



Ron Bewley PhD, FASSA

Woodhall's Weekly

They're happy and they know it!

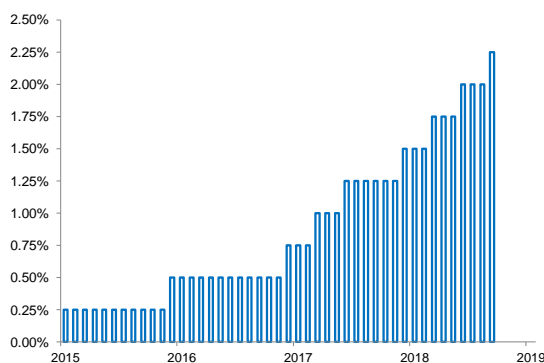
- **US consumer confidence is a beat and an 18-year high**
- **US Fed still stiffer than markets**
- **US Q2 growth confirmed at 4.2%**

Overview

Some UN leaders chortled at Trump's US address to the UN but is it jealousy? In the same week, the US consumer confidence index smashed expectations and hit an 18-year high. Which UN country can match that?

The Fed deliberated during the week and raised rates (as expected – see chart of the week) because the US economy is so strong. The first revision of Q2 growth came in unchanged at 4.2% - to-die-for growth.

Chart of the week: Fed funds rate (top of range)



Twelve of the 16 members of the Fed see a December hike and the "dot plots" show an expected 3 hikes next year (one or two more than the market). With the new range at 2.00% to 2.25%

for the Fed Funds rate, there is not much room left before the 2.5% "neutral rate" is surpassed.

We sit on there being two more hikes by mid-2019. That is 2.50% - 2.75% around June/July. Then a discussion about tightening might start. Recessions often start because of over-zealous tightening. We've had ten years to think about this one.

In spite of all of the talk about trade, the S&P 500 just ended Q3 up by +9.0% while the ASX 200 was up +2.3%. However, this last week saw only modest gains – but the third in a row for us.

With both markets being only slightly mispriced and volatility and fear contained, this is perhaps the time to take a breather before November's mid-term elections in the US.

Market expectations

Our start-of-year 2018 eoy forecasts for the ASX 200 are given in Table 1 (left column) together with the latest calculations (right column) and last week's (middle column) for comparison. Chart 1 includes a trace of the index to compare with the forecast highs and lows.

Table 1: ASX 200 range forecasts 2018

Forecast CY18	Forecast origin		
	30-Dec-2017	21-Sep-2018	28-Sep-2018
Low	5,750	6,000	6,000
High	6,750	6,500	6,500
End	6,400	6,300	6,300
Fair value	5,950	6,250	6,250
Exuberance	1.5%	-0.9%	-0.7%
ASX 200	6,065	6,195	6,208

Note: the latest forecasts in the right hand column do not provide updates of the original forecasts in the left column of numbers. Rather the latest forecasts facilitate an assessment of the degree to which the original forecasts are on track, or not. Moreover, exuberance is assumed to be eroded over a 12-month period and so the 'latest' forecasts are less reliable the closer is the current date to the end-of-year and the greater is any mispricing.

Chart 1: Graphical representation of Table 1



Note: the low and high are based on 'normal' volatility levels. The 'high-volatility' low allows for well above normal volatility and a breach of which starts to suggest the base-line forecasts may no longer be relevant. The dashed black lines are derived from average volatility assumptions; the dot-dash line corresponds to high volatility.

The eoy forecast for 2018 (left-hand column in Table 1) was 6,400 with a forecast high of 6,750 and a forecast low under normal volatility of 5,750. The 'high-volatility' forecast low was 5,300. [See the IOZ:IVV:IHVV section for the decision rules surrounding these low and high forecasts. The updated eoy 2018 forecast (Table 1, last column) is 6,300. Fair value is 6,250.

Our eoy 2018 forecasts for the S&P 500 are given in Table 2. Because overnight data are not available to us until the afternoon, the latest data for Wall Street will usually be presented for the day before the ASX 200 in this *Weekly* that we try to publish at around 10am on a Saturday.

Table 2: S&P 500 range forecasts 2018

Forecast CY18	Forecast origin		
	30-Dec-2017	20-Sep-2018	27-Sep-2018
Low	2,550	2,840	2,830
High	3,030	3,080	3,060
End	2,890	2,980	2,970
Fair value	2,620	2,860	2,870
Exuberance	-1.2%	2.4%	1.5%
S&P 500	2,674	2,931	2,914

Note: see notes for Table 1.

Chart 2: Graphical representation of Table 2



Note: see notes to Chart 1.

Our original forecast for eoy 2018 was 2,890 with a high of 3,030 and a low of 2,550. The 'high-volatility' low was 2,360.

The updated eoy forecast for the S&P 500 is 2,970. Fair value was up on the week at 2,870 which is 250 pts higher than at the start of the year.

Market stats

Our market volatility index (Chart A-1 to be found in the Chart Appendix) is below average at 8.5%. Our Fear Index (Chart A-2) is in the zone at 8.6%. The VIX stands at 12.1%. Our Disorder index (Chart A-3) is in the zone at 0.6%.

Our updated 12-month capital gains forecast (Chart A-4) is +5.6%. The market is modestly cheap at -0.7% (Chart A-5). So that leaves the adjusted rolling 12-month capital gains' forecast at +6.4%. The comparable 12-month adjusted capital gains forecast for the S&P 500 stands at about +7.5%.

Sector pricing (Chart A-6) is such that IT (+7.6) is in the danger zone. Energy (+4.5%) is quite expensive.

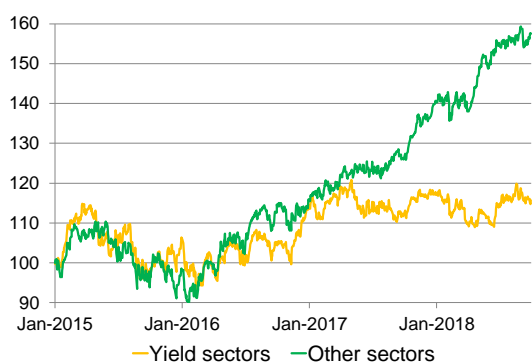
The yield play definitely waned during 2016 and 2017 but there was a big comeback for a while. From Table 3, we note Yield is again holding its own but lagging behind 'other'.

Table 3: Yield play - total returns

Period	Sector		Difference
	Yield	Other	
1 year	3.2%	25.1%	-21.9%
6 months	5.4%	14.2%	-8.8%
3 months	1.2%	1.8%	-0.6%
1 month	-2.5%	-1.1%	-1.5%

Chart 3 shows another interesting angle on the yield play. The yield sector and the 'other' sector moved roughly together for 2015, 2016 and the first half of 2017. Since then the yield play went nowhere until mid-2018 but it has, again, stalled.

Chart 3: Total returns indexes for 'yield' and 'other' aggregated sectors

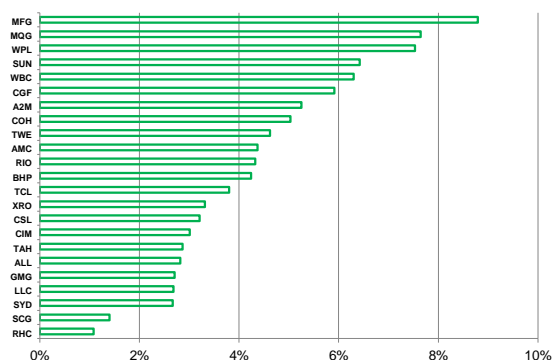


SMSF Share Portfolio

I last rebalanced my share portfolio in my SMSF on 1st August 2018. I re-set it at 100% High Conviction from 50% High Conviction and 50% High Yield using our definitions.

There are currently 23 stocks in my domestic direct equity portfolio as shown in Chart 4.

Chart 4: Current holdings



The performance of my domestic equities in my SMSF portfolio – including various rebalances –

against the ASX 200 since late June 2014 is shown in Table 4. That corresponds to an outperformance of +3.2% p.a. (annualised) since inception. The portfolio has been returning +11.2% p.a.

Table 4: Total returns from SMSF (domestic equities)

Period	Portfolio	ASX 200	Alpha
Since inception	11.2%	8.1%	3.2%
4 years	11.7%	8.9%	2.8%
3 years	14.1%	12.9%	1.2%
2 years	14.7%	11.8%	2.9%
1 year	17.2%	14.2%	3.0%
6 months	13.8%	10.1%	3.7%
3 months	2.1%	1.5%	0.5%

Note: Since June 25th 2014. Returns include dividends. For periods above one year, the returns are annualised.

In Table 5, I show the performance (including dividends) of the individual stocks since the last rebalance.

Table 5: Individual stock total returns

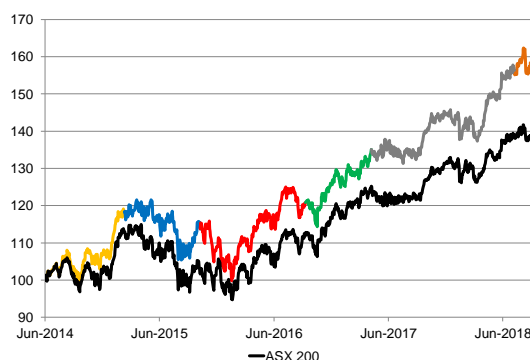
	AZM	ALL	AMC	BHP	CGF	CIM	COH	CSL
Return	8.1%	-11.0%	-8.9%	-0.5%	-9.8%	4.3%	-1.0%	1.9%
Alpha	7.9%	-11.2%	-9.1%	-0.7%	-10.0%	4.1%	-1.2%	1.6%
	GMG	LLC	MFG	MQG	RHC	RIO	SCG	SUN
Return	-2.3%	-2.7%	13.8%	3.8%	-2.4%	-2.7%	-6.0%	0.2%
Alpha	-2.5%	-2.9%	13.6%	3.6%	-2.6%	-2.9%	-6.2%	0.0%
	SYD	TAH	TCL	TWE	WBC	WPL	XRO	ASX 200
Return	-2.3%	7.7%	-1.5%	-4.8%	-3.4%	7.6%	11.0%	0.2%
Alpha	-2.5%	7.4%	-1.7%	-5.0%	-3.6%	7.4%	10.8%	0.0%

Note: Since August May 1st 2018. Returns include dividends.

We have two stocks (MFG and XRO) beating the index by more than 10% since August 1st 2018 and one (ALL) trailing by more than -10%.

The returns chart (Chart 5) shows the recent performance using colours to denote rebalanced portfolios.

Chart 5: SMSF and ASX 200 total returns



Note: the different coloured sections show the impact of rebalancing.

Table 6 shows the gap between broker forecasts for one year hence (Target) and current price. A

negative value for T/P - 1 expressed as a percentage change therefore indicates brokers on average think the stock is overpriced.

There is one stock with a recommendation at worse than 3.0: COH which has been one of our best performers. COH has had a poor rating throughout its share-price rise from around \$50 to over \$200!

Table 6: Price and current broker forecasts

Sector	Stock	Price	Target	Rec	T/P - 1
Energy	WOODSIDE PETROLEUM	38.58	27.05	2.42	-29.9%
	AMCOR	13.68	11.03	2.20	-19.4%
Materials	BHP BILLITON	34.63	25.40	2.52	-26.7%
	RIO TINTO	78.76	63.85	2.35	-18.9%
	CIMIC GROUP	51.36	48.00	2.57	-6.5%
Industrials	SYDNEY AIRPORT	6.89	7.38	2.83	7.0%
	TRANSURBAN GROUP	11.22	12.43	2.40	10.8%
	ARISTOCRAT LEISURE	28.44	34.00	2.00	19.5%
Discretionary	TABCORP HOLDINGS	4.87	5.20	2.22	6.8%
	THE A2 MILK COMPANY (ASX)	10.24	12.73	3.00	24.3%
Staples	TREASURY WINE ESTATES	17.49	19.00	2.81	8.6%
	COCHLEAR	200.64	182.00	3.28	-9.3%
Health	CSL	201.11	166.78	2.46	-17.1%
	RAMSAY HEALTH CARE	54.93	58.75	2.41	7.0%
	CHALLENGER	11.20	12.00	2.61	7.1%
Financials	MACQUARIE GROUP	126.04	122.00	2.23	-3.2%
	MAGELLAN FINANCIAL GP.	27.69	29.00	2.25	4.7%
	SUNCORP GROUP	14.46	15.55	2.66	7.5%
	WESTPAC BANKING	27.93	31.00	2.57	11.0%
	GOODMAN GROUP	10.36	10.24	2.40	-1.2%
Property	LENLEASE GROUP	19.66	21.83	2.10	11.0%
	SCENTRE GROUP	3.97	4.58	2.58	15.5%
IT	XERO (ASX)	49.00	46.35	2.75	-5.4%

Note: T/P - 1 is the broker target price divided by the current share price minus one giving an indication where the price might move to over the coming 12 months.

The IOZ:IVV:IHVV Update

Decision rules: given the data in Tables 1 and 2, I use the following decision rules – until new rules are formed, expected to be January 1 2019. These rules are based on calendar year forecasts for new money:

Buy IOZ at 5,750 from Table 1 (up to maximum levels determined by risk assessments) and start to sell at 6,750 for new investments. If the ASX 200 falls to 5,300 (high-volatility low) it might be prudent to exit the strategy until clarity emerges and then buy back in at (well) above 5,300 but below 5,750.

Buy IVV:IHVV at 2,550 (up to maximum levels determined by risk assessments from Table 2a) and sell at 3,030 for new investments. If the S&P 500 falls to 2,360 (high-volatility low) it might be prudent to exit the strategy until clarity emerges and then buy back in at (well) above 2,360 but below 2,550.

For older investments, some regard is taken of the trigger points set when the investments were made.

Charts 6 and 7 are based on the price indexes as this is the metric where the signals are being made.

The strategy has been returning +13.1% pa since inception (Table 7) (including dividends). The IVV:IHVV leg is up +15.8% pa. The IOZ part of the strategy is up +10.5% pa. The table below shows that I am 48% hedged in the Wall Street component. The domestic share of the portfolio is 55%.

Table 7: Total returns on IOZ:IVV strategy

28-Sep-2018	Inc divs.	Current allocation	
ETF	IRR pa	Total	USA
IOZ	10.5%	55%	
IVV+IHVV	15.8%	45%	100%
IVV	14.4%		52%
IHVV	17.8%		48%
Total	13.1%	100%	
Indexes		Alpha pa	
ASX 200	8.2%	2.3%	
S&P 500	11.9%	2.5%	
S&P 500 (\$A)	15.3%	2.5%	

NB: IRR is the internal rate of return (p.a.) that compensates for the different buy and sell points and include dividends on the day they were paid and not the ex-div date. See notes in the Strategy Section for further explanation and charts. The index returns are based on a start date of 1/7/2014 for the ASX 200 and S&P 500 when the strategy was launched. The S&P 500 (\$A) return starts from 22/12/2014 when IHVV first became available.

I have also included the benchmarks for each ETF in Table 7 so I can calculate any outperformance from the buying low – selling high strategy. Annualised outperformance is eroded in the long-run to zero unless fresh buys are made or a sell signal arrives.

The Charts 6 and 7 in the strategy section now include a yellow square to show where the hedging trades were made. The red diamonds denote the buy points. The green boxes denote the sell points.

There is nothing in recent behaviour to suggest to me that the underlying forecasts for the ASX 200 or the S&P 500 have been proven to be invalid. I plan to flag any perceived weaknesses if and as they eventuate.

The IOZ:IVV:IHVV Strategy

(Except for the charts, this section does not usually change week to week)

I plan to use the Table in the 'IOZ:IVV:IHVV Update' section to keep readers informed about the performance of my geared portfolio [an approximate equal mix of two ETFs: IOZ for the ASX 200 and IVV:IHVV for a partially hedged exposure to the S&P 500]. I will await the sell signals in times to come.

The basis of the strategy is to buy when the indexes (using ETFs) get very close to or cross the beginning of the year predicted low – and to sell when the indexes reach the predicted highs – as indicated in the 'Market Expectations' section. I do not use the weekly updated lows and highs for this purpose. These update statistics help me consider whether or not the strategy is going awry.

Since the IVV ETF is unhedged it benefits from \$A depreciations and vice versa. I switch to IHVV – the hedged version of the S&P 500 ETF – when I think the currency is more likely to appreciate – or at least insure against it. When I am unsure, I blend IVV and IHVV.

Note that the irr is a single annualised return to summarise all of the buys of the three ETFs and the current value including dividends when paid and not when the ETF went ex-div.

The following charts show where I bought. Since the 'buy' signals are based on the S&P 500 (as I do not have credible exchange rate predictions – hence an implicit no-change assumption).

Chart 6: IOZ buy points - ASX 200

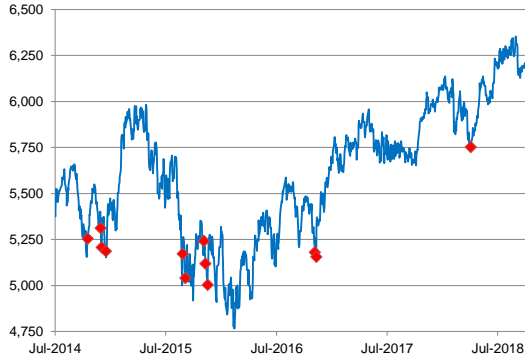
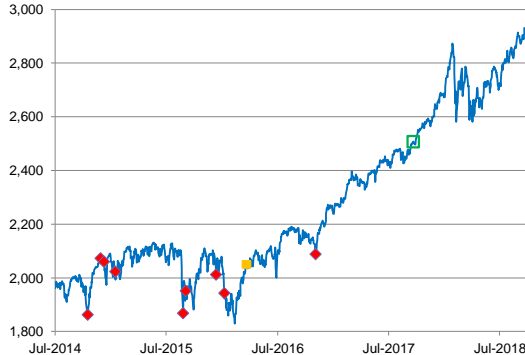


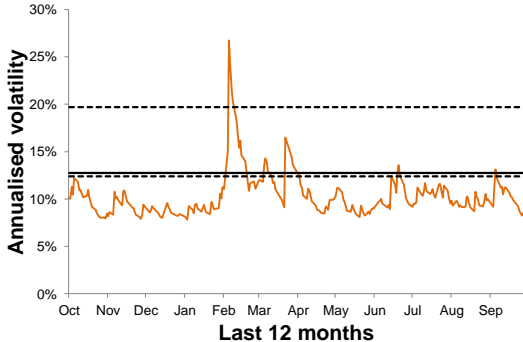
Chart 7: IVV/IHVV Buys - S&P 500



The charts in this strategy section include a yellow square to show where the hedging trades were made. The red diamonds are the buys. The green squares are the sells.

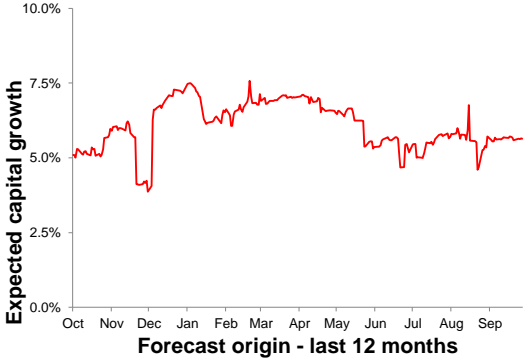
Chart Appendix

Chart A-1: Market volatility



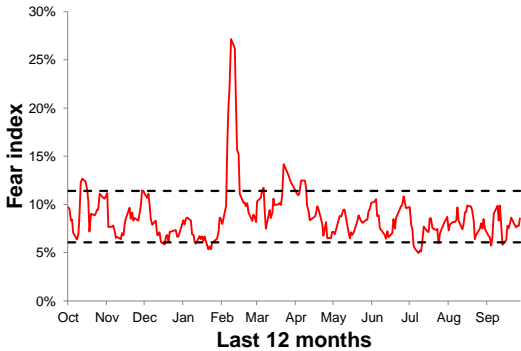
Notes: The solid black line depicts the average volatility since January 2010; the lower dotted line depicts the average volatility pre the GFC; the higher dotted line depicts the average level of volatility during the GFC - up to December 2009. The brown line is a daily estimate of the ASX 200 index volatility.

Chart A-4: 12-month capital gains forecasts



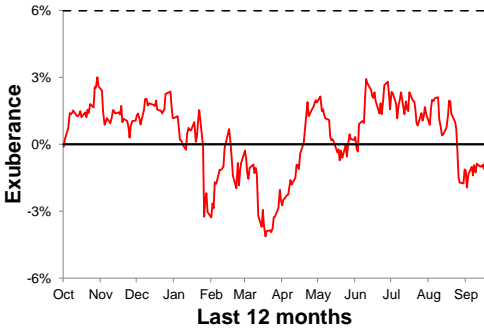
Notes: Each business day we update our estimates for capital gains on the ASX 200 for the following 12 months. For example, the left-most estimate on the vertical axis is a forecast for the 12 months concluding today. The right hand estimate is for the 12 months from today.

Chart A-2: Fear index



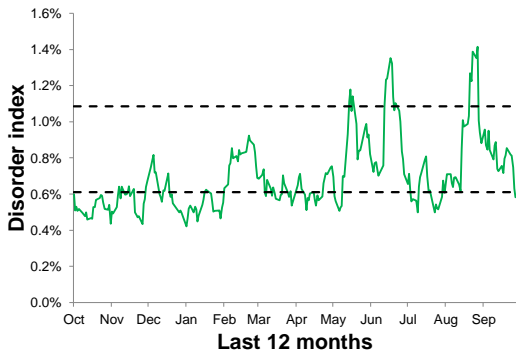
Notes: The fear index is a measure of 'excess' volatility denoting behaviour outside the open/close values each day. The two dotted lines depict the band in which the fear index resided before the GFC in two thirds of days. Extended periods below the lower dotted line might indicate complacency. Extended periods, or extreme values, of the index above the higher dotted line might indicate a propensity for the market to overreact in an irrational manner.

Chart A-5: Market exuberance



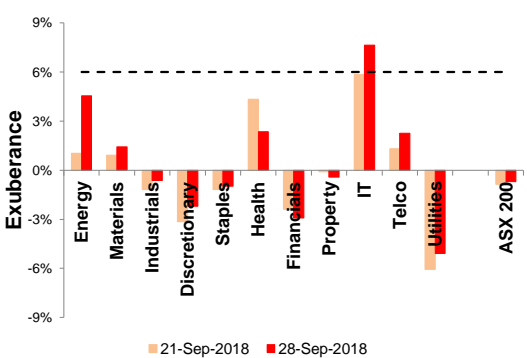
Notes: Exuberance is our measure of mispricing on the ASX 200. A value below the solid black line denotes the market is perceived to be cheap and above that line expensive. Experience suggests that exuberance above +6%, denoted by the dotted line, is an indicator of a potential correction of 6% to 10% - or for the market to move sideways for an extended period.

Chart A-3: Disorder index



Notes: The disorder index measures the degree to which the 11 sectors' daily returns move in harmony. The two dotted lines depict the band in which the disorder index resided before the GFC in two thirds of days. Extended periods below the lower dotted line might indicate belief that there is little information to have different impacts on different sectors. Extended periods, or extreme values, of the index above the higher dotted line might indicate investors and traders are lurching from sector to sector in search of a new trend.

Chart A-6: Sector exuberance



Notes: The estimates in this chart are based on the same notions as for Chart A-5. More detailed information on mispricing is contained in our companion weekly publication in the same section of our website

Glossary

Abenomics – Japan's Prime Minister Shinzo Abe came to power early in 2013 and has brought a new economic style to managing that economy.

ASX forecasts - We have further supplemented our forecasting process for the ASX 200 by including not just a forecast of the peak (at some unspecified time during the year) but also the low. Thus, we now have an end point (e-o-y forecast) and a range for the whole year. Naturally, on a rising market the low is more likely to occur earlier in the year and the high nearer the end. Since we publish our forecasts to the nearest 50 points to reduce the sense of false accuracy a change of just a couple of points can kick the forecast over by 50 points at around the 25 and 75 marks.

Australian debt ceiling – Labor brought in a debt ceiling in mid 2008 of \$75bn to self-impose some fiscal discipline during the onset of the GFC. Within seven months that ceiling was almost trebled to \$200bn and it has since been raised to \$300bn during Labor's term in office. Since before 2008 we had no debt ceiling that is equivalent to an infinite ceiling!!!

Bad debt, good debt – Whether one is referring a household or national debt, the classification implies the following. Good debt is expected to produce income or other returns in the future – such as from infrastructure spending or buying a principal place of residence. Bad debt is used to finance 'recurrent' expenditure such as pensions or family holidays.

Black Friday – This term is used for the Friday after Thanksgiving in the US to denote the start of the shopping season for the holidays. Black refers to the accounts going back into the black from increased sales – it is certainly not a negative term!

Brexit – on 23rd July 2016 Britain voted to leave the European Union. The process is expected to take at least two years and negotiations must take place to engineer a smooth transition.

CAIXIN (formerly HSBC) flash PMI – CAIXIN publishes an alternative to the official PMI for China. It is based on a survey of predominantly small to medium sized firms – unlike the official version. The number on the 1st of the month gets much less attention than the official but the preliminary, or 'flash', reading gets attention as a read a week or two before the official numbers.

China's shadow banking – In essence, the China government dictates what all banks must lend at and pay for deposits. As a result, if a potential borrower is deemed too risky at the prevailing rate, the banks refuse to lend (rather than increase borrowing rates as may happen here). The 'failed' borrower may then seek funding from the shadow banking system that is not so regulated.

FOMC – The Federal Open Market Committee determines monetary policy in the United States. It can be thought of as being similar to our Reserve Bank board.

GOP – stands for Grand Old Party which is an alternative name for the US Republican Party.

High-Yield Sectors: by this, we mean Financials, Property, Telcos and Utilities.

International Monetary Fund (IMF) – Managing Director, Christine Lagarde (French), since 28th June 2011. The IMF is charged with fostering global monetary cooperation.

ISM - Institute of Supply Management produces a 'PMI-like' number for the US economy. Like the PMI, 50 is the cut off between improving and worsening expectations.

Long-run mispricing – Our measure is based on analysing trends over more than a century of data. The average period of over-

under-pricing is about 18 months. That is, we do not expect the market to rapidly approach its fair value.

MYEFO (Mid-year economic and fiscal outcome) is a mid-year update on the Australian Budget situation – usually in December.

PMI – This acronym stands for Purchasing Managers Index. There is one for most countries and separate statistics for manufacturing and services. Manufacturing typically gets more attention. The official statistics are published in the first few days of each month – with China on the 1st. A reading less than 50 means the sector is decreasing in its growth rate – so if China growth slows from 8% to 7%, its PMI should be below 50. If the US speeds up from 2% to 2.5%, its PMI should be above 50. Note also the existence of the CAIXIN measure and its 'flash' or preliminary estimate.

Savings ratio – In Australia, the ratio of net savings to household disposable income defines the savings ratio.

Short-run mispricing – Our exuberance measure is our mispricing statistic reported in Chart 5. It is based on 12-month-ahead forecasts of the ASX 200. Please see the notes under Chart 5.

Tapering – It was the name given to the exit strategy from QE3. It is not a tightening monetary policy – just an increasingly less accommodative stimulus.

US non-farm payrolls data – are usually published on the first Friday of each month. They are generally considered to be the most reliable indicators for employment and unemployment in the US. Roughly speaking, a 200,000 increase in jobs is considered strong. Of course less new jobs are needed when the economy is running at full employment.

Key people

Australia – Prime Minister, Scott Morrison, (Liberal) since 24th August 2018; Treasurer, Josh Frydenberg, since 24th August 2018; Governor of the Reserve Bank of Australia (**RBA**), Dr Philip Lowe, since 18th September 2016.

China – President Prime Minister, Xi Jinping, since 14th November 2013; Premier, Li Keqiang since 15th March 2013; Yi Gang, President of the People's Bank of China (**POBC**) since March 2018.

Europe – President of the European Central Bank (**ECB**), Mario Draghi (Italian), since 1st November 2011; Chancellor of Germany, Dr Angela Merkel, since 22nd November 2005; President of France, Emmanuel Macron, from May 2017; Prime Minister of Greece, Alexis Tsipras, since 21st September 2015.

Japan – Prime Minister, Shinzo Abe, since 26th December 2012; Emperor, Akihito, enthroned 12th November 1990; Governor of the Bank of Japan (**BoJ**), Haruhiko Kuroda, since 20th March 2013.

New Zealand – Prime Minister, Jacinda Arden, October 2017; Governor of the Reserve Bank of New Zealand (**RBNZ**), Graeme Wheeler, since 26th September 2012.

United Kingdom – Prime Minister, Theresa May, since 11th July 2016; Chancellor of the Exchequer, Philip Hammond, since 13th July 2016; Governor of the Bank of England (**BoE**), Mark Carney (Canadian), since 1st July 2013.

United States of America – President, Donald Trump, from January 20th 2017 (4 year term); Chair of the Federal Reserve Bank (**Fed**), Jerome "Jay" Powell, since 5th February 2018 (4 year term)