MONTHLY PERFORMANCE REPORT
January 2019

The Fund returned +0.08% for the month, compared with -0.81% for the Credit Suisse Global Macro Index, while the HFRX Absolute Return Index returned +1.22%. The Fund has achieved its returns with lower volatility than the S&P/ASX 200 since inception July 2014, as a consequence of our risk averse strategies.

As 2019 begins, our models indicate that all major equities markets (the US, Europe & Japan) have been significantly oversold but as yet no definitive turnaround catalyst has been identified. Our econometric models can locate oversold conditions in all major markets which implies a risk-off outlook. We expect the US dollar and US interest rates to both continue appreciating in 2019. This implies an outlook of more defaults in lower-quality sovereign and corporate bonds.

GENERAL INFORMATION

Base Currency: AUD
Entity Type: Open Ended Unit Trust
PMs: Marcel von Pfyffer (CIO)
Neill Colledge
Launch date: Jul-2014
Benchmark: 0% (Absolute Return)
Fees: 1 and 10
Domicile: Australia
Close of Financial Year: 30th June
Unit Pricing: Weekly
APIR Code: PKF0001AU
ISIN Code: AU60PKF00011
Fund Administration: APEX Fund Services (Australia)
Fund Custodian: Australian Executor Trustees Limited
Prime Broker: Interactive Brokers
Auditors: Grant Thornton
Compliance: King Irving

INVESTMENT MANAGER
Arminius Investment Management Pty Ltd
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licensed by:
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PERFORMANCE (Inception JUL-2014)	Arminius Capital ALPS Fund	HFRX (USD) ABSOLUTE RETURN INDEX	CREDIT SUISSE GLOBAL MACRO (USD) INDEX	MSCI World Index	S&P/ASX200 XJO (AUD)
1 Month	**0.08%**	1.22%	-0.81%	7.14%	3.87%
3 Months	**-5.85%**	-0.16%	-11.16%	-0.45%	0.59%
Calendar YTD	**0.08%**	1.22%	-0.81%	7.14%	3.87%
1 Year	**-17.32%**	-0.08%	-14.59%	-6.12%	-2.87%
3 Years	**3.19%**	4.40%	-2.91%	27.87%	17.17%
5 Years	**-**	7.56%	-9.95%	34.83%	13.00%
Cumulative since Inception JUL 2014	**11.27%**	**6.36%**	**-7.64%**	**25.04%**	**8.69%**

Arminius Capital ALPS Fund (Inception July-2014) Returns are net of base fees; gross of performance fee.

%	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY
2014	-	-	-	-	**INCEPTION =>**		2.09%	0.04%	-1.43%	2.02%	1.18%	2.35%	6.37%
2015	3.85%	1.56%	-0.07%	-1.47%	0.77%	-0.09%	0.52%	-1.23%	-0.45%	1.23%	0.19%	-2.43%	2.26%
2016	-0.38%	-2.38%	0.54%	2.37%	1.22%	0.41%	-0.10%	0.03%	0.00%	0.20%	3.55%	4.60%	10.33%
2017	-0.13%	2.69%	3.31%	0.10%	1.25%	0.02%	-0.34%	1.28%	-1.45%	1.93%	-1.41%	1.04%	8.47%
2018	3.94%	-2.64%	-3.56%	0.49%	0.24%	-0.57%	-1.77%	0.88%	-1.94%	-3.90%	-3.75%	-2.26%	-14.1%
2019	0.08%	-	-	-	-	-	-	-	-	-	-	-	0.08%

* 2014/07 - 2015/02 Strategy run as Mandate, 2015/03+ as Unit Trust Structure. EOM date is typically last Friday of month.

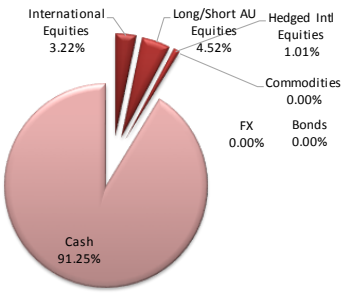
FUND OBJECTIVES: The fund provides investors with exposure to all asset classes in the global macro universe. Arminius' aim is to provide smooth positive returns with lower volatility and lower risk than concentrated single market/asset class exposure. Our absolute return investment methodology utilises a combination of fundamental, momentum and quantitative inputs. As an absolute return fund, the objective is to preserve the capital base across every 3 year rolling period.

INVESTMENT STRATEGY: Arminius uses econometric modelling based on macro-economic indicators alongside fundamentals pertinent to each individual instrument within each asset class. Momentum is taken into account only once the fundamental value of each instrument has been ascertained. Low volatility and risk management is complemented by frequent re-balancing and equal weighting, according to what each hedging sub-strategy dictates.

FUND STATISTICS MONTHLY

From July 2014	ALPS Fund	XJO
Sharpe Ratio	**0.10**	0.04
Sortino Ratio (RFR)	**0.26**	0.14
Downside Deviation	**2.53%**	3.56%
Standard Deviation	**1.92%**	3.35%
Annualized SD	**6.66%**	11.60%
Mean Monthly Return	**0.22%**	0.21%
Compound Monthly Return	**0.20%**	0.15%
Excess Return (RFR)	**0.66%**	0.49%
Portfolio Correlation to XJO	**0.51**	-
R^2 Coefficient of Determination	**0.09**	-

STRATEGIC ASSET ALLOCATION
at Month's commencement



FUND MANAGER'S COMMENTARY:

After the painful losses of the December quarter, global share markets rebounded in January. The US led the way: the S&P500 price index jumped 7.87%, making up more than half of its losses in the previous three months. The rebound was strongest among technology stocks, banks, and small caps – three sectors which had been hit the hardest in the downturn. The main driver of the rebound was the change in monetary stance by the Federal Reserve, which indicated that further interest rate rises would occur only if US economic growth remained strong. The Fed also retreated from its policy of shrinking

its balance sheet by means of selling bonds, a.k.a. "quantitative tightening".

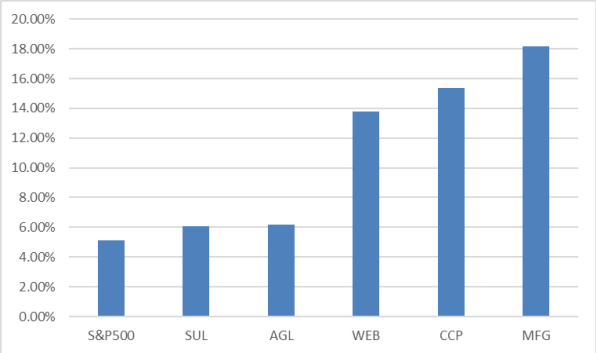
Other share markets did not recover as strongly, suggesting that the good news was mainly about the US. The S&P/ASX200 price index rose 3.9%, and the Shanghai and Shenzhen markets improved by similar amounts. The Stoxx Europe 600 price index gained 6.2% for the month, partly because European economic news was not as bad as expected.

The ALPS Fund de-risked significantly between December 2018 and January 2019 by model-derived systematic drawdown control methodology. A consecutive number of negative months in late 2018 was the reason for this SAA implementation and this reduced the volatility of our exposures due to a material cash holding in the fund. Pleasingly, this allowed the fund to return a modest positive return for January 2019, happily in contrast to the Credit Suisse Global Macro Index which had a negative -0.81% month.

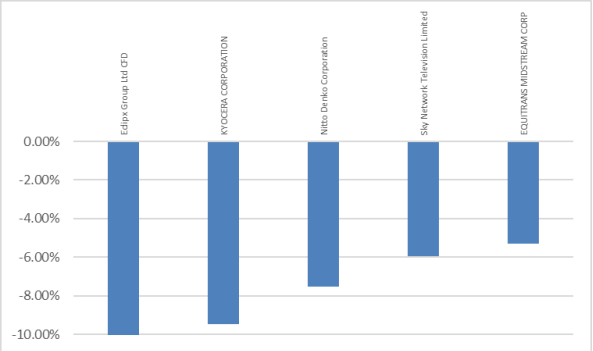
Eventhough we held a material amount of the fund in cash, the fund had 6 positions (including a US index position) which returned 5% or greater (in AUD terms). Our Top 3 positions have returned +13.79%, +15.37% and +18.16%.

As is to be expected when markets rallied so hard after the worst December since 1931 (US up +7.87%, Europe up +6.23%, Japan up +3.79%) we had 5 short positions which lost -5% or more, with the worst position down 10.3%.

>+5% Performing Positions



<-5% Performing Positions



The commodities asset class likewise bounced very hard, with Crude Oil (WTI) up +18.45% and Nickel up +16.8% for the month. We are somewhat suspicious that the superlative January asset price rebounds (after such a dismal December) may not be long lasting.

Investment Outlook

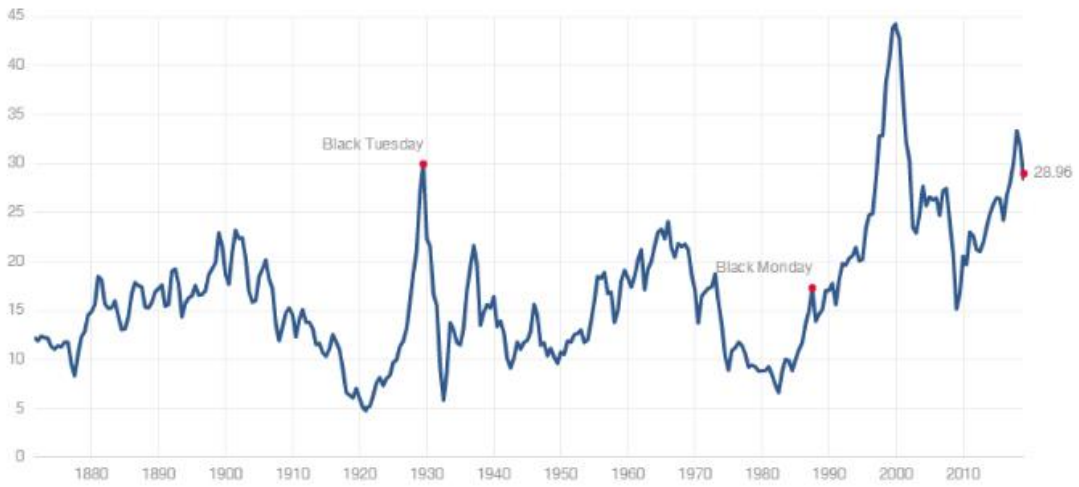
The chart to follow shows the monthly performance of the S&P500 index since the start of 2015. The January 2019 bounce is strong but not unusually so. What we can see from this chart is that, after the uninterrupted rises of 2017, 2018 saw volatility come back with a vengeance. We expect global markets this year to become used to volatility returning as economic imbalances and geopolitical issues work themselves out well into 2020.

As opposed to 2018, which saw short, sharp outbreaks of volatility which affected all asset classes and most (ours included) fund strategies, we see 2019 pointing towards a more slow burn deterioration in financial markets – something which should prove more beneficial to performance for funds such as ours. 2018 saw short bouts of wanton destruction of asset prices which made things very difficult for value managers. Combined with this, the sharp reversals that accompanied the shocks disassociated the notion of any "clear trends" that lasted for more than a few weeks. Now that the market has realised that volatility which has been absent for the better part of at least the last 5 years has now returned, we expect that strategies such as those we use will have a higher probability of a more successful 2019.

Chart: S&P500 Monthly % Change since 2015

We regard the January rebound as a temporary pause in the US market's ongoing correction. US stocks are still expensive by most measures, and we still expect the S&P500 to fall at least 27% from its record of 2930 (set on 20 September 2018). The chart below shows the Shiller Cyclically Adjusted P/E (CAPE) for the US share market all the way back to 1870. It is at the third-highest level in its history, beaten only by its peaks before the 1929 Crash and the GFC. Although the CAPE is a blunt instrument, in the sense that it can take years before it returns to fair value, the current level suggests that the US correction has a long way to run yet.

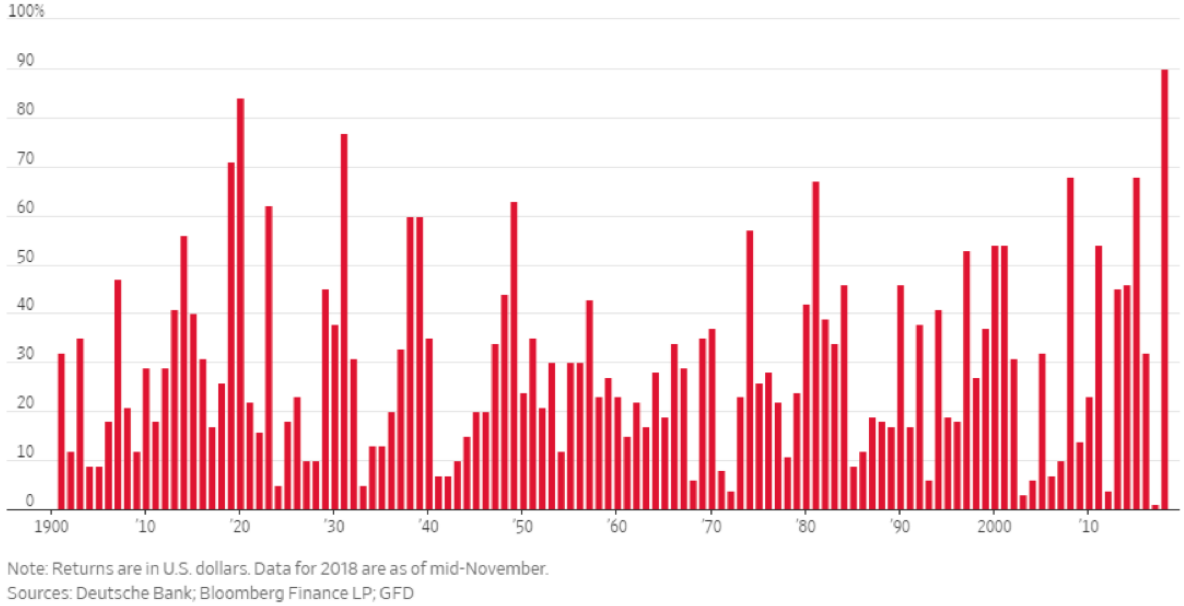
Chart: Shiller Cyclically Adjusted P/E (CAPE)



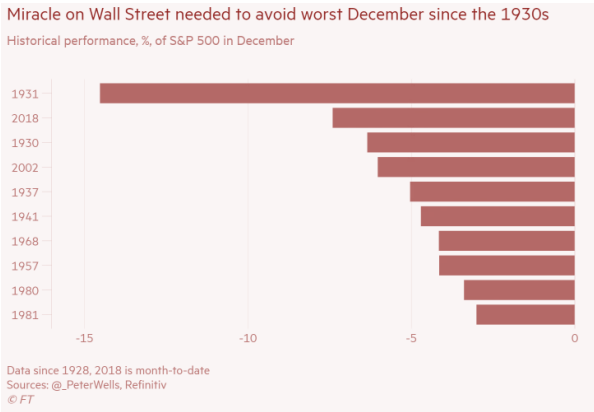
Source: Shiller, Princeton

So even after the final quarter of 2018's destruction of value on global share markets, the CAPE remains at third highest historical levels and, as the chart on the next page shows, 2018's rout of almost all asset classes has still not led to valuations being re-set. The chart illustrates the percentage of all asset classes that recorded negative total returns since 1900 to 2018.

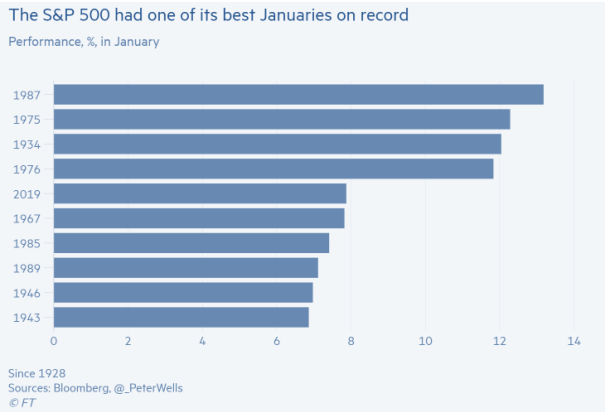
Chart: % of all Asset Classes which returned negative total returns per calendar year: 1900-2018



Left Chart: Dated 21st December 2018



Right Chart: Dated 31st January 2019



Readers will remember us talking about data in the chart on the left from our report last month, showing the worst December since 1931. The global financial media has now led the January market updates with charts similar to the chart on the right, extolling the brilliance of the passive investing world since it has just spat out the best "January" return since 1987, with the US S&P500 returning +7.87% in 5 weeks (in USD).

Pretty impressive stuff, hey? +7% in one month! Buying the dips won again if you were on a trading screen on 31 December 2018? Just like the guy who quit his job at Target to day-trade shorting the VIX? [1]

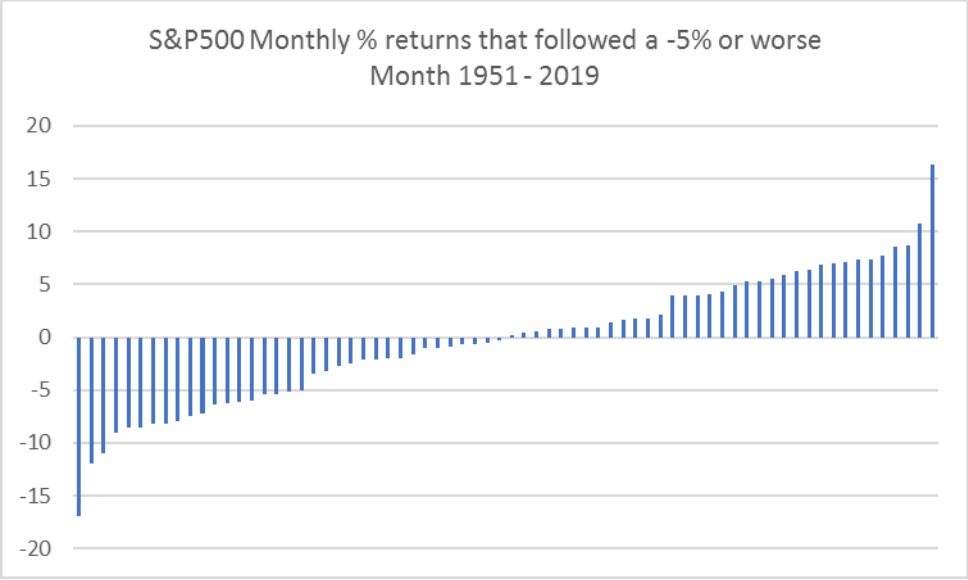
> ***In 1999, it was your drunk neighbor who made millions day trading pets.com in his underwear on the back porch. In 2007, it was the 22-year-old Vegas stripper who managed to accumulate $2.4 million in mortgage debt just before foreclosing on 10 homes. In 2017, the harbinger of the latest fed-induced equity bubble could very well be former Target manager Seth Golden of Ocala, Florida. Until 5 years ago Golden was a Logistics Manager at his local Target store, but since quitting he has apparently made millions day trading volatility indices from the comfort of his home office.***
>
> ***Per the New York Times 2017 article here:*** [2]

[1] https://www.zerohedge.com/news/2017-08-28/signs-peak-former-target-manager-makes-millions-day-trading-volatility-his-bedroom

[2] https://www.nytimes.com/2017/08/28/business/dealbook/vix-trading.html

There was some prophetic fun to be had by people covering this story in August 2017, rightly and presciently suggesting that sometime soon this former Target employee would be returning to his labour market alma mater if volatility ever got back above 12 again (Mr Target aka Seth M. Golden was making zillions shorting volatility – a trade that spectacularly blew up billions of dollars and everyone doing this in January/Feb 2018).

Let's get some perspective and intellectual rigour around January 2019's 7.87% rise in the S&P500 (and 7.02% rise in the MSCI World ex USA). Since 1951, we can observe that there have been 70 months recorded when the market has fallen **-5% or worse** in a one calendar month period.



Source: Arminius Capital, Factset, CRSP

We note that there were precisely 35 months that bounced back positive after the market had fallen -5% or worse in the previous month.

However, we further note there were also precisely 35 months that continued to fall, negatively, the month after the market had already fallen -5% percent in the previous month. So across a time sample of 68 years, you would have had precisely a coin-toss probability of **success** that "buying the dips" would have worked in January 2019. And a coin-toss outcome also for the probability of **failure**. Information such as this arouses statisticians. Burton Malkiel would be proud and chuckling. Buy his book "A Random Walk Down Wall St" to learn why. [3]

If nothing else, this serves to remind investors to measure investment returns and funds over time periods measured in years, not months. **January 2019 had a 50% chance of being a positive month** after the S&P500 had fallen in excess of -5% (actual -9.18%) in December. It did, and it rose by 7.87%.

However in 2018's final quarter it had fallen that October by -6.94%, risen 1.79% in the November and then in December fell -9.18%. So even January's 7.87% rise **still makes the US underwater at January end** being 2704, having not regained its September 2018 level of 2939, let alone its January 2018 high of 2875.

Even if the next few months were to see the US-China trade war settled, a no-deal Brexit averted, and no more US interest rate rises, the global economy would still face three major negatives which imply lower share prices:

- Slowing GDP growth in China, contributing to slowing growth in the global economy
- Falling profits in the US, China, Europe, and elsewhere
- Excessive gearing in many US corporate balance sheets.

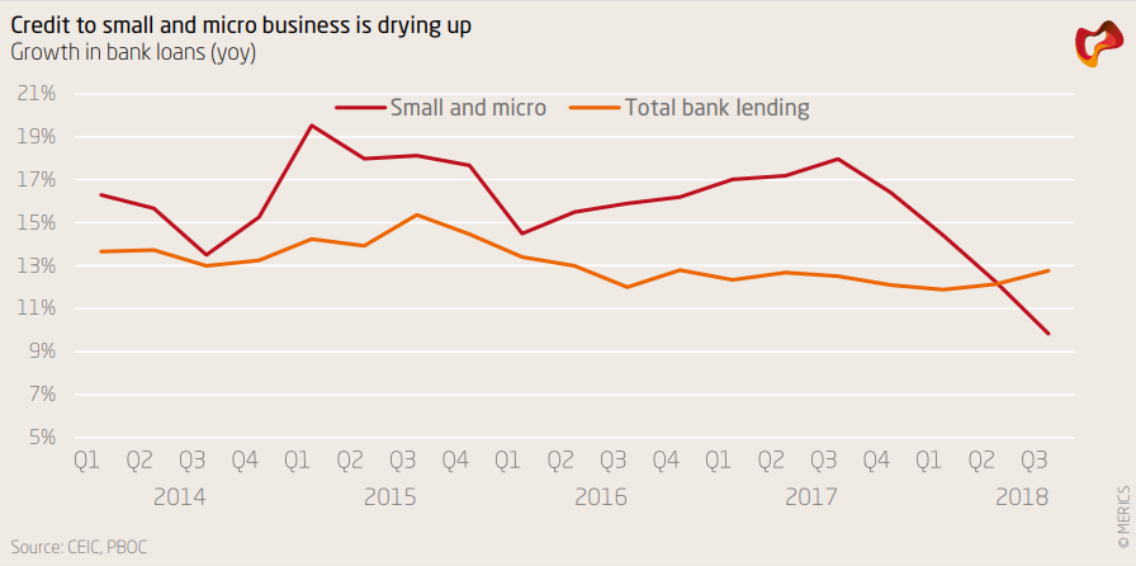
[3] https://www.abebooks.com/9780393055009/Random-Walk-Down-Wall-Street-0393055000/plp

The US equity market may not have noticed the slowdown, but the US bond market certainly has. The yield on the benchmark 10-year year US government bond touched 3.23% in October and November last year, but by 31 January 2019 it had dropped as low as 2.62%, and it is currently trading around 2.69%. Clearly, bond investors are not expecting any rises in inflation or GDP growth.

Equity investors may soon wake up to the negatives. US profit reports for the December quarter have been mixed so far, and companies from Apple down have said that deteriorating business conditions in China have caused them to reduce their guidance. As a result, the consensus profit growth forecast for the March quarter, which was +3.3% at end-December, has now been downgraded to -0.8%. This is not a huge fall, but it is the first quarter of negative earnings since June 2016.

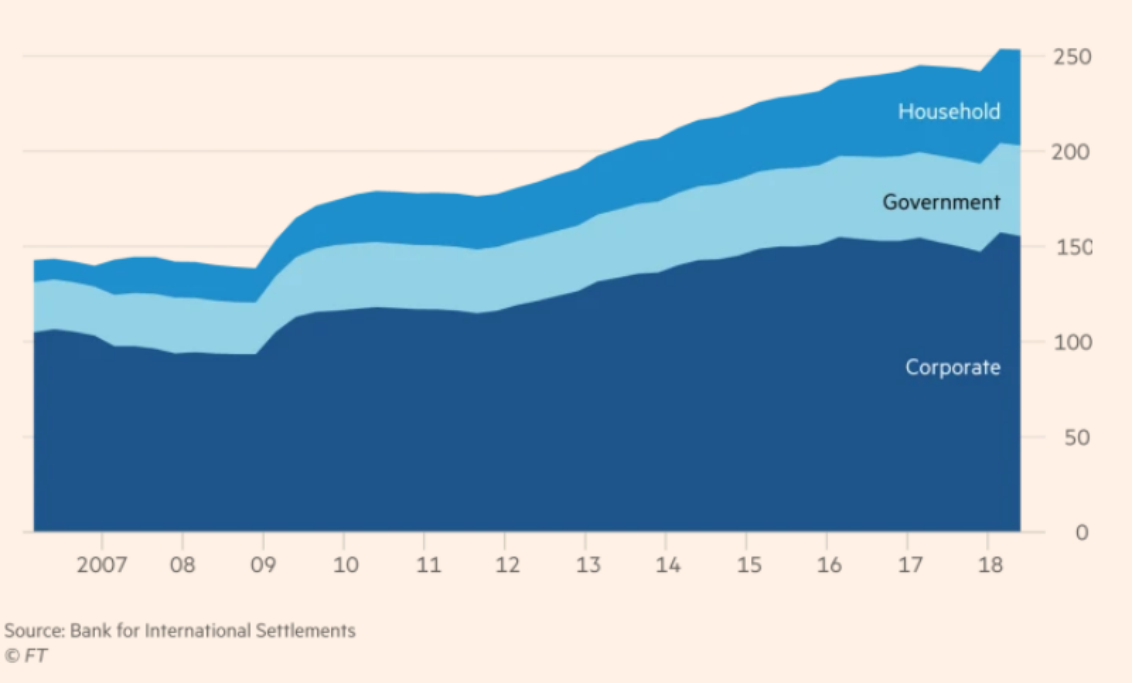
The China slowdown is causing a slowdown in global growth because China has provided one-third of global growth in recent years. China not only accounts for half of the world's coal consumption, it is also the largest importer of oil, gas, and many other commodities. Its 2018 GDP growth of 6.6% was the lowest since 1990. Part of the decline in GDP is due to a long-term trend, and part is the consequence of a much tighter monetary policy from mid-2017 on.

In order to reduce the level of systemic risk in the banking system, in 2016 the Chinese regulators set about reducing the amount of lending by shadow banks, as well as reducing the amount of financing given by large banks to small banks. (China's "big four" banks have more retail deposits than they can use, so they lend their surplus funds to small banks at a large premium.) What the regulators overlooked was the fact that the small banks and the shadow banks did the most lending to the private sector, whereas the big banks preferred the safer alternative of lending to governments and state-owned enterprises (SOEs). As a result, the crackdown sharply reduced the amount of lending to private enterprises, but affected the state sector much less, as the chart below shows.



This was one of the reasons why the Shanghai share market fell 24% in 2018. Another reason was the increasing number of bond defaults by Chinese companies. According to the ratings agency Fitch, in 2018 45 companies defaulted on 117 bonds with a face value of 110 billion renminbi (about USD 16bn), more than three times the 2017 value. 90% of the bonds by value were issued by private companies. (The Chinese government appears to agree with bond investors' forecasts that there will be even more defaults in 2019 – in recent weeks it has created specialized insolvency courts in Beijing, Shanghai, and Shenzhen.)

Chart: Chinese Debt as a share of GDP (%)



Some investors are hoping that the Chinese government will try to solve its slowdown problem by introducing a huge stimulus package, as it did in 2008. We consider this unlikely, because a stimulus would severely exacerbate the government's other big problem, which is the country's unsustainable 250% debt-to-GDP ratio. As the chart above shows, the hugely over-geared corporate sector is the primary cause of the debt problem. Chinese companies – both private and SOEs – have been borrowing heavily since the GFC. By contrast, the government has been well behaved, but the rise of consumer finance has allowed ordinary citizens to join in the party.

This high level of debt to GDP is why the authorities have responded to the current downturn by using piecemeal measures which target particular sectors. They have explicitly stated that they are not going to flood the economy with cash again. If for some reason they do so, this will mark the onset of China's first financial crisis.

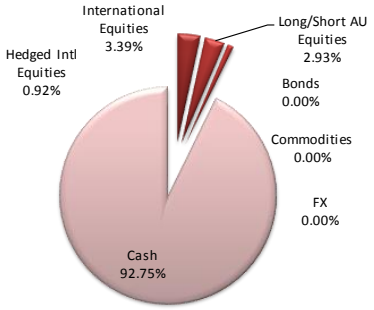
The outlook for Australia is of course dependent on the health of the Chinese economy, but we also have problems of our own making. The last four months have seen a string of profit downgrades, perhaps partly due to slowing GDP growth here, but a resurgent resources sector has offset the bad news elsewhere. Our view on the slowdown in global and Chinese growth implies that this latest echo of the resources boom will not last long.

The Royal Commission's final report on the banks is not as harsh as feared, but it is likely to constrain the sector's profits for a while. The combination of sliding property prices and falling housing starts means that, in addition to adjusting the new regime, bankers will be coping with a rise in overdue loans and workouts. Even though the Australian share market is currently neither cheap nor expensive, we cannot identify any forces which will propel it back into a bull market this year.

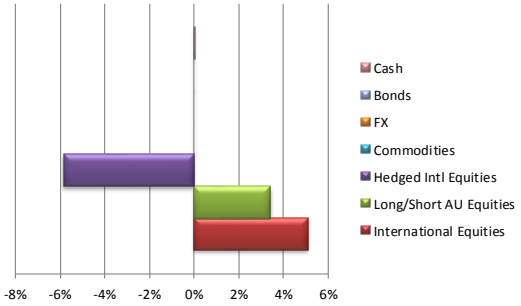
In short, 2019 is the Year of the Pig in the Chinese zodiac, and although Chinese tradition claims that pigs are kind, generous, passionate, and hardworking, we suspect this year will live up to the Western stereotype of the pig. And if that's not enough, 2020 is the Year of the Rat!

PERFORMANCE TABLES

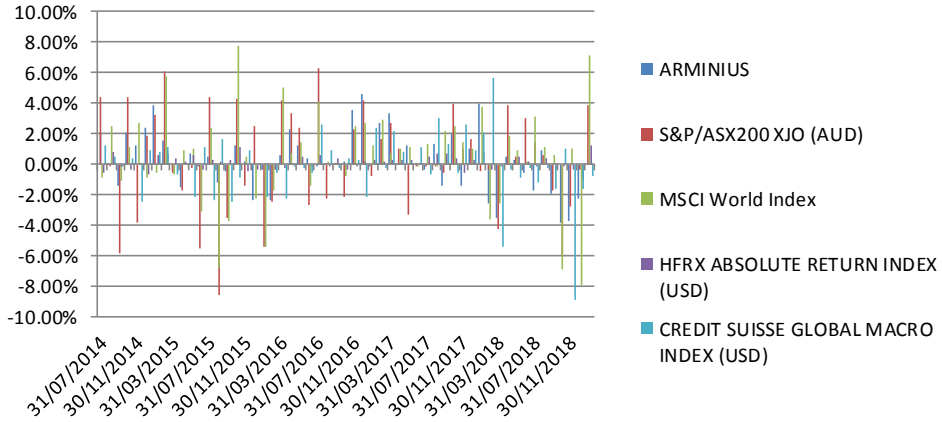
Exposure at month's end as % of NAV



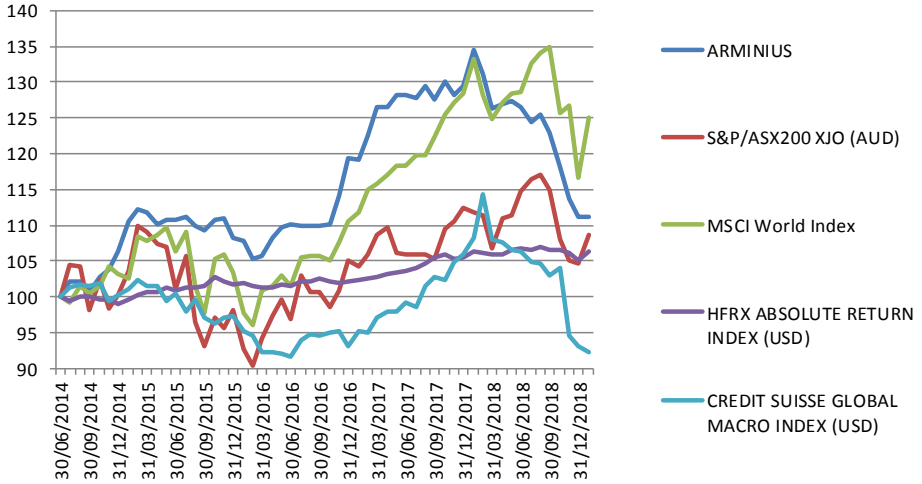
Monthly Asset Class average returns of individual constituents per SAA in domestic market currency



Monthly Performance since Inception July 2014



Cumulative Performance since Inception (Base 100 = 30 June 2014)



GLOBAL FINANCIAL MARKETS – MONTHLY DATA

EQUITIES	31-Dec-18	31-Jan-19	ROR
EUROPE			
Germany DAX (TR)	10559.0	11173.1	**5.82%**
Switzerland SMI (PR)	8429.3	8969.3	**6.41%**
STOXX Europe 600 (EUR)	337.7	358.7	**6.23%**
FTSE 100	6728.1	6968.9	**3.58%**
France CAC 40	4730.7	4992.7	**5.54%**
FTSE MIB	18324.0	19730.8	**7.68%**
Netherlands AEX	487.9	520.6	**6.71%**
Belgium BEL 20	3243.6	3491.6	**7.65%**
OMX Stockholm 30	1408.7	1515.4	**7.57%**
Norway Oslo All-Share	902.3	946.4	**4.89%**
Ireland ISEQ	5479.8	5767.7	**5.25%**
Spain IBEX 35	8539.9	9056.7	**6.05%**
Cyprus CSE General	66.8	62.9	**-5.77%**
AMERICAS			
S&P 500	2506.9	2704.1	**7.87%**
DJ 30 Industrials	23327.5	24999.7	**7.17%**
DJ 65 Composite Average	7710.4	8252.4	**7.03%**
NASDAQ Composite	6635.3	7281.7	**9.74%**
Russell 1000	1384.3	1498.4	**8.24%**
S&P TSX	14322.9	15540.6	**8.50%**
Brazil Bovespa	87887.3	97393.7	**10.82%**
Mexico IPC	41640.3	43987.9	**5.64%**
ASIA			
S&P ASX 200	5646.4	5864.7	**3.87%**
Nikkei 225	20014.8	20773.5	**3.79%**
Hang Seng	25845.7	27942.5	**8.11%**
Korea KOSPI	2041.0	2204.9	**8.03%**
FTSE Strait Times	3068.8	3190.2	**3.96%**
Taiwan TAIEX	9727.4	9932.3	**2.11%**
New Zealand NZX 50 (TR)	8811.3	8985.3	**1.98%**
Shanghai SSE Composite	2493.9	2584.6	**3.64%**
China Shenzhen A Share	1325.7	1332.8	**0.54%**
India S&P BSE SENSEX	36068.3	36256.7	**0.52%**
FTSE Bursa Malaysia KLCI	1690.6	1683.5	**-0.42%**
Indonesia JSX	6194.5	6533.0	**5.46%**

FOREIGN EXCHANGE	31-Dec-18	31-Jan-19	ROR
AUD/USD	0.705	0.727	**3.09%**
EUR/USD	1.152	1.149	**-0.31%**
JPY/USD	109.039	108.513	**-0.48%**
GBP/USD	1.279	1.314	**2.74%**
CHF/USD	1.024	1.009	**-1.46%**
USD/CAD	0.735	0.762	**3.72%**
EUR/GBP	0.901	0.874	**-2.97%**
EUR/AUD	1.634	1.580	**-3.30%**
USD/CHF	0.982	0.994	**1.24%**
GBP/AUD	1.811	1.802	**-0.53%**
CBOE Volatility Index	25.42	16.57	**-34.82%**

COMMODITIES	31-Dec-18	31-Jan-19	ROR
Energy			
Crude Oil WTI (NYM $/bbl) Continuous	45.41	53.79	**18.45%**
Brent Crude (ICE $/bbl) Continuous	53.80	61.89	**15.04%**
NY Harbor ULSD (NYM $/gal) Continuous	1.68	1.88	**11.79%**
NY Harb RBOB (NYM $/gal) Continuous	1.30	1.38	**5.80%**
Natural Gas (NYM $/btu) Continuous	2.85	2.81	**-1.30%**
Precious Metals			
Gold (NYM $/ozt) Continuous	1281.30	1325.20	**3.43%**
Silver (NYM $/ozt) Continuous	15.54	16.07	**3.42%**
Industrial Metals			
Aluminum (LME Cash $/t)	1869.50	1880.50	**0.59%**
High Grade Copper (NYM $/lbs) Continuous	5965.00	6148.00	**3.07%**
Nickel (LME Cash $/t)	10595.00	12380.00	**16.85%**
Iron Ore 62% CN TSI (NYM $/mt)	69.20	76.03	**9.87%**
Zinc (LME Cash $/t)	2510.50	2719.50	**8.33%**
Agricultural			
Corn (CBT $/bu) Continuous	3.75	3.77	**0.40%**
Soybeans (CBT $/bu) Continuous	8.95	9.15	**2.26%**
Wheat (CBT $/bu) Continuous	5.03	5.17	**2.63%**
Cotton #2 (NYF $/lbs) Continuous	0.72	0.74	**3.05%**
Sugar #11 (NYF $/lbs) Continuous	0.12	0.13	**5.82%**
Indices			
GS Commodity (CME) Continuous	375.25	407.80	**8.67%**
PowerShares DB Commodity Index Tracking Fund	14.49	15.52	**7.11%**
db x-trackers SICAV - db x-trackers DB COMMODITY BO	13.96	14.71	**5.40%**

10 YEAR SOVEREIGN YIELDS	30-Dec-18	31-Jan-19	Yield D
US	2.74%	2.63%	**-0.11%**
UK	1.27%	1.22%	**-0.05%**
Europe	0.24%	0.15%	**-0.09%**
Australia	2.36%	2.23%	**-0.13%**
Belgium	0.77%	0.60%	**-0.16%**
Canada	1.96%	1.88%	**-0.08%**
Denmark	0.22%	0.30%	**0.08%**
France	0.70%	0.56%	**-0.14%**
Germany	0.24%	0.15%	**-0.09%**
Greece	4.35%	3.86%	**-0.49%**
Ireland	0.89%	0.87%	**-0.02%**
Italy	2.75%	2.59%	**-0.16%**
Japan	0.01%	0.00%	**-0.01%**
Netherlands	0.38%	0.25%	**-0.13%**
New Zealand	2.38%	2.25%	**-0.13%**
Norway	1.74%	1.71%	**-0.03%**
Portugal	1.72%	1.62%	**-0.10%**
Spain	1.41%	1.20%	**-0.21%**
Sweden	0.46%	0.38%	**-0.08%**
Switzerland	-0.19%	-0.22%	**0.03%**

ROR = Rate of Return
Yield D = Yield differential