

Regional Outlook

Late In The Cycle

The global economy appears to have peaked, with the possible exception of the US. However, we note that some of the key market indicators preceding a slowdown in the US economy are falling in place – the US Fed is tightening, risk aversion is on the rise, and the US yield curve is becoming flatter. Data from the past economic cycle suggests that both US and Asian equities have delivered positive returns during the late stage of an expansion. Key sectors that have outperformed during this phase are technology, energy, and consumer staples.

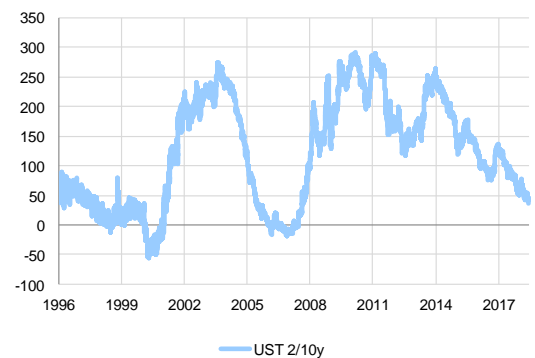
US economy may slow down soon. As we near the end of 1H18, it appears that 1Q18 may well have been the peak of the global growth cycle. PMIs and the OECD Leading Indicator signal that a peak may be past for Europe and Japan. While there is little sign of a slowdown in the US, some of the key market indicators – such as the US Fed tightening, rise in risk aversion, and the US yield curve becoming flatter, which have preceded a slowdown in the US – are falling in place. This makes us believe the US economy is also likely to slow in the near future, therefore currently exhibiting “late cycle” behaviour. In this report, we study the last 12 months before peak growth in the US to assess the movement of key market indicators and equity market performance.

US and Asian equities deliver positive returns late in the expansion phase of a cycle. In the last five US economic cycles, the S&P 500 delivered an average of 12% return during last 12 months of the expansionary phase. While Asian equity markets have gained a year before peak growth in the US, regional stock market movements in each of the cycles has differed. We noticed a rising correlation between Asian and US stock markets during the 2001 economic cycle – RHB’s compiled market cap weighted Asian equity index (based on eight Asian market indices) delivered 50% returns for the year preceding peak growth in the US.

Sector leadership in MIST and HK during a late cycle. Looking at the relative performance for 11 GICS sectors in Malaysia, Indonesia, Singapore, Thailand (MIST) and Hong Kong during 12 months before the peak of economic growth in US, we note that energy and consumer staples were the sectors that delivered relative outperformance in all markets. While Hong Kong’s telecoms and Singapore’s industrials sectors were among the two best performing sectors as well, we note that outperformance of the former was a sector-specific fundamental story, while the latter included energy-related stocks.

Asian investors, however, need to be cognisant of flow of funds. The regional funds flow picture suggests a risk-off mode currently, based on external events. In June, foreigners continued to sell EM Asian equities for the fifth consecutive month. The total net selling over the last 12 months is approximately USD28bn, compared with an USD34bn sell-off in the eight months preceding the first post-GFC Fed rate hike in Nov-15. Funds flow indicators for Hong Kong and Singapore also raise amber flags.

Spread between US 10Y and 2Y bond yields



Source: Bloomberg, RHB

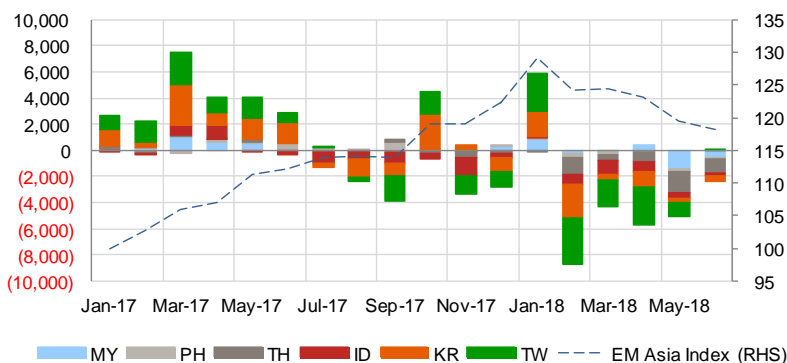
Top performing sectors in MIST+HK during the late expansionary phase of a cycle (relative outperformance to market)

	Sectors	
Singapore	Industrials	Telecom
Malaysia	Energy	Cons. Staples
Hong Kong	Info Tech.	Energy
Indonesia	Energy	Industrials
Thailand	Cons. Staples	Cons. Disc.

Note: Based on the average relative performance for the past two economic cycles

Source: Bloomberg, RHB

Total net foreign buying of some Asian equity markets (USDm)



Source: Bloomberg, RHB Note: Data updated till 15 June 2018.

Economist & Strategists

Arup Raha
+65 6232 3896
arup.raha@rhbgroup.com



Miranda Ma, CFA
+852 2103 9202
miranda.ma@rhbgroup.com



Shekhar Jaiswal
+65 6232 3894
shekhar.jaiswal@rhbgroup.com



20 June 2018

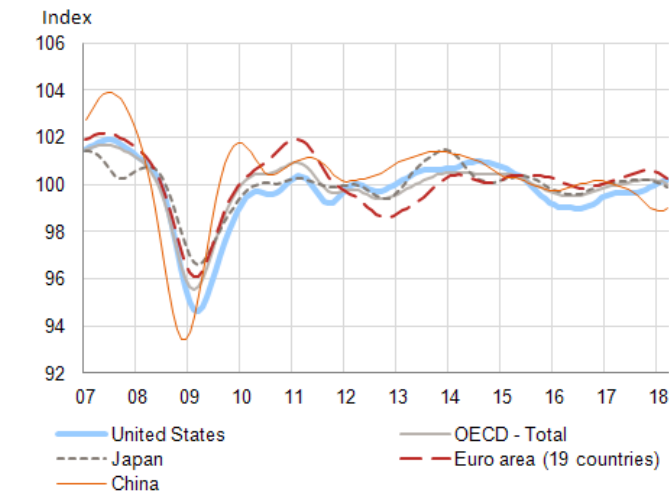
US Economy – End of the expansion?

The global economy ended 2017 on a strong note, with global GDP estimated to have grown by 3.9% – its strongest performance in several years. That momentum was meant to continue well into 2018, with any possibility of a slowdown only being entertained in the second half of the year. Even in that phase, a fair amount of the discussion was centred on base effects giving lower numbers, rather than any real loss of momentum.

As we near the end of the first half of 2018, it now appears that 1Q18 may well have been the peak of the global growth cycle. For Europe (both EA-19 and EU-28), growth was 0.4%, down from around 0.6% in 4Q17. Both the Purchasing Managers' Index (PMI) and Organisation for Economic Co-operation and Development (OECD) Leading Indicator signal that a peak may be past. In Japan, it was a similar story and besides that, 1Q GDP growth was negative. In China, GDP growth in 1Q18 stayed at 2017's pace of 6.8%, but – with an official expectation of 6.5% growth in 2018 and increased policy emphasis on stability – the economy is likely to slow down.

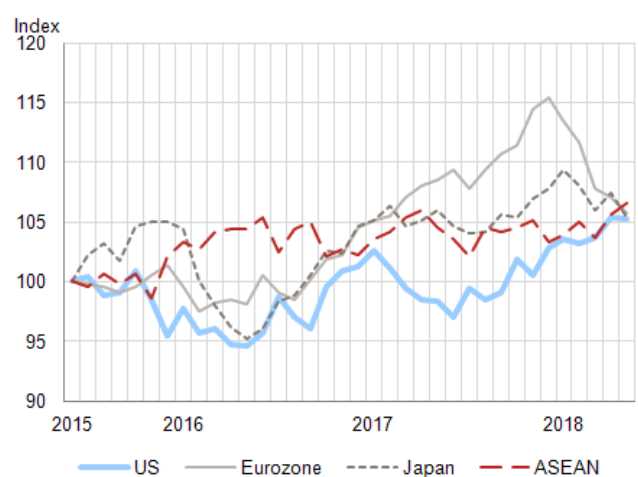
The US, however, presents a different case, and that is the focus of our attention. There is currently very little sign of a slowdown in either hard or survey data. After growing 2.3% in 1Q, the second quarter should have a clip of around 4.8%, according to the Atlanta Fed Nowcast. The latest Manufacturing PMI reading was 58.7, up from an already strong 57.3, while the Services PMI was 56.8, up from 55.7¹. The OECD Leading Indicator is pointing up.

Figure 1: OECD Leading Indicators



Source: OECD, RHB

Figure 2: PMI



Source: Bloomberg, RHB

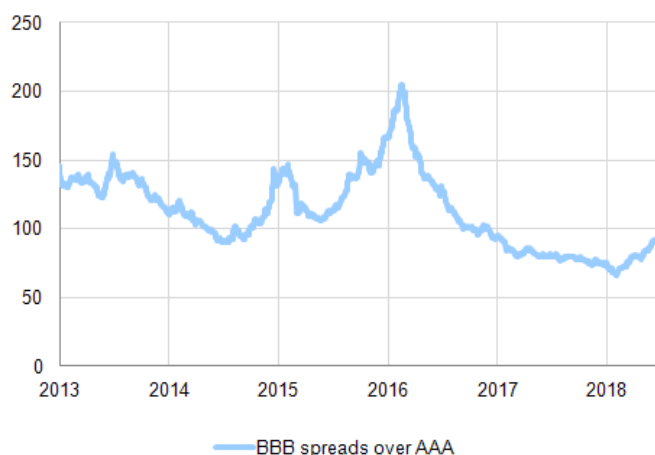
Moreover, in its latest projections – the famous “dot plot” – the US Federal Reserve (US Fed) upgraded its 2018 GDP forecast, increased its 2018 and 2019 inflation forecasts and lowered its unemployment estimates for 2018, 2019 and 2020. It also changed its tone on interest rates to becoming more hawkish. In short, there is both a recognition that growth is strong, the labour market is getting tighter, costs pressures are rising, and the US Fed is likely to respond to that.

And yet, some of the key market indicators preceding a slowdown are falling in place: The US Fed is tightening; risk aversion – as measured by the spread between AAA- and BBB-rated bonds is rising; the spread between the yields on 10Y and 2Y US Treasuries is falling; and the yields curve is becoming flatter, although it is far from getting inverted.

¹A reading above 50 indicates an expansion.

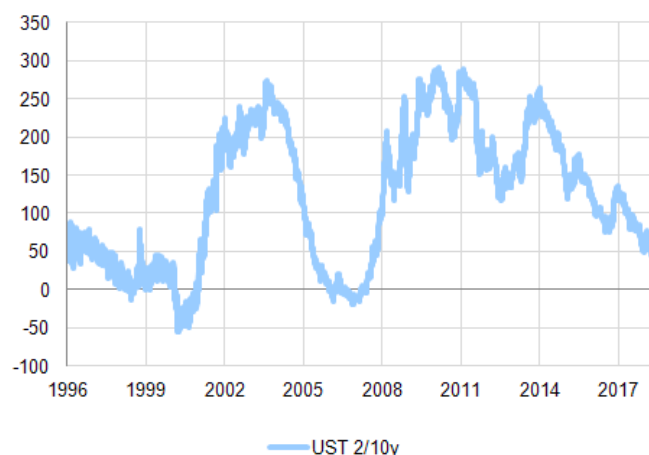
20 June 2018

Figure 3: Spread between US AAA and BBB bonds



Source: Bloomberg, RHB

Figure 4: US 10Y/2Y spread



Source: FRED, RHB

The key question is whether the flattening yield curve is signalling a slowdown or, as some would believe, a recession. In our view, a slowdown is likely – if for nothing else, cost pressures are now starting to build. The recession, though, is unlikely. While a flattening yield curve is providing the correct signal, the extent of the flattening is overdone, given other factors.

First, there has been a rise in risk aversion, which has had little to do with the economic cycle. The US is in a trade skirmish with its closest allies and there is a tit-for-tat on tariffs going with China and India, meaning that a trade war – always believed to be a long shot and not seen since the 1930s – is appearing possible. The geo-political situation is volatile, improving one day and then taking two steps back the next. US policy appears to be more erratic and more prone to a reversal than ever. The rules-based world order itself appears to be at risk. In short, there is a fair amount of flight to quality, and it is lowering US long-term bond yields.

Besides this, there has also been buying at the long end that has not been strictly driven by commercial reasons. Firstly, there is still quantitative easing (QE) abroad, and so those central banks are buying long date treasuries as they need to park their excess liquidity somewhere. Second, long-term investors – like pension funds – are also buying. They were previously looking for yields abroad, when QE by the US Fed had kept domestic long-term bond yields artificially low. Thus, any jump in treasury yields has seen a disproportionate increase in buying.

Lastly, the short end has risen for two reasons. First, the US Fed is raising rates – this is a “correct” reason for rising yields. However, there has also been a disproportionate increase in government debt whose impact on growth is unclear, thus having larger impact on the short end.

In short, the extent of the flattening of the yield curve may be overdone, although the flattening itself is probably justified. The US Fed is raising interest rates and its latest projections have growth slowing through 2020. The world economy is already slowing and, furthermore, is subject to a fair amount of stress on the trade side. Lastly, costs appear to be rising, leading to an increase in the US Fed’s inflation projections. A recession is unlikely, but there are clear signs that the US economy, while lagging the rest of the world, is also likely to slow in the near future. We are starting to observe late cycle behaviour.

20 June 2018

Economic Inflection Points

Economic cycles do not move in a standardised fashion, i.e. no two cycles are exactly the same and unforeseen macroeconomic events or shocks may disrupt a trend. An overall economic cycle tends to have parts that repeat at varying intervals. This is how a typical economic cycle unfolds:

- The economy emerges from a recession, and the rate of economic growth – which has been negative – starts to turn positive.
- The rate of economic growth gathers pace as economic expansion becomes firmly entrenched – this is when the US Fed begins to raise rates to moderate the growth rate before the inflation becomes unmanageable.
- The pace of economic growth slows down and eventually turns negative and the economy contracts and enters recession, leading to a cut in US Fed rates and helps move the economy gradually towards recovery.

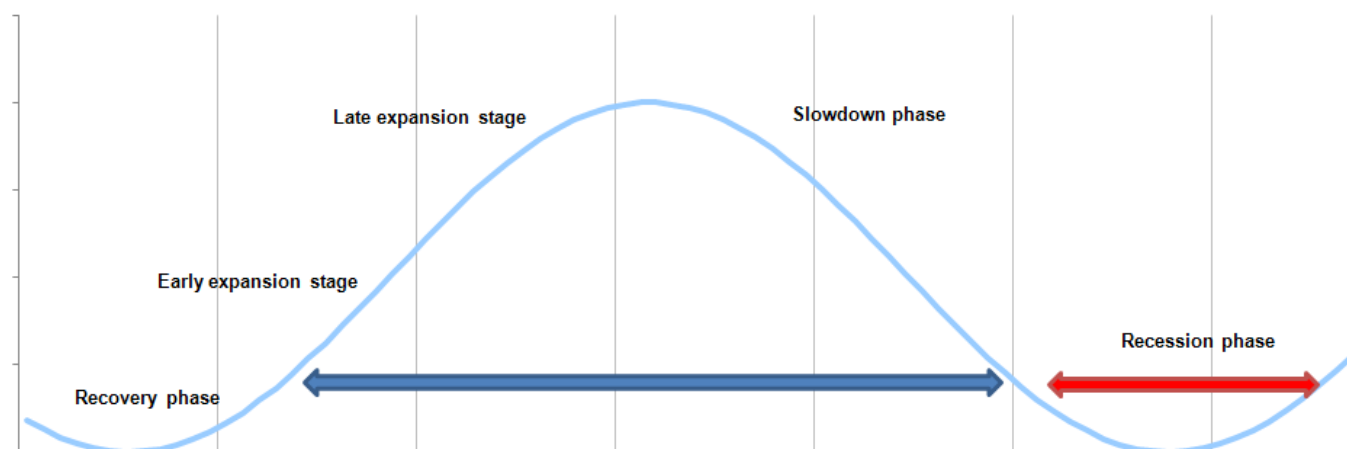
The distinct phases of economic cycle have some peculiar characteristics:

- **Recovery phase.** This phase is characterised by falling inflation and easing monetary policies, which leads to higher business confidence and creates a platform for strong profit growth.
- **Expansion phase.** This usually tends to be the longest phase of an economic cycle and can be subdivided into two stages, namely:
 - Early expansionary phase: Inflation remains low and there is a rapid increase in business confidence
 - Late expansionary phase: Inflation gradually starts picking up and policy starts to turn restrictive

Irrespective of the stages, improving economic activity, strong credit growth and healthy business profitability, remains a common theme for this phase of the cycle.

- **Slowdown phase.** Following the restrictive monetary and tighter credit policies being implemented during the late stage of the expansion phase, economic growth witnesses a significant slowdown during this stage. Inflation tends to continue rising up and starts heading above the historical trend rates. There is decline in business confidence and the same is visible from declining corporate profits and the build-up in inventory.
- **Contraction/recession phase.** This phase witnesses a contraction in economic activity, wherein business confidence is weak as corporate profits continue to decline. Inventories gradually fall despite a low sales level. Inflation peaks during this phase, as monetary policy becomes more accommodative, setting up the platform for the next recovery.

Figure 5: Distinct phases of a typical business cycle



Source: RHB

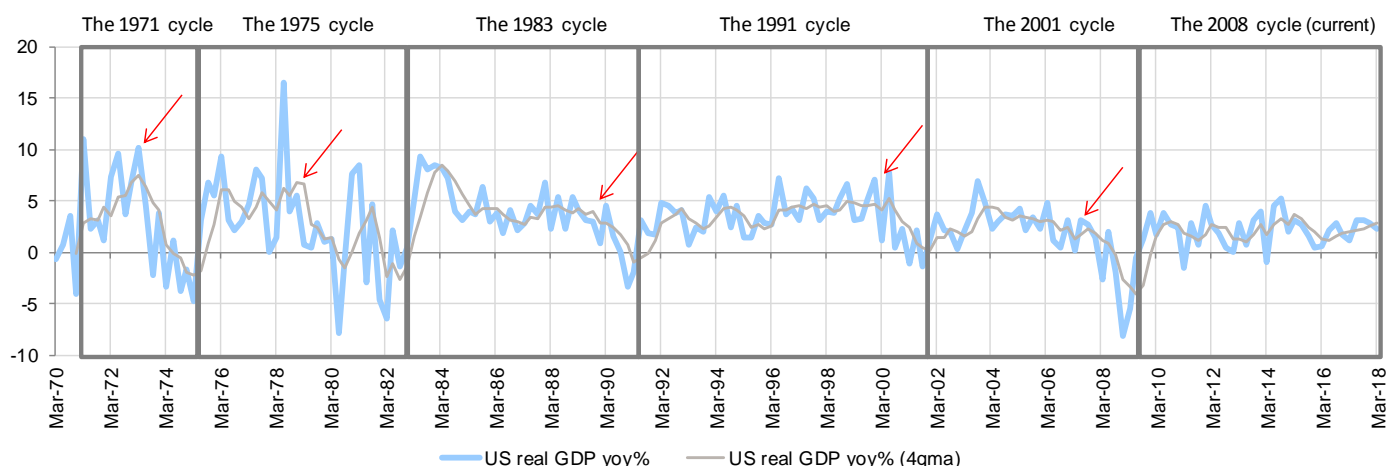
20 June 2018

The US Economic Cycle

The US economy is still in (late?) expansion phase

The US economy is in its sixth period of expansion or growth cycle since 1970 (Figure 6). For ease of analysis, we have focused only on three distinct economic phases – expansion (this also includes the recovery phase), slowdown and contraction. The slowdown phase begins when the real GDP growth rate, while still in positive territory, starts to decline rapidly before entering a contraction period. Contraction begins when we witness two successive quarters of negative real GDP growth rates. Based on the above definitions, the US economy is in the expansion phase for the current cycle.

Figure 6: US real GDP growth cycles, from expansion, slower growth to contraction



Note: The red arrows indicate the beginning period of slower growth
Source: CEIC, RHB

Figure 7: Number of quarters of different phases of the US real GDP growth cycles

Cycle started	Expansion phase		Slowdown phase		Contraction phase	
1971	1Q1971-1Q1973	12	2Q1973-4Q1973	3	1Q1974-1Q1975	5
1975	2Q1975-4Q1978	20	1Q1979-1Q1980	5	2Q1980-4Q1982	11
1983	1Q1983-1Q1989	25	2Q1989-3Q1990	6	4Q1990-1Q1991	2
1991	2Q1991-2Q2000	37	3Q2000-4Q2000	2	1Q2001-3Q2001	3
2001	4Q2001-3Q2007	24	4Q2007-2Q2008	3	3Q2008-2Q2009	4
Average for the past 5 cycles		27		4		5
The current	3Q2009-2Q2018+	36+				

Source: CEIC, RHB

Based on data for the past five economic cycles, we assess that – on an average – the US economy has been in expansion phase for 27 quarters, a slowdown phase for four quarters, and in contraction phase for five quarters. The 1991 cycle had the longest expansion phase – it lasted 37 quarters – and was followed by the shortest slowdown and contraction phases of two quarters and three quarters respectively.

Equity Performance Around Peak Growth

SPX performance in different phases

Changes in the pace or trajectory of economic growth historically have triggered performance shifts within the equity markets. Based on historical data, the US equity market performance during these key inflection points can be summarised as follows:

Expansion phase until economic growth peaks. This phase begins with the end of recession and extends through the whole economic acceleration phase. During the last five economic cycles, S&P 500 delivered an annualised return of 3.7%-15.8%, with an average of 10.4%.

20 June 2018

Slowdown in economic growth. This phase begins when economic growth tops out, as the US Fed is already taking steps to avoid a hard landing. The market tends to lose steam, and it prepares for an oncoming recession. S&P 500 delivered an annualised return ranging from negative 20.9% to positive 4.9% during this phase in the last five economic cycles, with an average of negative 10.3%. The positive returns brought by the expansion phase could come to a halt.

Contraction phase. This phase begins when economic growth has turned negative. Historically, the annualised return for S&P 500 during this phase has ranged between negative 28.2% (2001 economic cycle) to positive 50.3% (1983 economic cycle), giving an average of negative 0.4%. However, as markets are forward looking, investors are already starting to factor in a potential revival in the economy. Therefore, looking at the returns of the full contraction phase could be misleading. The return to the worst point is what investors fear, and the average annualised return to the lowest month-end point during the contraction period is negative 30.2%.

Figure 8: Price performance for the S&P 500 during various phases of previous economic cycles

Cycle	Expansion phase		Slowdown phase		Contraction phase					
	Actual	Annualised	Actual	Annualised	Actual	Annualised	Annualised (the worst)*			
1971	1Q1971-1Q1973	24.8%	13.5%	2Q73-4Q1973	-15.7%	-20.3%	1Q1974-1Q1975	-11.6%	-9.4%	-29.2%
1975	3Q1975-4Q1978	14.7%	3.7%	1Q79-1Q1980	6.2%	4.9%	2Q1980-4Q1982	37.8%	12.4%	n.a
1983	1Q1983-1Q1989	109.7%	12.6%	2Q89-3Q1990	3.8%	2.5%	4Q1990-1Q1991	22.6%	50.3%	-7.7%
1991	4Q1991-2Q2000	287.7%	15.8%	3Q00-4Q2000	-9.2%	-17.6%	1Q2001-3Q2001	-21.2%	-27.2%	-27.2%
2001	4Q2001-3Q2007	46.7%	6.6%	4Q07-2Q2008	-16.2%	-20.9%	3Q2008-2Q2009	-28.2%	-28.2%	-56.5%
Average	Average		10.4%			-10.3%			-0.4%	-30.2%

Note: *The annualised return to the worst month-end point. We have used the month average data for the SPX for the period before 1976

Source: Bloomberg, RHB

US equities deliver 12% returns during last 12 months of an expansion cycle

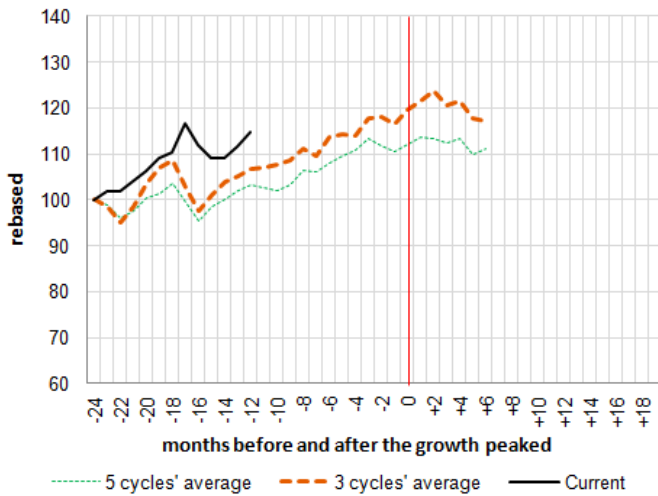
We are still enjoying the last upswing of the expansion phase before entering into the slowdown phase. However, any sudden economic shocks would lead to a faster-than-expected slowdown phase, and market volatility may arise as a result. The change in inflationary expectation seen earlier this year was an example.

How did the equity market react around peak growth in the past cycles (Figure 9 and Figure 10)? In the 12 and 24 months preceding the peak of economic growth, the S&P 500 generated an average return of 12% and 20% respectively during last three economic cycles. The index peaked 3-4 months before the growth peak was seen in all cycles, except during the 1983 cycle (where The Black Monday in Oct 1987 happened 18 months before the growth peaked). During the first 6-month slowdown phase, we have seen a decline of 9% and 13.4% respectively in the last two cycles.

On P/E, should we expect to see an expansion in the last upswing (Figure 11 and Figure 12)? Looking at the history, the answer is no. With the exception of the 1991 cycle, we did not see earnings multiple expansion during any of the previous economic cycles. We assess that the S&P 500's price performance during the late stage of an expansion cycle was mostly in line with corporate earnings growth. While we do not have coverage on the US equity market, we reckon that the S&P 500 Index's return of 15% in the last 12 months is supported by a consensus 2018E earnings growth of around 20%. This is largely consistent with what we observed from the past cycles. Earnings appear to be key to fuelling the US market rally further.

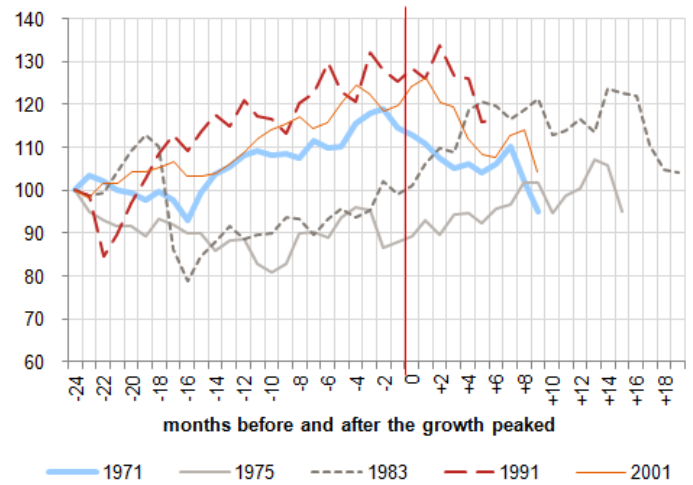
20 June 2018

Figure 9: The S&P 500 movement around the economic growth peak in current vs. previous cycles



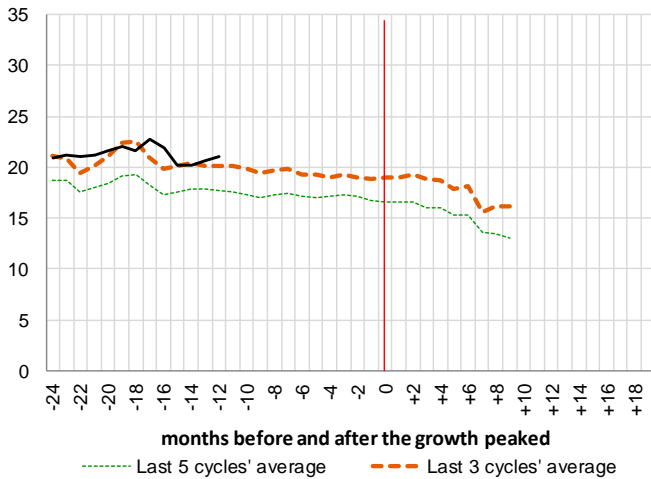
Note: Month-end prices from 1976, monthly average prices from 1970-1975
Source: Bloomberg, RHB

Figure 10: The S&P 500 movement around the economic growth peak



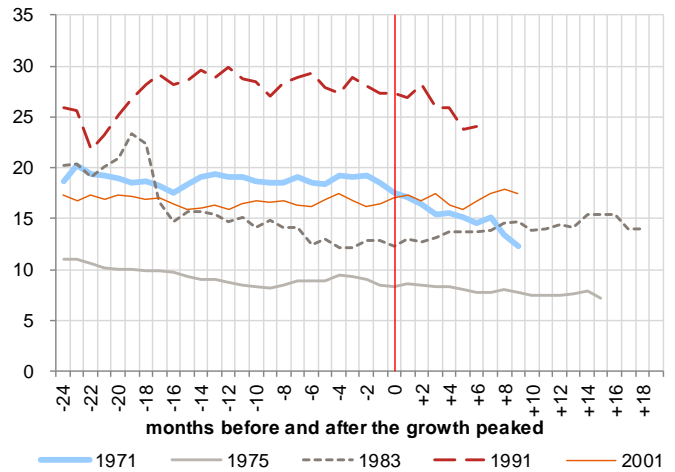
Note: Month-end prices from 1976, monthly average prices from 1970-1975
Source: Bloomberg, RHB

Figure 11: The S&P 500's P/E – movement around the economic growth peak in current vs. previous cycles



Bloomberg, RHB

Figure 12: The S&P 500's P/E – movement around the economic growth peak



Bloomberg, RHB

What about Asia around peak US economic growth?

In Asia, did we see the regional stock market performance follow the SPX around peak US economic growth? The answer is yes and no. Asian equity markets in general have moved up a year before the peak growth. However, the regional stock market movements in each of the cycles appear differently (Figure 13). It could be partly explained by the boom and bust of the regional economic performance (Figure 14).

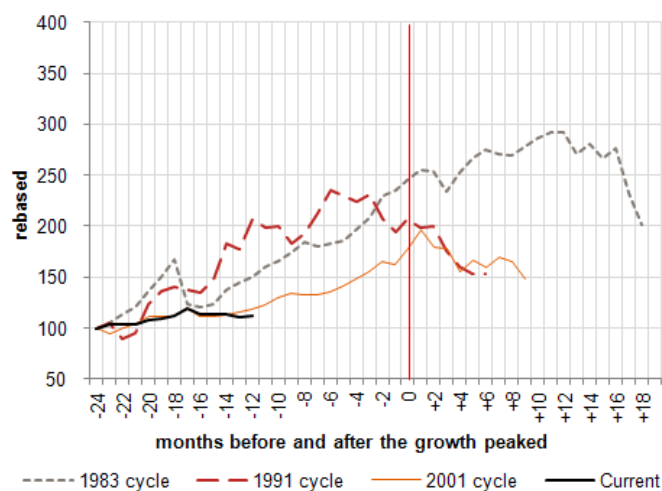
During the 1983 cycle, thanks to strong growth registered by Asian economies – especially the Four Asian Tigers – which included Hong Kong, Singapore, South Korea and Taiwan – Asian equity markets continued to perform well even after the US economic growth had peaked. The regional stock market returned exceptionally well, topping the other two cycles.

The recovery post the Asian Financial Crisis led to Asian markets peaking six months before the US economic growth peaked during the 1991 economic cycle.

However, during the 2001 economic cycle, Asia was also impacted by the Global Financial Crisis and the equity markets peaked just a month after the peak of US economic growth. Our RHB-compiled marked cap weighted Asian equity index (based on eight local market indices) delivered 50% returns during the last 12 months before peak economic growth in the US.

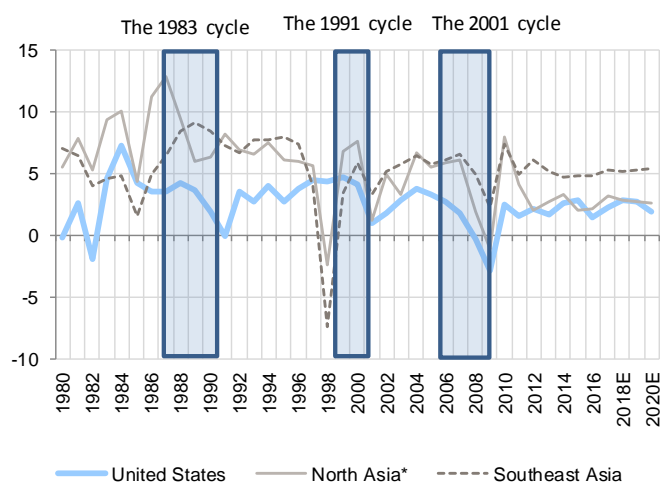
20 June 2018

Figure 13: Asia market-cap weighted performance around US economic growth peak



Note: The Asian index comprises of HSI, TWSE, KOSPI, STI, KLCI, SET, JCI and PCOMP, weighted by a fixed current market cap
Source: Bloomberg, RHB

Figure 14: Real GDP growth in the US vs. Asia



Note: North Asia is a simple average of Hong Kong, South Korea and Taiwan. 2018-2020 forecasts from the International Monetary Fund (IMF)
Source: IMF, RHB

To account for differences in economic cycles, we calculate the correlation between price performances of Asian markets and the US equity market for a period of one year before and six months after economic growth peaks in the US.

Barring some exceptions in the 1983 economic cycle, Asian equity indices have shown varying degrees of positive correlation with the S&P 500, with the highest correlation coefficients 0.37, 0.33 and 0.32 for Hong Kong, Korea and Singapore's equity markets respectively in the 1991 cycle (Figure 15). These three markets continue to show significantly positive correlation with the SPX in the 2001 cycle, with the correlation coefficients ranging from 0.36 to 0.50. Both Taiwan and Malaysia have also seen a rising correlation with the SPX during the period from cycle to cycle.

Figure 15: Correlation analysis of Asian stock indices with S&P 500

	HK	TW	KR	SG	MY	TH	ID	PH
1983 cycle	0.08	(0.05)	0.06	0.18	0.17	0.14	(0.06)	0.24
1991 cycle	0.37	0.13	0.33	0.32	0.26	0.29	0.14	0.22
2001 cycle	0.36	0.23	0.42	0.50	0.37	0.29	0.39	0.51

Note: For the late upswing stage of an expansion cycle, we use equity index data for one year before and six months after economic growth peaks in the US
Source: Bloomberg, RHB

Looking at the actual market performance (Figure 16), the peak in US growth actually formed a clear divider in the last 2001 cycle for positive and negative returns in nearly all eight markets that we looked at. With the ever increasing globalisation efforts in place, we should continue to see the higher correlation between Asia and US economies. This should also hold true for Asian equity markets and the S&P 500.

Figure 16: Asian market returns (USD) around peak of economic growth in the US

Cycle	US growth peaked in	Period	S&P 500	HK	TW	KR	SG	MY	TH	ID	PH
1983	Mar-89	1yr before	13.9%	18.4%	129.8%	69.8%	33.7%	33.4%	12.1%	239.3%	18.6%
		6mths after	18.4%	-8.4%	47.2%	-5.8%	11.0%	24.0%	54.9%	31.8%	22.3%
1991	Jun-00	1yr before	6.0%	18.8%	2.4%	-3.5%	-6.8%	2.7%	-41.3%	-40.8%	-45.8%
		6mths after	-9.2%	-6.6%	-46.6%	-45.3%	-5.9%	-18.4%	-25.3%	-23.8%	-15.7%
2001	Sep-07	1yr before	14.3%	55.2%	39.5%	47.0%	50.6%	49.5%	35.1%	55.5%	55.9%
		6mths after	-13.4%	-16.0%	-2.7%	-19.3%	-11.4%	-0.4%	-3.4%	3.7%	-9.6%

Source: Bloomberg, RHB

20 June 2018

Sector Leadership Around Peak Growth

While it is impossible for a single sector to outperform in every stage of an economic cycle, there are some patterns of sector leadership within each economic phase. During the late expansionary phase of a cycle – as the economy moves beyond its early stage growth and the US Fed begins to raise interest rates – economically-sensitive sectors continue to perform well, e.g. a) the information technology sector – boosted by software, and computers & peripherals, and b) the energy sector – supported by continuing strong demand of commodities. Elsewhere, as investors begin to glimpse signs of an impending slowdown, more defensive-oriented sectors – such as consumer staples and healthcare – start to outperform the market.

While the degree of growth and the duration of the economic cycle varies across countries, looking at the relative performance of eleven GICS sectors in main benchmark indices, ie Malaysia (KLCI), Indonesia (JCI), Singapore (STI), Thailand (SET) and Hong Kong (HIS) during 12 months before the peak of economic growth in the US (Figure 17), we note that energy, consumer staples and consumer discretionary were the common sectors that had delivered relative outperformance in all markets. We also note that the telecom sector in Hong Kong and industrials sector in Singapore were among the top two best performing sectors in respective countries. We believe that the outperformance of the telecom sector in Hong Kong was a sector-specific fundamental story, that is related to the strong initial growth of China's telecom sector. It is also important to note that a number of energy-related stocks in Singapore (e.g. Keppel Corp, SembCorp Marine and Noble Group) were categorised under the industrials sector by GICS. Another theme that seems to recur across all countries is the relative underperformance of the real estate sector.

To identify the top performing sectors, we look at their performance relative to the local market index. The values stated in Figure 17 and Figure 19 are the average of the sectors' performance for the last two economic cycles. The green colour denotes sector outperformance, while the red colour indicates sector underperformance. White space indicates the lack of data or insignificant market capitalisation for the sector during last two economic cycles. We applied the Global Industry Classification Standard (GICS) to the constituents of local market indices to arrive at the list of key eleven sectors. For the Thailand and Indonesian markets, our sample data covers c.70% of the index market capitalisation.

Figure 17: Best-performing sectors during 12 months before the peak of economic growth in the US

	Financials	Telecom	Real Estate	Industrials	Utilities	Cons. Disc.	Info Tech.	Cons. Staples	Energy	Materials	Healthcare
Singapore	9.6	15.4	(2.3)	23.9		(5.7)		6.7			
Malaysia	11.0	(5.5)		(9.4)	(9.2)	14.0		22.8	40.6		
Hong Kong	(33.5)	122.7	(15.8)	11.9	(30.1)	29.6	165.5	3.3	53.8		
Indonesia	(25.4)	(9.9)	26.1	34.1	(52.1)	6.0	319.7	(4.4)	63.3	24.3	(3.0)
Thailand	(9.6)	10.2	(13.3)	(16.6)	7.7	20.8	27.2	26.9	17.1	0.7	12.2

Source: Bloomberg, RHB

Figure 18: Last 12 months' relative price performance for sectors that tend to do well during the late expansionary phase of a cycle

	Info Tech.	Cons. Staples	Energy	Materials
Singapore	69.5	(8.2)		
Malaysia		26.0	12.5	30.4
Hong Kong	31.7	13.7	16.0	
Indonesia	6.6	(3.6)	36.4	57.2
Thailand	(37.9)	9.4	31.2	5.1

Source: Bloomberg, RHB

We also reviewed the relative performance of the same eleven GICS sectors during the six months after the peak of economic growth in the US to assess whether there is a change in investor preference for sector exposure. We note that, as economic growth starts to slow down, investors gravitate towards sectors that are less economically sensitive – including consumer staples, utilities and telecom, as their profits are likely to be more stable than those in other sectors during the period of economic slowdown. During this period, we noticed that the financial sectors in all countries performed largely in line with the local market index – with the exception of Hong Kong, where the sector was perceived to be a defensive play in the past.

20 June 2018

Figure 19: Best-performing sectors during 6 months after peak of economic growth in the US (during the slowdown phase)

	Financials	Telecom	Real Estate	Industrials	Utilities	Cons. Disc.	Info Tech.	Cons. Staples	Energy	Materials	Healthcare
Singapore	3.9	17.3	15.4	1.0		8.6		17.7			
Malaysia	2.5	13.8		16.6	6.1	(12.4)		22.1	(5.1)		
Hong Kong	24.4	(15.9)	19.9	(0.5)	29.7	(2.8)	(14.2)	2.6	3.9		
Indonesia	2.4	(10.8)	5.4	2.9	12.6	9.8	(42.9)	14.7	28.7	(4.9)	(11.5)
Thailand	7.0	7.3	19.9	(0.3)	10.7	20.2	(3.9)	6.3	16.2	(7.0)	(10.4)

Source: Bloomberg, RHB

Foreign Investor Sentiment In Asia

Foreign investors are getting wary of Emerging Asia equity markets

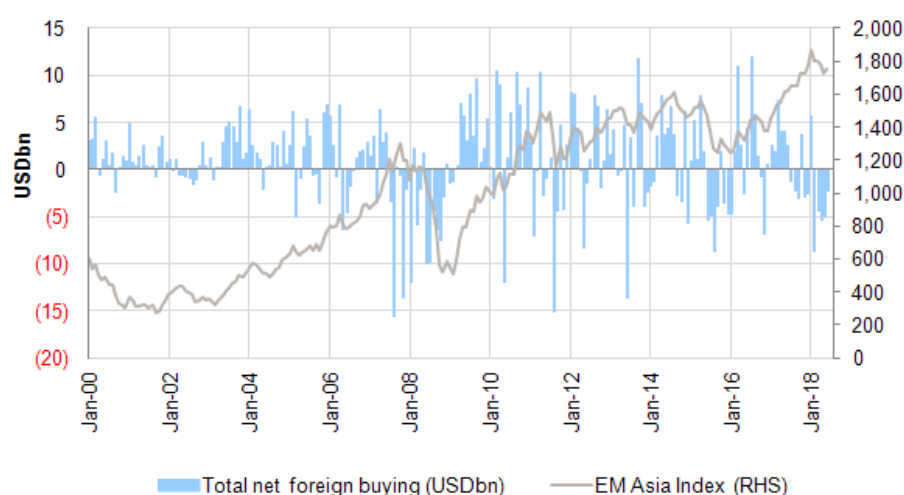
After a positive start to the year, Emerging Asian markets, which we track – Malaysia, the Philippines, Thailand, Indonesia, South Korea and Taiwan – declined, ranging from 5% to 17% during Feb-May 2018. This was associated with a total net selling of USD23.5bn by foreign investors after registering USD5.7bn in net foreign buying in the month of Jan 2018. Foreigners continued to sell EM Asia in the first two weeks of Jun 2018. If the selling trend does not revert, then Jun 2018 will be the fifth consecutive month of net foreign selling, adding the total net selling to USD25.8bn from Feb-Jun 2018. If we include the net sell-off since 3Q17, the total net selling over the past 12 months has reached USD28bn.

Foreigners have sold Asian equities for a similar prolonged period during Jun 2008-Feb 2009, which coincided with the US economic contraction as well as the regional downturn. That time, we saw a total net foreign selling of USD43bn and, during the slowdown phase preceding it, another net selling of USD33.8bn was seen.

The other comparable period was 2H15, when the US Fed funds rate bottomed and started to rise in Nov 2015. The total net selling amount was USD33.9bn for an eight-month period, during which only a single month experienced net inflows.

The regional funds flow picture argues a not-too-rosy investor sentiment. The current net selloff in EM Asia could be a few billions away from the past worse cases. While the correlation between the flow and market index appears to exist, the flow data indicates a risk-off mode.

Figure 20: Total net foreign buying of EM Asian ex Indian equities (monthly)



Note: Total includes data for Malaysia, the Philippines, Thailand, Indonesia, South Korea and Taiwan. Funds flow data for Malaysia is only available from 2010

Source: Bloomberg, RHB

20 June 2018

Figure 21: Net foreign buying of some Asian equity markets (USDm)

	MY	PH	TH	ID	KR	TW	Total
2015	(5,012)	(1,194)	(4,383)	(1,580)	(3,626)	3,345	(12,451)
2016	(621)	83	2,244	1,259	10,480	10,956	24,402
2017	2,532	1,095	(802)	(2,960)	8,268	5,736	13,869
1H2017	2,466	408	386	1,304	9,011	8,667	22,242
2H2017	66	687	(1,188)	(4,264)	(743)	(2,931)	(8,373)
Jan-18	871	45	(179)	132	1,963	2,856	5,688
Feb-18	(279)	(296)	(1,314)	(760)	(2,598)	(3,480)	(8,727)
Mar-18	(18)	(371)	(353)	(1,085)	(449)	(2,089)	(4,364)
Apr-18	390	(171)	(685)	(750)	(1,213)	(2,873)	(5,303)
May-18	(1,443)	(174)	(1,656)	(460)	(262)	(1,064)	(5,059)
Jun-18	(597)	(121)	(1,003)	(223)	(433)	51	(2,326)
Jan-Jun 2018	(1,077)	(1,087)	(5,190)	(3,147)	(2,991)	(6,600)	(20,092)

Note: Malaysia data refers to the transactions on Bursa Malaysia securities by foreign institutional investors

Note 2: Last update was on 15 Jun 2018

Source: Bloomberg, RHB

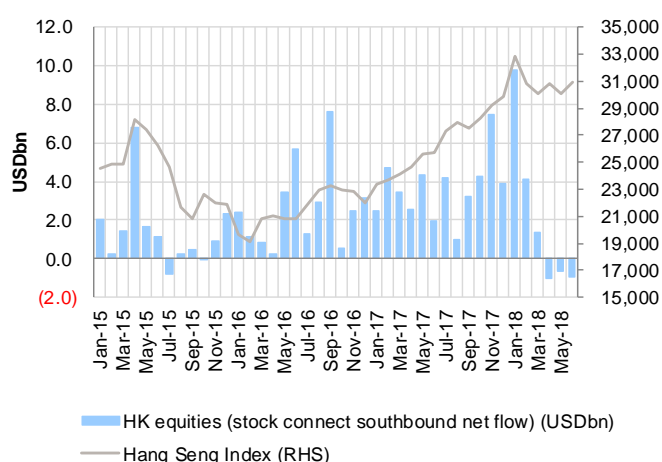
Fund flow indicators in Hong Kong and Singapore raise amber flags too

As Hong Kong and Singapore do not have foreign buying data available, we use the Hong Kong-Shanghai and Hong Kong-Shenzhen Stock Connects' total southbound net flows for Hong Kong and institutional buying data for Singapore as a proxy to look at investor sentiment.

The former recorded Mainland Chinese as being net buyers of Hong Kong-listed equities through the stock connects, which, we believe, has been the key liquidity force driving the HSI to its peak in early 2018. The decline of the index to its 2015 low also coincided with a drying up of this flow. In the past consecutive three months – from Apr 2018 – we saw a total net outflow of USD2.7bn. This has not been seen since the launch of this scheme.

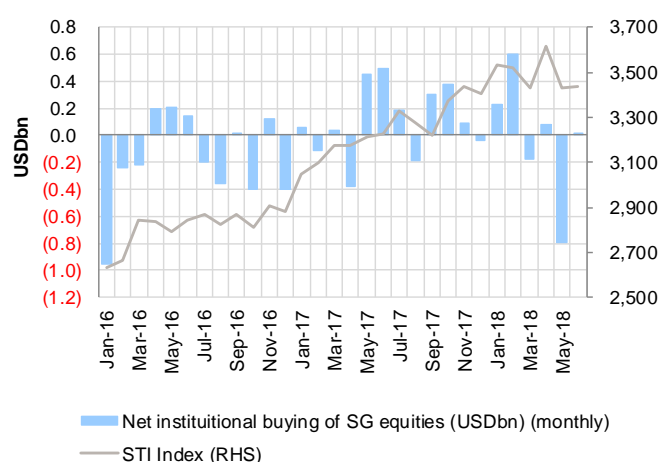
Interestingly, Singapore also witnessed its second-largest monthly net selling by institutional investors in May 2018 since data has been available. The sell-off triggered a sharp drop in the STI during May.

Figure 22: Stock connect – southbound net flows into Hong Kong equities



Source: HKEX, RHB

Figure 23: Net institutional buying of Singapore equities



Source: Bloomberg, RHB

20 June 2018

Key Variables Around Peak Economic Growth

In theory, the later part of an economic expansion cycle should entail a gradual pickup in inflation, more restrictive monetary policies, rise in bond yields, and topping out of stock markets. As we believe no one can predict the peak of economic growth in the US with absolute certainty, we identify trends in key investment variables in the past five economic cycles and try to assess what we could expect to see around the peak of real GDP growth and at what stage of economic cycle we are in today.

For the purpose of this study we look at US inflation, US Fed funds rate, US 10Y bond yields, bond yield curve and the USD index (DXY) for past US economic cycles. In the later part of this report, we also study the relationship between late expansionary phase of an economic cycle with equity market movements.

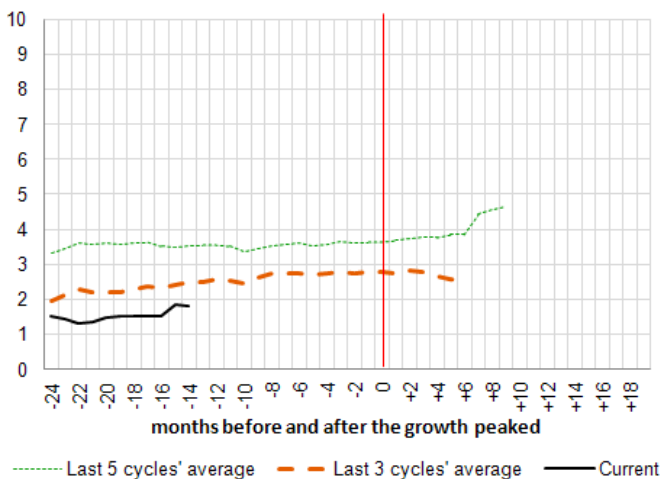
We identify the quarter-end month in which real GDP growth rate peaked in these five economic cycles and study the trend for key investment variables during the period of 24 months prior to – and 6-18 months after – the month of peak economic growth.

Anchoring on the US Congressional Budget Office and International Monetary Fund (IMF) forecasts of a slowdown in the US economy in the next one year, we plot the key variables for the current economic cycle at 12 months before the peak of economic growth. The Great Moderation period since the 1980s also prompts us to look at the past three cycle average in order to ensure trend robustness for comparison.

US core inflation

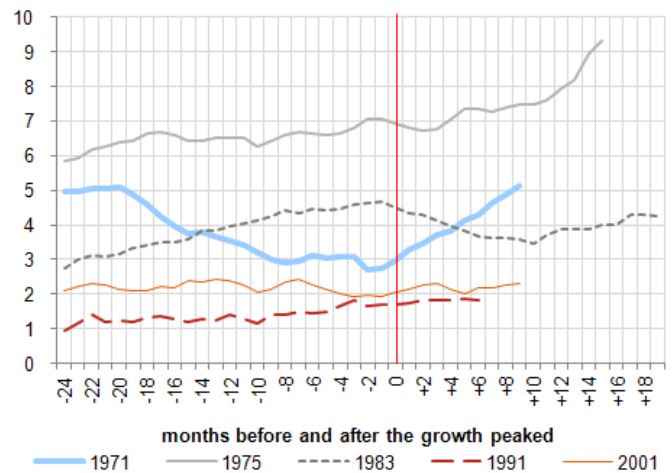
- What happened in the past cycles?** Looking at the trend of past economic cycles, it is obvious that inflation in the US starts to move moderately higher before the economy gets close to peak growth. With the exception of the 1971 and 1975 economic cycles, inflation either stabilised or moved lower once the economic growth peaked. Based on the average for the last three cycles, inflation – as measured by US Personal Consumption Expenditures Core Price Index (Core PCE) – peaked two months after the real GDP growth peaked. The 1971 and 1975 economic cycles were part of The Great Inflation period, whereby loose monetary policies that financed massive budget deficits led to inflation running as high as 9% despite weaker economic growth.
- What about the current cycle?** The increase in headline inflation in the US during last 12 months has been driven by higher energy prices and gradual increases in food prices. However, the main driver for the increase in core inflation is core service inflation, reflecting higher wage pressures (far from threatening though) caused by an increasingly tight labour market. Inflation – as measured by Core PCE, a measure that is closely watched by the US Fed – has also been moving higher during the same period and may reach the Federal Open Market Committee’s target of 2% sooner rather than later.

Figure 24: US PCE Core Price (core inflation in %) - movement around economic growth peak in current vs. previous cycles



Source: Bloomberg, RHB

Figure 25: US PCE Core Price (core inflation in %) - movement around economic growth peak



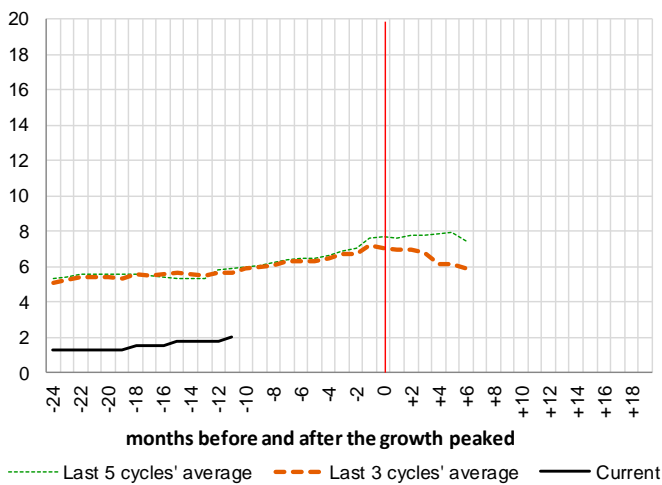
Source: Bloomberg, RHB

20 June 2018

US Fed funds rate

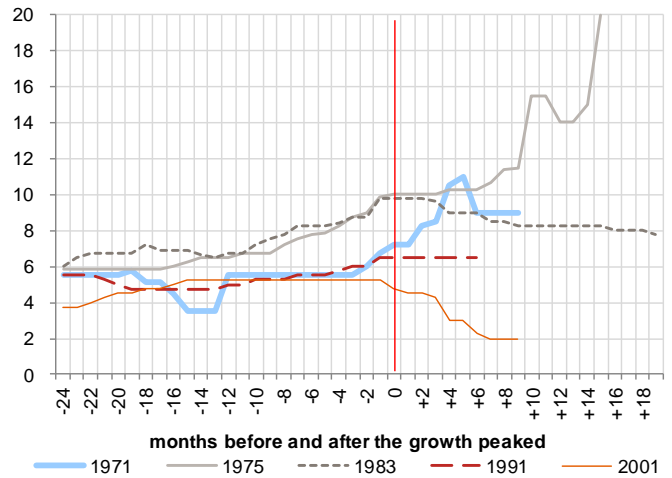
- **What happened in the past cycles?** The US Fed increases interest rates (US Fed funds rate or FFR) to counter the rise in inflation and ensure that the economy does not overheat. With the exception of The Great Inflation period of the 1970s – when FFR continued to rise beyond the peak period of economic growth – on average the FFR continues to rise or hold during the late stage of an expansion cycle and peaks around the same time as the US real GDP growth.
- **What about the current cycle?** In the current economic cycle, the FFR is rising after a prolonged period of extremely low interest rate environment, as the US Fed is in process of normalising the interest rates. However, if we ignore the current level of interest rates, the FFR is expected to remain on a rising trend till 2020. We expect the US Fed to raise rates twice more in second half of the year. By the end of 2018, the US Fed expects its benchmark rate to average 2.4%. It is then expected to rise to 3.1% in 2019 and 3.4% by 2020 before eventually declining.

Figure 26: US Fed funds rate (%) – movement around economic growth peak in current vs. previous cycles



Source: Bloomberg, RHB

Figure 27: US Fed funds rate (%) – movement around economic growth peak



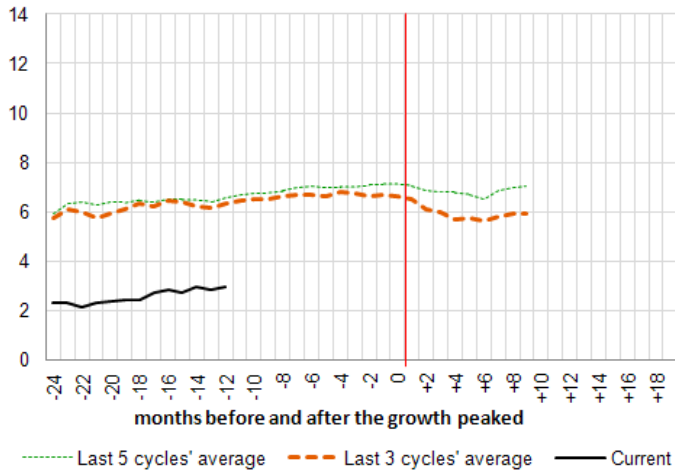
Source: Bloomberg, RHB

US 10Y bond yields

- **What happened in the past cycles?** In theory, a rise in interest rates – to counter rising inflation – pushes bond prices lower and yields higher. While the magnitude of change and direction of US 10Y bond yield have varied across economic cycles, the average bond yield for previous five and three economic cycles have increased 123bps and 86bps respectively during 24 months before the peak of economic growth.
- **What about the current cycle?** The current US 10Y bond yield is following trends witnessed in the past and has risen by 164bps from its mid-2016 low, of which a 64bps rise has been seen in the last 12 months. While bond prices (and hence yields) are forward looking, further increases in rate hikes are already priced in (currently US Fed fund futures market seems to be pricing in two further hikes by the US Fed in 2H18). However, there are growing concerns that US cost pressures are building up and elevated energy prices could force the US Fed to raise rates more aggressively, leading to faster and sharper increases in bond yields.

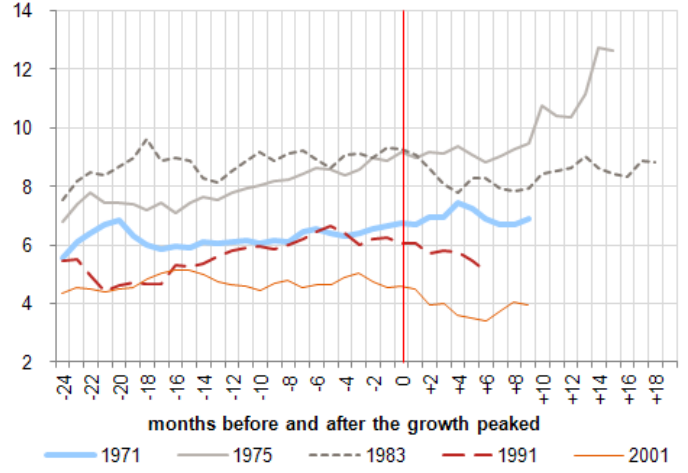
20 June 2018

Figure 28: US 10Y bond yield – movement around economic growth peak in current vs. previous cycles



Source: Bloomberg, RHB

Figure 29: US 10Y bond yield – movement around economic growth peak

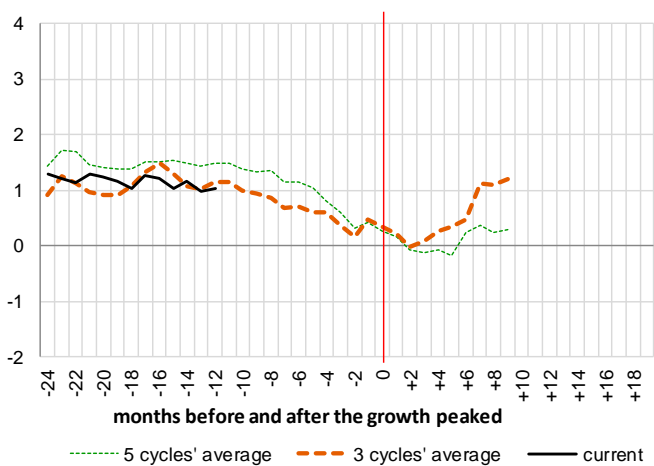


Source: Bloomberg, RHB

US bond yield curve (10Y bond yield minus 3M T-Bill)

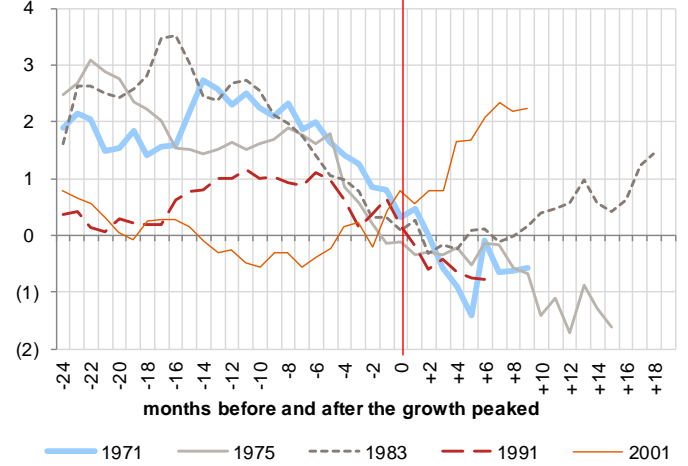
- **What happened in the past cycles?** We assess the yield curve as the difference between the 10Y US bond yield and the short-term borrowing rate set by the US Fed (the 3M T-Bill rate). The shape of the yield curve is known to provide an early indication of a recession. Generally, a flattening yield curve indicates the potential for a slowdown of economic growth.
- During the past five economic cycles in the US, we note that the flattening yield curve either hit zero or turned negative just around the peak of economic growth in the US, suggesting a tightening monetary condition and/or a sharp slowdown in the US economic growth expectation in the next 12 months.
- **What about the current cycle?** In the current cycle, the yield curve has been flattening since 2014 and seems to be following the average trends witnessed in the last three economic cycles. We believe the flattening – but still positive-sloped – yield curve may be indicating a moderate chance of an economic slowdown within the next 12 months. If the current trend continues to mirror the historical trend, then the yield curve could slip to near zero within the next 12 months or by mid-2019. We may expect a growth peak to be seen.

Figure 30: US bond yield curve – movement around economic growth peak in current vs. previous cycles



Source: Bloomberg, RHB

Figure 31: US bond yield curve – movement around economic growth peak



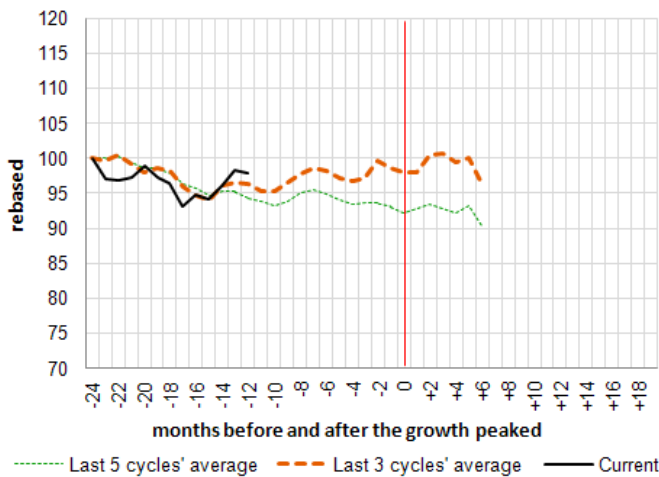
Source: Bloomberg, RHB

20 June 2018

DXY

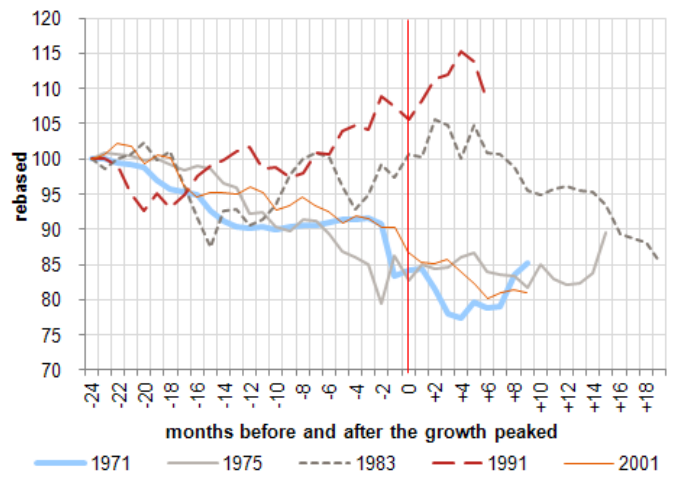
- **What happened in the past cycles?** The end of the Bretton Woods System led to the devaluation of the USD in the 1970s. The growing trade deficits, financial globalisation (e.g. emergence of other markets such as the EU) and emergence of China as the number one exporter of manufactured goods in the world in some way contributed to the decreased value of the USD during the 2002-2008 period. However, the DXY has been largely unchanged or even marginally appreciated during the 1983 and 1991 economic cycles. The average of last three cycles suggests a nominal 2% depreciation in the DXY during the 24 months before a peak of the US economic growth.
- **What about the current cycle?** The DXY has depreciated slightly more than 2% in last 12 months. Future currency movements are likely to depend on growth and inflation expectations, which we believe are more likely to be USD friendly. Nevertheless, a combination of tighter-than-expected monetary and looser fiscal policy makes for a stronger currency (see our 18 Jan report: [Making The USD Great Again](#) for further details).
- While we remain bullish call on the USD, the balance of risk in the near term – with respect to expected inflation being discounted by the market – has changed a little. At the start of 2018, we had expected the US Fed to increase rates four times. While the US Fed has moderately nudged up its expectation during the recent rate hike, the market made bigger adjustments – i.e. an increase to four rate hikes, from just two – and this has been reflected in the recent upward movement of the USD. The 2018 rates outlook is now in consensus. The market’s focus will soon change to a 2019 outlook. For 2019, the market currently expects to two rate hikes, the US Fed’s “dot plot” median value is pointing to three increases, while we are expecting it to happen four times. We believe, the markets continue to be relatively complacent about inflation, despite the UD Fed now predicting that the inflation will run slightly above its target 2% through 2020 – at 2.1% each year. We believe there is a risk of some moderation in the USD strength between the time the markets fully digest the current signals on 2018, and as attention shifts to the 2019 economic outlook and glide path on interest rates (see our 18 Jun [Monetary Policy Updates](#) report).

Figure 32: DXY – movement around an economic growth peak in current vs. previous cycles



Source: Bloomberg, RHB

Figure 33: DXY – movement around an economic growth peak



Source: Bloomberg, RHB

While the magnitude may vary, the direction of travel for most of the above indicators seems to be aligned with what happened in the late stage of the previous expansion cycles, moving steadily towards peak economic growth and slowdown.

RHB Guide to Investment Ratings

Buy: Share price may exceed 10% over the next 12 months

Trading Buy: Share price may exceed 15% over the next 3 months, however longer-term outlook remains uncertain

Neutral: Share price may fall within the range of +/- 10% over the next 12 months

Take Profit: Target price has been attained. Look to accumulate at lower levels

Sell: Share price may fall by more than 10% over the next 12 months

Not Rated: Stock is not within regular research coverage

Investment Research Disclaimers

RHB has issued this report for information purposes only. This report is intended for circulation amongst RHB and its affiliates' clients generally or such persons as may be deemed eligible by RHB to receive this report and does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. This report is not intended, and should not under any circumstances be construed as, an offer or a solicitation of an offer to buy or sell the securities referred to herein or any related financial instruments.

This report may further consist of, whether in whole or in part, summaries, research, compilations, extracts or analysis that has been prepared by RHB's strategic, joint venture and/or business partners. No representation or warranty (express or implied) is given as to the accuracy or completeness of such information and accordingly investors should make their own informed decisions before relying on the same.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to the applicable laws or regulations. By accepting this report, the recipient hereof (i) represents and warrants that it is lawfully able to receive this document under the laws and regulations of the jurisdiction in which it is located or other applicable laws and (ii) acknowledges and agrees to be bound by the limitations contained herein. Any failure to comply with these limitations may constitute a violation of applicable laws.

All the information contained herein is based upon publicly available information and has been obtained from sources that RHB believes to be reliable and correct at the time of issue of this report. However, such sources have not been independently verified by RHB and/or its affiliates and this report does not purport to contain all information that a prospective investor may require. The opinions expressed herein are RHB's present opinions only and are subject to change without prior notice. RHB is not under any obligation to update or keep current the information and opinions expressed herein or to provide the recipient with access to any additional information. Consequently, RHB does not guarantee, represent or warrant, expressly or impliedly, as to the adequacy, accuracy, reliability, fairness or completeness of the information and opinion contained in this report. Neither RHB (including its officers, directors, associates, connected parties, and/or employees) nor does any of its agents accept any liability for any direct, indirect or consequential losses, loss of profits and/or damages that may arise from the use or reliance of this research report and/or further communications given in relation to this report. Any such responsibility or liability is hereby expressly disclaimed.

Whilst every effort is made to ensure that statement of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable and must not be construed as a representation that the matters referred to therein will occur. Different assumptions by RHB or any other source may yield substantially different results and recommendations contained on one type of research product may differ from recommendations contained in other types of research. The performance of currencies may affect the value of, or income from, the securities or any other financial instruments referenced in this report. Holders of depositary receipts backed by the securities discussed in this report assume currency risk. Past performance is not a guide to future performance. Income from investments may fluctuate. The price or value of the investments to which this report relates, either directly or indirectly, may fall or rise against the interest of investors.

This report does not purport to be comprehensive or to contain all the information that a prospective investor may need in order to make an investment decision. The recipient of this report is making its own independent assessment and decisions regarding any securities or financial instruments referenced herein. Any investment discussed or recommended in this report may be unsuitable for an investor depending on the investor's specific investment objectives and financial position. The material in this report is general information intended for recipients who understand the risks of investing in financial instruments. This report does not take into account whether an investment or course of action and any associated risks are suitable for the recipient. Any recommendations contained in this report must therefore not be relied upon as investment advice based on the recipient's personal circumstances. Investors should make their own independent evaluation of the information contained herein, consider their own investment objective, financial situation and particular needs and seek their own financial, business, legal, tax and other advice regarding the appropriateness of investing in any securities or the investment strategies discussed or recommended in this report.

This report may contain forward-looking statements which are often but not always identified by the use of words such as "believe", "estimate", "intend" and "expect" and statements that an event or result "may", "will" or "might" occur or be achieved and other similar expressions. Such forward-looking statements are based on assumptions made and information currently available to RHB and are subject to known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievement to be materially different from any future results, performance or achievement, expressed or implied by such forward-looking statements. Caution should be taken with respect to such statements and recipients of this report should not place undue reliance on any such forward-looking statements. RHB expressly disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or circumstances after the date of this publication or to reflect the occurrence of unanticipated events.

The use of any website to access this report electronically is done at the recipient's own risk, and it is the recipient's sole responsibility to take precautions to ensure that it is free from viruses or other items of a destructive nature. This report may also provide the addresses of, or contain hyperlinks to, websites. RHB takes no responsibility for the content contained therein. Such addresses or hyperlinks (including addresses or hyperlinks to RHB own website material) are provided solely for the recipient's convenience. The information and the content of the linked site do not in any way form part of this report. Accessing such website or following such link through the report or RHB website shall be at the recipient's own risk.

This report may contain information obtained from third parties. Third party content providers do not guarantee the accuracy, completeness, timeliness or

availability of any information and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content.

The research analysts responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously. The research analysts that authored this report are precluded by RHB in all circumstances from trading in the securities or other financial instruments referenced in the report, or from having an interest in the company(ies) that they cover.

RHB and/or its affiliates and/or their directors, officers, associates, connected parties and/or employees, may have, or have had, interests in the securities or qualified holdings, in subject company(ies) mentioned in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities. Further, RHB and/or its affiliates may have, or have had, business relationships with the subject company(ies) mentioned in this report and may from time to time seek to provide investment banking or other services to the subject company(ies) referred to in this research report. As a result, investors should be aware that a conflict of interest may exist.

The contents of this report is strictly confidential and may not be copied, reproduced, published, distributed, transmitted or passed, in whole or in part, to any other person without the prior express written consent of RHB and/or its affiliates. This report has been delivered to RHB and its affiliates' clients for information purposes only and upon the express understanding that such parties will use it only for the purposes set forth above. By electing to view or accepting a copy of this report, the recipients have agreed that they will not print, copy, videotape, record, hyperlink, download, or otherwise attempt to reproduce or re-transmit (in any form including hard copy or electronic distribution format) the contents of this report. RHB and/or its affiliates accepts no liability whatsoever for the actions of third parties in this respect.

The contents of this report are subject to copyright. Please refer to Restrictions on Distribution below for information regarding the distributors of this report. Recipients must not reproduce or disseminate any content or findings of this report without the express permission of RHB and the distributors.

The securities mentioned in this publication may not be eligible for sale in some states or countries or certain categories of investors. The recipient of this report should have regard to the laws of the recipient's place of domicile when contemplating transactions in the securities or other financial instruments referred to herein. The securities discussed in this report may not have been registered in such jurisdiction. Without prejudice to the foregoing, the recipient is to note that additional disclaimers, warnings or qualifications may apply based on geographical location of the person or entity receiving this report.

The term "RHB" shall denote, where appropriate, the relevant entity distributing or disseminating the report in the particular jurisdiction referenced below, or, in every other case, RHB Investment Bank Berhad and its affiliates, subsidiaries and related companies.

RESTRICTIONS ON DISTRIBUTION

Malaysia

This report is issued and distributed in Malaysia by RHB Research Institute Sdn Bhd. The views and opinions in this report are our own as of the date hereof and is subject to change. If the Financial Services and Markets Act of the United Kingdom or the rules of the Financial Conduct Authority apply to a recipient, our obligations owed to such recipient therein are unaffected. RHB Research Institute Sdn Bhd has no obligation to update its opinion or the information in this report.

Thailand

This report is issued and distributed in the Kingdom of Thailand by RHB Securities (Thailand) PCL, a licensed securities company that is authorised by the Ministry of Finance, regulated by the Securities and Exchange Commission of Thailand and is a member of the Stock Exchange of Thailand. The Thai Institute of Directors Association has disclosed the Corporate Governance Report of Thai Listed Companies made pursuant to the policy of the Securities and Exchange Commission of Thailand. RHB Securities (Thailand) PCL does not endorse, confirm nor certify the result of the Corporate Governance Report of Thai Listed Companies.

Indonesia

This report is issued and distributed in Indonesia by PT RHB Sekuritas Indonesia. This research does not constitute an offering document and it should not be construed as an offer of securities in Indonesia. Any securities offered or sold, directly or indirectly, in Indonesia or to any Indonesian citizen or corporation (wherever located) or to any Indonesian resident in a manner which constitutes a public offering under Indonesian laws and regulations must comply with the prevailing Indonesian laws and regulations.

Singapore

This report is issued and distributed in Singapore by RHB Research Institute Singapore Pte Ltd and it may only be distributed in Singapore to accredited investors, expert investors and institutional investors as defined in the Financial Advisers Regulations and the Securities and Futures Act (Chapter 289), as amended from time to time. By virtue of distribution to these categories of investors, RHB Research Institute Singapore Pte Ltd and its representatives are not required to comply with Section 36 of the Financial Advisers Act (Chapter 110) (Section 36 relates to disclosure of RHB Research Institute Singapore Pte Ltd 's interest and/or its representative's interest in securities). Recipients of this report in Singapore may contact RHB Research Institute Singapore Pte Ltd in respect of any matter arising from or in connection with the report.

Hong Kong

This report is issued and distributed in Hong Kong by RHB Securities Hong Kong Limited (興業僑豐證券有限公司) (CE No.: ADU220) (“RHBSHK”) which is licensed in Hong Kong by the Securities and Futures Commission for Type 1 (dealing in securities) and Type 4 (advising on securities) regulated activities. Any investors wishing to purchase or otherwise deal in the securities covered in this report should contact RHBSHK. RHBSHK is a wholly owned subsidiary of RHB Hong Kong Limited; for the purposes of disclosure under the Hong Kong jurisdiction herein, please note that RHB Hong Kong Limited with its affiliates (including but not limited to RHBSHK) will collectively be referred to as “RHBHK.” RHBHK conducts a full-service, integrated investment banking, asset management, and brokerage business. RHBHK does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this research report. Investors should consider this report as only a single factor in making their investment decision. Importantly, please see the company-specific regulatory disclosures below for compliance with specific rules and regulations under the Hong Kong jurisdiction. Other than company-specific disclosures relating to RHBHK, this research report is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such.

United States

This report was prepared by RHB and is being distributed solely and directly to “major” U.S. institutional investors as defined under, and pursuant to, the requirements of Rule 15a-6 under the U.S. Securities and Exchange Act of 1934, as amended (the “Exchange Act”). Accordingly, access to this report via Bursa Marketplace or any other Electronic Services Provider is not intended for any party other than “major” US institutional investors, nor shall be deemed as solicitation by RHB in any manner. RHB is not registered as a broker-dealer in the United States and does not offer brokerage services to U.S. persons. Any order for the purchase or sale of the securities discussed herein that are listed on Bursa Malaysia Securities Berhad must be placed with and through Auerbach Grayson (“AG”). Any order for the purchase or sale of all other securities discussed herein must be placed with and through such other registered U.S. broker-dealer as appointed by RHB from time to time as required by the Exchange Act Rule 15a-6. This report is confidential and not intended for distribution to, or use by, persons other than the recipient and its employees, agents and advisors, as applicable. Additionally, where research is distributed via Electronic Service Provider, the analysts whose names appear in this report are not registered or qualified as research analysts in the United States and are not associated persons of Auerbach Grayson AG or such other registered U.S. broker-dealer as appointed by RHB from time to time and therefore may not be subject to any applicable restrictions under Financial Industry Regulatory Authority (“FINRA”) rules on communications with a subject company, public appearances and personal trading. Investing in any non-U.S. securities or related financial instruments discussed in this research report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in the United States. The financial instruments discussed in this report may not be suitable for all investors. Transactions in foreign markets may be subject to regulations that differ from or offer less protection than those in the United States.

OWNERSHIP AND MATERIAL CONFLICTS OF INTEREST**Malaysia**

RHB does not have qualified shareholding (1% or more) in the subject company (ies) covered in this report except for:

a) -

RHB and/or its subsidiaries are not liquidity providers or market makers for the subject company (ies) covered in this report except for:

a) -

RHB and/or its subsidiaries have not participated as a syndicate member in share offerings and/or bond issues in securities covered in this report in the last 12 months except for:

a) -

RHB has not provided investment banking services to the company/companies covered in this report in the last 12 months except for:

a) -

Thailand

RHB Securities (Thailand) PCL and/or its directors, officers, associates, connected parties and/or employees, may have, or have had, interests and/or commitments in the securities in subject company(ies) mentioned in this report or any securities related thereto. Further, RHB Securities (Thailand) PCL may have, or have had, business relationships with the subject company(ies) mentioned in this report. As a result, investors should exercise their own judgment carefully before making any investment decisions.

Indonesia

PT RHB Sekuritas Indonesia is not affiliated with the subject company(ies) covered in this report both directly or indirectly as per the definitions of affiliation above. Pursuant to the Capital Market Law (Law Number 8 Year 1995) and the supporting regulations thereof, what constitutes as affiliated parties are as follows:

1. Familial relationship due to marriage or blood up to the second degree, both horizontally or vertically;
2. Affiliation between parties to the employees, Directors or Commissioners of the parties concerned;
3. Affiliation between 2 companies whereby one or more member of the Board of Directors or the Commissioners are the same;
4. Affiliation between the Company and the parties, both directly or indirectly, controlling or being controlled by the Company;
5. Affiliation between 2 companies which are controlled, directly or indirectly, by the same party; or

6. Affiliation between the Company and the main Shareholders.

PT RHB Sekuritas Indonesia is not an insider as defined in the Capital Market Law and the information contained in this report is not considered as insider information prohibited by law. Insider means:

- a. a commissioner, director or employee of an Issuer or Public Company;
- b. a substantial shareholder of an Issuer or Public Company;
- c. an individual, who because of his position or profession, or because of a business relationship with an Issuer or Public Company, has access to inside information; and
- d. an individual who within the last six months was a Person defined in letters a, b or c, above.

Singapore

RHB Research Institute Singapore Pte Ltd and/or its subsidiaries and/or associated companies do not make a market in any securities covered in this report, except for:

- (a) -

The staff of RHB Research Institute Singapore Pte Ltd and its subsidiaries and/or its associated companies do not serve on any board or trustee positions of any issuer whose securities are covered in this report, except for:

- (a) -

RHB Research Institute Singapore Pte Ltd and/or its subsidiaries and/or its associated companies do not have and have not within the last 12 months had any corporate finance advisory relationship with the issuer of the securities covered in this report or any other relationship (including a shareholding of 1% or more in the securities covered in this report) that may create a potential conflict of interest, except for:

- (a) -

Hong Kong

The following disclosures relate to relationships between RHBHK and companies covered by Research Department of RHBSHK and referred to in this research report:

RHBSHK hereby certifies that no part of RHBSHK analyst compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

RHBHK had an investment banking services client relationships during the past 12 months with: -.

RHBHK has received compensation for investment banking services, during the past 12 months from: -.

RHBHK managed/co-managed public offerings, in the past 12 months for: -.

On a principal basis. RHBHK has a position of over 1% market capitalization of: -.

Additionally, please note the following:

Ownership and material conflicts of interest: RHBSHK policy prohibits its analysts and associates reporting to analysts from owning securities of any company covered by the analyst.

Analyst as officer or director: RHBSHK policy prohibits its analysts, and associates reporting to analysts from serving as an officer, director, advisory board member or employee of any company covered by the analyst.

RHBHK salespeople, traders, and other non-research professionals may provide oral or written market commentary or trading strategies to RHB clients that reflect opinions that are contrary to the opinions expressed in this research report.

This research report is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research report is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice.

Kuala Lumpur	Hong Kong	Singapore
RHB Research Institute Sdn Bhd Level 3A, Tower One, RHB Centre Jalan Tun Razak Kuala Lumpur 50400 Malaysia Tel : +(60) 3 9280 8888 Fax : +(60) 3 9200 2216	RHB Securities Hong Kong Ltd. 12 th Floor World-Wide House 19 Des Voeux Road Central, Hong Kong Tel : +(852) 2525 1118 Fax : +(852) 2810 0908	RHB Research Institute Singapore Pte Ltd. 10 Collyer Quay #09-08 Ocean Financial Centre Singapore 049315 Tel : +(65) 6533 1818 Fax : +(65) 6532 6211
Jakarta	Shanghai	Bangkok
PT RHB Sekuritas Indonesia Wisma Mulia, 20th Floor Jl. Jenderal Gatot Subroto No. 42 Jakarta 12710, Indonesia Tel : +(6221) 2783 0888 Fax : +(6221) 2783 0777	RHB (China) Investment Advisory Co. Ltd. Suite 4005, CITIC Square 1168 Nanjing West Road Shanghai 20041 China Tel : +(8621) 6288 9611 Fax : +(8621) 6288 9633	RHB Securities (Thailand) PCL 10th Floor, Sathorn Square Office Tower 98, North Sathorn Road, Silom Bangrak, Bangkok 10500 Thailand Tel: +(66) 2 088 9999 Fax : +(66) 2 088 9799