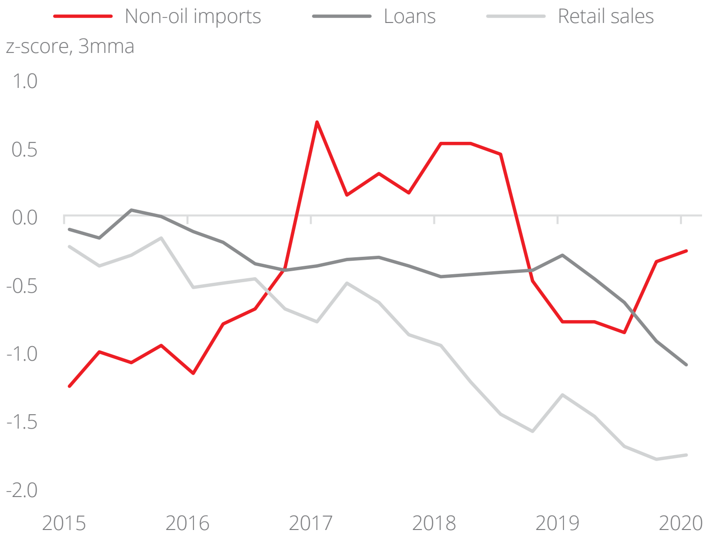
But the gist of the matter is that the state owns both enterprises and the banks, and it has enormous political power to keep them afloat regardless of their financial health – lest not forgotten, bank deposits amounted to CNY196t should provide adequate cushion to any unforeseen shocks. The costs of sustaining them, however, compromises the effectiveness of monetary policy to buttress the real economy. Subsequent increases in liquidity is used to service interest payments on old debts. Also rising credit risks negate downward pressure on interest rates.

Figure 13: China's key growth indicators (part 1)



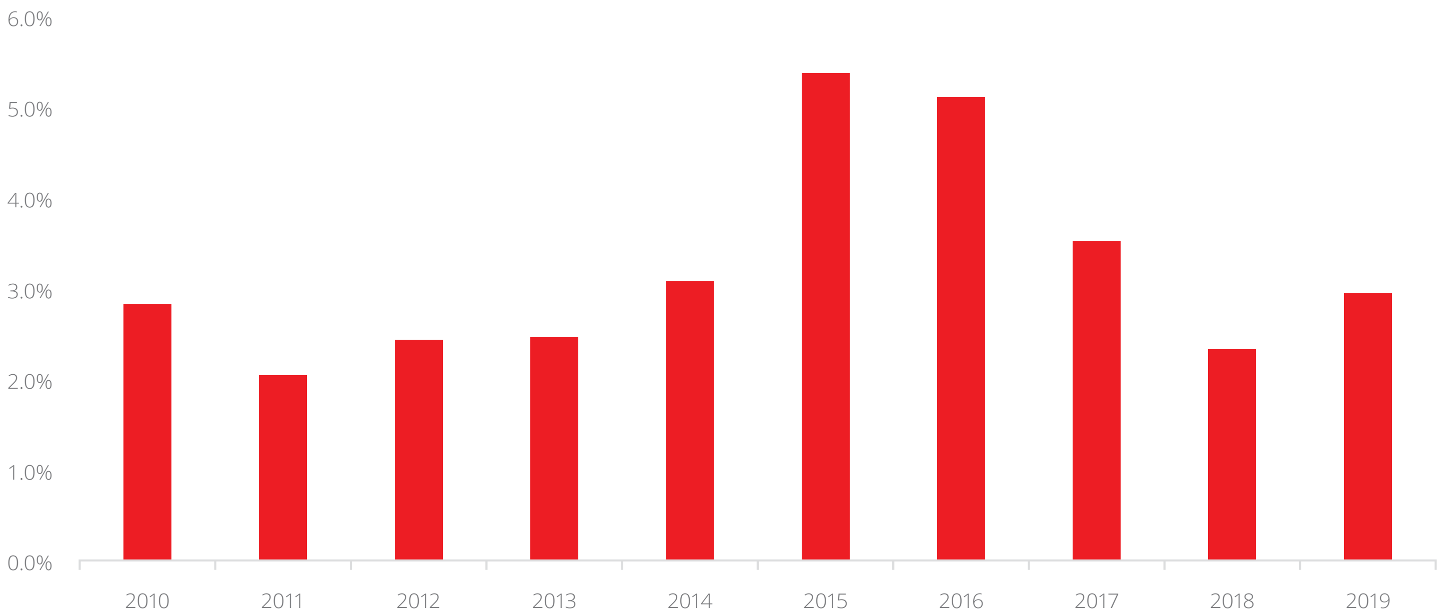
Source: CEIC, DBS.
z-score denotes standard deviation from long-term trend.

Figure 14: China's key growth indicators (part 2)



Source: CEIC, DBS.
z-score denotes standard deviation from long-term trend.

Figure 15: China's trade balance (as a share of GDP)



Source: CEIC, DBS.
Data through January-September each year

Property sector: The authorities have managed the demand and supply side of the property market well, as evidenced by stability of residential pricing and the absence of loan defaults in this sector. The average net debt to total equity ratio of the property sector in 1H19 is stable at 66%, same as 2018, but down from the peak of 71% in 2014. For next year, it is unlikely that they will change the policy mix – restraints of funding channels to developers and ongoing presence of sale price increment restrictions.

On the supply side, the central and local governments will continue to restrain liquidity from flowing too much into the hands of property developers via trust financing and USD bond issues. For example in 1Q19, the proceeds from the newly issued offshore bonds of developers are limited to the purchase of long-term bonds issued by the National Development and Reform Commission.

Such move exemplifies the determination of the authority to control leverage in this sector. As a result, banks in general are charging higher interest rates to them. The prime policy goal here is to slow down land bank replenishments of major property developers because most of them are low in land banks. The authorities see rising risks of higher land costs will consequentially translate into higher property prices. Strict controls on funding for the property sector will remain next year. Even with further cuts on headline RRR by the PBOC, it would not particularly help property developers too much.

Performance of the demand side has remained decent. National residential sales, in GFA terms, had already returned to positive territory since August 2019. In September, nationwide residential average ASP increased 9.1% y/y. The property price index for 55 of the 70 sampled cities tracked by the National Bureau of Statistics continued to post moderate increments on a m/m basis, particularly in Tier 2 cities, even under the presence of price restriction policies. If the economy were to decelerate notably in 2020, the authorities may allow property prices of selected projects to increase mildly.

Currency: In August, the Chinese yuan breached the sensitive level of 7 to the dollar for the first time in a decade. USD/CNY has since been trading in a range of 7.0-7.15. A thaw in frosty trade relations between China and the US would help put a floor on the exchange rate. The risks of runaway devaluation and resultant capital flight are much lower now than before.

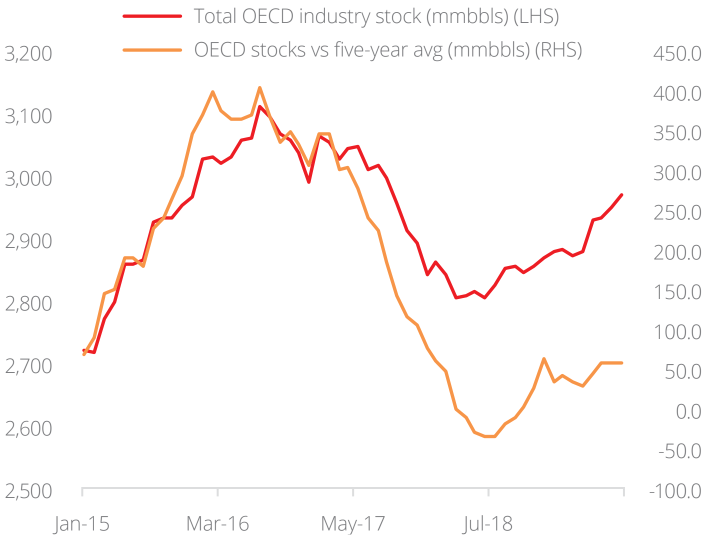
Even in the event of another breakdown in US-China trade negotiations, the PBOC could reintroduce the countercyclical factor into the yuan's daily reference rate to curb depreciation expectations. State-owned banks could also engage in swap contracts to fend off volatility, without draining PBOC's forex reserves. Meanwhile, hiking RRR for banks settling forex forward yuan positions is another option to discourage USD purchases. Mopping up offshore liquidity via central bank bill sales has also proven to be an effective tool to support the currency.

Oil

There are no clear catalysts in sight either way. Brent crude oil prices have been uncharacteristically immune to geopolitical developments over the past few months, with even the rebel attacks on major Saudi oil processing facilities not having a lasting impact on sentiment and risk premiums. This is mainly due to the overarching demand decline – from the usual run rate of 1.3-1.4mmbpd pa in preceding years to around 1.0mmbpd or even slightly lesser growth in 2019 and similar expectation for 2020 – amid the trade war fallout and slowdown in global growth. Things could have been worse if not for OPEC's falling production (by an average of 1.8mmbpd YTD in 2019) and a slower-than-expected US production growth in the initial months of the year.

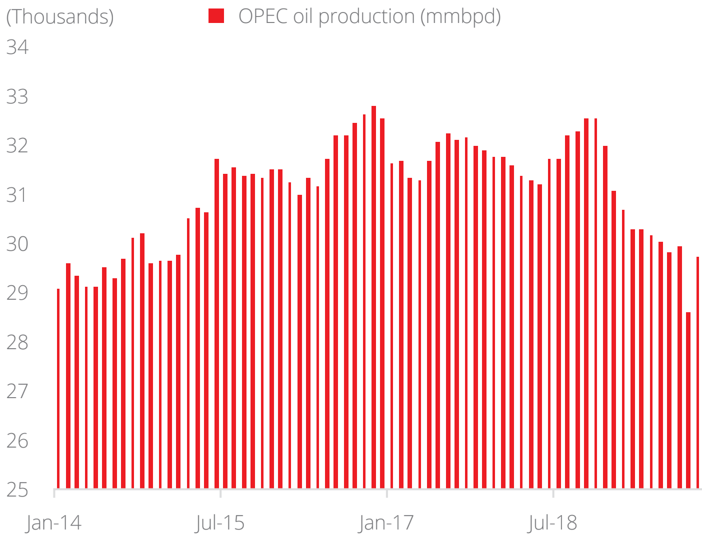
With supply growth set to remain restrained, OPEC is likely to maintain the status quo on production cuts, Iran sanctions are in place, and US production growth will be moderate. At best, we

Figure 16: Global oil inventory levels resume upward climb in 2019



Source: IEA, DBS

Figure 17: OPEC oil production decline led by Saudi cuts, Iran sanctions, and Venezuela issues



Source: Bloomberg, DBS

expect incremental supply-demand to be fairly well matched in 2020 and do not expect any significant downside for oil prices.

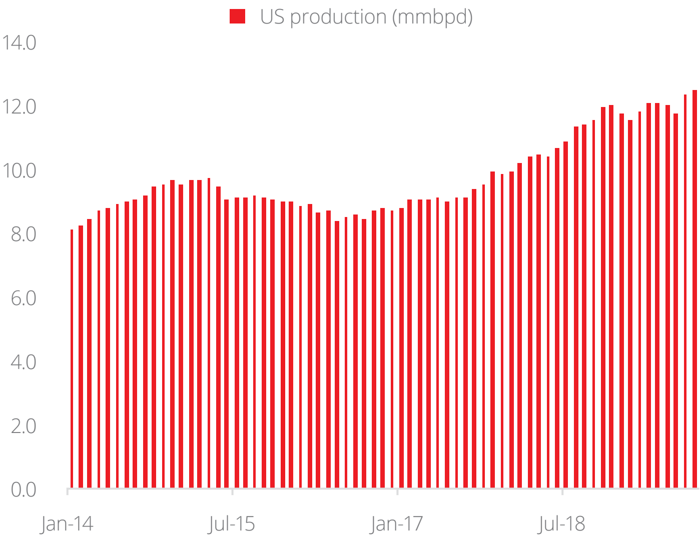
On the other hand, with global oil inventories continuing to rise even in the second half of 2019 and resolution on trade war front still sketchy, the upside is limited unless OPEC can find the will to push through further production cuts in the coming months or if – as unwanted as it is – conflicts in the Middle East intensify.

Under our base case scenario, we now forecast oil prices to average between USD60-65/bbl in 2020. 2021 is unlikely to be different, as slower growth in US shale oil production could be offset by OPEC turning on its taps slightly greater again, given its fairly large surplus capacity of c.2.5mmbpd.

Some international agencies like the IEA and OPEC have forecast non-OPEC oil supply growth to increase at a rapid pace of more than 2.0mmbpd in 2020, but we do not believe this is likely to happen. US shale growth is likely to slow down to well below 1.0mmbpd in 2020, after growing 1.5mmbpd and 1.2mmbpd on average in 2018/19, owing to the steep fall in US onshore rig count (down 25% YTD in 2019), amid capex discipline and focus on cashflows from the independents.

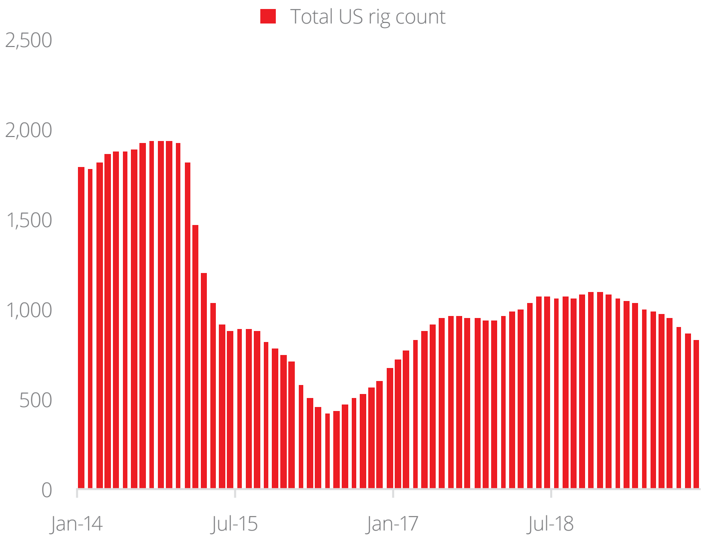
Brazil and Norway are the other supply growth drivers for 2020, but increases from Brazil are likely to be more tempered, given its track record. Even these countries are unlikely to record supply growth again in 2021, leaving the supply situation in 2021 and beyond much more benign and amenable to OPEC decision making.

Figure 18: US oil production likely to end 2019 with only 0.6mmbpd growth over the year



Source: Bloomberg, DBS

Figure 19: US rig count in down 25% YTD in 2019; impact to be felt further down the line



Source: Bloomberg, DBS

Table 1: DBS base-case view – quarterly average oil price forecast 2020/21

(USD per barrel)	1Q20F	2Q20F	3Q20F	4Q20F	1Q21F	2Q21F	3Q21F	4Q21F
Average Brent crude oil price	59.5	58.5	63.0	63.0	61.5	60.5	63.5	61.5
Average WTI crude oil price	54.0	53.0	57.5	57.5	56.5	55.5	58.5	56.5

Source: DBS

Table 2: GDP growth and CPI inflation forecasts

	GDP growth, % y/y				CPI inflation, % y/y, ave			
	2018	2019f	2020f	2021f	2018	2019f	2020f	2021f
Mainland China	6.6	6.1	5.8	5.6	2.1	2.6	2.3	2.5
Hong Kong	3.0	-1.7	1.5	1.5	2.4	2.7	2.5	2.5
India	7.4	5.0	5.8	6.4	4.0	3.5	4.2	4.5
India (FY basis)*	7.1	6.8	5.0	5.8	3.6	3.4	3.9	4.2
Indonesia	5.2	5.0	5.0	5.1	3.2	3.1	3.4	3.2
Malaysia	4.7	4.5	4.6	4.6	1.0	0.9	1.6	1.8
Philippines**	6.2	5.9	6.3	6.3	5.2	2.8	3.5	3.3
Singapore	3.1	0.6	1.4	1.8	0.4	0.6	1.1	1.5
South Korea	2.7	2.1	2.4	2.3	1.5	0.5	1.5	1.3
Taiwan	2.7	2.3	2.0	2.2	1.3	0.7	1.0	1.1
Thailand	4.1	2.5	3.0	3.2	1.1	0.8	1.2	1.3
Vietnam	7.1	6.9	6.8	6.7	3.5	2.5	2.9	3.0
Eurozone	1.9	1.2	1.3	1.5	1.8	1.2	1.2	1.3
Japan	0.8	0.7	0.5	0.9	1.0	0.5	0.7	0.6
United States***	2.9	2.2	1.9	1.8	2.0	1.7	1.7	2.0

*Refers to financial year ending March 2020. **New CPI series. ***End of period for CPI inflation.

Source: CEIC, DBS

Table 3: Policy interest rates forecasts, eop

	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
Mainland China*	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
India	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90
Indonesia	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Malaysia	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Philippines	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
Singapore**	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
South Korea	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Taiwan	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
Thailand	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Vietnam***	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Eurozone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Japan	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20
United States***	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75

*1-yr lending rate; **3M SOR; ***Prime rate.

Source: CEIC, DBS

US Equities | 1Q20

Broadening rally

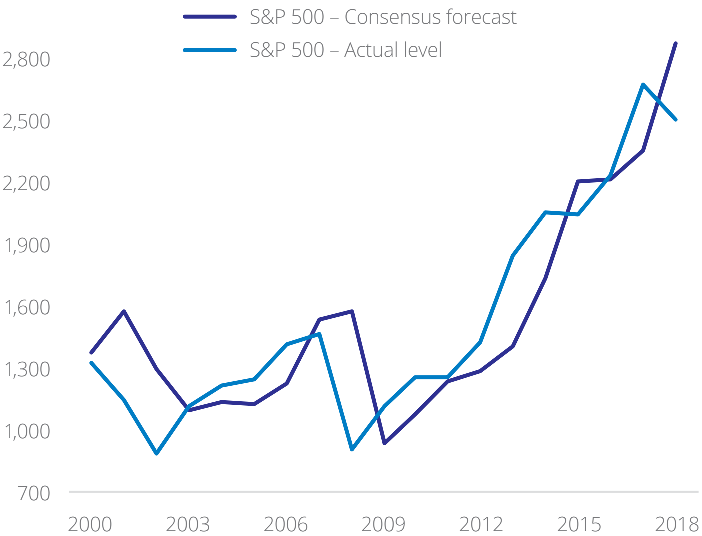
US Equities

Dylan Cheang | Strategist

Another year, another forecast for the S&P 500's trajectory.

It is evident from our historical data analysis that investor mentality has undergone a fundamental change since the Subprime Crisis of 2008. Prior to it, market consensus on the outlook of the S&P 500 Index was generally exuberant. This explains why professional forecasters overestimated the trajectory of US equities 56% of the time during the 2000-2008 period – a period where the market closed 8% below consensus forecast on average.

Figure 1: S&P 500 consensus forecast vs actual



Source: Bloomberg, DBS

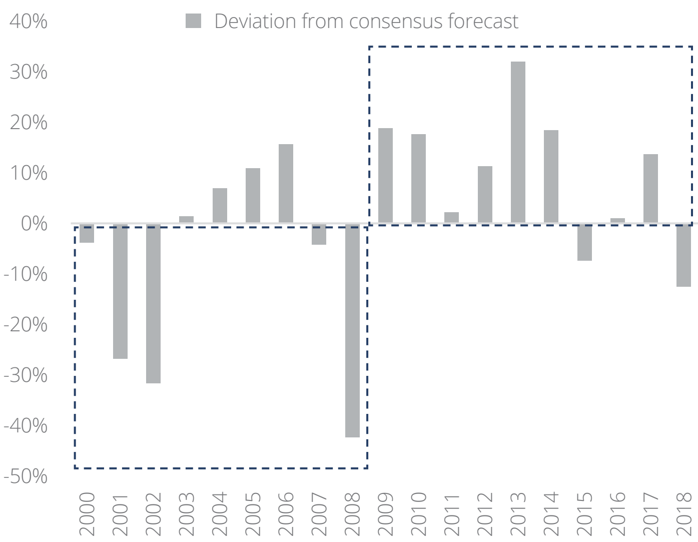
But things abruptly changed after 2008. From 2009 till 2018, professional forecasters were overly cautious on the market 80% of the time and the S&P 500 has, on average, closed 9% higher than consensus forecast (Figure 2). In our view, professional investors failed to accurately gauge the impact of certain developments, and this has added to the bearish sentiment. These developments include:

- Monetary Easing: The US Federal Reserve embarked on substantial QE after the Subprime Crisis. The subsequent decline in long-term interest rates is not only positive for the valuation of risk assets, it has also triggered the global search for yield – a phenomenon which drove rates-sensitive equities higher. From fund flows data, it is evident that asset allocators have underestimated the positive impact QE has on risk assets.

- Monetisation of e-Commerce: Despite the proliferation of global Internet usage since the 2000s, e-Commerce as a commercially lucrative business model did not fully take off till recent years. This is manifested by the S&P 500 Internet Retail Index, which saw average earnings growth at 18% per annum during 2010-2017, before surging 166% in 2018 (Figure 3).

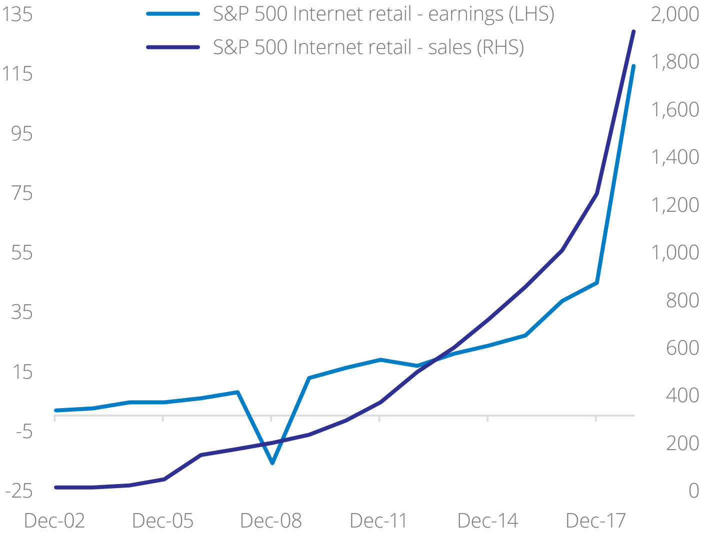
- US Shares Buyback: The other major factor driving US equities over the past five years is the enormous growth of shares buybacks. During 2001-2012, shares buybacks averaged USD57b per quarter – this has since increased to USD154b per quarter during the 2013-3Q19 period (Figure 4).

Figure 2: Historical deviations from consensus forecast



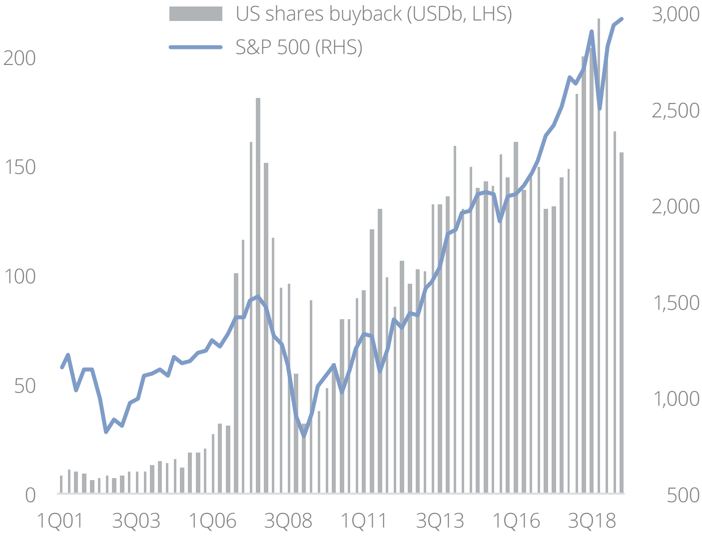
Source: Bloomberg, DBS

Figure 3: Monetisation of e-Commerce as a business model started to take off in recent years



Source: Bloomberg, DBS

Figure 4: US shares buyback is on the rise



Source: Bloomberg, DBS

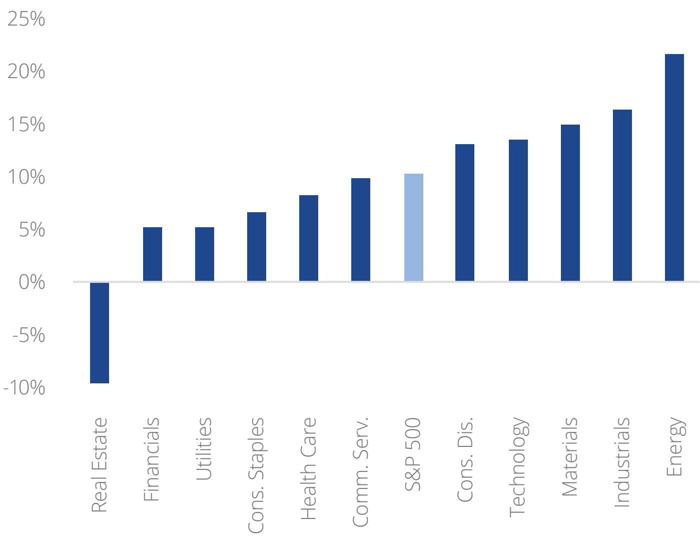
Earnings + Valuations: More upside for US equities in 2020. The US equity market has been our conviction Overweight call since 2018. The strategy has paid off handsomely as the market has registered total returns of 20.5% since January 2018 – 947 bps higher than those of global equities. Our positive view on US equities remains unchanged despite its continuous outperformance. We expect further upside in 2020, driven by a combination of (a) Earnings growth, and (b) Valuation multiple expansion.

Based on consensus forecast, the US market is poised to register earnings growth of c.10% in 2020, driven by strong momentum in Energy (+c.22%), Industrials (+c.16%), Materials (+c.15%), Consumer Discretionary (+c.13%), and Technology (+c.13%). Among these five sectors, we are particularly positive on Technology, Consumer Discretionary, and Energy. On the other hand, the only sector that is expected to experience earnings decline is the Real Estate sector (-c.10%) (Figure 6).

Figure 5: The S&P 500 Index has outperformed global equities since our Overweight call in 1Q18

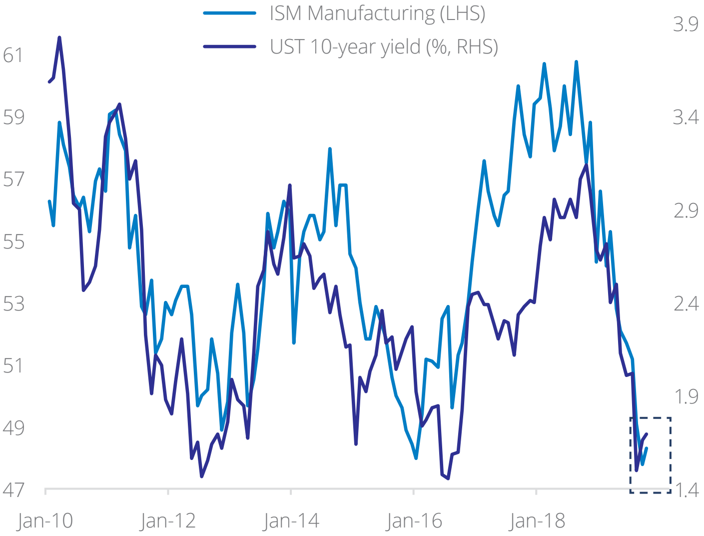
Source: Bloomberg, DBS

Figure 6: 2020 US consensus earnings forecasts by sectors



Source: Bloomberg, DBS

Figure 7: US economy showing early signs of recovery – ISM manufacturing and UST yield rebounding in tandem



Source: Bloomberg, DBS

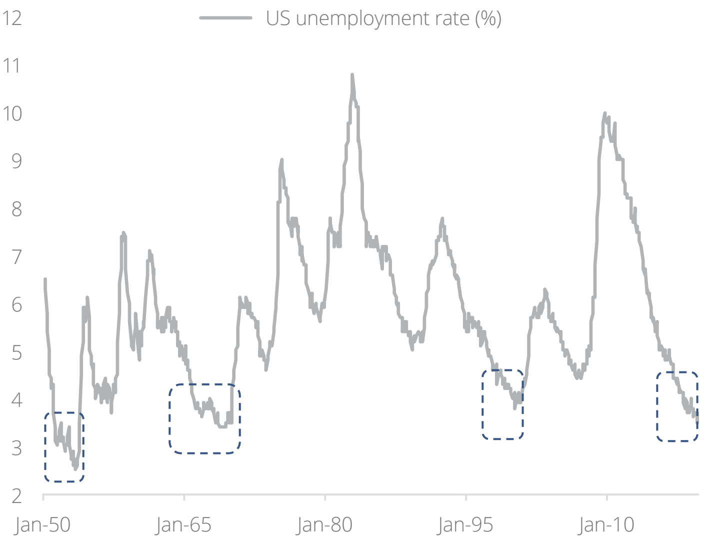
On balance, the upbeat earnings outlook for 2020 ties in with prevailing macro conditions. US manufacturing is showing initial signs of recovery as ISM Manufacturing rebounded from the lows of 47.8 in September 2019 to 48.3 in October 2019. The improving manufacturing conditions also coincided with the recent uptick in the UST 10-year yield (Figure 7). Retail sales, meanwhile, remains upbeat as domestic consumption continues

to be underpinned by the robust labour market, which saw the unemployment rate maintaining at the lows of 3.6% in October 2018 (Figure 8).

On the valuation front, the S&P 500 trades at c.18.9x forward P/E (Figure 9) – a level somewhere between the median and the one standard deviation expensive mark. In the current cycle, the highest valuation attained was 20.1 forward P/E on 28 December 2017, before the start of the US-China trade war. We believe there is a high chance the valuation for the S&P 500 will grind towards a similar level in 2020 given:

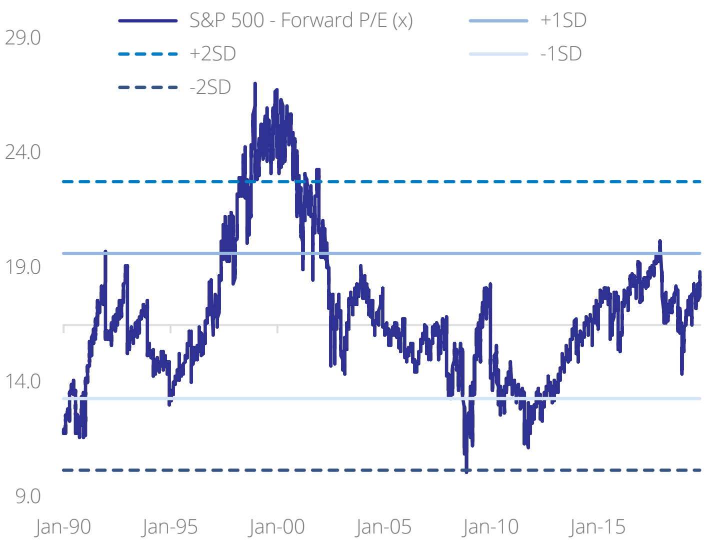
a) Moderation of US-China trade tensions
b) Improving macro outlook
c) Potential return of foreign institutional fund flows

Figure 8: Robust US labour market to underpin domestic consumption



Source: Bloomberg, DBS

Figure 9: Potential for US equity valuation to breach the +1SD mark as US-China trade tensions moderate



Source: Bloomberg, DBS

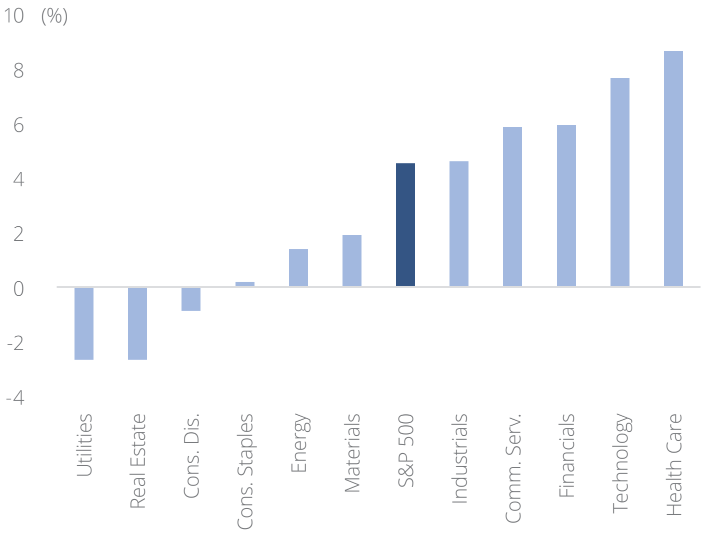
1Q20 US Sector Allocation

Keeping status quo. To recap, we upgraded US Energy and Real Estate to an Overweight while downgrading Financials to Underweight in 4Q19. Our tactical switches were premised on the view that interest rates will stay low and the "search for yield" will dominate in coming quarters. But our strategy did not pan out as expected given the sudden surge in bond yields during the quarter amid moderating US-China trade tensions. Financials emerged as one of the best performing sectors during the quarter (Figure 10).

For 1Q20, our sector calls remain unchanged with Financials maintained at Underweight. Given the persistence of (a) Weak inflationary expectations, (b) Subdued energy prices, and (c) Lingering geopolitical uncertainties around the world, steepening of the UST 2s10s yield curve will likely be capped in coming quarters, limiting banks' potential for NIM expansion.

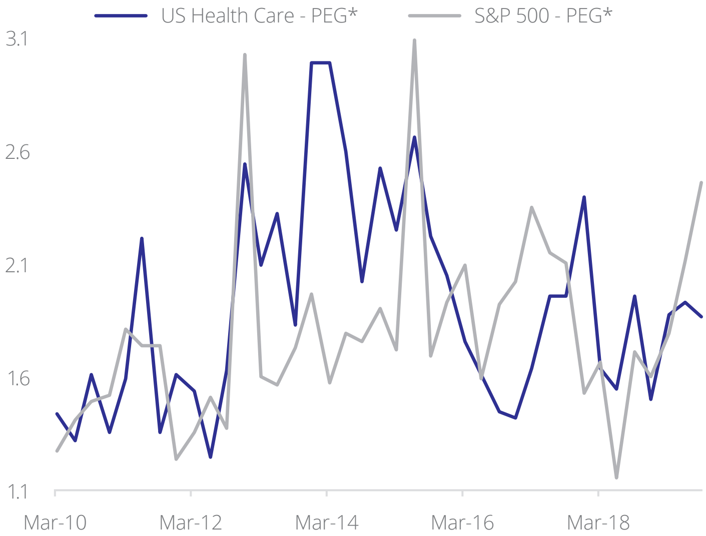
Stayed engaged in the US Technology-related and Health Care space for growth opportunities. The latter emerged as one of the top performers in 4Q19 as the US equity rally broadened. The US Health Care currently trades at a PEG of 1.9 and this is lower than a PEG of 2.5 for the broader market (Figure 11).

Figure 10: Performance of US sectors during 4Q19



Source: Bloomberg, DBS, as of 21 November 2019.

Figure 11: US Health Care sector is trading at a lower PE-to-growth compared to the broader market



Source: Bloomberg, DBS
*Adjusted

Table 1: 1Q20 US Sector Allocation

	Overweight	Neutral	Underweight
US Sectors	Technology	Utilities	Financials
	Consumer Staples		Materials
	Communication Services		Industrials
	Consumer Discretionary		
	Health Care		
	Real Estate		
	Energy		

Source: DBS

Table 2: US sector key financial ratios

	Forward P/E (x)	P/B (x)	EV/EBITDA (x)	ROE (%)	ROA (%)	OPM (%)
S&P 500 Index	18.9	3.5	13.5	15.2	3.2	13.0
S&P 500 Financials	13.4	1.5	-	10.9	1.3	22.3
S&P 500 Energy	20.3	1.5	9.1	5.7	2.8	5.7
S&P 500 Technology	21.8	7.4	16.6	29.9	10.5	22.4
S&P 500 Materials	19.9	2.4	11.8	8.2	3.4	9.2
S&P 500 Industrials	18.9	5.0	12.8	23.1	5.6	11.9
S&P 500 Cons. Staples	20.6	6.1	17.8	21.3	6.2	7.7
S&P 500 Cons. Discretionary	22.6	7.9	13.6	30.3	6.3	8.6
S&P 500 Comm. Services	18.9	3.4	12.1	14.2	5.4	17.7
S&P 500 Utilities	20.2	2.2	13.0	9.7	2.5	18.9
S&P 500 Real Estate	36.0	3.8	21.5	10.6	4.1	22.7
S&P 500 Health Care	16.6	4.4	15.9	16.3	5.7	8.6

Source: Bloomberg
* data as at 21 November 2019.

DBS
Live more,
Bank less

Source: Unsplash

Europe Equities | 1Q20

Brexiternity

Europe Equities

Yeang Cheng Ling | Strategist

All eyes are now on the ECB's new president Christine Lagarde, after eight years of leadership under Mario Draghi. Among other achievements, Draghi was known for his pledge to do "whatever it takes" to maintain stability of the trade bloc and single currency system. Conditions in the EU remain challenging as the bloc sees worsening economic data, Italy's stubbornly high sovereign debt, and escalating trade tensions with the US.

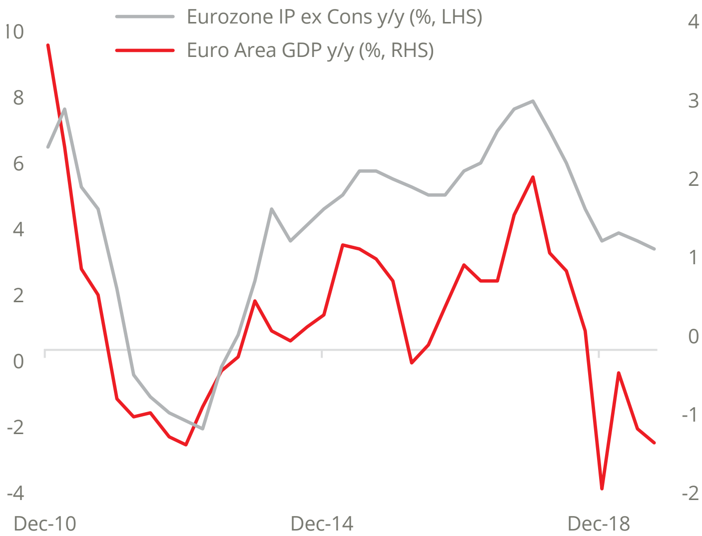
For example, growth in the important manufacturing sector has swung into negative territory (Figure 1) and industrial production is decreasing, indicating further downside for the EU's economy (Figure 2).

Figure 1: High frequency data are dreadful

Source: Bloomberg, DBS

Monetary easing could only do so much, with policy rates already at negative levels. The ECB, after introducing the first European-style QE in the form of a bond purchase programme (which ended in 2018), is now reviving a new bond-buying programme. This involves a monthly EUR20b package in a bid to counter looming downside risks and ease the pressure on the banking sector's balance sheet brought about by the negative interest rates (Figure 3).

Figure 2: Industrial production signals more downside to GDP growth

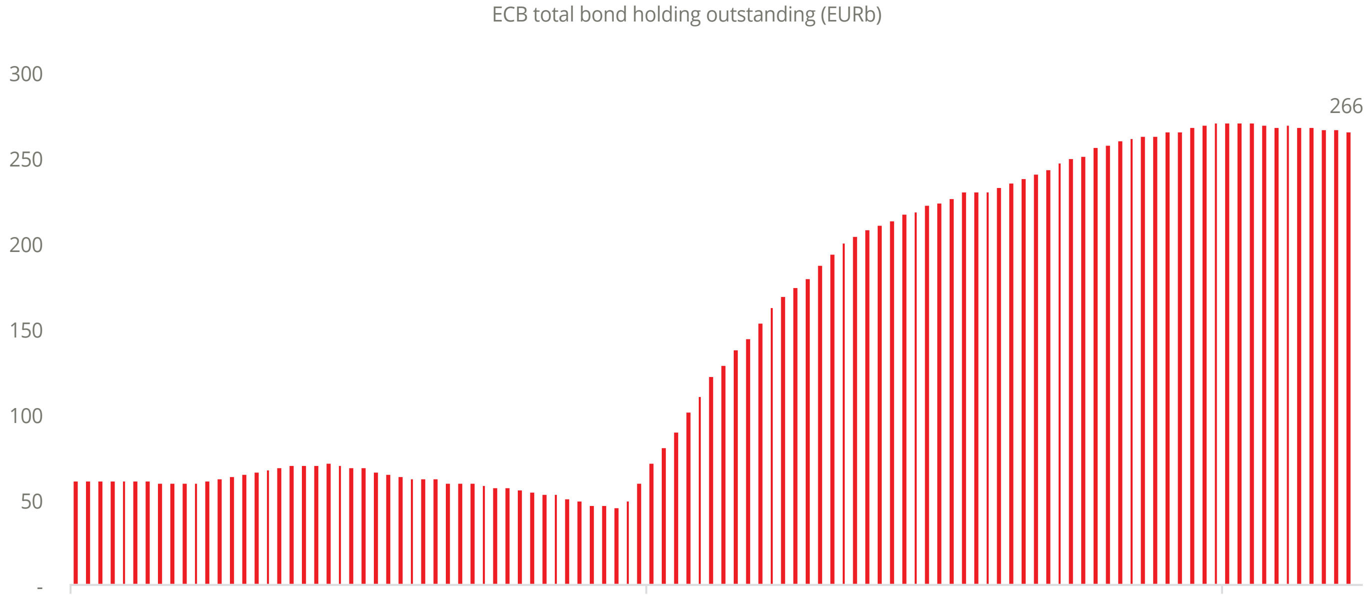


Source: Bloomberg, DBS

Brexiternity

More than three years after the UK voted to leave the EU, the country of 66m remains in a bitter exit-deal deadlock within itself and against the 500m strong trade bloc. Merely months after UK Prime Minister Boris Johnson vowed to leave the EU in a "do or die" fashion by 31 October, he missed the self-imposed deadline and asked for another extension to January 2020.

Figure 3: ECB's total outstanding bond holdings (EURb)



Source: Bloomberg, DBS

The election outcome would not really change the implications of Brexit towards the UK as a whole. The real challenge to the corporate earnings outlook will only take centre stage after the final exit from the EU. UK corporates will no longer enjoy the benefits of a cross-border supply chain, preferential tax treaty, and the privileges that come with the free movement of goods, capital, and people.

Since the Brexit referendum in June 2016, UK's GDP growth has been supressed (Figure 4), with no clear signs of any near-term recovery. Similarly, UK equities have struggled compared to their EU cousins over the same period (Figure 5).

Under the shadow of Brexit uncertainty, capital spending across UK firms is likely to remain subdued. This will weigh on productivity and wage growth till issues relating to EU trade, immigration security, and custom unions are settled.

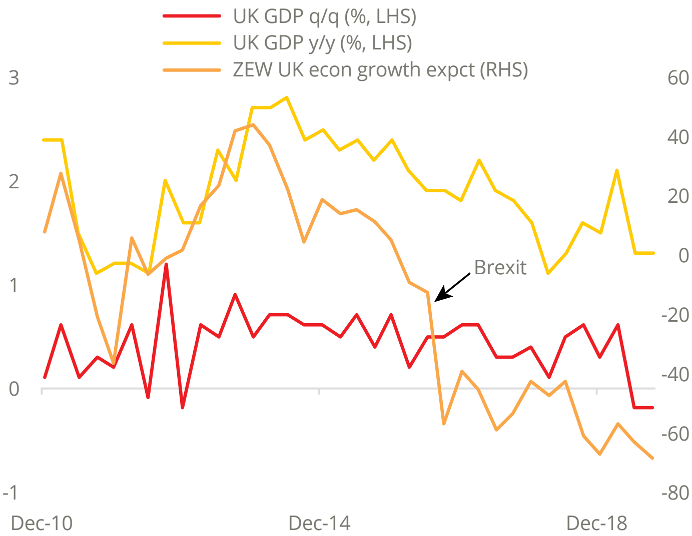
Europe equities – declining influence

Over a 10-year period, the weighting of Europe equities has declined by 10%pts in the global index – from 29% to 19% (Figure 6). This is against the backdrop of a lack of innovative technology vis-à-vis the US, resulting in Technology-related stocks representing less than 6% of its index vs a representation of more than 30% in the US.

We can also see this declining influence with only five European companies making to the Top 50 list of global stocks as compared to 12 in 2009. And the top three today are Nestlé (ranked 9), Roche (31), and Novartis (34), as compared to the top three in 2009 which were HSBC (ranked 4), BP (5), and Nestlé (7).

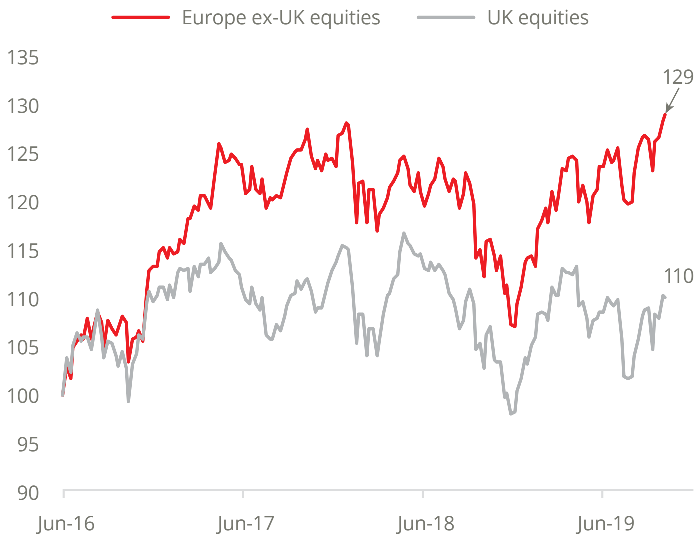
Over the past decade, both the US's and Asia's capital markets have outgrown the EU in terms of representation and importance. In addition, domestic consumption and spending power are waning in the face of an ageing population, policy splits among member nations, and rising sovereign debt burden.

Figure 4: Brexit uncertainties doing the damage...



Source: Bloomberg, DBS

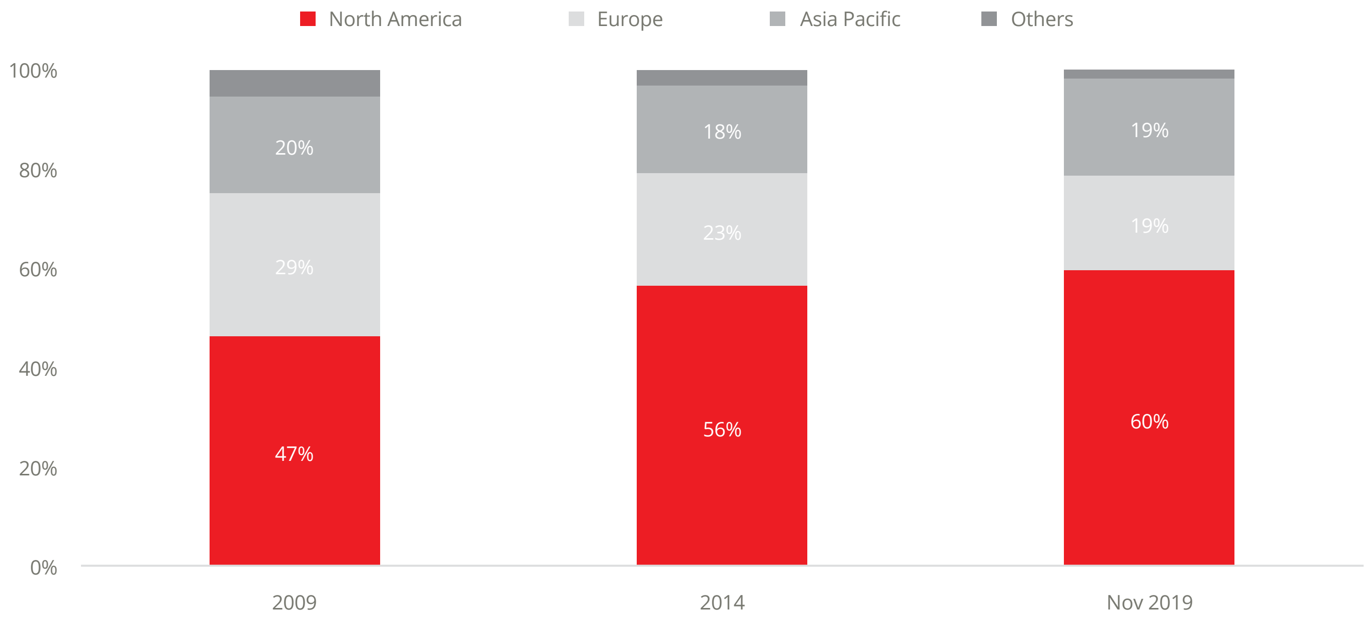
Figure 5: ...dragging down the equities market



Source: Bloomberg, DBS

Source: Unsplash

Figure 6: Europe equities used to be more important

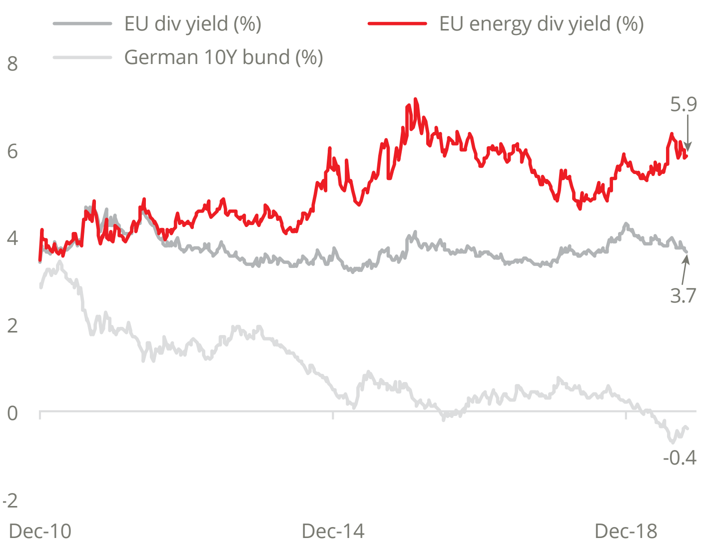


Source: Bloomberg, DBS

Dividend play – an attractive opportunity

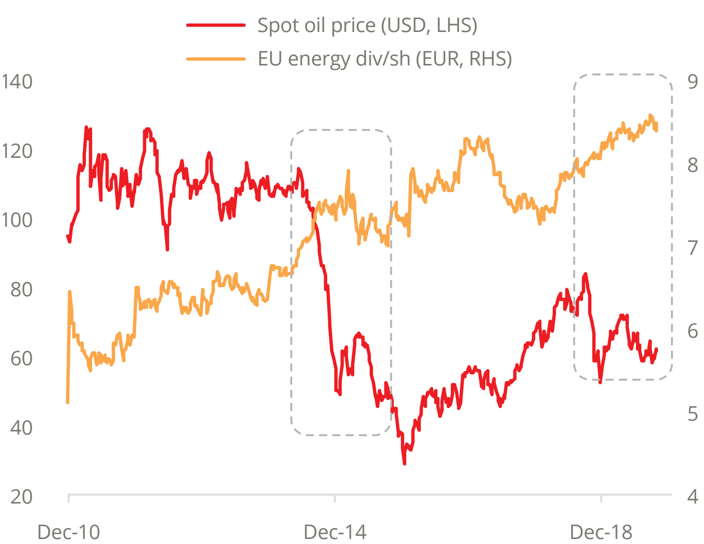
Despite the lack of growth-oriented stocks in Europe, dividend stocks are an attractive investment theme. We favour Europe oil majors for their capacity to generate high and sustainable dividends. The spread between negative-yielding government bonds and the high dividend yield offered by Europe oil majors makes the latter a compelling investment (Figure 7). Dividend per share of these companies has continued to grow despite volatility in the oil price (Figure 8) and these dividends comprise the main source on a total return basis (Figure 9). The discipline in capital expenditure after the oil price crash in 2014 reaffirms our view that the current high dividend yield is sustainable (Figure 10).

Figure 7: Europe oil majors as the dividend saviours



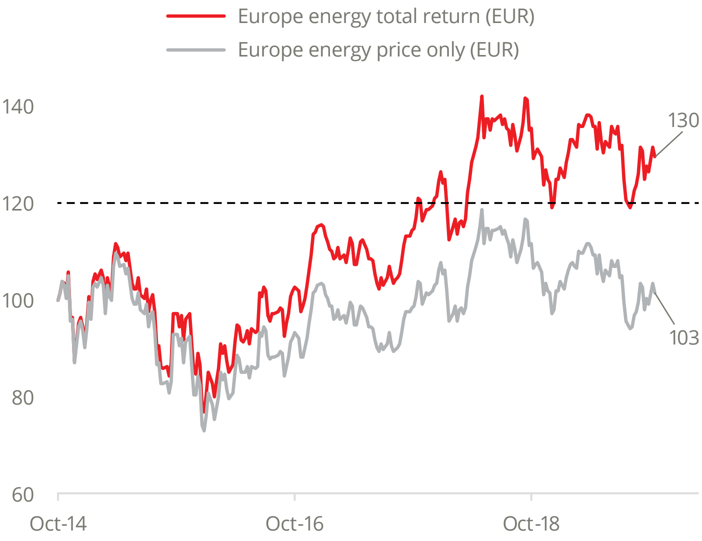
Source: Bloomberg, DBS

Figure 8: Dividend ability unfazed by oil price movements



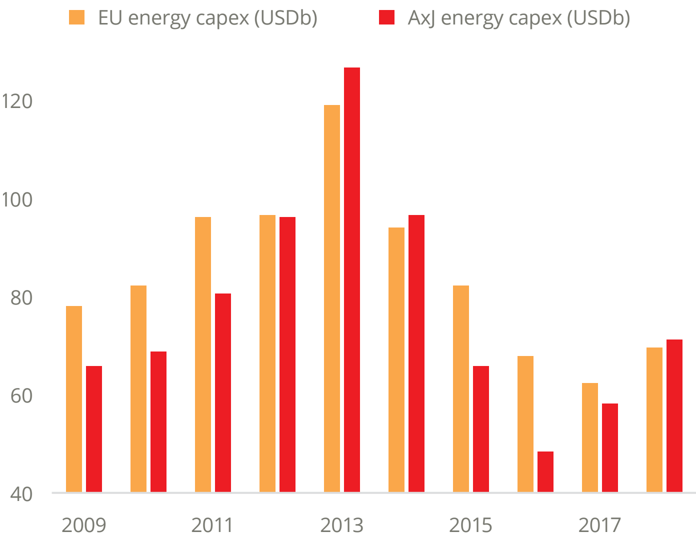
Source: Bloomberg, DBS

Figure 9: The power of dividends



Source: Bloomberg, DBS

Figure 10: Capex discipline supporting dividend pay out



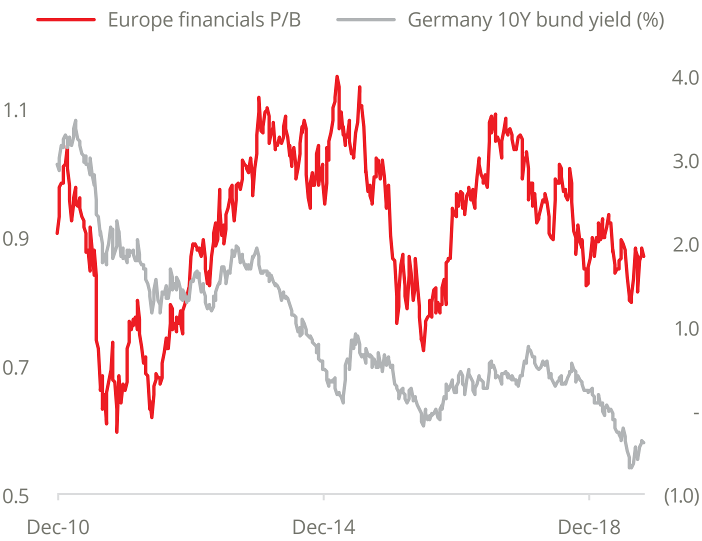
Source: Bloomberg, DBS

Old economies, beware

On the flipside, we are vigilant in monitoring other "old economies" sectors, due to the likely derating from the shift in fundamentals. For example, Financials will continue to face the headwinds from negative rates. This would undermine Europe banks' earnings ability, leading to further valuation derating (Figure 11).

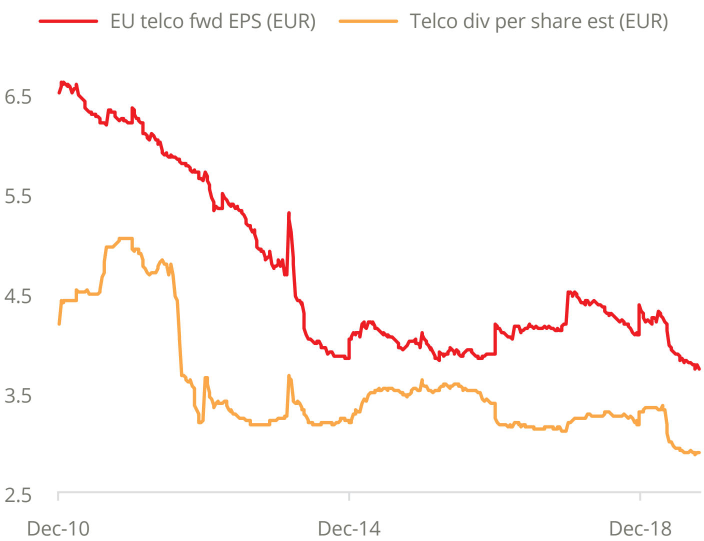
The telecommunications sector is also being challenged. Unlike the past where they enjoyed earnings stability from their utility-like business nature, rising capital expenditure, subsidies, and rapidly shifting technology are working against them today, resulting in declines in earnings and dividend payouts (Figure 12).

Figure 11: Europe Financials and the negative rates



Source: Bloomberg, DBS

Figure 12: Telecommunications companies in long-term derating



Source: Bloomberg, DBS

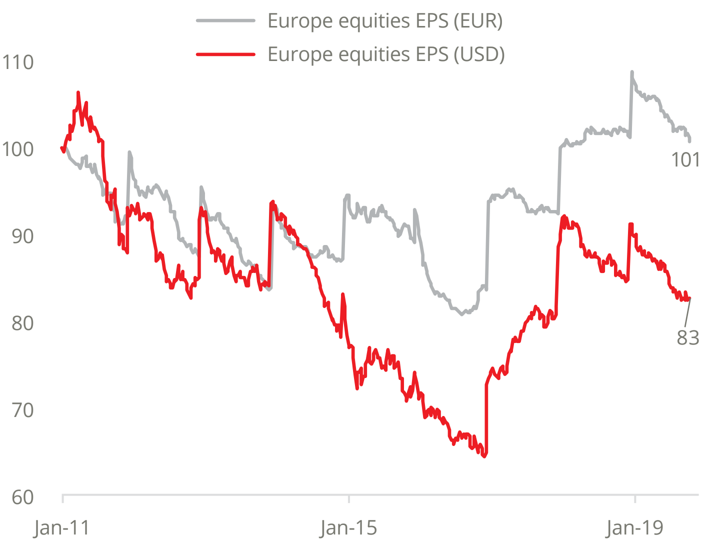
A weak EUR has helped maintain the stability in earnings among European firms. Over the past decade, earnings per share among European firms have stayed unchanged in EUR but declined some 17% in USD (Figure 13). We opine that the earnings quality does not justify the premium valuations (Figure 14) and hence maintain the Underweight call.

Recommendations

We maintain a relative Underweight stance in Europe equities, with preference for the Health Care, Technology, Industrials, and Energy sectors (Table 1). We like Health Care as the sector is a beneficiary of the ageing population – Europe-based health care names account for nearly one quarter of the global health care index. As for Technology, Europe technology firms are known for their expertise in semiconductor wafer lithographic technology and integrated circuit design, both of which are widely used among smart devices and automotives.

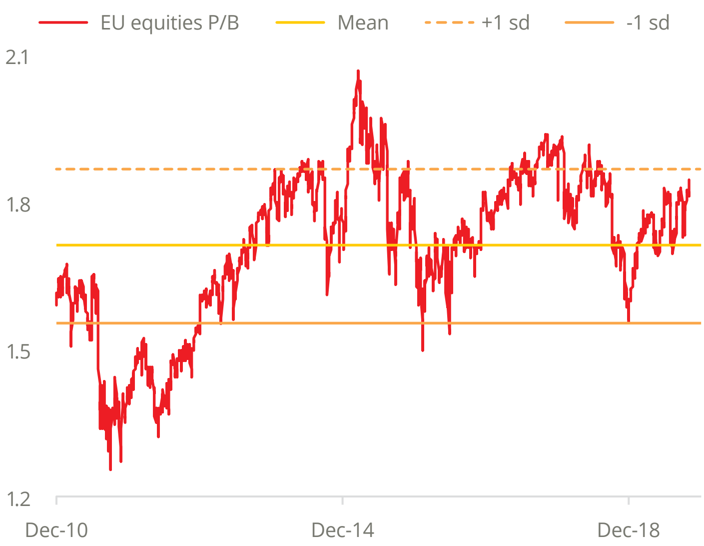
We also remain constructive on Industrials where European brands are among the global leaders in industry robotics, and oil majors in the Energy sector for their attractive income-generating characteristic.

Figure 13: Earnings helped by currency weakness



Source: Bloomberg, DBS

Figure 14: Premium valuations on relatively lower growth



Source: Bloomberg, DBS

Table 1: 1Q20 Europe Sector Allocation

	Overweight	Neutral	Underweight
Europe Sectors	Health Care	Consumer Staples	Communication Services
	Technology	Materials	Consumer Discretionary
	Industrials	Utilities	Financials
	Energy		Real Estate

Source: DBS

Source: Unsplash

Live more,
Bank less

Japan Equities | 1Q20

Olympic boost

Japan Equities

Joanne Goh | Strategist
Glenn Ng, CFA | Equities

Global cyclical markets, including Japan, advanced in 4Q19 as prospects of a US-China trade deal gained momentum. Japan is more sensitive to trade talk developments as the ongoing tension has cast uncertainties on exports and global supply chain outlook, which the country's economy is heavily dependent on. This, coupled with the safe-haven induced strengthening of JPY, has clouded the corporate profit outlook. During the quarter, the Topix Index found some relief amid improving sentiments and crawled back into positive territory after one year.

Figure 1: Topix, y/y changes – back into positive territory

Source: Bloomberg, DBS

2020 economic and growth outlook still weak. As a mature economy, Japan's GDP will continue to grow at a low rate of around 1% (its potential growth rate). The BOJ forecasts GDP growth to gradually return to potential growth only by FY21 – expecting both short- and long-term interest rates to remain at "the present or lower levels", while fiscal stimulus would likely be broad-based to "keep the economy going".

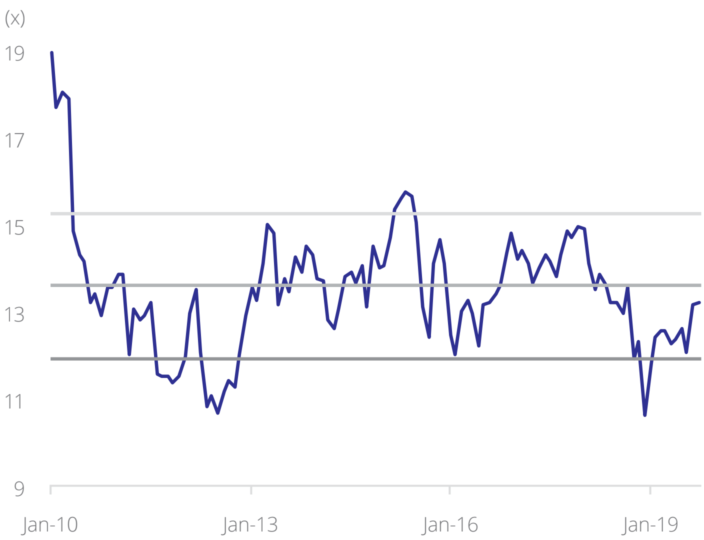
Table 1: BOJ's growth and inflation forecasts

	FY19	FY20	FY21	LT potential/ target
GDP growth	0.6%	0.7%	1.0%	1.0%
Core CPI (excl. sales tax)	0.5%	1.0%	1.5%	2.0%

Source: BOJ, DBS

Corporate earnings improving. Earnings growth forecasts are weak historically, but nonetheless they will be showing moderate improvement in the next few years. This suggests that markets believe that the worst may be over in the current cycle. On valuations, the market is not expensive, be it historically or in comparison with its DM peers.

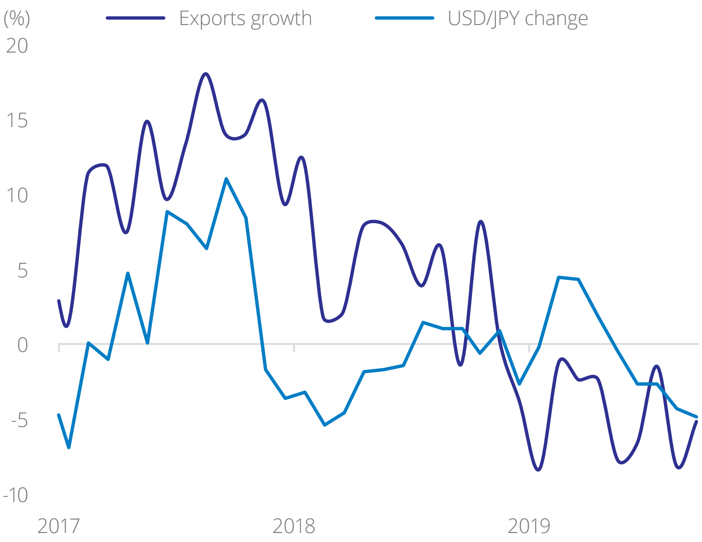
Figure 2: Japan's 12-month forward P/E valuations



Source: Bloomberg, DBS
Bands are average and +/- SD.

Top-down challenges remain. Against a weak global macro backdrop, investing in Japan will remain challenging from a bird's eye view. Japan is the most cyclical market among DM due to its high exposure exports and industrial activities. Uncertainties clouding the sustainability of the current bottoming and recovery cycle, as well as JPY and its impact on exports, are affecting the near-term outlook.

Figure 3: Japan's export growth and USD/JPY, y/y changes



Source: Bloomberg, DBS

At the same time, "Japanification" is likely to leave investors doubtful about its long-term prospects. This is a term economists use to describe the country's long-term struggle with deflation and anaemic growth, in which unconventional monetary stimulus is used that pushes interest rates down into negative territory to reflate the economy. Moreover, long-term structural challenges, such as an ageing and shrinking population, make one believe that Japan is a country in crisis.

The BOJ has joined the rest of the global banks in echoing the need for fiscal stimulus when negative interest rates are seemingly doing more damage than effectively stimulating economic growth. While further monetary easing seems to be the way out for the BOJ at this juncture, we do not exclude the possibility of fiscal policy being a more prominent part during the next economic downturn.

Strategies to adapt as long-term winners. With an economic outlook that is still uncertain – it will remain heavily dependent on trade talks – and with demographics changes being unfavourable to its long-term prospects, we believe investment opportunities are in companies that focus on transformative trends in the country. These trends include shifts in demographic (ageing population, labour shortages), the global transition in Millennial lifestyles (changes in consumption patterns, the rise of gaming culture, different set of leisure activities), and the IOT (e-Commerce, cloud, automation). Companies that have strategies to adapt to these secular trends will be long-term winners.

2020 Summer Olympics - a major boost for tourism. The major highlight for Japan in 2020 will be Tokyo's Summer Olympics. We believe this year will amplify Japan's culture, food and beverages, brands, and tourism. Investors can look to these beneficiaries.

Tokyo 2020 Olympic & Paralympic Games Mascots

Source: Tokyo 2020 Olympics and Paralympic Games mascots. ©Tokyo 2020

To be held in Tokyo from 24 July to 9 August, the 2020 Summer Olympics is expected to boost tourism and have positive implications for a host of companies across sectors. Japan's railway companies are among obvious beneficiaries, given higher passenger volumes.

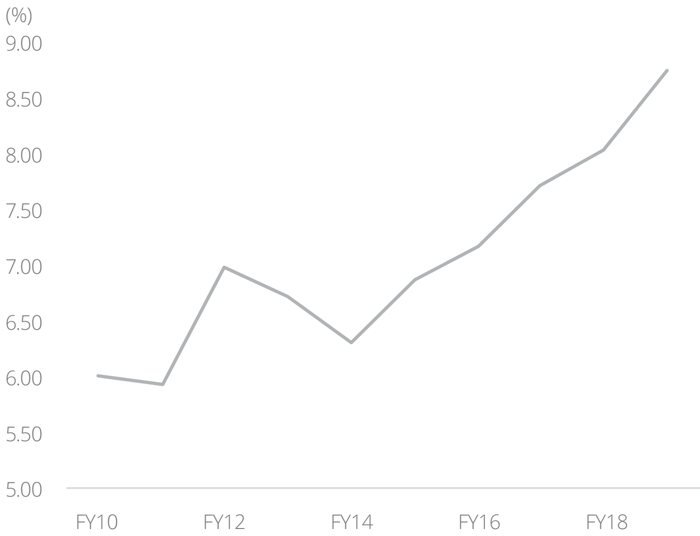
In the consumer sector, cosmetics and discount stores are popular among tourists. Recruitment companies may also see a boost in their part-time job matching businesses, given the expected spike in part-time labour demand as a result of this mega event.

Reference is also made to the positive read-through from 2019's Rugby World Cup held in Japan from September to November 2019. While official visitor arrivals numbers have yet to be released at the time of writing, anecdotal figures are encouraging. For one, despite the threat of typhoons (which has left some matches cancelled), tickets for matches in the knockout stage were reportedly almost sold out. A survey by Nikkei also found that tourists visiting to watch the 2019 Rugby World Cup spent more than twice as much as an average Asian tourist, particularly in accommodation, as they stayed longer and paid a higher rate per night (probably due to the seasonal pricing structure during the World Cup event). This bolsters our case that the 2020 Olympics would be a repeated win for Japan.

IT services sector to benefit from trends. Japan's IT services sector benefits from the rise in domestic IT spending. This is driven by several factors including: (i) the ageing population that leads to an acute labour shortage, (ii) work-style reforms, and (iii) the rise of next generation IT technologies including cloud, big data, and AI. Being almost wholly domestic-focused, Japan's IT services sector also provides a hiding place from the ever-changing trade rhetoric and at the same time offers secular growth prospects – a rarity in Japan.

The sector's operating margins have been on the rise owing to two main factors. Firstly, a shift in product mix towards higher value-added, consulting-related work as opposed to lower margin IT equipment distribution and leasing businesses. As IT complexity increases with the advent of things like big data, AI, and more cloud-based systems, this shift will likely continue, further supporting margins. Secondly, as demand for IT services has become more urgent due to Japan's persistent labour shortages, IT solutions companies have been able to focus on profitability by being more selective in accepting jobs or exercising pricing power amid this favourable order climate. However, the key risk for the sector will be a broad-based economic slowdown.

Figure 4: Japan IT services sector's average operating margin has been rising



Source: Bloomberg, DBS

Table 2: Beneficiaries of themes in Japan

Themes	Beneficiaries
Ageing Population/ Labour Shortage	Pharmaceuticals
	Medical devices
	Health Care services
	IT services
	HR services/recruitment
	Recruitment
Olympics/Tourism	Cosmetics
	Discount stores
	Railway transportation
Technology	IT services
	e-Commerce
	FinTech
	Automation
	e-Gaming
	Semiconductors
Fiscal Stimulus	Construction

Source: DBS

Asia ex-Japan Equities | 1Q20

Re-rating on the cards

Asia ex-Japan Equities

Yeang Cheng Ling | Strategist
Joanne Goh | Strategist

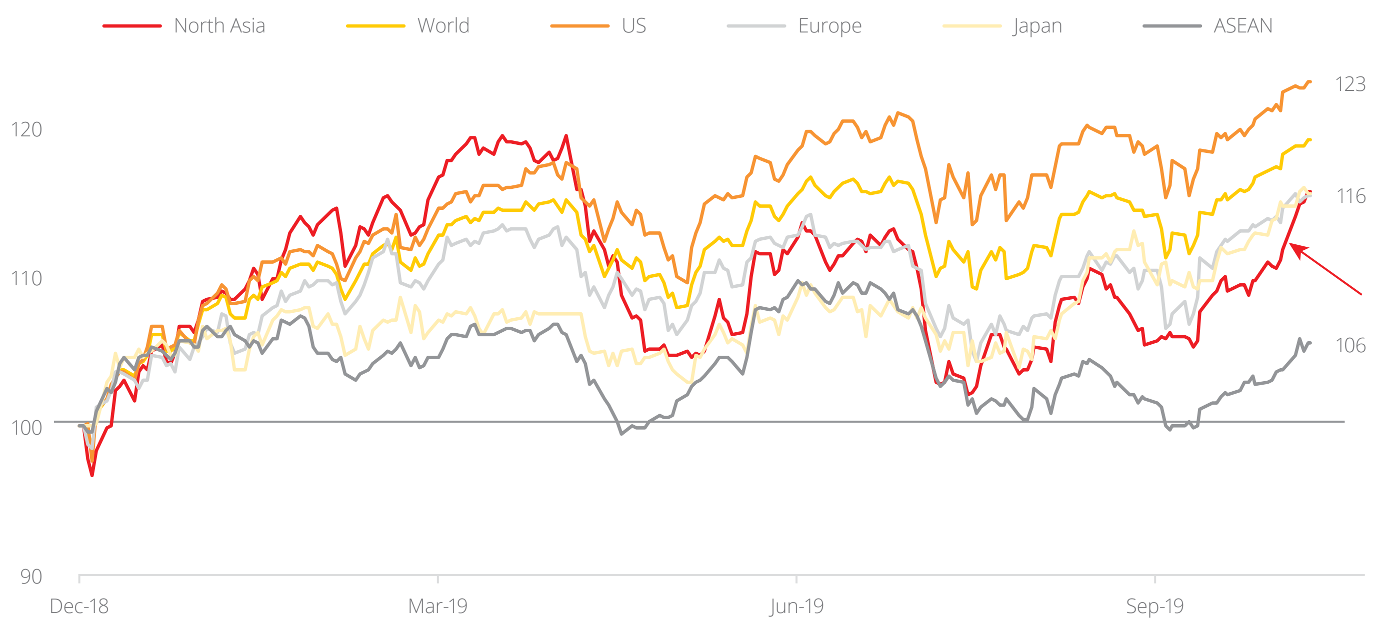
Since the start of the US-China trade war in early-2018, market sentiment in AxJ equities has been largely subdued. During the same period, Asian policymakers have embarked on a number of policy measures to buffer the negative impact – including a series of fiscal stimulus packages, monetary easing measures, as well as structural reforms in the attempt to shore up domestic demand amid external uncertainties.

The rise in trade tensions has taken a toll on world's economic growth. This is reflected in US factory output which shrank in 3Q19, UK industrial production growth that hit its lowest since 3Q13, and Germany data which indicated the country is teetering into recession. Similarly in Asia, China's growth is slowing.

In 4Q19, optimism began to rise upon signs of easing trade tensions. North Asia equities outperformed as a result, en route to catch up with the US and other DM (Figure 1). Should an interim US-China trade deal be sealed, we expect confidence to be restored and more importantly, it will inspire the revival of corporate capital spending.

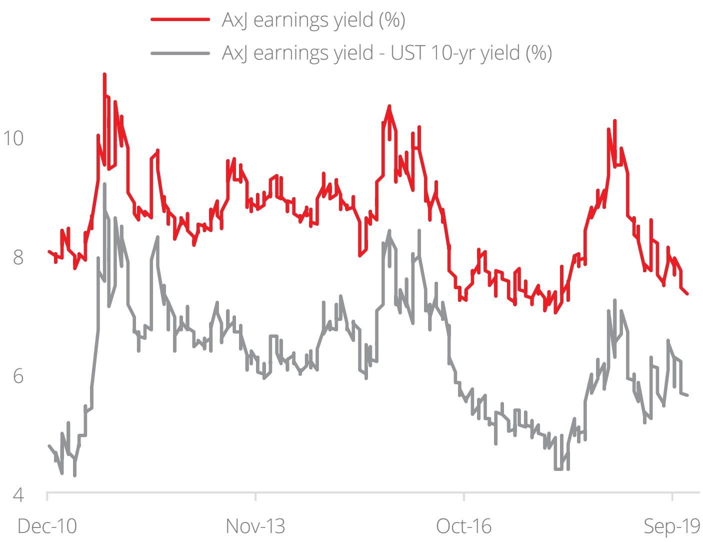
Today, earnings yield, standing at 7%, alongside a positive spread over UST yield are supportive to the AxJ equities (Figure 2). In addition, other valuation metrics such as high free cashflow yield and low P/B also make the case for the AxJ markets (Figure 3). We believe a re-rating is in sight once investor confidence in the fundamental is restored.

Figure 1: North Asia equities recovering



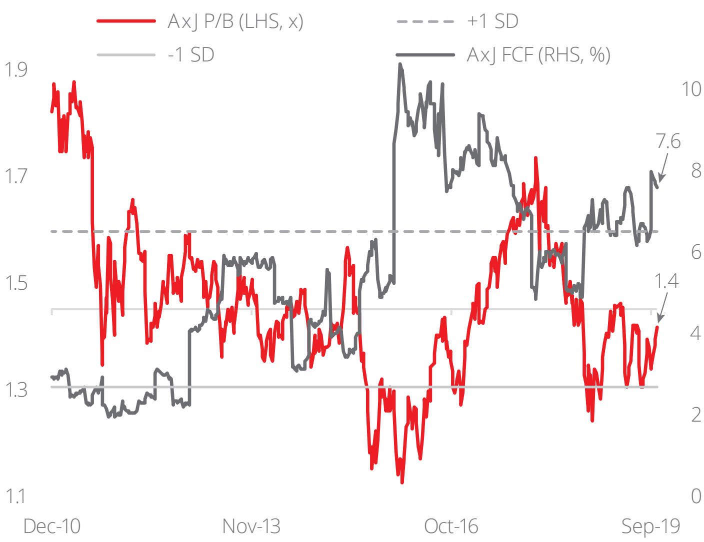
Source: Bloomberg, DBS

Figure 2: AxJ earnings yields vs US 10-year sovereign bond yields



Source: Bloomberg, DBS

Figure 3: Valuation and FCF yield gaps should converge



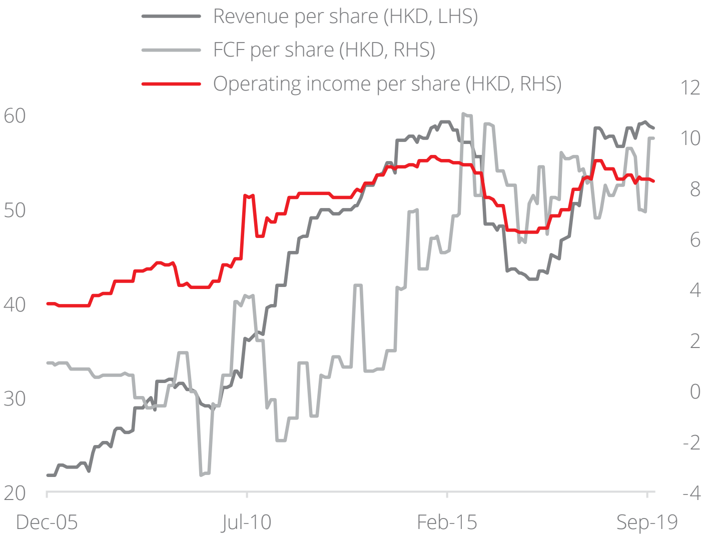
Source: Bloomberg, DBS

Stay constructive on China. We have been constructive on China equities since the start of 2019 and we singled out the domestic consumption trend as well as specific themes like ageing and health care as bright spots. Year-to-date, China Shanghai A-shares registered a total return of 22%, vastly outperforming the AxJ index's 15%, as investors turned upbeat about the long-term domestic demand.

The spread between equities earnings yield of 8% and the 10-year sovereign bond yield has stayed in the range of 3-4% (Figure 4), highly supportive of China stocks. The recent 300 times oversubscription of a convertible bond issuance by Shanghai Pudong Development Bank is testament to the confidence in China's capital markets.

Mainland firms have demonstrated their revenue and earnings ability over different economic cycles. On a per share basis, revenue and operating income almost tripled between pre-GFC and now; free cashflow also rose sharply (Figure 5) amid the country's economic and capital market transformations.

Figure 5: Growing revenue and profits among China companies



Source: Bloomberg, DBS

Figure 4: Equities earnings yields above bond yields

Source: Bloomberg, DBS

Demographic changes: With a 1.4b population, a shift in China's demographic median age and longer life expectancy (Figure 6) presents a unique long-term investment opportunity.

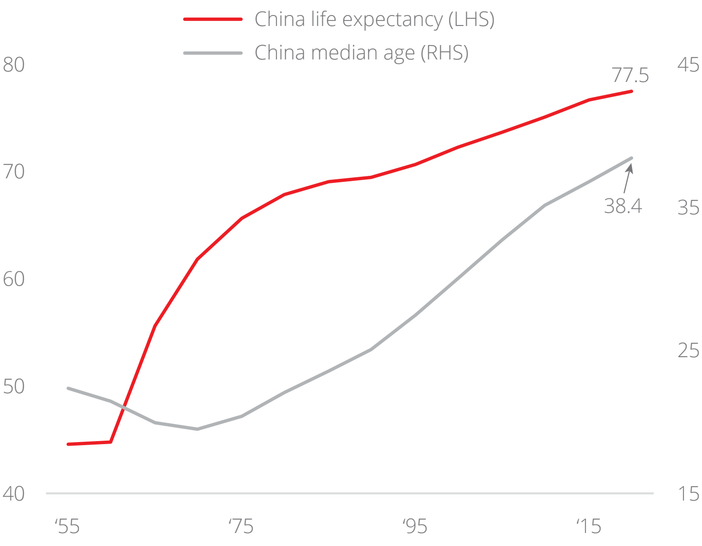
With an annual spending of USD122.6b, China became the world's second-largest pharmaceutical market in 2017. Its pharmaceutical market is also the largest among emerging economies, with annual total addressable market projected to reach USD145-175b by 2022.

Low health care expenditure as a percentage of GDP, an ageing population, and rising household income will spur demand for health care and related services.

Urbanisation: We expect more large cities to mushroom going forward, reaching the 60% mark by 2020 (Figure 7). The top five most populated cities (Shanghai, Beijing, Tianjin, Guangzhou, and Shenzhen) account for only 5% of total population, and the top 10 cities collectively make up less than 8%. As at end-2018, there were 18 cities with populations of more than 5m and we expect more such cities to emerge.

Of the 1.4b population, 342m fall in the age group of 25-54. This is more than the US population of 330m.

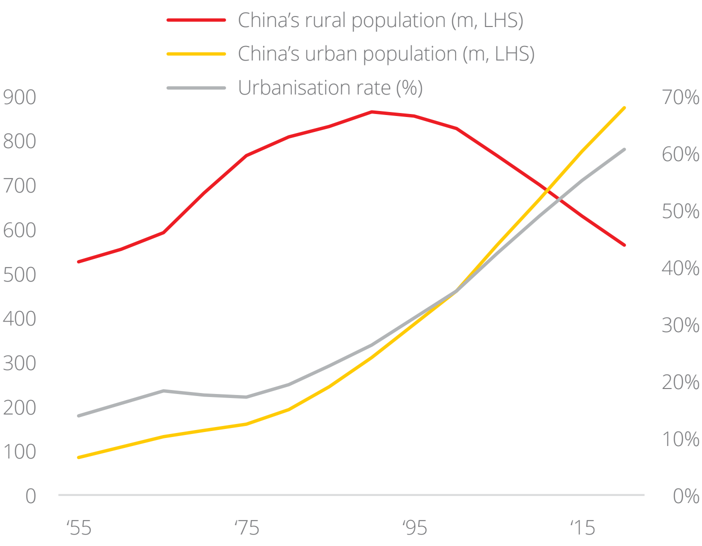
Figure 6: Longer life expectancy a new normal



Source: Worldometers, DBS

Rapid urbanisation and the emergence of mega cities will spur domestic consumption in the long term, creating an extensive range of investment opportunities in real estate, health care, insurance, education, high-end consumption, dining, and travelling.

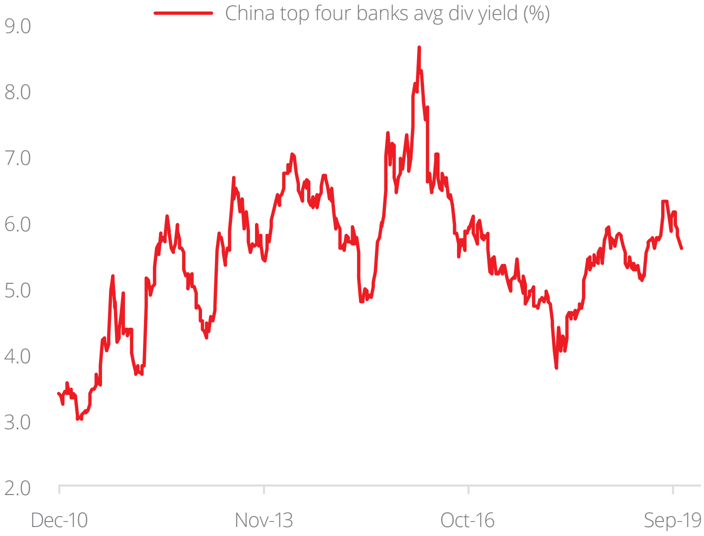
Figure 7: Urbanisation offers investment opportunities



Source: Worldometers, DBS

Source: Unsplash

Figure 8: China large banks, a dividend play



Source: Bloomberg, DBS

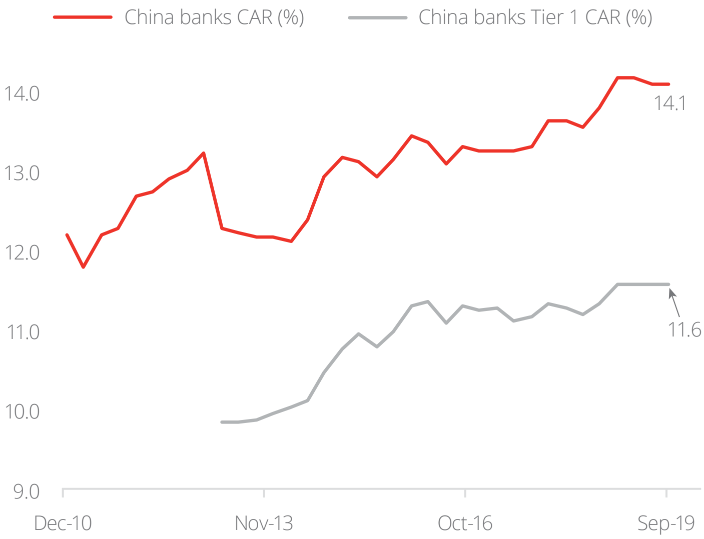
Figure 9: Dividends a boon to investors

Source: Bloomberg, DBS

We stay constructive on this theme despite a strong return of 9% by the top four banks in 3Q19. China's large banks, with its 6% dividend yield (Figure 8), are a key part of the income-generating allocation in CIO's Barbell Strategy. Over time, we believe dividends will form a larger portion of the total return. This was reflected in the performance of the country's listed financials over the past five years where the total return, comprising both dividends and price gain, amounted to 46%, ahead of the absolute price return of 20% (Figure 9).

The banking sector is well capitalised with capital adequacy ratio of 14% and Tier 1 capital ratio of nearly 12% (Figure 10), sufficiently above the 10.5% as required by the Basel III. At 0.7x forward P/B, China Financials are trading at compelling valuations and we maintain constructive view on them.

Figure 10: China banks have sufficient capital buffer ...



Source: Bloomberg, DBS

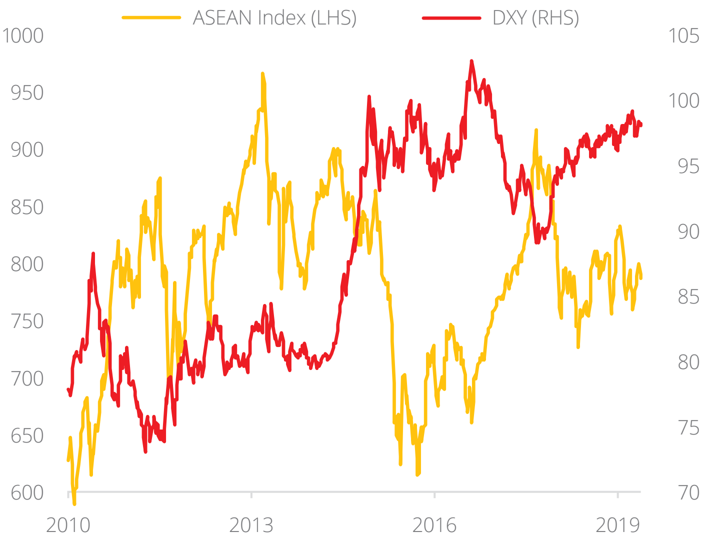
Figure 11: ... and on compelling valuations

Source: Bloomberg, DBS

Notwithstanding the low bond yield environment globally, the overall investment tone in ASEAN remains cautious as global economic outlook deteriorated. IMF lowered its forecast for global GDP growth five times in 2019 to 3.0%, the slowest pace since the GFC in 2008, amid escalating trade war tensions.

ASEAN's GDP is expected to grow at 4.6% in 2019 and 4.8% in 2020, significantly outperforming global growth. That said, ASEAN markets would need a benign USD and low bond yield environment for the EM yield carry trades to return.

Figure 12: ASEAN index and DXY holds inverse correlation



Source: Bloomberg, DBS

At this juncture, while USD looks toppish, it does not seem to be ready to turn as unresolved global challenges are likely to drive safe-haven flows. Meanwhile, global bond yields have recovered from lows and look set to normalise toward a higher range as global central banks caution on the damaging impact of negative bond yields.

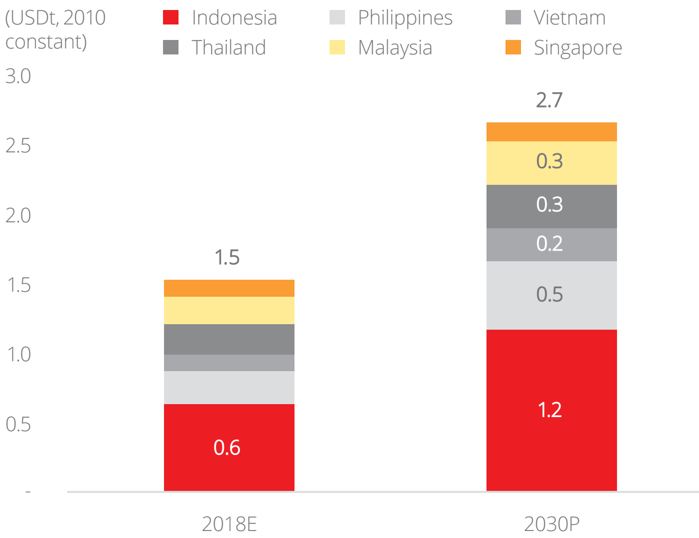
Within ASEAN equities, we look for winners in secular growth trends where growth prospects are superior as well as sustainable. A low interest rate environment also makes us look for yields in high dividend-paying sectors. Valuations for companies with recurring income should be well supported from a discounted cashflow perspective.

Investment themes in ASEAN

Indonesia consumption: The investment strength in Indonesia lies in its favourable demographics. Indonesia is the third-most populous country in Asia and has a high proportion of working adults. Its household consumption spending leads the rest of ASEAN, accounting for 42% of the group in total. This should drive many consumer brands to seek a presence in the market. The nation is also fast becoming ASEAN's biggest e-Commerce market, as private equity funds continue to invest in start-ups in the digital space, endorsed by President Joko Widodo's push for a digital economy.

Long-term winners can thus be found in the consumer sector. As consumption proxies, we see Telecommunications and Banks as business enablers to capture the benefits of a digital economy due to their sheer size of customer base.

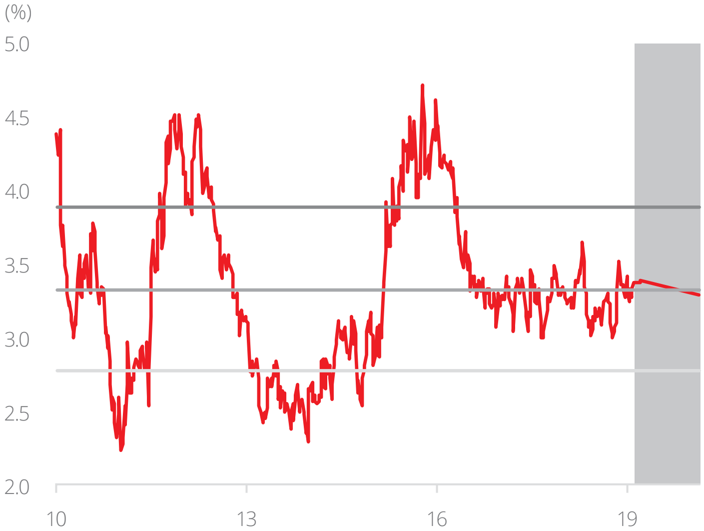
Figure 13: ASEAN household consumption – Indonesia constitutes about 42% and is projected to grow to 49%



Source: CEIC, DBS estimates

Singapore REITs: Although the sharp yield compression for Singapore REITs is likely over, the sector could still be supported by: i) low funding costs; ii) yield accretive acquisitions; and iii) a possible increase in permissible debt ratio. The recent inclusion of some the REITs in benchmark indices also bodes well for a broadening of investors' base. As shown in Figure 14, even taking into account for a rise in SGS 10-year bond yields by 30 bps into 2020, valuations continue to be supported. We expect dividends to grow by 3% on average.

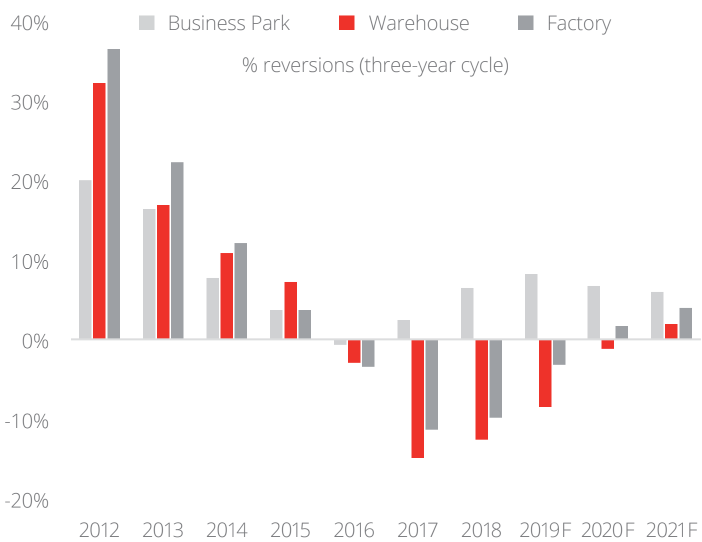
Figure 14: Singapore REITs dividend yield over 10-year SGS yield



Source: Bloomberg, DBS
Shaded cells are proforma into 2020 based on forecast

We look for selected picks which offers both yield and growth, and prefer the Industrial sub-sector. In that sector, focus is shifting away from more general specification flatted factories to include business parks and data centre properties. Demand for industrial, logistics, and warehousing are expected to increase on the back of growth in e-Commerce as well as from companies looking to diversify operations away from China. Singapore, as a regional hub, will benefit from these sources of new demand.

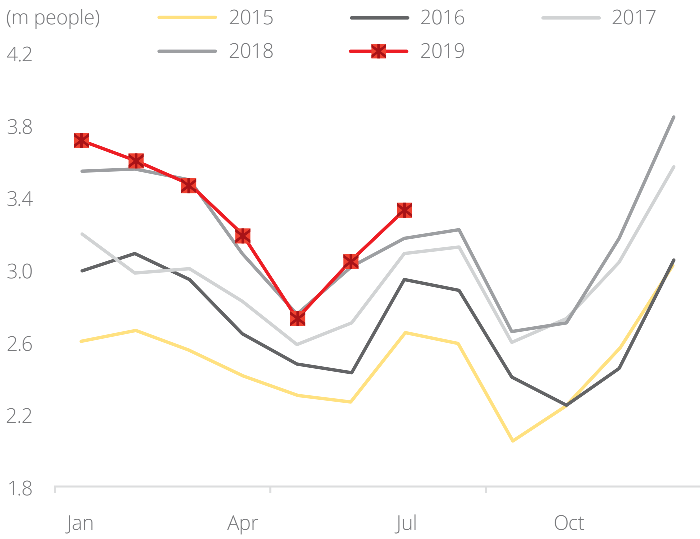
Figure 15: Rental rates have reversed from the downtrend in 2017 amid stable demand and as supply reduces. Bright spot is in business parks



Source: JTC, URA, DBS
Shaded cells are proforma into 2020 based on forecast

Thailand tourism: We focus on Thailand's tourism sector as a long-term winner. The sector contributes to about 10% and 20% of the country's GDP, calculated directly and indirectly, with the latter number projected to grow to 30% by 2030. As the economy grows slower than expected, it is important that this growth engine gets going. Beneficiaries include airport operators, hotels, and retail chains catered for the tourists.

Figure 16: Thai tourist arrivals in line with seasonality



Source: Bloomberg, DBS

Table 1: Summary of key Asia investment themes

Themes	Beneficiaries
Semiconductor and e-Sports	North Asia IC design and wafer foundries
Ageing population	Insurance
Dividends play	China large banks
	Singapore REITS
Tourism	Airports
Asia domestic consumption	China e-Commerce
	Indonesia consumption
	Vietnam proxies
China trade diversification	Singapore and Thailand Industrial property
Government stimulus	China banks
Market reform	China A-shares
	Vietnam

Source: DBS


Source: Unsplash

DBS Live more, Bank less

Global Rates | 1Q20

Policy pause

Global Rates

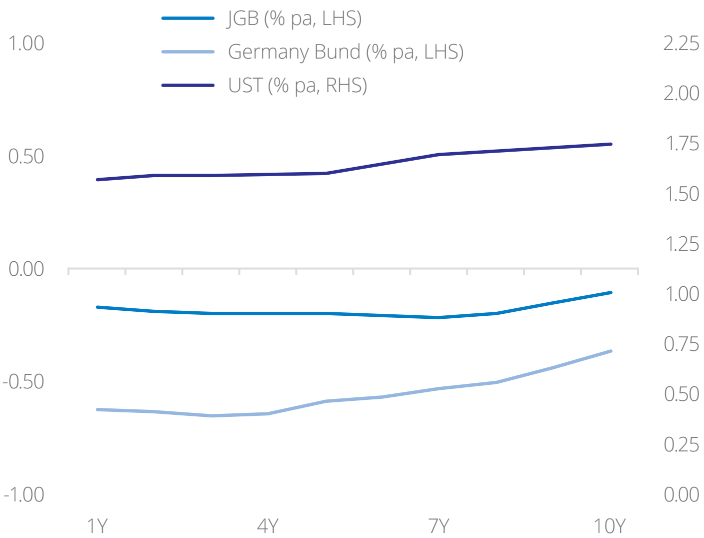
Eugene Leow | Strategist
Duncan Tan | Strategist

2020 is likely to mark a pause in monetary easing across the G-3 space. To recap, global economic growth proved challenging in 2019 amid an extended manufacturing/electronics slump. Increased uncertainties surrounding the US-China trade war have dented sentiment and proved to be a drag on investment growth. As a result, both the Federal Reserve and ECB have stepped up efforts to cushion growth while the BOJ, having embarked on aggressive easing for multiple years, held back.

Limits of monetary policy? The ECB and BOJ have likely reached the limits of monetary policy. We are seeing increasing signs of pushback against overly flat curves and overly low rates as policymakers realise that they are pushing on a string. At the same time, low rates may impair the ability of financial institutions to function. To the Fed, the cumulative 75 bps of rate cuts should be viewed as a mid-cycle adjustment. We suspect that the hurdle for policy moves in either direction is now set much higher and reiterate our base case that the Fed will be on hold through 2020.

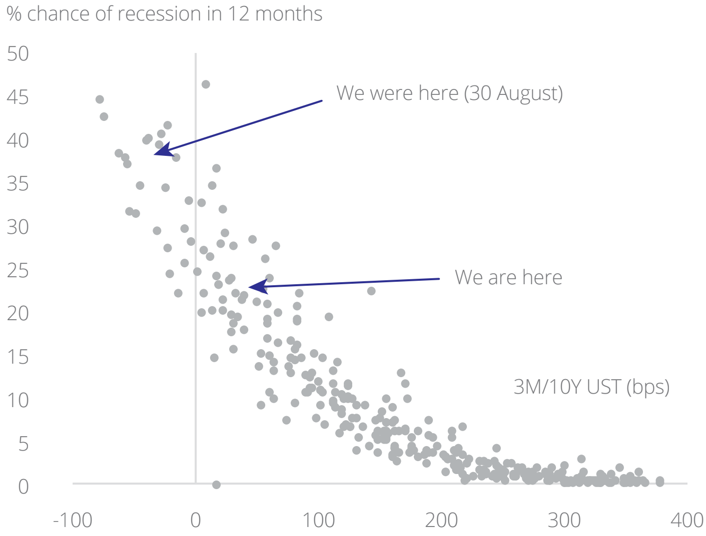
There have been some tentative signs of a turnaround in the global electronics sector in 4Q19 and this should translate into better numbers in 1H20. The slowdown in manufacturing was the single largest factor weighing on global growth. However, with electronics inventories starting to fall in South Korea and Taiwan, the supply overhang could be slowly easing, ending an almost two-year slump. Headline growth figures should subsequently start to look better as production begins to contribute to GDP growth again.

Figure 1: G-3 curves are normalising



Source: Bloomberg, DBS

Figure 2: Recession risks have receded

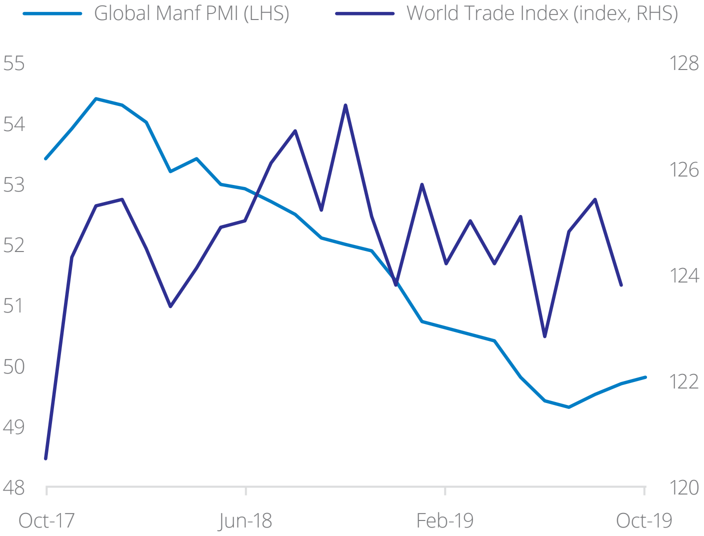


Source: Bloomberg, DBS

Policy shift towards aggressive fiscal spending. Lastly, we think the policy mix will shift towards more aggressive fiscal spending over the coming quarters, balancing out the one-sided monetary policy easing in 2019. Arguably, only the US is running expansionary fiscal policy as revenue growth lags after US President Donald Trump's tax cuts. Japan implemented a consumption tax hike in October while the Germans are still reticent to spending even as the economy narrowly averts a technical recession. Modest loosening could be in the offing across the G-3 amid lingering concerns over growth.

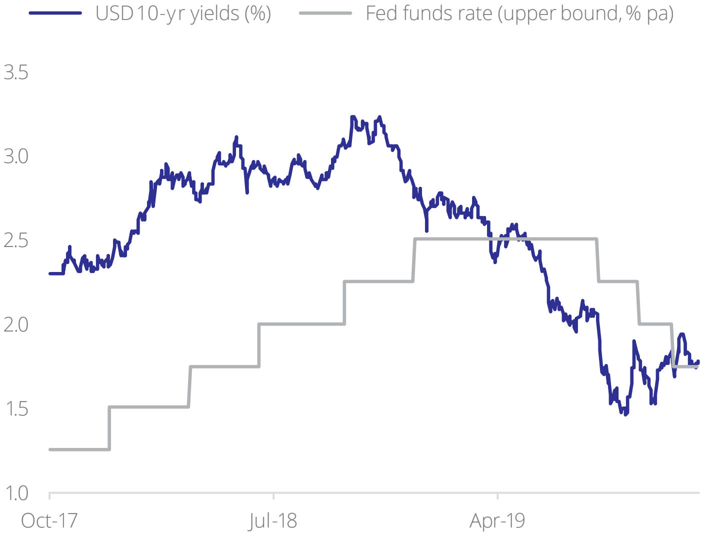
We expect modest bear steepening across the G-3 curves, based on these reasons. Short-term rates are likely to be broadly stable as their respective central banks keep policy rates on hold. However, an improvement in growth dynamics should see long-term rates drift higher.

Figure 3: Early signs of manufacturing bottom?



Source: Bloomberg, DBS

Figure 4: Steepening ahead



Source: Bloomberg, DBS

Source: Unsplash

Asia Rates

CNY rates: Cautious optimism

Controlled monetary policy easing by the PBOC will be lightly supportive of government bonds and rates in 2020. Bond investors were largely disappointed with the returns in 2019 when the PBOC took a much more calibrated approach to easing than expected. In total return terms, China government bonds clearly lagged peers. To put things into perspective, the one-year MLF rate was cut by just 5 bps this year, compared to 75 bps worth of Fed cuts. The difference is even more stark for the longer tenors. Ten-year China yields are down by less than 10 bps since end-2018. Comparatively, UST 10-year yields are still down by around 75 bps over the same period.

In 2020, we think that the PBOC can deliver another 5-10 bps of cuts (very measured), playing catchup to the rest of the world. As headline GDP growth looks likely to slip below 6% and CPI starts to fall (as pork prices ease), current elevated yield levels are probably not warranted. We see 10-year government bond yields drifting towards 3% in the coming few quarters. Further downside below 3% does not appear likely at this point.

Figure 5: Elevated CPIs preventing a rally in China government bonds

Source: Bloomberg, DBS

IDR rates: Measured easing ahead

BI is likely to keep an easing bias heading into 2020 as slower growth bites. This should support shorter tenor government bonds in the coming few months. The combination of slow global growth and depressed commodity prices have hit economic activity. However, the sizable Current Account deficit and self-imposed limits on fiscal spending (hard deficit capped at 3% of GDP) suggests that room for more government spending is constrained. The fiscal impulse for 2020 will probably be neutral to modestly positive at best.

Against this backdrop, we think that monetary policy may be the logical lever to pull. BI has been more aggressive in recent months, cutting by a cumulative 100 bps since mid-2019, unwinding slightly more than half of the hikes seen in 2018. Despite the cuts, the passthrough to various borrowing costs differ. To be sure, some of the improved liquidity has already led to compression in the 3M Jibor/7D repo spread, but transmission to commercial borrowing costs has been more muted, suggesting that more cuts may be needed.

Figure 6: Short-term IDR rates to stay supported

Source: Bloomberg, DBS

INR rates: Steepening into flattening

We think India government bonds will hold up relatively well in early-2020 but are somewhat concerned about fiscal issues over a longer horizon. The RBI has been on an aggressive easing spree, but we suspect that the room to cut rates has become limited. As such, the bull steepening in the INR curve is starting to look stretched. Notably, the 2-year/10-year spread (98 bps, 2.5 SD away from the five-year average) is steep by recent standards and we think that short-term rates may be resistant to heading much lower even as they are anchored by low policy rates.

Thus far, longer-term rates have borne the brunt of budgetary worries. Shorter-term rates have done well as low inflation is supportive of easy monetary policy. However, these dynamics could change over the coming quarters. The interplay between inflation and fiscal worries will be critical to watch for and we see two ways curve flattening can play out. In the benign scenario, inflation expectations fall and fiscal worries ease, allowing longer-term INR rates to decline. In a more challenging scenario, fiscal and inflation worries pick up with the underperformance now concentrated in the front of the INR curve.

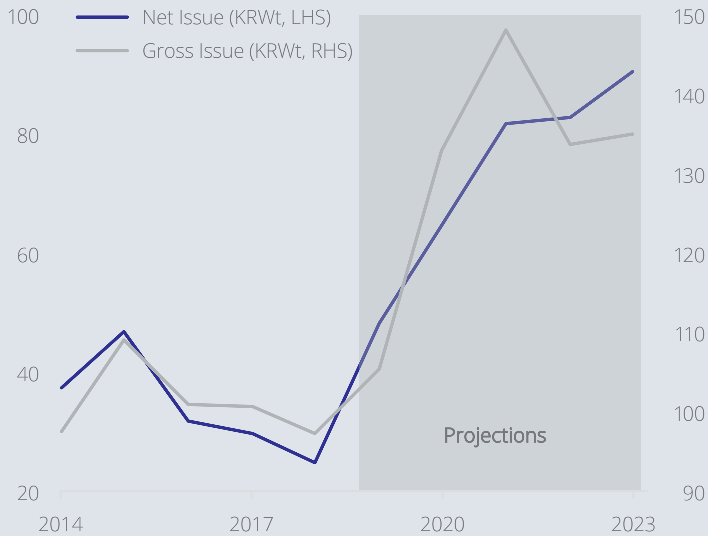
Figure 7: Steepening into eventual flattening

Source: Bloomberg, DBS

KRW rates: High beta to US-China trade outcomes

Improving sentiments surrounding the US-China trade talks have led to a rebound in KTB yields as markets bring forward their expectation of a bottoming in Korean economic activity. However, yields could overshoot in the absence of a clear turnaround in economic data. In the near term, KTBs will continue to be primarily driven by the trajectory of US-China trade talks. Considering the likely volatility and the start-stop nature of negotiations thus far, we are neutral on KTBs and advise light positioning on duration. We are also monitoring the prospects of more expansionary budgets in the coming years (supply risks). Based on the 2020 Budget proposal, government debt is estimated to climb from 37.1% to GDP in 2019 to 46.4% in 2023. Working off those parameters, our projections show that both gross and net issuances could increase considerably in the coming years. Yearly net issuances could jump from a KRW25-50t range (2016-19) to a much higher KRW65-90t range (2020-23 projected).

Figure 8: Yearly issuances could rise quite materially



Source: Bloomberg, DBS

MYR rates: Valuations richened despite staying on FTSE Russell watchlist

We are neutral on MYR interest rates with a slight bearish tilt. Against a less expansionary fiscal stance next year and continued downside growth risks, onshore swap markets are pricing for a moderate-to-high likelihood of one more rate cut from BNM by mid-2020. However, we think that the current policy stance and rate are sufficiently accommodative and hence, BNM is likely to stand pat. Malaysian government bonds remain on FTSE Russell's watchlist for potential exclusion from FTSE World Government Bond Index (WGBI), with the next review scheduled March 2020. Since escaping exclusion at the recent review in September 2019, Malaysian bonds have richened significantly based on several indicators. Considering rich valuations and lingering index exclusion risks, we advise light positioning on bond duration.

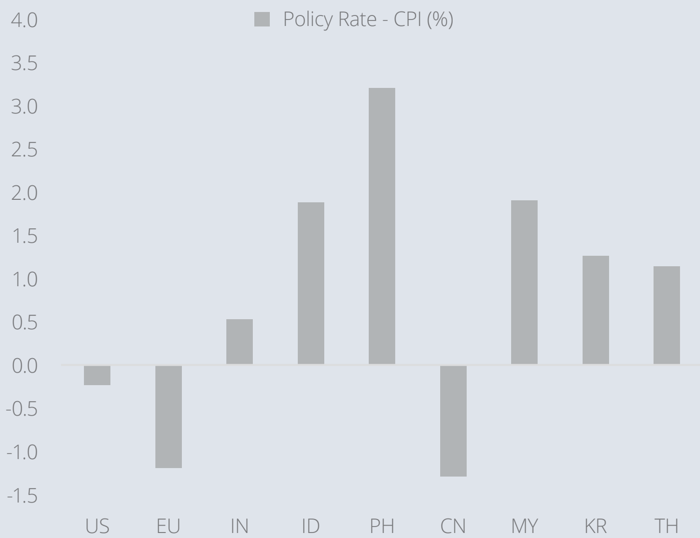
Figure 9: Swaps are pricing for one more BNM cut in 2020

Source: Bloomberg, DBS

PHP rates: Stay constructive for another year

We remain constructive on RPGB even after this year's outperformance. Onshore factors could continue to be anchors, holding yields low. With the current real rates being high, BSP could further unwind 2018's policy rate hikes to support growth. Continuing to cut RRR in stages would also add more liquidity that could help to dampen any upward pressure on rates, e.g. from possible PHP weakness. Considering the current macro backdrop, there is a lot to like about RPGBs vs other Asian bonds. The Philippines' economic outlook is considerably less challenging relative to other Asian economies. A stronger growth trajectory would be positive for credit metrics and could translate to lower borrowing costs. In terms of risks characteristics, we like that RPGBs have low sensitivities to the trajectory of US-China trade talks (hard to predict) and offer strong buffers against rising core yields via steep curves and healthy rate differentials.

Figure 10: With high real rates, BSP has room to cut



Source: Bloomberg, DBS

SGD Rates: Conducive environment

Conditions will become more conducive for SGD rates' outperformance (vs the USD counterparts) in 2020. We highlight several reasons for this. Firstly, we think that the Fed is largely done with the easing cycle (three cuts in 2019). After front loading, we expect the hurdle to move (in either direction) to be set higher and the Fed to stay on hold through 2020. Against this backdrop, we think that short-term SGD rates will drift sideways. Secondly, a modest rebound in the export cycle could be in the offing. If this plays out, the optimism that is feeding into the market could sustain into 2020, keeping SGD rates low vis-à-vis USD rates. Thirdly, a larger fiscal stimulus (which we are penciling in for 2020) could improve SGD's liquidity.

We think that the SGS curve could modestly steepen over the next several quarters. This is contingent on our view that the US economy stays resilient and the global economy troughs in the immediate few months.

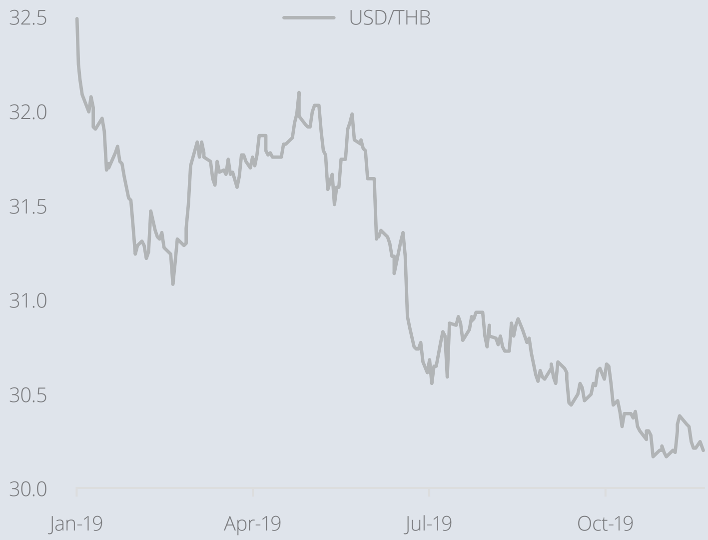
Figure 11: Un-inverting the SGD curve

Source: Bloomberg, DBS

THB rates: THB FIX to trade elevated

With a strong currency weighing on tourism and exports, the BOT has stepped up on measures to slow THB's appreciation. Some of these measures include cutting Treasury bill supply, reducing cap on non-resident bank accounts, relaxation of capital outflow regulations, and allowing gold to be traded in foreign currencies. On a standalone basis, the likely impact of these measures on onshore interest rates could vary. But in aggregate, to the extent that these measures act to rein in THB strength, the 6M THB FIX could start to trade elevated relative to the 1D Repurchase rate (BOT policy rate). Our forecast is for the BOT to stay on hold in 2020. In our view, there appears to be little room to cut rates further (based on distance to lower bound) and the effectiveness of weakening THB may be limited.

Figure 12: BOT introducing measures to rein in THB strength



Source: Bloomberg, DBS

Table 1: Rates forecasts

		2019	2020				2021			
		4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
US	3m Libor	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
	2Y	1.70	1.70	1.70	1.75	1.85	1.95	2.00	2.00	2.00
	10Y	1.75	1.75	1.90	2.00	2.20	2.40	2.50	2.50	2.50
	10Y-2Y	5	5	20	25	35	45	50	50	50
Japan	3m Tibor	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	2Y	-0.15	-0.15	-0.15	-0.13	-0.13	-0.10	-0.10	-0.10	-0.10
	10Y	-0.15	-0.15	-0.15	-0.10	-0.10	-0.05	-0.05	0.00	0.00
	10Y-2Y	0	0	0	3	3	5	5	10	10
Eurozone	3m Euribor	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40
	2Y	-0.60	-0.60	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
	10Y	-0.45	-0.45	-0.40	-0.30	-0.20	-0.10	0.00	0.00	0.00
	10Y-2Y	15	15	10	20	30	40	50	50	50
Indonesia	3m Jibor	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10
	2Y	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80
	10Y	6.80	6.80	6.80	6.90	7.00	7.10	7.20	7.20	7.20
	10Y-2Y	100	100	100	110	120	130	140	140	140
Malaysia	3m Klibor	3.35	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
	3Y	3.00	2.90	2.85	3.00	3.10	3.20	3.25	3.25	3.25
	10Y	3.40	3.40	3.50	3.60	3.70	3.80	3.85	3.85	3.85
	10Y-3Y	40	50	65	60	60	60	60	60	60
Philippines	3m PHP ref rate	3.30	3.25	3.20	3.15	3.10	3.05	3.00	3.00	3.00
	2Y	3.80	3.75	3.70	3.70	3.75	3.80	3.80	3.75	3.75
	10Y	4.70	4.55	4.40	4.30	4.20	4.40	4.50	4.50	4.50
	10Y-2Y	90	80	70	60	45	60	70	75	75
Singapore	3m Sibor	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
	2Y	1.65	1.65	1.65	1.65	1.65	1.70	1.75	1.75	1.75
	10Y	1.70	1.70	1.80	1.90	2.00	2.15	2.25	2.25	2.25
	10Y-2Y	5	5	15	25	35	45	50	50	50
Thailand	3m Bibor	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
	2Y	1.30	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
	10Y	1.75	1.85	1.95	2.05	2.15	2.35	2.45	2.45	2.45
	10Y-2Y	45	50	60	70	80	100	110	110	110
Mainland China	1Y Lending rate	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
	3Y	2.70	2.70	2.65	2.60	2.60	2.60	2.60	2.60	2.60
	10Y	3.20	3.20	3.10	3.05	3.00	3.00	3.00	3.00	3.00
	10Y-3Y	50	50	45	45	40	40	40	40	40
Hong Kong	3m Hibor	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
	2Y	1.65	1.65	1.65	1.70	1.80	1.90	1.95	1.95	1.95
	10Y	1.55	1.55	1.70	1.90	2.00	2.20	2.30	2.30	2.30
	10Y-2Y	-10	-10	5	20	20	30	35	35	35

%, eop, govt bond yield for 2Y and 10Y, spread bps.

Source: CEIC, Bloomberg, DBS

		2019	2020				2021			
		4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
South Korea	3m CD	1.55	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
	3Y	1.40	1.45	1.45	1.50	1.60	1.70	1.75	1.75	1.75
	10Y	1.65	1.80	1.95	2.05	2.15	2.35	2.45	2.45	2.45
	10Y-3Y	25	35	50	55	55	65	70	70	70
India	3m Mibor	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60
	2Y	5.55	5.55	5.55	5.60	5.65	5.70	5.75	6.00	6.00
	10Y	6.70	6.70	6.80	6.90	7.00	7.00	7.00	7.00	7.00
	10Y-2Y	115	115	125	130	135	130	125	100	100

%, eop, govt bond yield for 2Y and 10Y, spread bps. Source: CEIC, Bloomberg, DBS

Source: Unsplash

Live more,
Bank less

Global Credit | 1Q20

Carry
in play

Global Credit

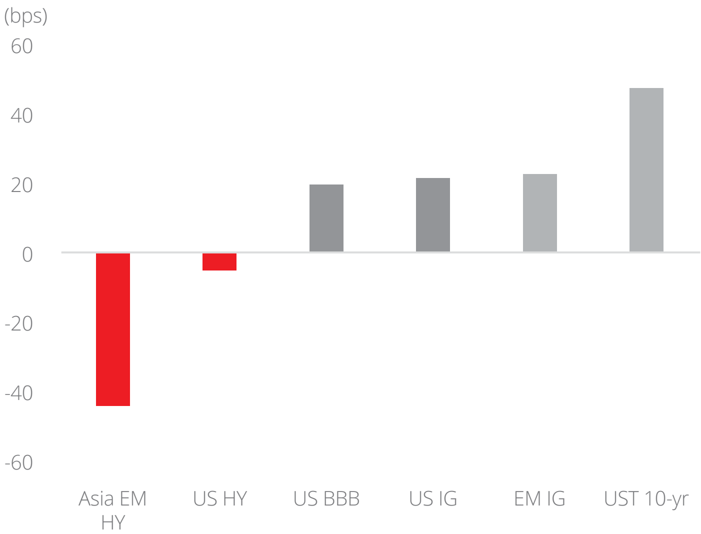
Joanne Goh | Strategist
Cheng Xin Yi | Fixed Income

Significant compression was already seen in the overall credit asset class this year, as global bond yields headed lower or turned negative in the first eight months of the year. The resumption of QE, rate cuts by global central banks, and recession fears are the main drivers behind the moves.

In 4Q19, global bond yields started to normalise as the US's government bond yields surged from the year's low by a whopping 50 bps, and Germany's bond yields recovered from -0.61% to -0.25%.

During the quarter, credit market performance was mixed as the corresponding yield increases in different credit segments was lower, suggesting that investors are not overly concerned on the moves. Instead, they see the steepening of the yield curve as a positive sign indicating that recession risks have receded. The yields in the segment that is most sensitive to the economy – EM Asia and US high yield credit – compressed further.

Figure 1: Rise in credit yields significantly lower vs UST; compression seen in Asia and the US



*Change in yields during 3 September to 11 November.
Source: Bloomberg, DBS

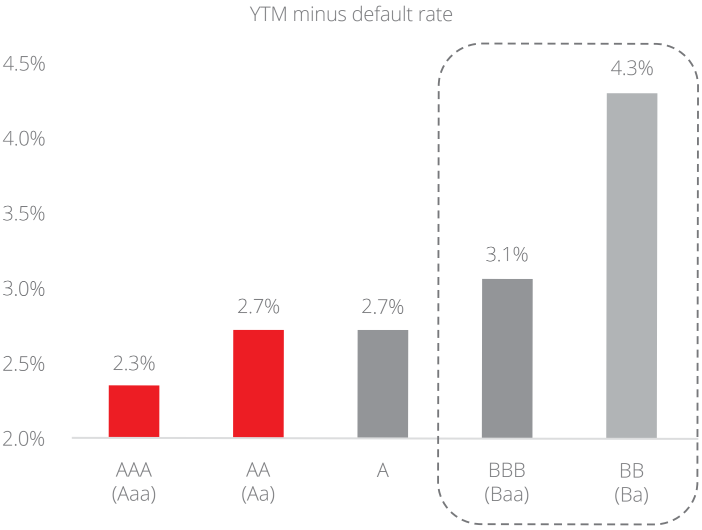
Figure 2: EM Asia high yield spread (vs UST 10-year) has compressed and is expected to compress further

Source: Bloomberg

We continue to advocate an Overweight stance in EM bonds and expect the yield spread to compress further. Despite this, we still see more value in the EM segment. In our view, near-term recession risk remains elevated by historical standards, but our base-case expectation is for the expansion – currently the longest in US history – to roll on. Recent bottoming of economic data is beginning to ascertain this view. We believe carry assets (such as high yield) make sense in an environment of low growth but no recession, and where interest rates continue to stay low.

The sweet spot is in the BBB/BB basket. Across the risk-rating spectrum, the risk-adjusted value for the BBB/BB basket is the highest. US Corporate BBB/BB (Baa/Ba)-rated credits currently yield between 3.3-5.3%. Historically, the average annual default rates for BBB (Baa) and BB (Ba) stand at 0.26% and 1.01%, respectively. Over the last 20 years, the default rate peaked during the 2008 recession, where the BBB (Baa) and BB (Ba) default rates were at 1.02% and 2.35%, respectively. If we consider the YTM relative to default rates of the different risk buckets, the BBB/BB (Baa/Ba) space does offer better value, even if we assume zero recovery rates (Figure 3).

Figure 3: Considering default rates since 1920, BBB/BB buckets offer better value



Source: Bloomberg, Barclays, DBS

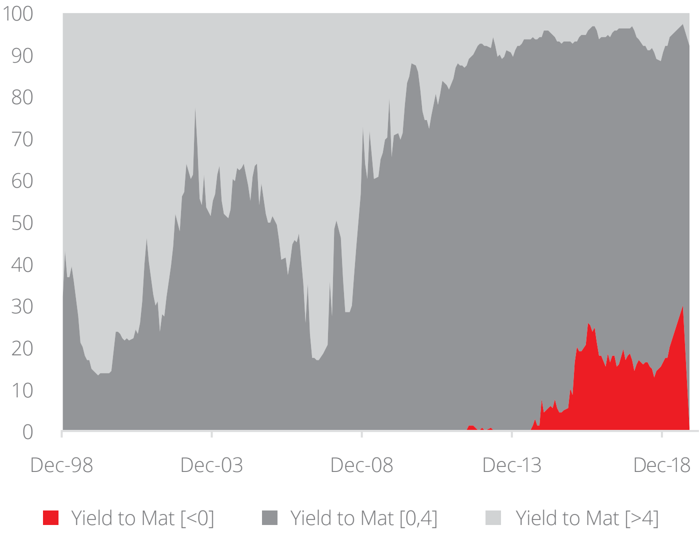
We recommend shortening the duration. Any growth surprises from the US economy could lead to a duration selloff. As a matter of fact, our economist has upgraded US economic growth from 1.5% to 1.9% for 2020. Admittedly the recent 50 bps moves in US 10-year Treasuries have made the bond market "less pricey" and have us feel more comfortable entering 1Q20, but we still see US bond yields rising to 2-2.5% in 2020.

Halting of central banks' easing poses further upside risks to yields. While interest rates are likely to stay low, recent central banks have voiced uneasiness with negative interest rates. The surge in negative-yielding bonds undermines the "time value of money" principle – that money today is worth more than money in the future as one can earn interest on it. It remains to be seen how long and extended this unusual phenomenon can last.

Both the ECB and BOJ have refrained from cutting interest rates further in their last policy meeting, and the Federal Reserve

Source: Unsplash

Figure 4: Percentage of global IG universe yielding 4% or more is getting smaller



Source: Bloomberg, Barclays, DBS

chairman has closed the possibility for another interest rate cut in this easing cycle.

Carry assets should continue to be supported. Still, global central banks' dovishness has led to the decline in G-3 interest rates in the longer term such that Europe and Japan government bond yields are now firmly in negative territory due to QE policies. In August, only 2.5% of the global IG universe yielded 4% or more. Although this number has since rebounded to 7.8%, it is still low compared to 36% 10 years ago.

Among Asia credits, China's property sector is a main highlight. Although the overall China economy is facing downside risk, we believe overall stability in the property sector is still of paramount importance to the central government. The authorities have managed the demand and supply side of the property market well in 2019, as evidenced by stability in residential prices. Significant changes in policy direction or excessive tightening are hence unlikely, in our view.

To be sure, the prime policy goal is to slow down land bank replenishments of major property developers, as the authorities see rising risks of higher land costs will consequentially translate into higher property prices. The central and local governments will thus continue to restrain liquidity from flowing too much into the hands of property developers via trust financing and USD bond issues. As such, we prefer names with diversified land banking capability, higher percentage of land bank in Greater Bay Area (GBA) and Yangtze River Delta (YRD) metro areas, and counter-cyclical rentals.

From a flows perspective, several RRR cuts in China and interest rate down cycles globally should offer a liquid credit environment both on- and offshore with the hunt for yield still a focused strategy. Some liquidity will eventually flow back into the property sector despite negative headline news on governments' efforts to control prices. We recommend investors to ride the sector consolidation wave and buy the solid BB/B names with good liquidity for carry during this credit tightening cycle.

Source: Unsplash

Global Currencies | 1Q20

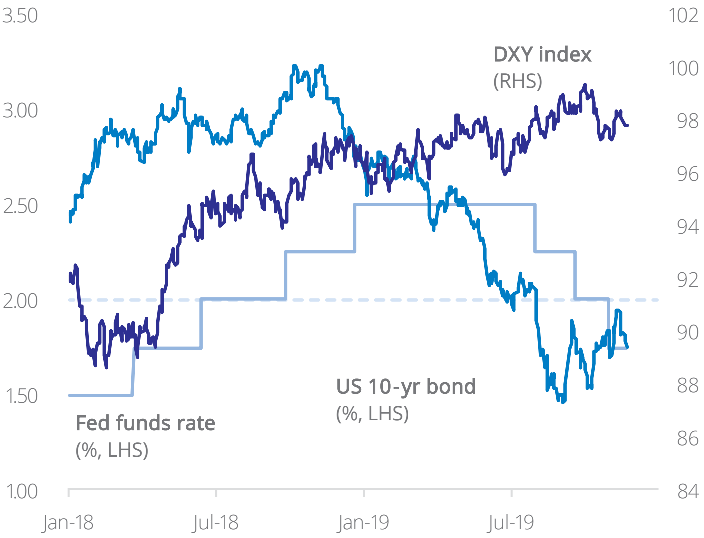
Dollar to stay firm

Global Currencies

Philip Wee | Strategist

The uptrend of the DXY is intact within a 95-100 range. The greenback has proven resilient to the three Federal Reserve rate cuts from July-October 2019. Barring a re-escalation of the trade war with China, the Fed has completed its mid-adjustment cycle after its third easing in October. Based on two previous episodes in 1996 and 1998, Fed hike expectations returned and lifted the DXY. This will require US economic growth to remain resilient amid record-high US stock indices. If so, the odds favour US President Donald Trump's re-election in 2020. To win back a GOP majority, Trump intends to woo voters with a middle-income tax cut.

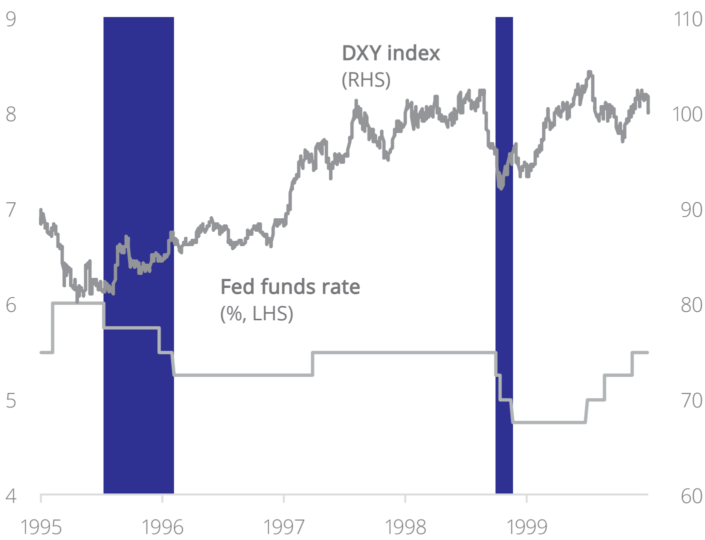
Figure 1: The US dollar



Source: Bloomberg, DBS

Euro has a weak bias against USD within 1.05-1.15, its old QE range of 2015-2017. Monetary policy divergence, economic woes, and political vulnerabilities in Germany could push EUR/USD into a lower 1.05-1.10 range. The ECB restarted its asset purchase programme on 1 November 2019, immediately after the Fed's final rate cut on 30 October. The European Commission has projected "a protracted period of more subdued growth and muted inflation" for the Eurozone economy. The German economy has averted a technical recession but not stagnation. EU unity will be questioned if the CDU-SPD grand coalition falls apart and lead to snap elections in Germany.

Figure 2: DXY appreciated after mid-adjustment cycles in 1995-96 and 1998

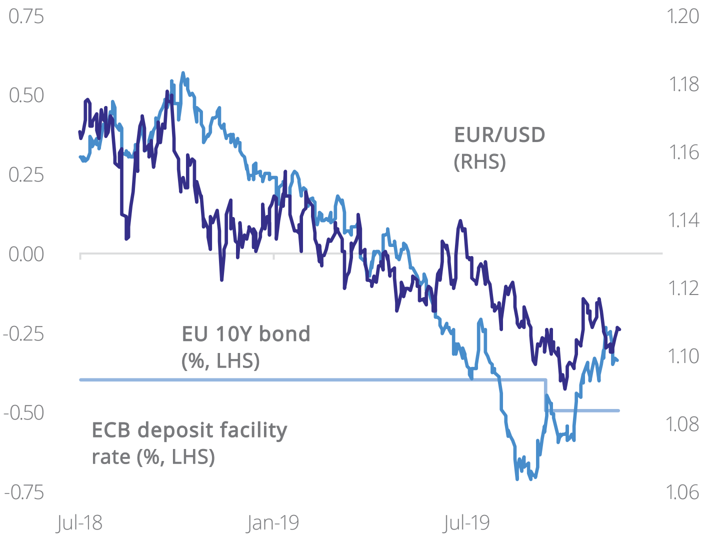


Source: Bloomberg, DBS

The British pound is vulnerable near the top of its 1.20-1.30 range. Having averted a no-deal Brexit on 31 October, the UK is headed for a hung parliament at the snap elections on 12 December. Brexit is likely to remain unresolved without any political party winning enough votes to form a majority government. EU is suffering from Brexit fatigue and is reluctant to accede any third request to extend Article 50 beyond 31 January 2020. Two BOE members have broken ranks and voted 7-2 to cut rates on 7 November 2019. Moody's has placed the sovereign debt rating on negative watch, alarmed that all the main parties intend to increase fiscal spending and borrowing without financing plans.

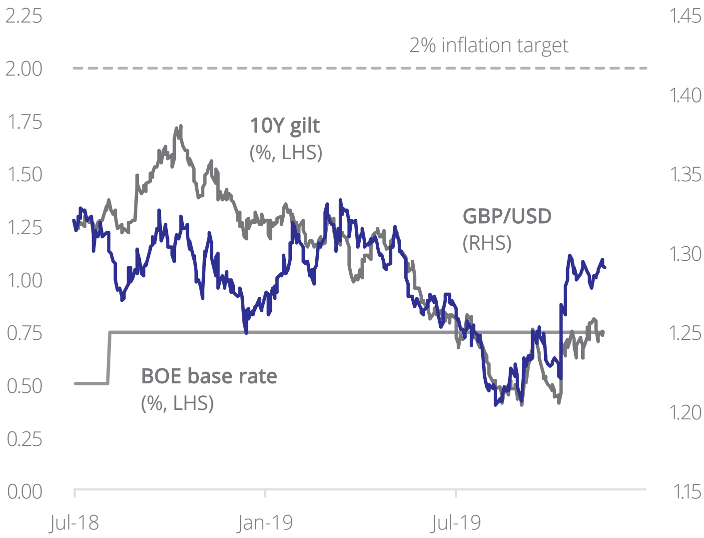
The Australian dollar has a downside bias below 0.70 against the USD. The RBA can, if necessary, further ease monetary policy after its third rate cut in October 2019. For now, the RBA is content to allow rates to stay low for an extended period, and return inflation back into its official 2-3% target. Real GDP growth decelerated to a decade-low of 1.4% y/y in 2Q19, accompanied by a rise in the unemployment rate to 5.3% in October from 4.9% in February. If the global economy deteriorates further, the RBA will consider unconventional tools such as negative interest rates and QE.

Figure 3: The euro



Source: Bloomberg, DBS

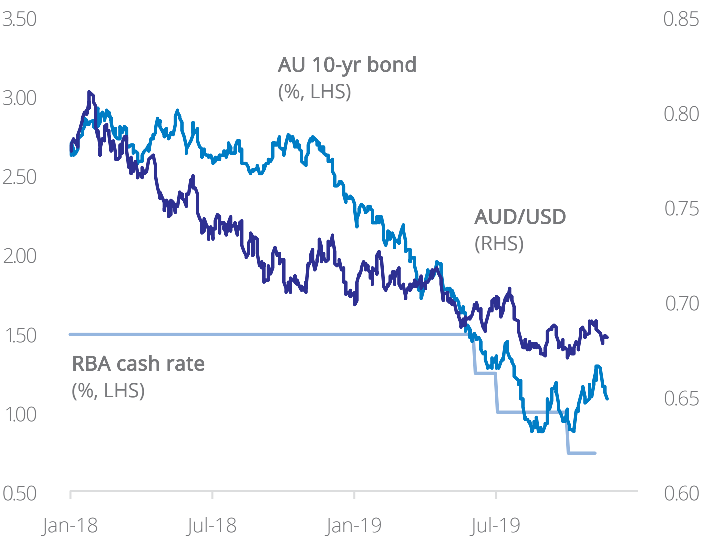
Figure 4: The British pound



Source: Bloomberg, DBS

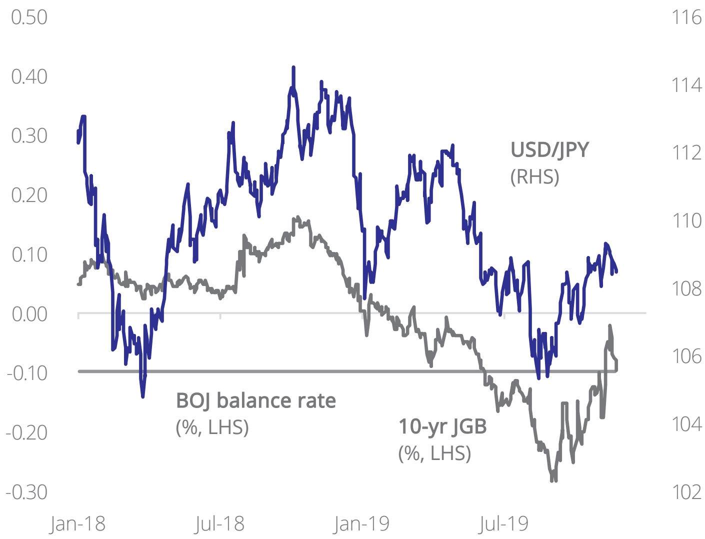
The Japanese yen will need a concerted fiscal/monetary stimulus boost to weaken past its 105-110 range. JPY has been sought as a safe-haven currency whenever the global trade war escalates. The BOJ's decision to stand pat during the three Fed cuts from July-October provided notable support for USD/JPY around 105. However, weakness in the economy has broadened. While trade and manufacturing contracted on the trade war, services declined for the first time since 2016 with the October sales tax hike set to weigh on consumption. On a positive note, the 2020 Tokyo Olympic Games is expected to provide a temporary boost to the economy via pre-event infrastructure spending and inbound tourism. With US rates on hold, a fiscal and monetary stimulus mix could work in tandem with a weaker JPY to support the economy.

Figure 5: The Australian dollar



Source: Bloomberg, DBS

Figure 6: The Japanese yen



Source: Bloomberg, DBS

Asia Currencies

CNY

The Chinese yuan is holding a 7.00-7.20 range vs USD for now. At the time of writing, China and the US have not been able to agree on tariffs for a Phase One trade deal. The base-case scenario sees a Trump-Xi trade deal that holds back more tariff increases. The best case sees the US acceding to China's request to roll back existing tariffs in phases. This would open the door for USD/CNY to fall below 7.00. The worst case would be the absence of a trade deal and a re-escalation in the war with tariffs increasing again. In this scenario, China's economic slowdown to less than 6% will come into focus and weaken CNY towards 7.20 and possibly more.

Figure 7: The Chinese yuan

Source: Bloomberg, DBS

HKD

The Hong Kong dollar has been stable within its 7.75-7.85 convertibility band. Pressure from the anti-government protests has fallen mostly on the economy which entered a technical recession in 3Q19. According to new HKMA Chief Executive Eddie Yue, monetary markets have been operating smoothly amid a stable exchange rate with no signs of outflows from the banking system. The linked exchange rate system is supported by an Exchange Fund that totalled 2.5 times the monetary base, foreign reserves that exceeded nominal GDP, and twin Current Account and budget surpluses. With the HKD peg to the USD intact, HKMA has affirmed that capital and foreign exchange controls would not be necessary.

Figure 8: The Hong Kong dollar

Source: Bloomberg, DBS

KRW

The South Korean won has depreciated against the USD into a 1,160-1,220 range since May 2019. The KRW has been most sensitive to the global trade war, both as a victim and a beneficiary throughout 2019. With the Fed on hold, USD/KRW could rise again on monetary policy divergence. Standard & Poor's views deflation as the largest domestic risk. CPI inflation turned negative for the first time in September. The BOK has already sent its policy rate to a record low of 1.25% via two rate cuts to complement the government's fiscal stimulus. Unfortunately, they have yet to overcome the global uncertainties (including the country's trade spat with Japan), keeping private sector corporate investment and consumer spending cautious.

Figure 9: The South Korean won

Source: Bloomberg, DBS

SGD

The Singapore dollar has held within a 1.35-1.39 range since mid-2018. Barring a positive US-China trade deal, SGD should return into the weaker half. SGD is considered strong relative to its weakened fundamentals. Ultra-low growth and slow inflation have led the MAS to slightly flatten the appreciation pace of the SGD NEER policy band in October. The MAS is ready to ease again (by ending the SGD's appreciation stance and re-centering the band lower) if the trade war spills over from trade and manufacturing into domestic demand and services. This will heighten the risk for the SGD NEER, which is already uncharacteristically strong in the highest quartile of its band, to fall sharply within its 4%-wide band.

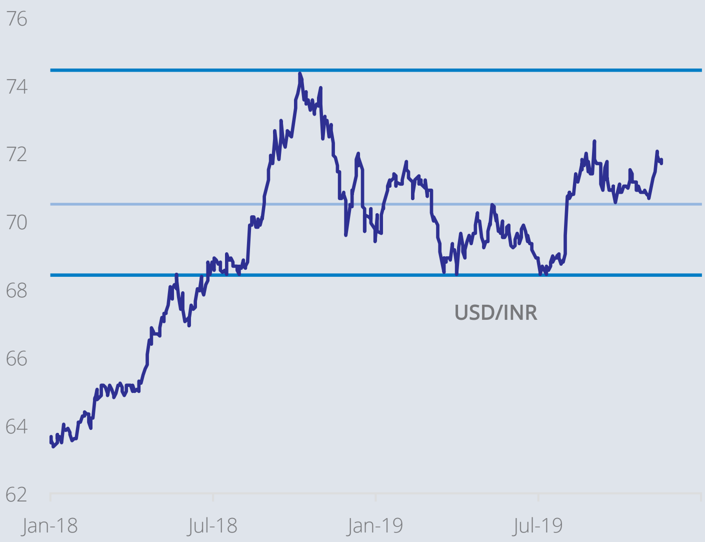
Figure 10: The Singapore dollar

Source: Bloomberg, DBS

INR

Look for the Indian rupee to hold a 68.5-74.5 range with a weak bias. The second term of the Modi government did not start well. Real GDP growth slowed dramatically to 5% y/y in 2Q19 from 8% the same quarter a year ago. The central bank is expected to further lower rates by another 50 bps into 1Q20 after the total 110 bps delivered since February 2019. The revenue shortfall from the slowdown and the corporate tax cut announced in September are likely to lead the government to miss its FY20 fiscal deficit target – 3.3% of GDP. Moody's has, in November, put the country's sovereign debt rating on negative watch. There was some disappointment that India decided to withdraw from the Regional Comprehensive Economic Partnership.

Figure 11: The Indian rupee

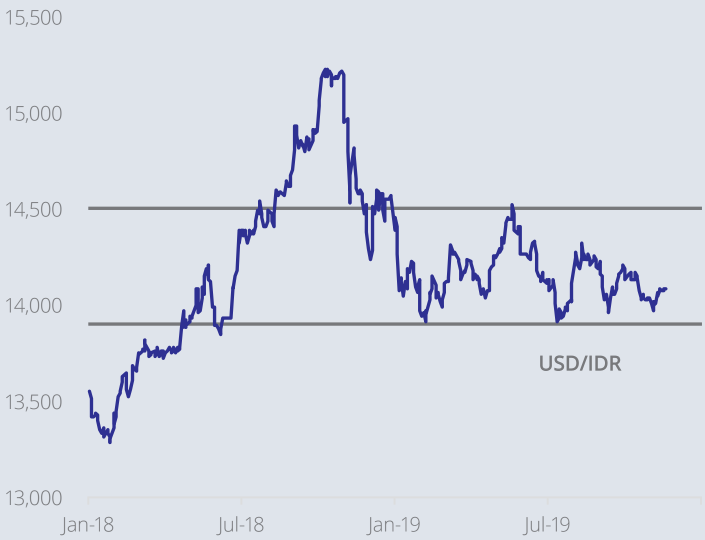


Source: Bloomberg, DBS

IDR

The Indonesian rupiah can keep to a stable 13,900-14,500 range for a second year. Externally, there will be no pressure from rising US rates during the US election year. Despite four rate cuts in 2019, Indonesian bond yields have remained attractively high to investors in a globally ultra-low to negative-yield environment. According to The Global Competitiveness Report 2019, Indonesia ranked high in macroeconomic stability. BI may lower its 2020 inflation target to 2-4% from 2.5-4.5% in 2019. President Joko Widodo and his economic team have prioritised narrowing the Current Account deficit during their second term in office.

Figure 12: The Indonesian rupiah



Source: Bloomberg, DBS

MYR

The Malaysian ringgit will continue to fluctuate within a 4.10-4.25 range. While not immune to global headwinds, the Malaysian economy has held up better than many of its Asian peers. GDP growth slowed only to two-year, and not 10-year, lows. BNM's rate cut in May 2019 is likely to be one-off; the overnight policy rate is set to remain stable at 3% into 2020. The cut in the statutory reserve requirement to 3.0% from 3.5% in November should not be construed as a prelude to more monetary easing but a measure to release more liquidity into the domestic financial system. Malaysia is probably more concerned about global shocks resulting in currency volatility via capital outflows than it is about currency appreciation.

Figure 13: The Malaysian ringgit

Source: Bloomberg, DBS

THB

The Thai baht may start to stabilise around 30-31. Thai businesses have blamed the trade war and the strong THB for weakening GDP growth to 2.3% y/y in 2Q19 from 5% in six quarters. With THB near 30, major business groups have called for a public-private committee to be set up to curb its appreciation. In November, the BOT announced extensive measures to relax capital outflow controls on exporters and retail investors to help balance capital inflows. Monetary divergences could also help here. The BOT has kept the door open for its record low 1.25% rate to fall a third time. Conversely, the US central bank intends to keep its Fed funds rate steady at 1.50-1.75% after three rate cuts.

Figure 14: The Thai baht

Source: Bloomberg, DBS

VND

The Vietnamese dong has been stable between 23,200 and 23,400 since mid-2018. Vietnam has benefitted from the trade war via the relocation of supply chains from China. On one hand, this has fuelled foreign direct investments and inflows and kept VND firm around 23,200. On the other hand, VND can quickly lose ground if the US labels Vietnam a currency manipulator and hit its goods with tariffs. The US's trade deficit with Vietnam has already exceeded the USD20b criteria; the bilateral gap ballooned 40% to USD41b in the first nine months of 2019. VND could weaken again if China and the US fail to sign a trade deal, re-escalate the trade war, and lead CNY and other Asian currencies to resume their depreciation.

Figure 15: The Vietnamese dong

Source: Bloomberg, DBS

Table 1: DBS currency forecasts

Exchange rates, eop								
	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
USD/CNY	7.20	7.15	7.10	7.05	7.00	6.95	6.90	6.85
USD/HKD	7.85	7.84	7.84	7.83	7.82	7.81	7.80	7.80
USD/INR	72.0	72.5	73.5	74.0	73.5	73.0	72.5	72.0
USD/IDR	14,200	14,300	14,400	14,500	14,450	14,400	14,350	14,300
USD/MYR	4.20	4.18	4.16	4.14	4.13	4.12	4.11	4.10
USD/PHP	52.0	51.5	51.0	50.5	50.4	50.3	50.2	50.1
USD/SGD	1.40	1.39	1.38	1.37	1.36	1.36	1.35	1.35
USD/KRW	1,180	1,175	1,170	1,165	1,160	1,155	1,150	1,145
USD/THB	31.0	30.8	30.6	30.4	30.3	30.2	30.1	30.0
USD/VND	23,300	23,300	23,300	23,300	23,300	23,300	23,300	23,300
AUD/USD	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71
EUR/USD	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15
USD/JPY	110	109	107	106	105	105	104	104
GBP/USD	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27

Australia, Eurozone, and United Kingdom are direct quotes.

Source: Bloomberg, DBS

Source: AFP Photo

DBS

Live more,
Bank less

Alternatives: Gold | 1Q20

Portfolio hedge

Alternatives: Gold

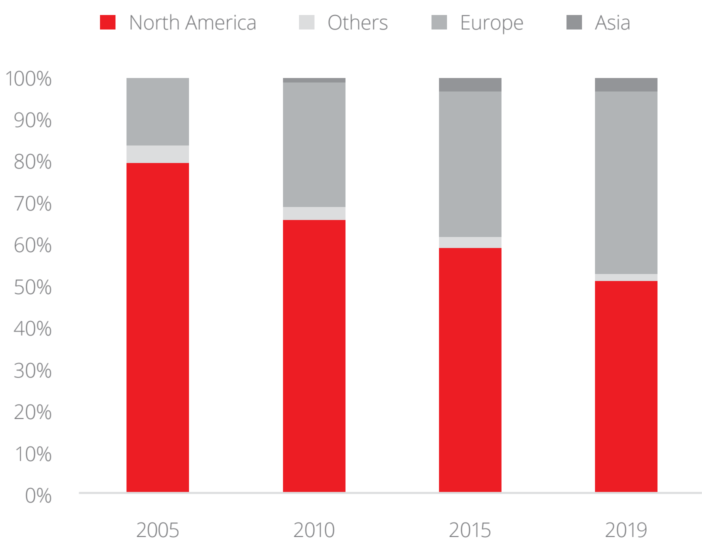
Joanne Goh | Strategist

The gold price rally paused in 4Q19 as global rates recovered from the bottom, lifted by trade optimism. Gold price fell 0.7% (in USD) in 4Q19 after having increased by 14% over the previous three quarters.

A less volatile environment should continue to challenge gold prices in the coming quarter. However, we believe support remains, with an upside bias.

ETF flows picked up strongly, with a broadening investor base. The expansion of negative-yielding debt to a new high was something noteworthy for the past quarter. This phenomenon has not only driven large inflows to gold-backed ETFs, but sources of inflows are also diversified. Europe-listed funds now account for 44% of global holdings, as compared to 2010's 30% (Figure 1).

Figure 1: Key holders of gold-backed ETFs (by regions) have changed in composition over the years

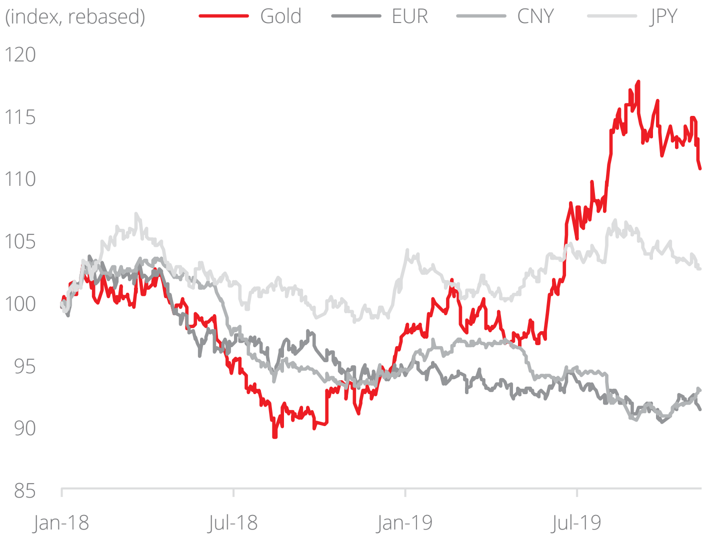


Source: Bloomberg, World Gold Council, DBS

The implications for gold price are:

1. Gold is now deemed as a USD proxy where non-USD domiciled holders will use gold as an alternative to USD, especially when their currencies are depreciating. Gold prices have appreciated more than EUR, CNY, and JPY since early last year (Figure 2).

Figure 2: Gold outperforms major currencies including EUR, CNY, and JPY



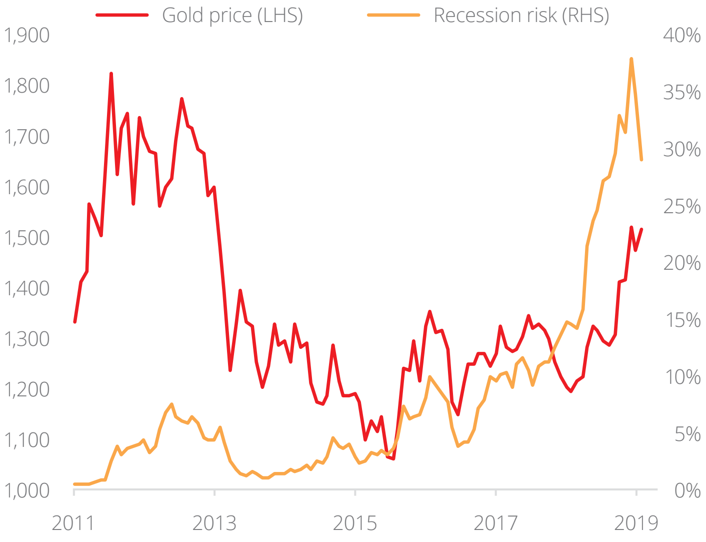
Source: Bloomberg, DBS

2. In fact, gold has greatly outperformed major currencies since 2009. The reasons are:
   a. The reduced appeal of major currencies as global central banks such as the ECB, BOJ, and Federal Reserve System embarked on the QE journey.
   b. Enhanced liquidity of gold as gold ETFs proliferate.
   c. Limited supply of gold production on hand while central banks expand their gold reserves.
   d. Bond yields in many economies are negative, which means there is no cost of carry for having gold in the portfolio.

Consequently, the relevance of gold as a strategic asset, a source of high quality hard currency, and a stable holder of long-term wealth is justified. We believe there will be increasing new demand for gold from long-term investors such as pension funds.

3. Gold lived up to its reputation as a good recession hedge in 2019, performing well as recession risks continued to rise. We believe this is due to its low correlation with other asset classes, as well as its lower price volatility (Figure 3).

Figure 3: Recession probability as a good predictor of gold price



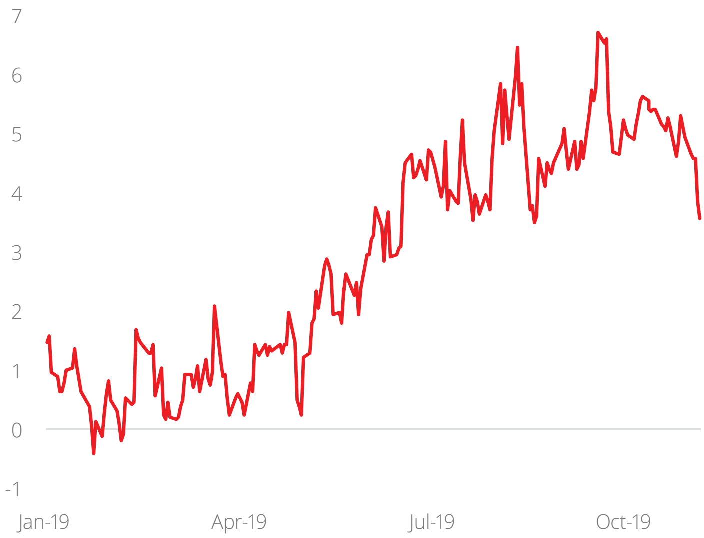
Source: Bloomberg, The Federal Reserve Bank of New York

Why should you continue to have gold in your portfolio? We see several potential positive catalysts for gold in the coming quarter.

The put/call skew – the spread for paying for upside exposure for gold then paying a premium for downside exposure – shows that gold price remains bullish. Moreover, the spread is now back to end-May's level which means that a lot of froth has already been taken out of the market (Figure 4).

Secondly, global uncertainty continues. While some solace seems to be returning to financial markets, economic data remain soft. We see pockets of opportunities in selected themes, but the uncertainties brought about by trade tensions and QE policies are putting pressure on bond yields, USD, investors' risk appetite, and alternative investments. Geopolitical tensions arising from US foreign policies, looming Brexit deadline, and rising populism could be flashpoints for black swan events in 2020.

Figure 4: Gold put/call skew remains bullish, but not exuberant



Source: Bloomberg, DBS

Thirdly, bond yields have rebounded and are at more palatable levels. Ten-year UST yields have briefly traded above 1.95% and have rebounded by 60 bps from 2019's 1.47% low, before closing at 1.92% – levels not seen since early August 2019. European bond yields also saw similar large upward adjustments over the past several weeks to become less negative. The moves can be attributed to the build-up of trade talk optimism and that the Fed is done with its insurance cuts. This brings 10-year UST yields closer to the upper end of our near-term range of 1.5-2.0%. Thus, we are more comfortable with bond yields now as it is less likely that they will be sustained higher.

Quantifying the gold price. Investors can look to the following range of forecasts on gold, based on consensus estimates.

Indeed, our model for gold prices suggests its sensitivity to the movements of bond yields (negative correlation), DXY (negative correlation), and the probability of recession (positive correlation). We believe that gold prices should remain supported in the long term. Investors should be watchful of opportunities in the near term should the dollar turn weaker, bond yields fall, and recession probability rise.

Table 1: Gold price forecast range based on Bloomberg's survey of 32 economists

	1Q20	2Q20	3Q20	4Q20
Median	1,500	1,490	1,507	1,525
Mean	1,494	1,495	1,508	1,502
High	1,625	1,600	1,650	1,600
Low	1,380	1,400	1,400	1,350

Source: Bloomberg, DBS


Source: AFP Photo

Thematic Research | 1Q20

Millennial Wave – e-Sports

Live more,
Bank less

Source: Unsplash

Theme I: Millennial Wave – e-Sports

Dylan Cheang | Strategist

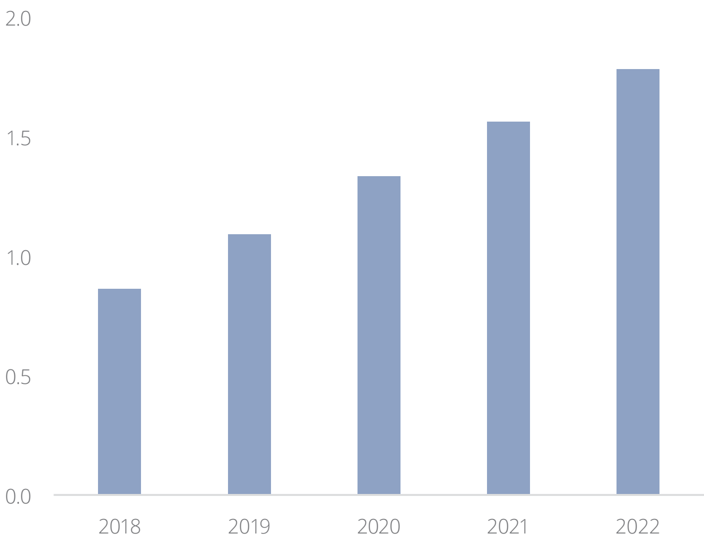
In this third instalment of our "Millennial Wave" series, we touch on e-Sports – an activity synonymous with the Millennial generation. e-Sports, short for "electronic sports", refers to multi-player video games played competitively by professional gamers. Previously, it was mainly amateurs who participated in such competitions and the first organised video game tournament was the virtually-unknown "Intergalactic Spacewar Olympics" in 1972. Today, e-Sports has seen exponential growth in popularity with the onslaught of live streaming, and is now widely perceived as a professional sport.

Indeed, riding on the breakthroughs in Internet speed and connectivity, e-Sports has become a global phenomenon generating massive interest from fans, professional players, and game developers. In particular, it is gaining traction among the younger generation. Top teams and gaming personalities garner huge followings on the Internet and unsurprisingly, companies are starting to take notice. Far from the hectic and unorganised early years of e-Sports, the industry now is standardising leagues and tournaments, closely imitating those of traditional sports.

e-Sports is on track to overtake major traditional sports in the coming years. Based on data from Newzoo, the size of the global e-Sports market was USD1.1b in 2019 and it is expected to grow at 9% CAGR to reach USD1.79b by 2022 (Figure 1). 73% of the e-Sports audience consists of Millennials and Generation Z who are aged between 18 and 35 (Figure 2). With over USD68t of wealth expected to be transferred over the next 25 years, Millennials are expected to be the richest generation ever while Generation Z is also not far behind.

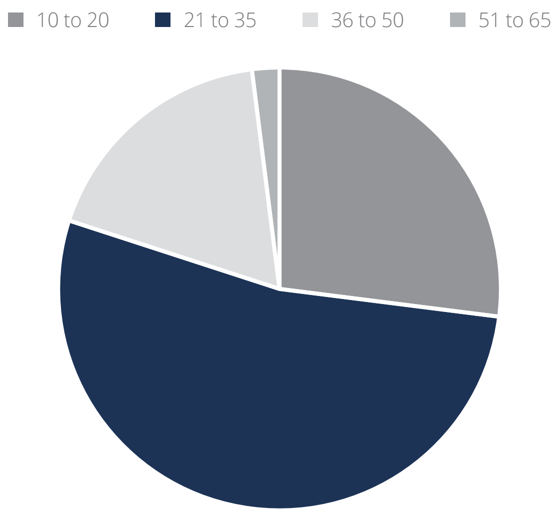
Asia Pacific accounts for the largest revenue percentage share of 54%, followed by North America at 25%, and Europe, the Middle East, and Africa totalling 22% (Figure 3). The robust growth in Asia Pacific is predominantly driven by China which generates over 56% of the total gaming revenue in the region. This is aided in part by the two dominant streaming players in the country: Huya and Douyu, both of which are backed by Tencent.

Figure 1: Size of global e-Sports market (USDb)



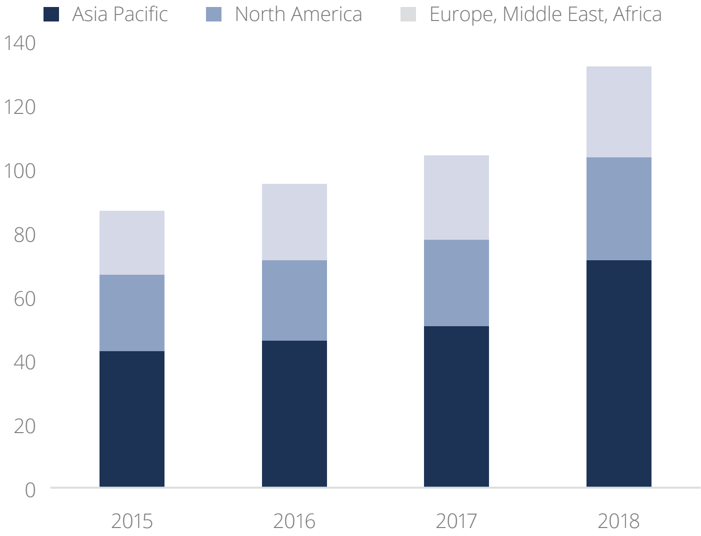
Source: Newzoo

Figure 2: Age distribution of e-Sports enthusiasts



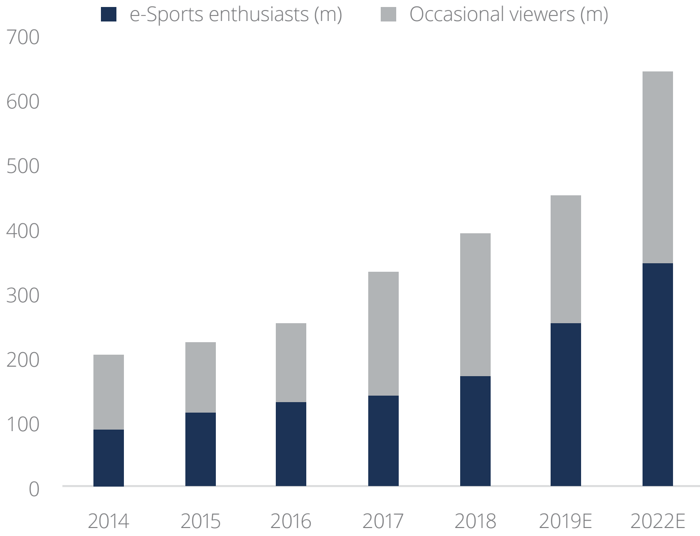
Source: Newzoo

Figure 3: Regional breakdown of video game market revenue (USDb)



Source: Spiresearch

Figure 4: Global e-Sports audience growth



Source: Newzoo

e-Sports viewership: Astronomical growth ahead. Times are changing. Traditional sporting events like the Olympics, NBA, and NFL have been suffering from declining viewership. The viewership for e-Sports, however, is on the rise (facilitated in part by improved Internet speed). The 2018 League of Legends World Championship Finals, for instance, attracted an audience of nearly 100m.

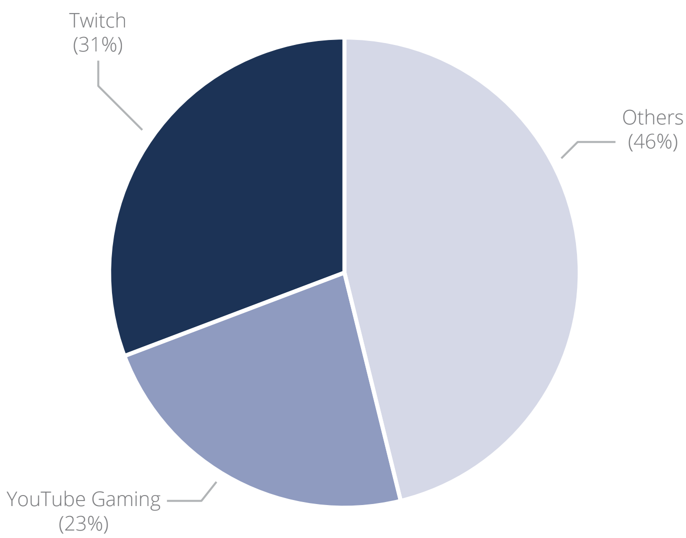
From 2014-18, total e-Sports viewership grew from 204m to 395m and this accounted for c.17% of the total gamers in the world. Despite the high viewership, the latter represents only c.9% of the total addressable market. Based on estimates by Newzoo, the overall audience size is targeted to reach 645m by 2022 (Figure 4).

The growing interest in e-Sports globally is driven by the following factors:

- Rise of live streaming: Live streaming is broadly defined as media that is simultaneously recorded and broadcasted. Live streaming makes it easy for gaming personalities to connect to a growing, tuned-in global audience. To attract and retain the audience, streaming platforms allow users to conduct live chats as well as interact with online streamers in real time.

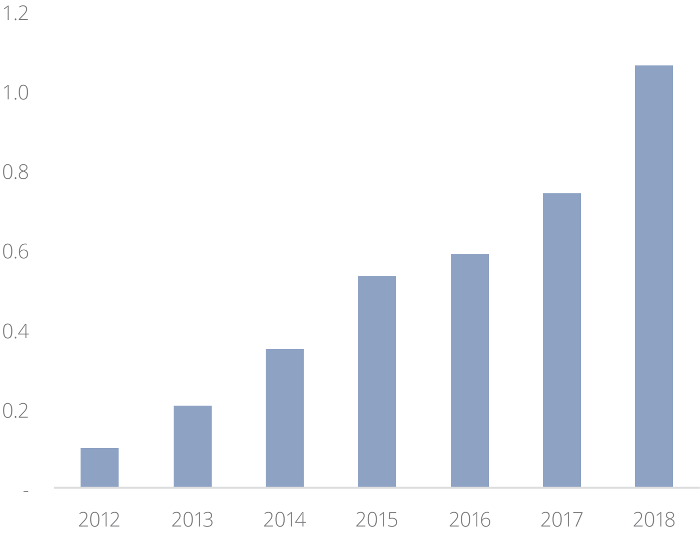
These capabilities have enabled companies like Twitch (Amazon.com-owned) and YouTube (Alphabet-owned) to dominate the video game streaming market globally, drawing billions of eyes onto e-Sports along the way (Figure 5). In essence, live streaming allows players to bypass physical restrictions and be immersed in their favourite games – anytime, anywhere in the world.

Figure 5: Gaming video content revenue worldwide, by platform



Source: eMarketer

Figure 6: Average number of Twitch concurrent viewers (m)



Source: TwitchTracker

The growth of live streaming has been robust. Take Twitch for instance – the company's average concurrent viewership has skyrocketed from 101,775 in 2012 to 1,069,194 in 2018 (Figure 6) and the company currently accounts for c.31% of video game streaming revenue in the US.

Separately, in the case of China, Huya is the dominant player. Popularly known as the "Twitch of China", Huya is the first Chinese company to expand into the west with its ground-breaking deal with Team Liquid, one of the most valuable e-Sports teams in the world. This deal will see Team Liquid players streaming on 19 different channels on Huya's platform, playing games like Electronic Art's Apex Legends and Riot Game's League of Legends. The 2018 League of Legends World Championship Final between Invictus Gaming and Fnatic drew almost 37m concurrent viewers on Huya alone.

- Emergence of e-Sports leagues and tournaments: The popularity of global e-Sports tournaments is on the rise. The League of Legends World Championship Finals in 2019, for instance, attracted nearly 100m viewers while The International in 2019 boasted an impressive total prize pool of USD34.3m. In Asia, e-Sports was featured as a medal event in the 2019 SEA Games in Manila while the International Olympic Committee is also in talks to include e-Sports as a demonstration sport for 2024's Paris Summer Games.

But this was not always the case. Decades ago, e-Sports leagues/tournaments for professional players were created once a game garnered enough popularity. However, the early leagues generally lacked coordination and were fragmented across different gaming platforms and publishers. Back then, tournaments were mainly hosted by third-party organisers while publishers rarely made an appearance.

Things have since evolved. Today, e-Sports game developers are involved in creating regional or global leagues. And some game publishers are going even further. Activision Blizzard, for instance, built the multiplayer game "Overwatch" with a competitive league in mind. Indeed, the "Overwatch League (OWL)" was created in 2017 and it has since sold 12 permanent regional franchises at USD20m each as well as eight expansion teams priced between USD30-60m in 2018.

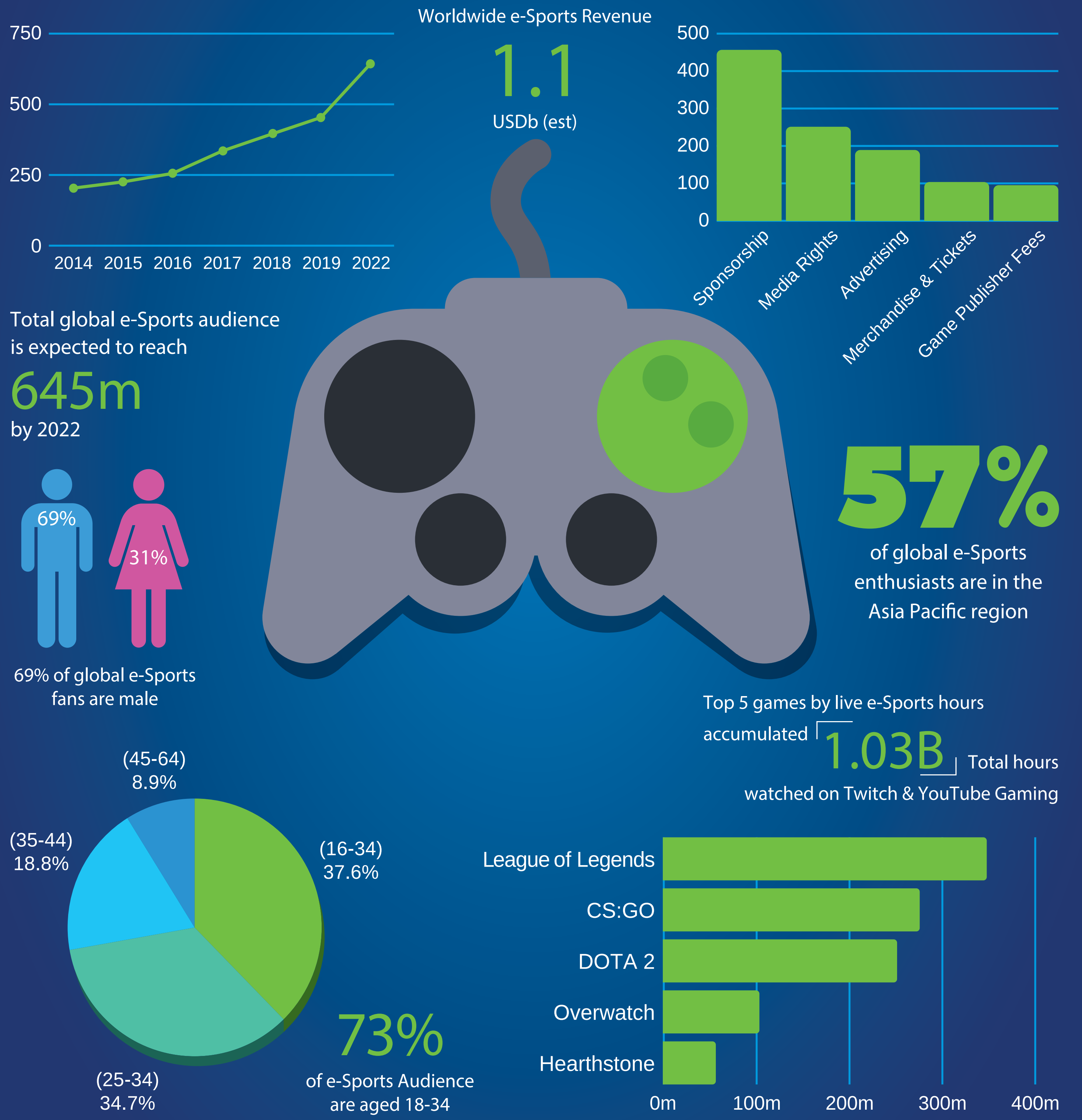
The emergence of leagues/tournaments brings about the following benefits:

- With permanent leagues and teams, e-Sports becomes more accessible to fans.
- The leagues/tournaments provide an avenue for investors and advertisers looking to sponsor teams.

Source: Unsplash

THE WORLD OF

E-SPORTS



The International 2019's prize pool of USD33m beats the NFL, NBA & Masters

e-Sports would be featured as a medal event in the SEA and Asian Games

9 e-Sports organisations are valued at more than USD100m, with Cloud9 valued at USD310m

Diagram 1: The e-Sports ecosystem

Source: DBS

e-Sports monetisation: The rise of sponsorships and advertising. Global brands are finding it challenging to market to Millennials and Generation Z, especially the latter as they live in an "on-demand" environment. This generation consumes far more content from the Internet/social media than from traditional mediums. According to a study by Omnicom, nearly half of all US Millennials do not watch any traditional TV. In fact, another study by eMarketer showed that close to 90% of Millennials consume content online.

Such a content consumption pattern presents huge opportunities for e-Sports sponsorships and several brands have since jumped onto the bandwagon, for instance:

- Intel sponsoring the Intel Extreme Masters Tournament annually.
- Mastercard signing multiyear partnerships with Riot Games to be the first global sponsor of League of Legends.
- Coca-Cola becoming the official non-alcoholic drink of the Overwatch League.
- Companies like Budweiser, Adidas, Axe, and Samsung establishing deals with top performers from e-Sports leagues.

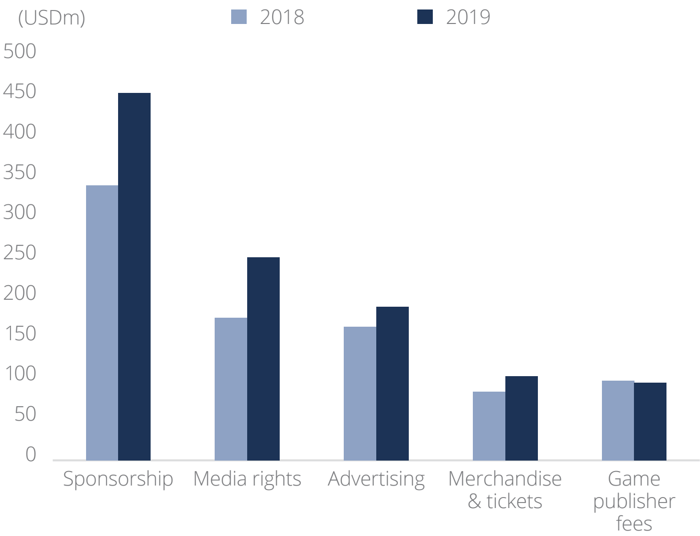
The growth potential ahead is huge. According to Newzoo, total e-Sports revenue crossed c.USD1.1b in 2019 and the breakdown (Figure 7) was:

(a) Sponsorship – 42%; USD457m
(b) Media rights – 23%; USD251m
(c) Advertising – 17%; USD189m
(d) Consumers spending on merchandise and tickets – 9%; USD104m
(e) Game publisher fees – 9%; USD95m

By 2020, the market is expected to reach USD1.79b.

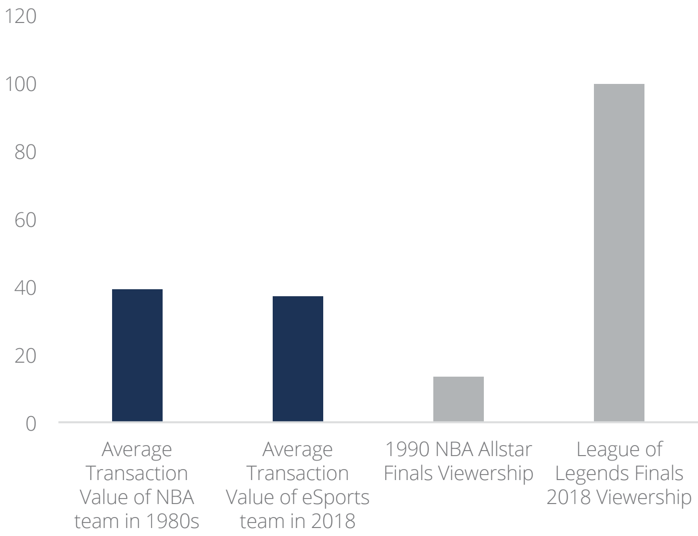
As game developers gradually drive monetisation via leagues and tournaments (which translates to recurring revenue), media rights is expected to be the biggest growth driver. According to PwC, over the next three to five years, media rights revenue would grow 11.5%. This trend has already started and it is evident from Twitch's USD90m deal with Activision Blizzard in 2018, which allows the former to stream the Overwatch League (with all access) for two years.

Figure 7: e-Sports revenue streams



Source: Newzoo

Figure 8: Present day e-Sports vs 1980s NBA



Source: Konvoy Ventures, Sports Media Watch

The long view: e-Sports to follow the expansionary footsteps of the NBA.

The valuation of e-Sports teams today is similar to those of NBA teams in the 1980s. According to data by Konvoy Ventures, the average transaction value of an e-Sports team is USD37m while the average transaction value of an NBA team stood at USD39m (if the Portland Trailblazers and Boston Celtics deals are excluded).

However, the difference in viewership is stark.

In the 1990 NBA All-Star game, the total viewership was 13.2m (based on data by Sports Media Watch). Comparatively, the total viewership for the League of Legends Finals 2018 was 99.6m – 655% higher than the NBA. Considering that an average NBA team transacts at c.USD1.9b today (according to Forbes), the growth potential for e-Sports teams will be exponential given:

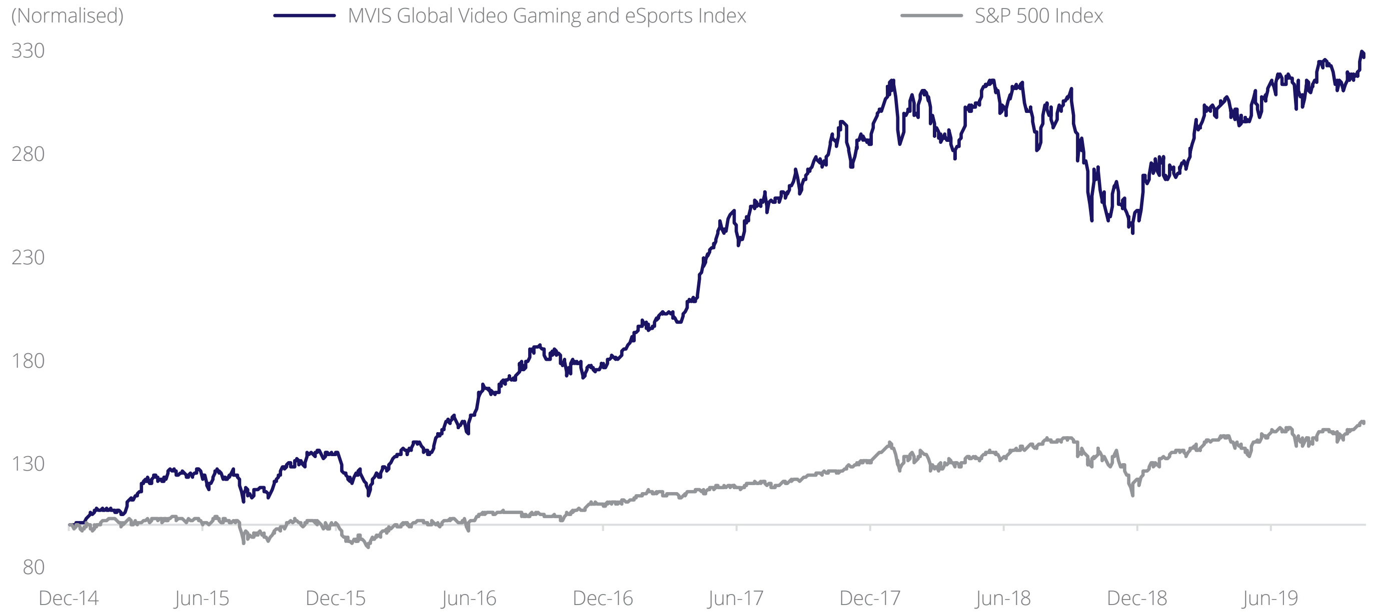
- Significantly higher viewership
- Larger and younger global fanbase
- Higher spending power
- Under-monetisation

That said, e-Sports lacks the revenue generating power of the NBA. According to Forbes, the average revenue per NBA fan is USD42 while in the case of e-Sports, the average revenue is only USD5.5. This suggests that e-Sports still has great room to optimise its income structure as well as develop its leagues/tournaments to enhance profitability.

Geared e-Sports beneficiaries: Game developers and hardware manufacturers. e-Sports is expected to undergo phenomenal growth in the coming years – from both a viewership and monetisation standpoint. This is manifested from the 177% outperformance of the MVIS Global Video Gaming and e-Sports Index over the S&P 500 Index since 2015 (Figure 9).

On a segmental basis, the beneficiaries of this wave include: (a) Game developers, (b) Streaming platforms, and (c) Hardware manufacturers. Game developers are predominantly the biggest beneficiaries given that they are involved in almost every facet of e-Sports – from games publishing to the creation of leagues and the hosting of tournaments. Such end-to-end involvement allows them to benefit from sponsorships, media rights, and merchandising/ticketing.

Figure 9: The e-Sports index has substantially outperformed the broader market

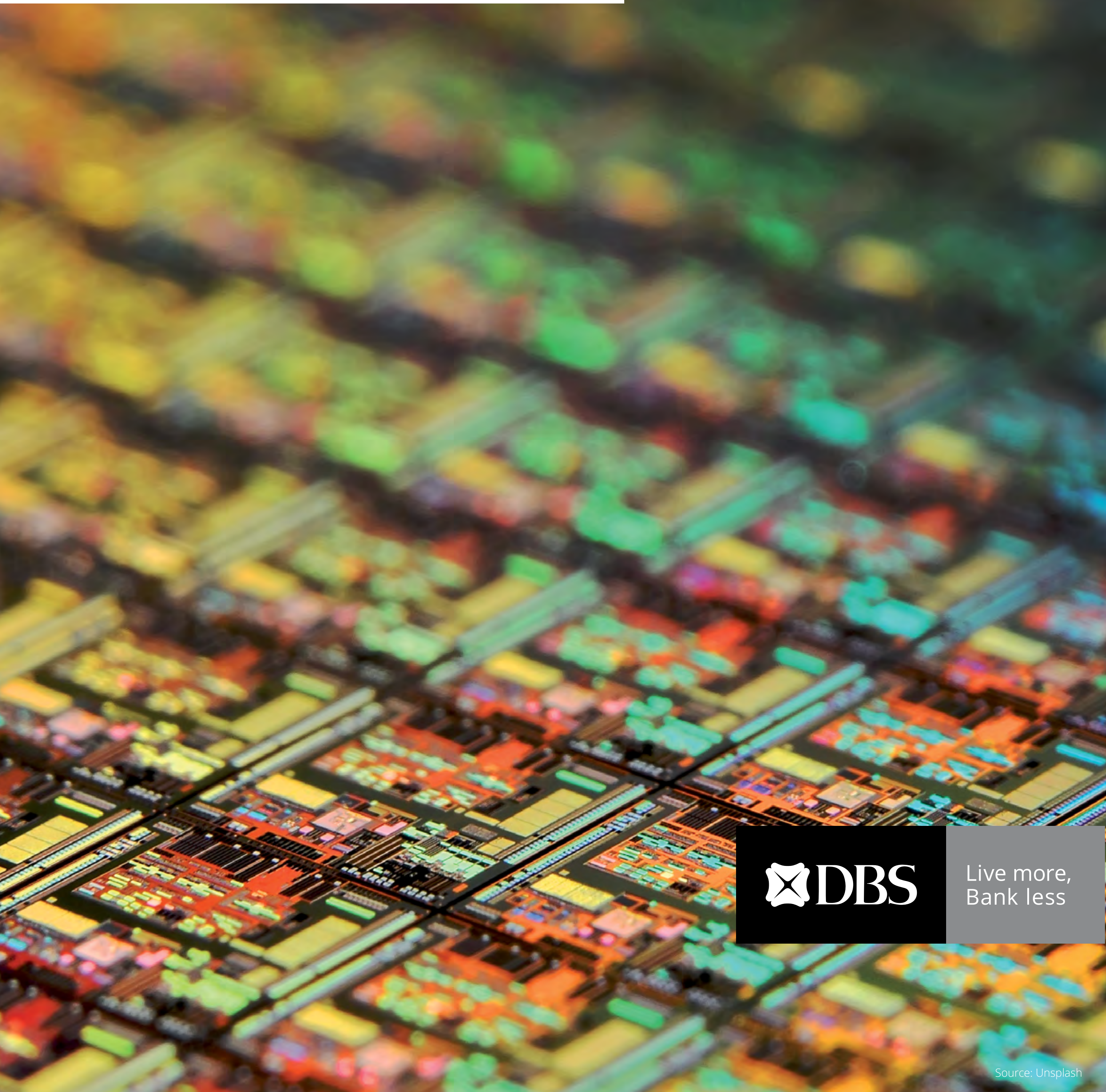


Source: Bloomberg, DBS

Source: Unsplash

Thematic Research | 1Q20

Semiconductors



DBS

Live more,
Bank less

Source: Unsplash

Theme II: Semiconductors

Yeang Cheng Ling | Strategist

The invention of semiconductor components half a century ago massively changed our lives and the world around us, and also brought immense investment opportunities.

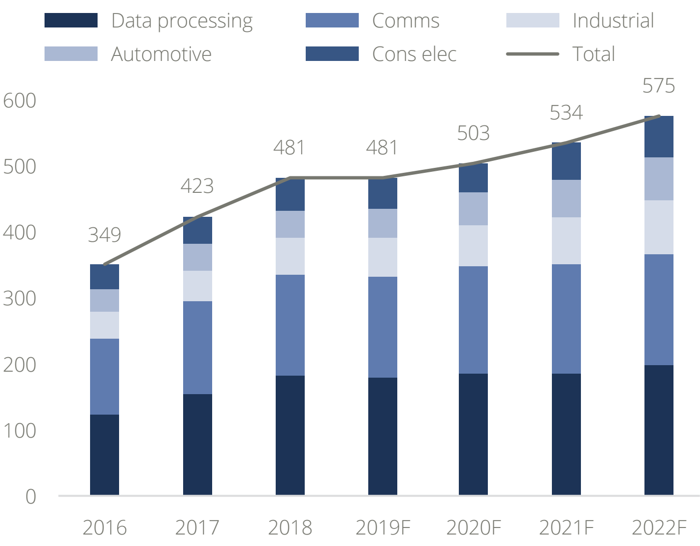
Over the past 60 years, the invention and convergence of capacitors, resistors, transistors, and diodes into sophisticated semiconductor integrated circuit (IC) chips have propelled the exponential development of technology.

IC chips – the foundation of all devices

An effective angle to ride the digitalisation wave is to invest in upstream semiconductor ecosystems that include IC design and wafer foundry. These segments focus on, among many others, the design and development of chips for CPUs, GPUs, power management, frequency switching, field programmable gate array, logic IC, analog communication, as well as memory and radio frequency mixed-signal.

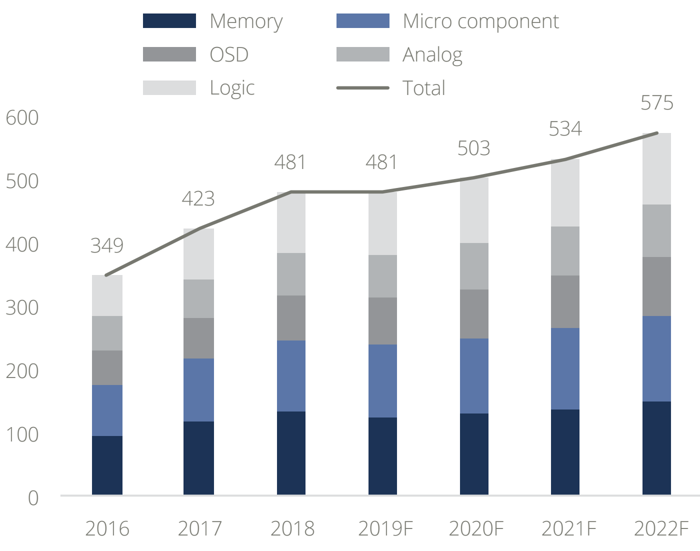
In today's world, the ubiquity of technology devices – powered by semiconductor chips and controlled by programmable applications – constantly changes our lives without us even realising. Smartphones, cars, online accesses, cloud data, industrial automation, smart homes, and consumer electronics are robust technological developments that perform a wide range of functions (Figure 1), powered by complex semiconductor chips (Figure 2). As demand for these technological developments grows, so has the demand for semiconductor components.

Figure 1: Total addressable market for major IT applications (USDb)



Source: PWC, DBS

Figure 2: Total addressable market for major semiconductor components (USDb)

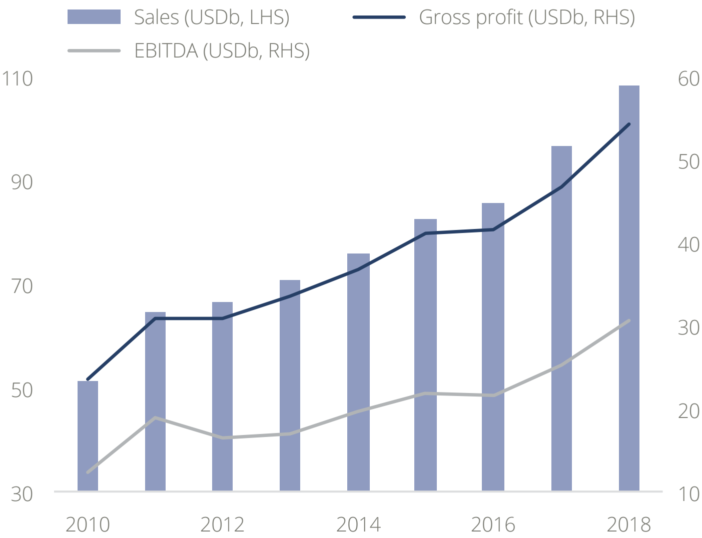


Source: PWC, DBS

The invention of complex micro processors and ICs seamlessly interacting with each other to perform almost all kinds of tasks will further heighten our reliance on connected gadgets and IOT networks. More profoundly, semiconductor IC chips have quietly found their way into communication networks, machineries, computing devices, servers, smart-TVs, vehicles, factories, buildings, and home appliances, just to name a few.

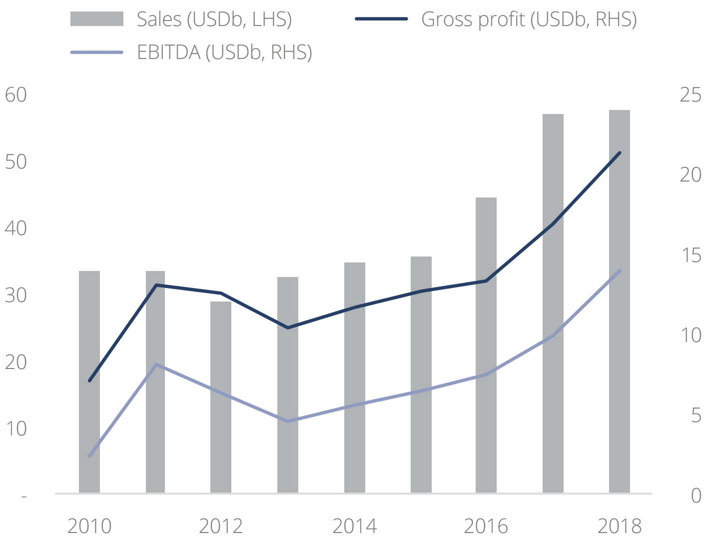
This phenomenon has brought about many investment opportunities. Global IC design companies have been generating sturdy revenue and profit trends (Figure 3). They have also fostered favourable earnings conditions among the upstream semiconductor equipment makers (Figure 4). As the backbone of digitalisation, upstream technology's future is bright.

Figure 3: Global leading IC design firms' revenue and profits



Source: Bloomberg, DBS

Figure 4: Global semiconductor equipment makers' revenue and profits



Source: Bloomberg, DBS

Wafer foundry and lithography – the backbone of semiconductors

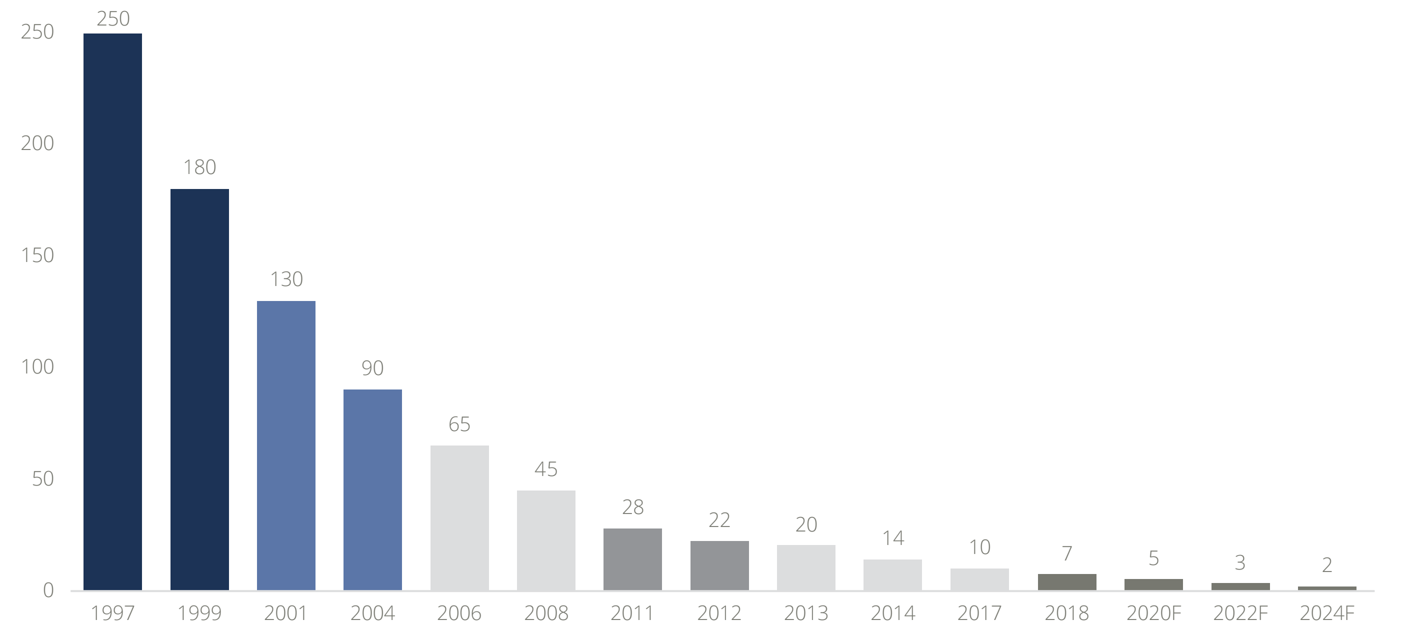
The circuit gaps of ICs in wafer chips have been shrinking since the mid-1990s. IC chips became increasingly smaller, allowing more transistors to be contained in a single chip. Wafer chips now enclose more transistors, consume less power, and offer more functionality. They are also faster, more efficient, enabling more chipsets and functions to be fitted into a single device. These remarkable evolutions owe much of their success to the advancement in the wafer technology roadmap (Figure 5).

The transistor circuitry in a wafer chip, as measured in nanometre "nm" (one billionth of a metre), is increasingly being constructed between 28 and 14 nm and moving towards 10 and 7 nm, made possible by innovation among wafer foundries and IC chip design firms.

The semiconductor industry has also welcomed the arrival of extreme ultra-violet (EUV) lithography technology, the new architecture in semiconductor chip circuitry patterning. This promises breakthroughs for wafer foundry, logic IC, and memory (DRAM/NAND) chips manufacturing, propelling the technology beyond 10nm and potentially simplifying the processes at lower costs.

Where will semiconductors be most prevalent?

Figure 5: Evolution of the wafer roadmap (nanometre, nm)



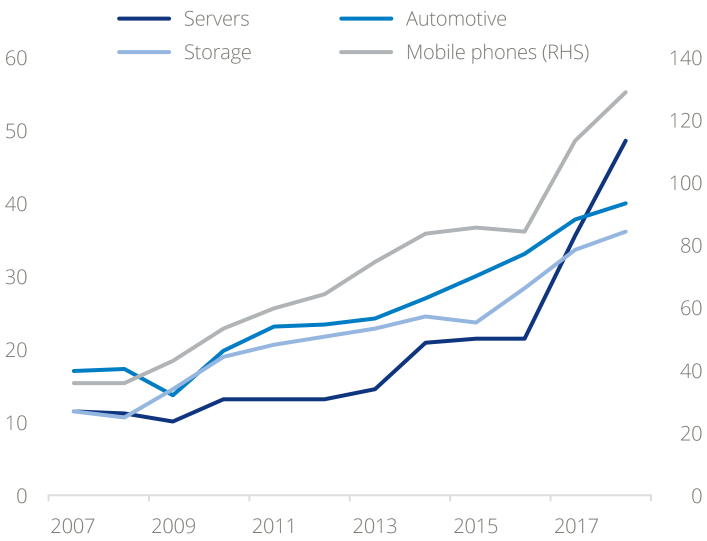
Source: Anysilicon, EE Times, DBS

1. IOT platforms and connections

Against the backdrop of rising IOT penetration rates – AI, 5G, cloud computing, industrial automation, smart automotive, and data analytics are powering the growth of the semiconductor sector (Figure 6).

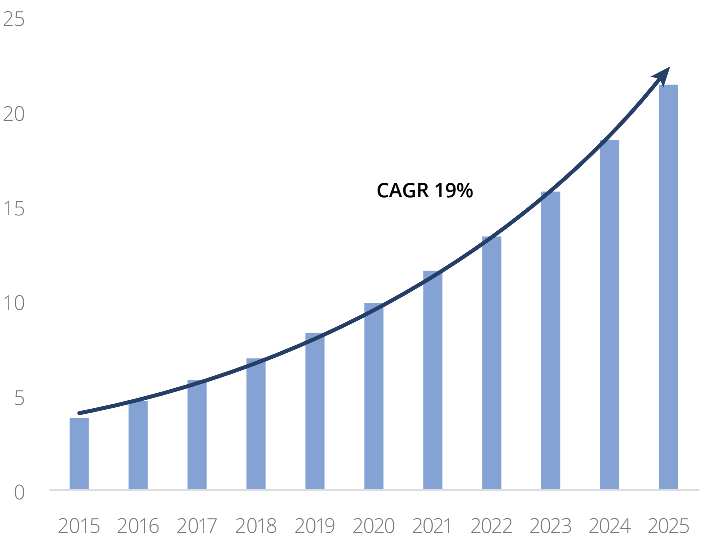
For example, the anticipated exponential surge in IOT connections (Figure 7) will further boost the need for data storage and processing power, consequently strengthening the growth of the semiconductor ecosystem.

Figure 6: Rising addressable markets in servers, automotives, storage, and mobile phones (USDb)



Source: Bloomberg, DBS

Figure 7: Total number of global active IOT connections (installed base, b)



Source: IOT analytics research, DBS

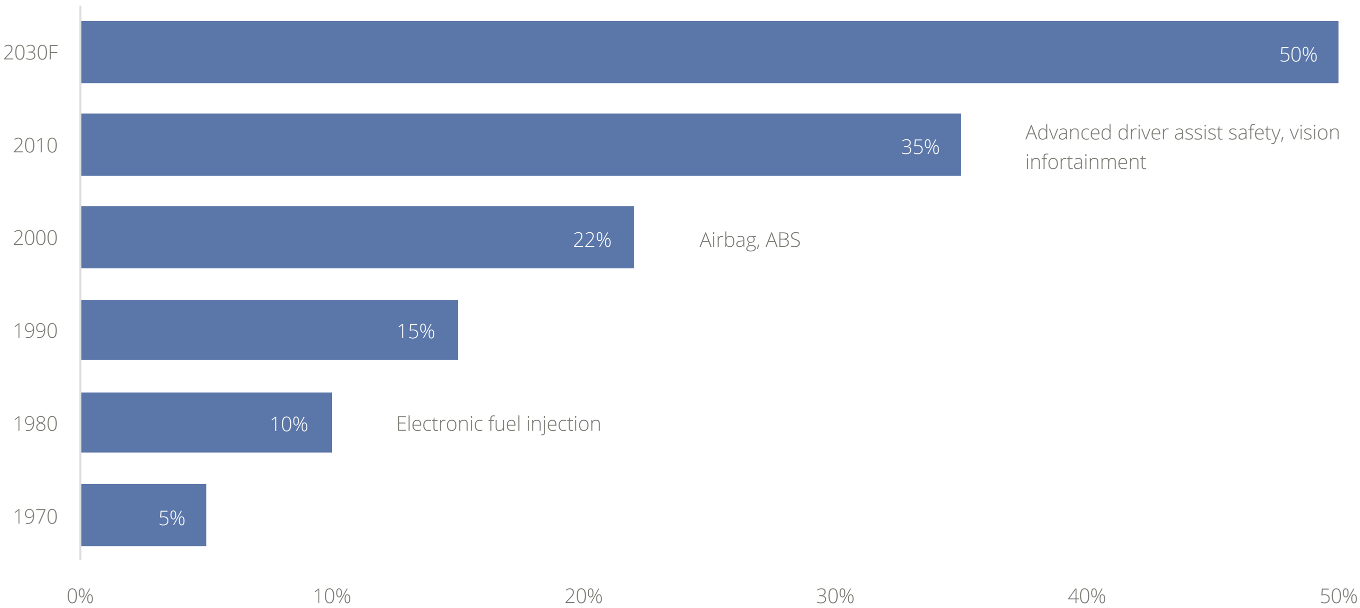
2. Smart automotives

The automotive industry has developed from merely making rolling machines to installing electronic components for performance, efficiency, safety, and comfort. Automotive innovations today are mainly driven by electronics functionalities, rather than mechanical. From a sheer 10% of the cost of making a car in the 1980s, total electronic component costs per car has risen to some 40% today. This is projected to touch 50% by 2030 (Figure 8) as car makers scramble to include more sophisticated components and functions.

Although annual global passenger car sales have been flat at 65-70m since 2014, and is likely to stay flat in coming years, the surging semiconductor components in vehicles affirms the growth in automotive IC's total addressable markets.

Source: Unsplash

Figure 8: Electronic components as % of car costs

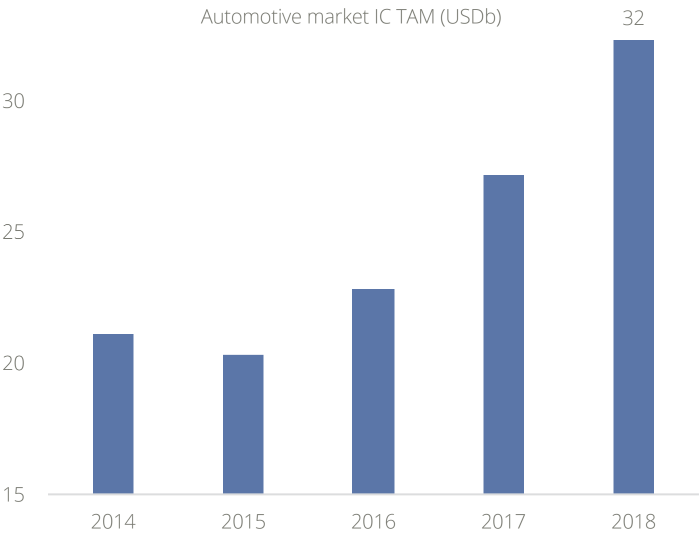


Source: Deloitte, DBS

Since the start of the decade, the total addressable market for automotive ICs has evidently expanded (Figure 9) and the upside potential is great. The use of advanced electronic components is still in its early stages, with a lot more elements in a vehicle yet to be replaced. With IC-based microcontrollers, sensors, discrete power management, logic, and passive chips, functions such as lane correction, navigation, event data recording, regenerative braking, stability control, driver alertness monitoring, and transmission control can be modified.

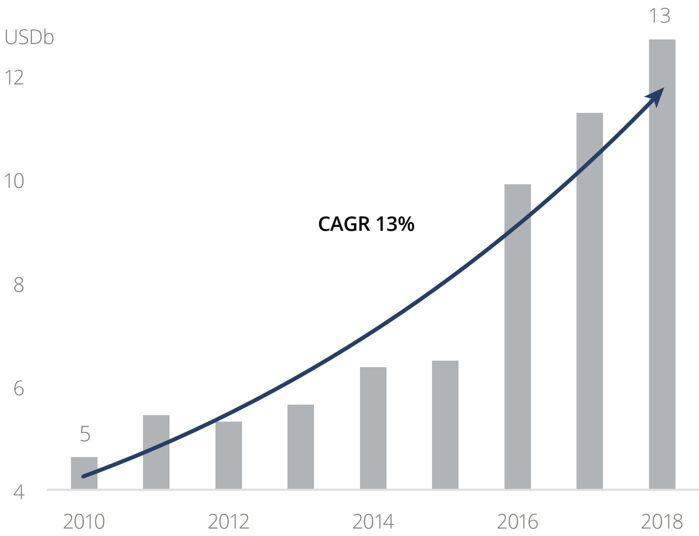
With these developments, it is not surprising to know that revenue derived from automotive chips among world-class IC design firms has surged (Figure 10). We believe this growth trend is still in its infancy.

Figure 9: Automotive market IC total addressable market (USDb)



Source: IC Insights, DBS

Figure 10: Automotive IC design firms' revenue (USDb)



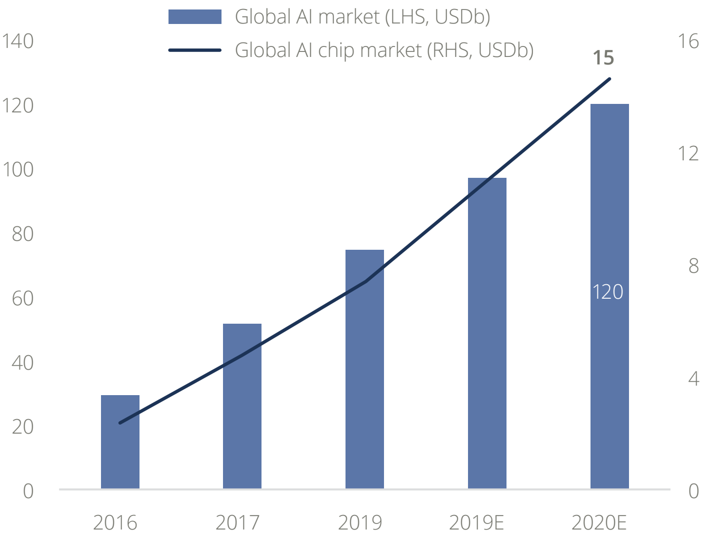
Source: Bloomberg, DBS

3. AI and 5G platforms

Chips with AI capability will further spur the industry's growth (Figure 11), driven by machine learning, health care, security, high performance computing, and data analytics. The total addressable market is expected to exceed USD120b post-2020.

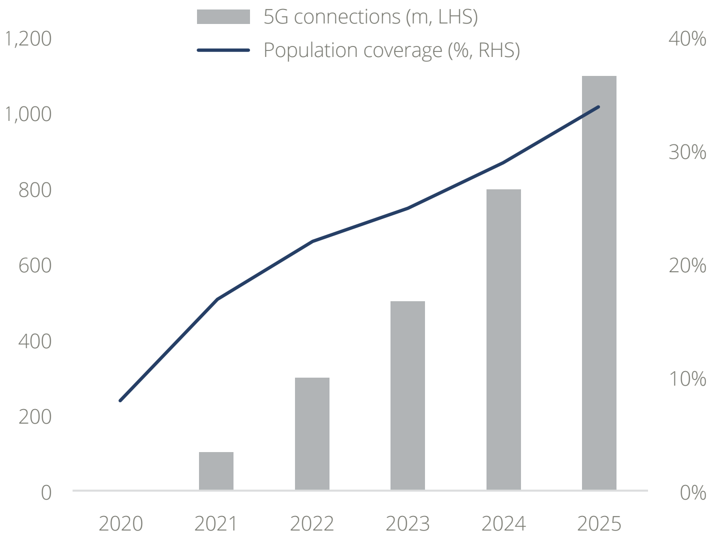
And on the 5G front, the increasing need to systematise communication standards to unify end users and devices on IOT platforms will propel higher adoption rates (Figure 12). The benefits of 5G will include significantly higher data rates, lower latency, larger network capacity, and efficiency in communications and connections. By 2025, total global 5G connections are projected to surpass one billion, covering the inhabited area of one-third of the world's population. Putting this into perspective, global IOT device connections – mainly led by the enterprise segment – are expected to reach 50b by 2030.

Figure 11: Huge potential in AI



Source: CDIC, Deloitte, DBS

Figure 12: 5G will be everywhere



Source: GSM Intelligence, DBS

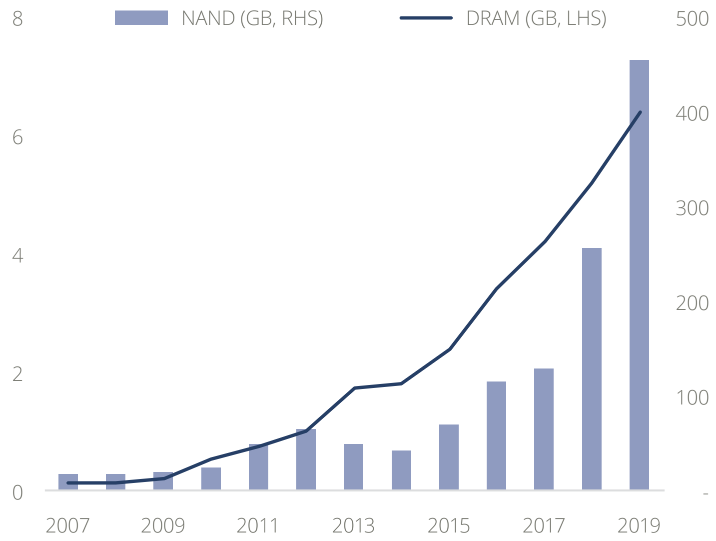
4. Smartphones – bigger, faster, stronger

As devices get more sophisticated, an increase in handset memory density becomes an essential element to win the battle. Smartphone handsets are armed with increasingly larger memory capacity since the first unit was sold more than a decade ago.

Every year, new handsets among top brands show consistent increase in DRAM and NAND content (Figure 13). Meanwhile, the combined total addressable market of smartphone memory rose to a massive USD160b in 2018 (Figure 14). This will drive the incredible growth in demand for processors and memory chipsets, as smartphones get equipped with larger memory density and consumer electronics are installed with smarter functions.

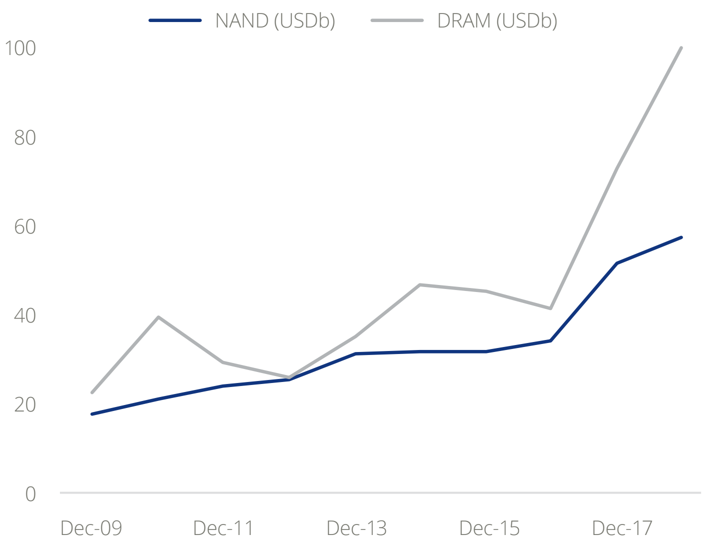
For example, the Samsung Galaxy S10 Plus comes with a built-in NAND flash memory capacity of 1TB, upping the game. With more advanced applications being developed and installed in handsets, and rising consumer appetite for media and entertainment content download, the demand for larger memory capacity is fast becoming a new normal.

Figure 13: Average memory content for new handsets (GB)



Source: GSMARENA, DBS
Note: Based on annual top-range handsets released by Apple, Samsung, Xiaomi, and Huawei

Figure 14: Memory holds mammoth potential

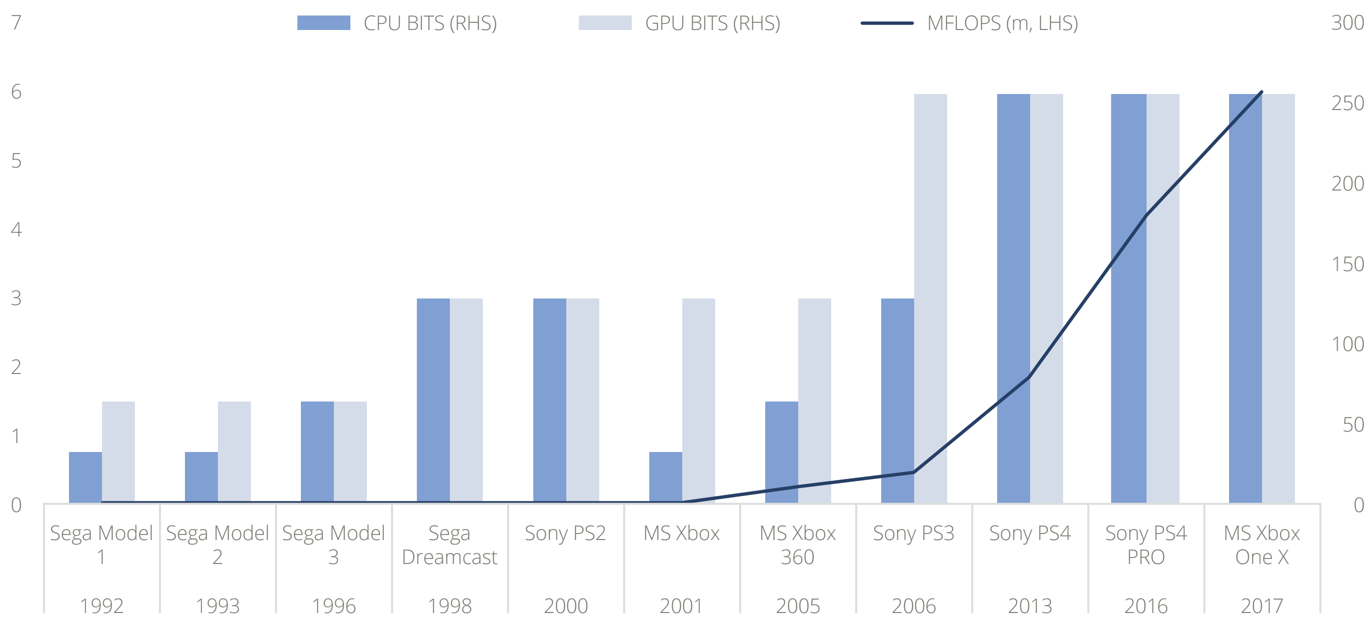


Source: Bloomberg, DBS

5. Game consoles – the need for speed

Console technology needs to catch up – gaming is progressively becoming a mainstream hobby and new games are being rolled out at breakneck speed. In the past 20 years, the processing power of game consoles has witnessed an astounding evolution. From 50 bits, the central and graphic processing powers have surged to more than 250 bits while the MFLOPS, the measure for the speed in floating-point calculations, has risen fivefold to 6m since 2005 (Figure 15). The constant progressions of IC chip design and wafer foundry technology have certainly catalysed these developments.

Figure 15: Game consoles' processing power has increased over the years

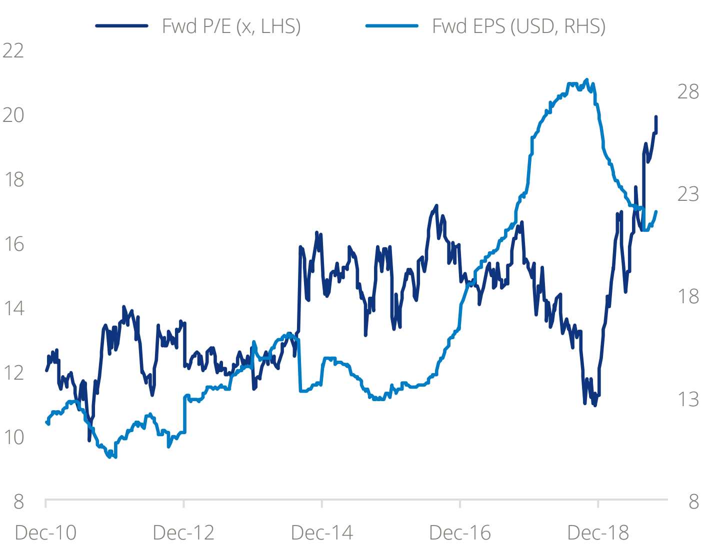


Source: Libertygames, Gamesradar, DBS

Semiconductors remain essential for technological progress. After the end of the dot-com era in the early-2000s, we saw new and sustained developments in semiconductors, IC, smart devices, communications, and high performance computing. This has flourished and the world today is increasingly data-driven, integrated, and interlinked.

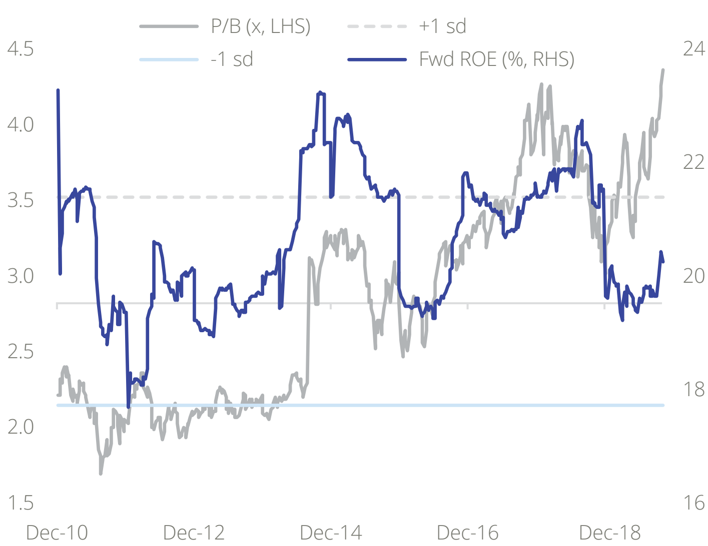
Stocks of global semiconductor and semiconductor equipment companies are seeing high valuations (Figure 16 and 17), supported by extensive investment catalysts. Equities in this sector are integral parts of the technological advancement that is to come (Table 1).

Figure 16: The premium valuations ...



Source: Bloomberg, DBS

Figure 17: ... are supported by unique investment catalysts



Source: Bloomberg, DBS

Table 1: Key technology themes

Themes	Beneficiaries
Semiconductor/IC design	Wafer foundry, backend assembly and testing, advanced semiconductor equipment, lithography, silicon wafers
IOT, cloud computing, data centres	Communication IC, radio frequency mixed signal, computer servers, logic IC, passive components
Smart devices, high performance computing	Application processors, baseband processors, memory, display IC, driver IC
Industry automation	AI, machine learning, IOT, process controls
e-Sports	Game consoles, graphic processors, communication chipsets
Automotive	Power management IC, microprocessors, sensors
5G	Communication chipsets, analog IC, power amplifier
e-Commerce	Market place, payment platforms, logistics and speed delivery, entertainment content

Source: DBS

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Acronym	Definition
ASEAN	Association of Southeast Asian Nations
ASP	average selling price
AxJ	Asia ex-Japan
bbl	barrel
BI	Bank Indonesia
BNM	Bank Negara Malaysia
BOE	Bank of England
boepd	barrels of oil equivalent per day
BOJ	Bank of Japan
BOK	Bank of Korea
BOT	Bank of Thailand
bpd	barrels per day
BSP	Bangko Sentral ng Pilipinas
BSP	Bangko Sentral ng Pilipinas
CAGR	compound annual growth rate
capex	capital expenditure
CAR	capital adequacy ratio
CDU	Christian Democratic Union of Germany
CET1	common equity tier 1
CLO	collateralised loan obligation
CPI	conusmer price index
CPU	central processing unit
DM	Developed Markets
DPS	dividend per share
DRAM	dynamic random-access memory
DXY	US Dollar Index
EBITDA	earnings before interest, tax, depreciation, and amortisation
EC	European Commission
ECB	European Central Bank
EM	Emerging Markets
EPFR	Emerging Portfolio Fund Research
EPS	earnings per share
e-Sports	electronic sports
ETF	exchange-traded fund
EU	European Union
FCF	free cashflow
FX	foreign exchange
GDP	gross domestic product
GFA	gross floor area
GFC	Global Financial Crisis
GPU	graphics processing unit
HY	high yield
IC	integrated circuit
IEA	International Energy Agency
IG	investment-grade
IMF	International Monetary Fund
IP	intellectual property
ISM	Institute for Supply Management
IT	Information Technology
JGB	Japanese Government Bond
KTB	Korean Treasury Bonds
MAS	Monetary Authority of Singapore
MFLOPS	mega floating-point operations per second
MLF	medium-term lending facility
mmbbl	million barrels
mmbpd	million barrels per day
NAND	NOT-AND
NBA	National Basketball Association
NEER	nominal effective exchange rate
NFL	National Football League
NIM	net interest margin
OPEC	Organization of the Petroleum Exporting Countries
OPM	operating profit margin
P/B	price-to-book
P/E	price-to-earnings
PBOC	People's Bank of China
PM	portfolio manager
PMI	purchasing managers' index
QE	quantitative easing
RBA	Reserve Bank of Australia
RBI	Reserve Bank of India
REIT	real estate investment trust
RM	relationship manager
ROA	return on asset
ROE	return on equity
RPGB	Philipine local government bonds
RRR	reserve requirement ratio
SAA	Strategic Asset Allocation
saar	seasonally adjusted annual rate
SD	standard deviation

Acronym	Definition
SGD NEER	Singapore dollar nominal effective exchange rate
SGS	Singapore Government Securities
SOE	state-owned enterprise
SOR	swap offer rate
SPD	Social Democratic Party of Germany

Acronym	Definition
TAA	Tactical Asset Allocation
UCITS	Undertakings for Collective Investment in Transferable Securities
UST	US Treasury
WTI	West Texas Intermediate
YTD	year-to-date
YTW	yield to worst

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