PARUS
FINANCE

January 21, 2019

Parus Fund Letter – H2 2018

Dear Investors,

The net performance for 2018 was +2.7% for the USD class against -10.4% for the MSCI World Index and -6.7% for the HFR Index. The compounded annual return of the strategy since inception in 2003 is +12.6%.

This year, the cost of hedging the USD Fund into other currency classes was particularly high due to the elevated delta in interest rates between the USD and other currencies.

We invite investors looking for a better understanding of our investment process to refer to the first four semi-annual letters[1].

For the avoidance of doubt, the structural part of the portfolio refers on the long side to quality growth companies and on the short side to structurally declining ones. The cyclical portion of the book targets cyclical companies with mean-reverting characteristics on both the long and short sides. This part of the process tries to capitalise on the fact that an equity market loses 40-50% peak-to-trough in each cycle.

H2 Portfolio Review

The Parus Fund performance was +2.7% for the year, with +5.3% in H1 and -2.5% in H2. The long portion of the portfolio contributed +8.1% in H1, then lost -6.8% in H2. The short portion of the portfolio lost -2.8% in H1 and contributed +4.3% in H2. For the year, the longs contributed +1% and the shorts contributed +1.7%. Unlike in 2017, the low gross and net exposure of our portfolio were better suited for these types of markets.

In 2018, most equity markets lost over -20% peak-to-trough. The main driver of this performance was the market correction of Q4, with the MSCI World down -14% and the Nasdaq down -18% during the quarter. This correction was led by US markets which had strongly outperformed other geographies in H1.

For the year, our real estate positions in Australian Banks, US Reits, and UK Homebuilders, which account for c. 50% of the short book, contributed the most given their size but less than we would have expected. They declined steadily with the help of worsening idiosyncratic data points, but their dividends, which we expect to be cut at

[1] Starting in H1 2013

some point, were viewed as a support in the volatile markets of H2. Australian Banks were on average down -16% before dividend and -10% including dividend, UK homebuilders -23% post dividend and US Reits -7%.

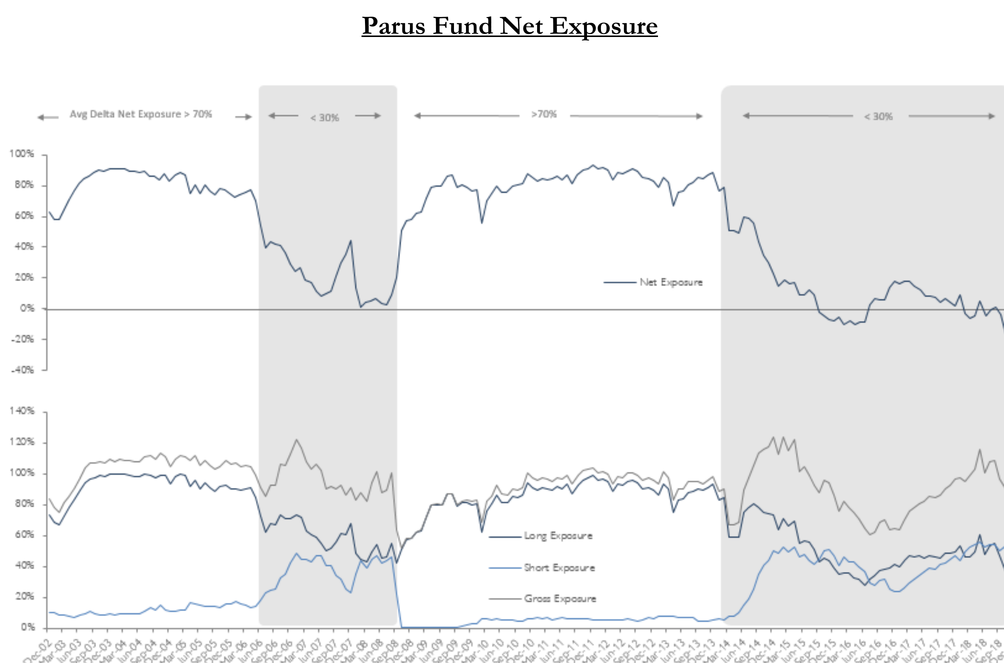
Other notable contributors on the short side were Alliance Data Systems, Macerich and Kingfisher. Seagate and US retail names contributed negatively due to a strong Q1 following on from the approval of the US tax reform.

The main contribution on the long side in 2018 came from the software sector with Microsoft and Adobe, alongside Apple and Nvidia, despite the sharp price reversal of Apple and Nvidia at the end of the year. Facebook was the largest single negative contributor, followed by Chinese retail names.

Positioning

The portfolio currently has 19 longs, 45 shorts, a long exposure of 30% and a short exposure of 50%, ie, a net and gross exposure of -20% and 80%. We continue in our phase of low net exposure. The beta adjusted net exposure is however closer to 0/-10% net.

Parus Fund Net Exposure



Looking at fundamentals, an economic slowdown became visible in China with Q2 results. The Chinese economy was impacted, with three to four quarters of delay, by the reduction in shadow credit growth which had fuelled the rebound of 2016-2017.

Chinese equity markets were most affected with the Shanghai Composite Index at -25% in 2018 and the Shenzhen Composite Index comprising smaller companies at -33%. These markets cannot be shorted directly, which is unfortunate given the magnitude of

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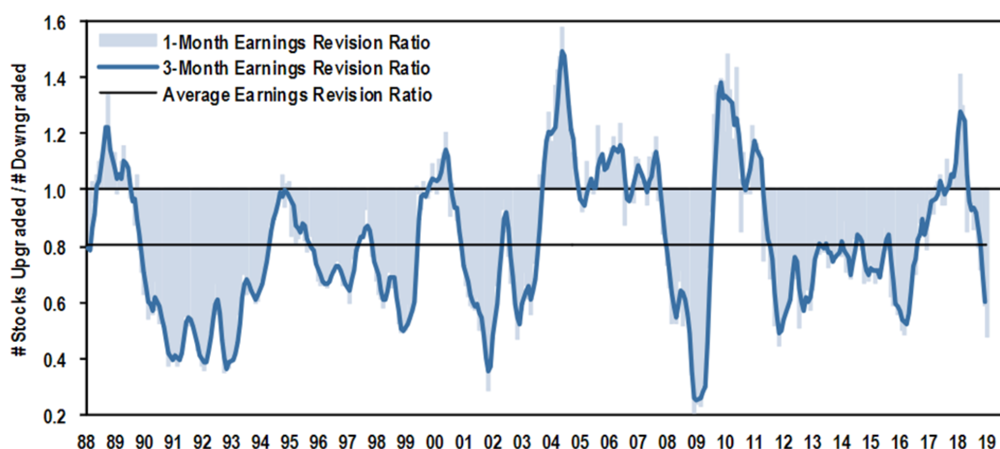
excesses resulting from the unprecedented printing of c. $25tn over the past 10 years and $12tn over the past three years.

While the slowdown was expected, as often, timing and magnitude were the key issue: this time it was led by consumption rather than industrials and materials as was the case in 2015. In H1, many companies were still revising their forecasts upwards, boasting about a business environment which was stronger for longer, only to revise them downwards quite sharply in H2. The benefits of the US tax reform were quickly replaced by the potential headwinds of the US-China trade discussions. The narrative of the companies moved from "this time it's different", to double ordering, unexpected inventory build-up and demand slowdown. The change of tone was sudden as illustrated by one of the sharpest collapses in global earnings revisions on record in such a short period of time.

Global Earnings Revision Ratio



Source – BAML - Number of companies with upwards revision divided by number of companies with downward revisions

In H2 cyclicals underperformed defensives, growth underperformed value and so did Tech with the Nasdaq underperforming the S&P 500 by -4%, reversing most of the outperformance of H1. In view of Q2 results, it was apparent that our growth bias on the long side and value bias on the short side could become an issue, which led us to rebalance our portfolio.

In August, we reduced almost our entire exposure to Chinese growth companies on the long side. Later we reduced a series of growth positions across the board and more specifically Nvidia and Apple. We added on the long side value positions with high dividend yield in the healthcare space.

On the short side, we initiated positions in industrials and semiconductors and finally introduced a few shorts in growth companies pricing an unrealistic mix of growth and profitability. We also reduced the UK real estate positions at the end of the year to limit the interference of Brexit discussions.

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Tech

In H2, many of cyclical tailwinds which had boosted the structural growth of our companies in 2017 turned into headwinds. The reversal of that cyclicality led most of the trading in our long book around H2.

The profit warnings of Nvidia and Apple were the most noteworthy. A slowdown in gaming and crypto mining impacted Nvidia's core business and led to downward revisions for Q4 2018 and 2019. This had been expected at some point, but occurred later than initially anticipated and for that reason, was stronger in magnitude. After being up +45% YTD[2] by the end of September, the stock corrected by -52% and finished the year down -31%. Following a 3-year CAGR[3] of over 35% for sales and 70% for earnings, the business model is pausing for a digestion year without growth. We had reduced the position in view of other trends in the semiconductor market. We still like the business model and growth potential going forward.

For Apple, very poor data points surrounding iPhone sales led us to reduce the position significantly. Apple is testing the limits of its premium pricing in phones and experiencing longer replacement cycles. Early January 2019, Apple announced its first profit warning in a very long time. Their franchise remains unique having locked more than a billion users into their ecosystem. The valuation is very low. The company and the market are trying to determine the recurring level of iPhone sales at maturity.

Helped by H1, these two positions had throughout the year a positive contribution despite their meaningful price corrections in H2.

Most costly to us were the negative quarterly earnings of Facebook in Q2, purely idiosyncratic, independent from any cyclicality and from which the company has not yet recovered. We wrote extensively on Facebook in our previous letter and provide the following update:

- **Q2 results**: After an investor-reassuring Q1 report which was not the best PR exercise in a world looking for constriction and pain from the company, Q2 was a way to show the world that Facebook cares. It delivered the bleakest picture, focusing on all the costs the company has to bear going forward as its status evolves from platform to publisher.
- **Usage**: Independent of whether Facebook could have done things differently, the media and political storm is still quite active. For us, what really matters is the impact on usage, and the recent usage data are encouraging in that respect. The usage at the Facebook property is stabilising while it is still growing strongly at Instagram.

[2] Year-to-date
[3] Compounded average growth rate

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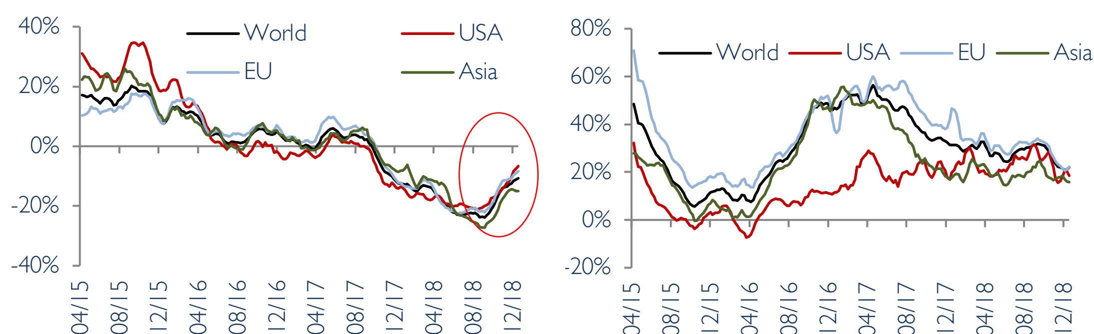
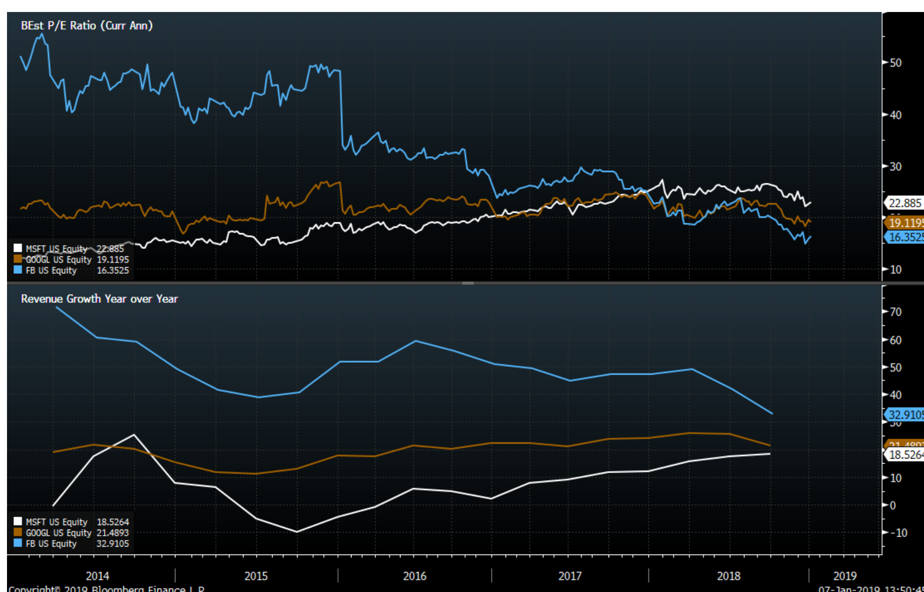
Monthly Minutes spent on Facebook (Left) and Instagram (Right) YoY%



Source – 7Park data

- **Over monetization**: A common critique of the Facebook app is that it has too many ads, which could lead to lower usage. Ad density could be too high and might have to decrease, however overall the pricing of ads is trending upwards, which would be supportive.
- **Regulation**: We had mentioned that regulation favours the larger players and maintain that view. One caveat could be a forced break-up of the company, unjustified and unlikely in our view, and not a disaster long term, but clearly a negative stock price driver in the short term.
- **Valuation**: At 16x P/E with a growth rate still above 20% (33% for the latest quarter) the valuation is very low considering the growth potential. Facebook remains a significant position in our book, similar to Google.

P/E[4] (upper graph) and Revenue growth[5] (lower graph)
Facebook (Blue) Microsoft (White) and Google (Brown)



(Facebook shows the lowest P/E multiple despite the highest revenue growth rate)

Source – Bloomberg

[4] P/E Current Year
[5] Revenue Growth YoY of latest Quarterly Report

We have received questions about how we view Facebook in the context of the ESG framework and more broadly, how we think about responsible investing in our portfolio. The ESG framework is one of the well-known frameworks for responsible investing, rating companies according to three dimensions: environment, social and governance. We had the opportunity to meet with several of the best-known ESG rating companies in the industry. At Parus, we believe that innovation often contributes to making the world better and would assume our growth positions, driven by innovation, would get a high rating in that respect.

We looked more closely at this ESG framework and identified several flaws:

- the first one, which we call the "sector flaw," is that ESG ranks companies within their sectors and fails to create a hierarchy between sectors. As a result, innovative companies are rated against their innovative peers while the oil companies are rated against their oil peers.
- the second flaw, which we call the "establishment flaw," is that within each sector the most innovative, early stage and yet-to-be established companies are likely to fall short on many criteria compared to more-established peers. Younger, high growth companies embarked on a disruptive race have less time and resources to devote to "ticking the box" regarding certain governance and social criteria.
- the third flaw is the equal weight given between the three main categories of ESG, namely environment, social and governance. The best-performing companies tend to emerge through superior execution and quicker decision-making, often inspired by a charismatic non-comprising leader. This type of governance is rated poorly by ESG standards but is often responsible for superior execution (Apple and Tesla are great examples of innovation initially led by controversial leaders).

For all of these reasons, we have found that the ESG framework is not well-suited for high growth companies.

Looking at Facebook in a broader scope of responsible investing, a framework for responsible data usage is long overdue in a world of big data. Today many new industries, in this case big data, at some point go through explosive growth in unchartered territory. This may lead to excesses and require normalization through self or imposed policing. This is the stage at which this industry is today. It happens that this specific topic of privacy has many complex dimensions including political ones, making it particularly difficult to solve.

Shorts

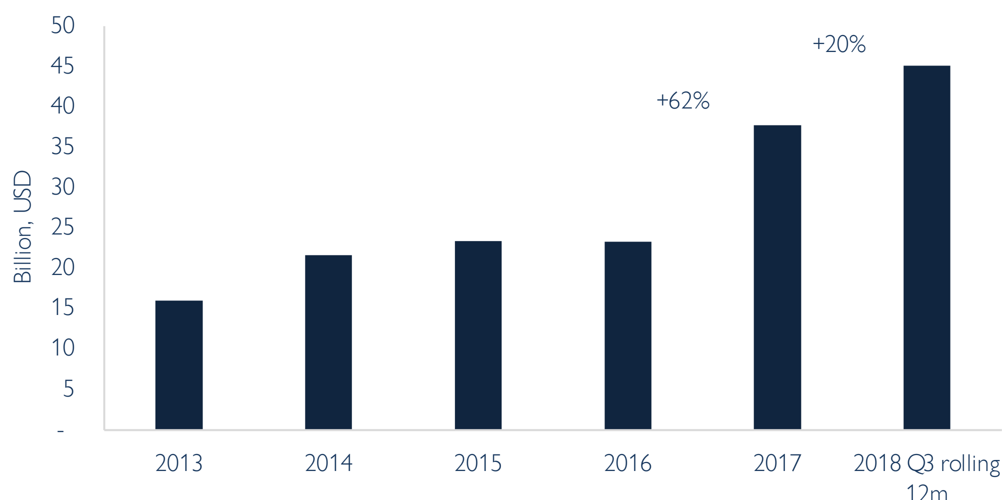
Our ideal shorts are declining businesses with balance sheet issues, ie perfect candidates for terminal shorts. Our screens currently find few of those large and liquid enough to be shorted. Many of the candidates we do find are in the energy sector, which is currently dependent on OPEC decisions. Others are often non-shortable A shares in China or H shares in sectors, which are potentially subject to government interference. At the time of this letter, two small Hong Kong listed leveraged homebuilders just revealed debt repayment issues. Their stock price decreased by over 60% in one day and one stock was

suspended. We are short several other, larger leveraged Chinese homebuilders, and their portfolio sizing is limited to account for the risk of interference.

In an attempt to widen our short universe, we look at shorts in three ways: companies facing a structural or cyclical decline not priced by the market; companies with a leveraged balance sheet vulnerable in a downturn or growth companies priced at an unrealistic mix of profitability and growth.

We are currently short a series of semiconductor companies significantly impacted by an excess of supply at a time of weakening demand. In memory, we reintroduced short positions in Micron and Western Digital. This sector is experiencing its recurring pattern of supply-demand imbalance. The recovery of 2016-2017 led to record profitability, and the prospect of growth from smartphones, cloud, artificial intelligence and crypto mining led the industry to increased capex collectively of almost +100% in 2017-2018. This usually translates, and this time was no different, into an oversupply 12-18 months later. A slowdown was expected by the market as Micron's PE at peak profitability never went beyond 5x, making timing particularly important. Normally, those downturns last 4-6 quarters. We expect this one to be similar, and recent data show that we are still in the phase of inventory accumulation which indicates that a recovery by Q2'19 is premature.

Semiconductor Capex



Source –Aggregated semiconductor capex of Samsung, Micron, Hynix - Company, Bloomberg

We are also short companies which have been viewed as immune from this semi downcycle and, we believe, are trading at much higher valuations than their peers (ASML, Infineon, and AMD).

In the pocket of highly valued shorts with questionable future mix of growth and profitability, we have had Asos, Wayfair and some very expensive high-growth software stocks.

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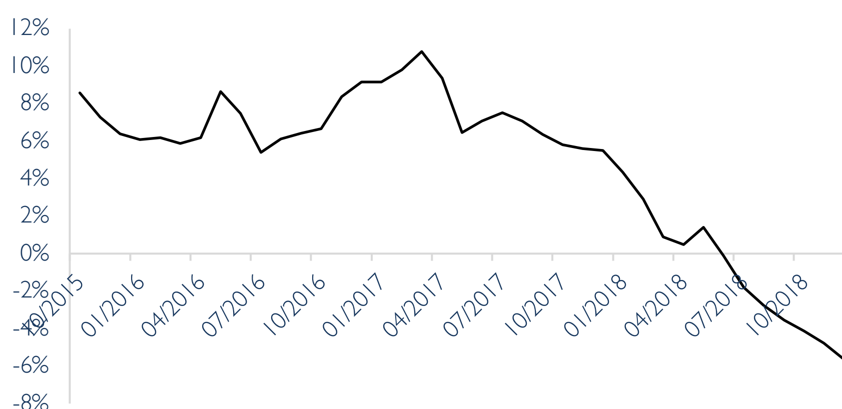
Asos, historically an innovator in selling apparel online, has been recently confronted with stiffer competition (Amazon, Boohoo, Zalando, improved online offerings of Zara, H&M,…). Maintaining its pace of growth in a very competitive world has led Asos to grow at a negative free cash flow and massage its EBIT margins by capitalizing more and more IT costs. All of these measures frontloaded its growth and caught up with it as soon as demand softened. This led to the profit warning of Q4 2018 when the stock lost -50%.

We are also short Wayfair, a marketplace for selling furniture online. Wayfair's business model is very efficient as it takes a revenue commissions from vendors without holding inventory. The valuation however prices a questionable mix of growth and profitability. Indeed, the company has been losing money almost every year. The management pitch is that the repeat business justifies the very high acquisition costs of new customers. Sales will reach close to $6.8 bn in 2018, c. 3 times more than 3 years ago which is impressive. But the company has yet to demonstrate an increasing return on marketing spend, even in the US which is its more mature market. At this stage there is no evidence that the company does not need to rebuy its business every quarter.

We continue to hold our positions in Australian Banks. Recent data points are not yet reflected in the valuations of the stocks. Housing prices keep declining as illustrated by the graph below, and the Royal Commission enquiry is supporting new prudential measures leading to higher costs and lower credit growth. New housing credit is in fact in decline by -7% year on year, based on the latest Q3 data. Negative for our thesis, the Central Bank is looking for a soft landing of this oligopoly. Their dividends are currently the key support for the valuation, representing almost 90% of their earnings. We expect these to be reduced in line with profits as soon as the pace of delinquencies increase.

Australian Residential Property Price YoY%



Source – Corelogic, Bloomberg

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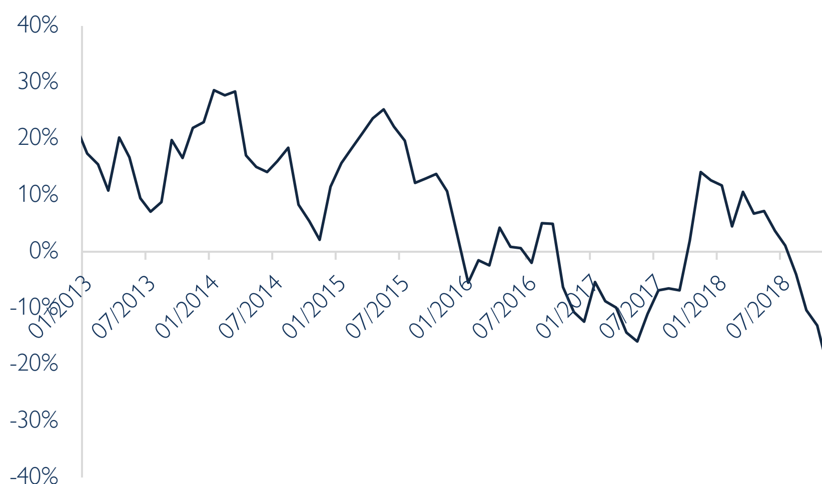
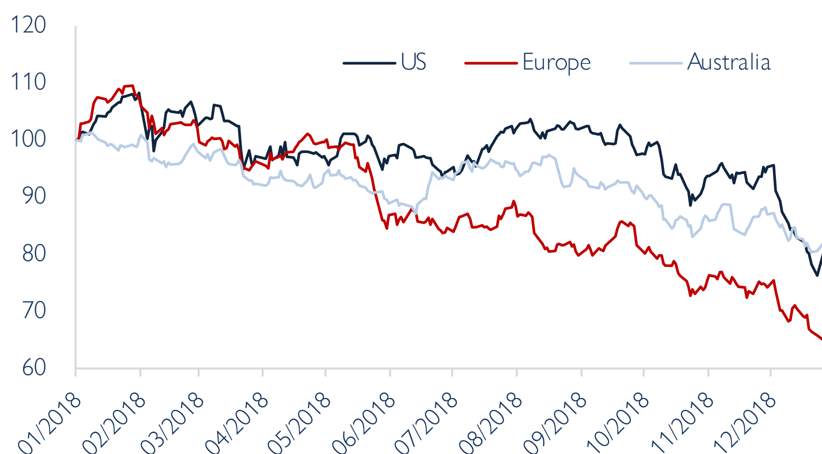
Australia: New Building Approvals Rolling 3 Month YoY%



Source – Australian Bureau Statistics, Bloomberg

Despite all of this supporting data, the Australian banks performed in line with US banks and outperformed their European peers which was quite surprising in 2018.

2018 Stock Price of Australian, US and European Banks – Base 100



Source – S&P 500 Banks Index, Euro STOXX Banks, S&P/ASX 200 Banks Index, Bloomberg

Valuation

From a valuation perspective, current-year P/E ratios of developed markets are back to the levels of 2013, though on higher earnings. Indeed, P/Es based on average 10-year earnings are at the levels of 2017 and remain close to their 10-year highs, a reminder of where we are in the cycle.

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P/E Current Year (Upper graph) and 10-Year Average Earnings (Lower graph) - MSCI World Developed Markets

Source – Bloomberg

Data points

The higher cost of funding in the US with Fed rates now at 2.5% vs 0.5% in 2016 has also had its effect. Manufacturing, investment and housing all are revised down in view of tougher financing conditions and year-on-year comparisons. Consumption and employment remain strong and delinquencies low, although rising. Consumption remains the largest driver of the US GDP so we are monitoring any change in that space very closely.

For China this slowdown was particularly visible in discretionary spending. Passenger auto sales which account for roughly 30% of the world's auto market were down in Q4 2018 -15% YoY and -15% over two years. The smartphone market is down -8% YoY in Q3 2018 and an estimated -15-17% in Q4. In that respect it is quite likely that the retail official statistics, still showing +8% year on year, are overstated. They indeed include a recent change in methodology without the revision of historical data.

The news flow around US-China trade discussions should appear positive as it is now well understood that the US, which had the upper hand with their strong economy, are now much too worried about their equity markets to adopt a risk-it-all strategy. However, the long-term roadmaps of both countries do conflict, so we expect nothing game-changing either.

We can't ignore the dovish comments of the Fed and the US government following the market correction of Q4, showing yet again their determination to manage market volatility. Indeed, our portfolio construction was better suited for a volatility environment of 2018 than one of 2017.

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Three years after the latest stimulus was started in 2015 and USD 12tn of additional debt later, China is again faced with the dilemma…to boost, or simply try to stabilize. China recently introduced stabilization measures through a VAT reduction and loans to support SMEs. This is so far shy of what is required to boost the economy significantly. We would argue that the digestion of the previous stimulus will take some time and make it tougher to activate something as impactful again.

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In summary, 2018 justified our cautious positioning; we would have expected more contribution for our shorts, and the sequence of the market correction affecting Tech in H2 led us to amend our book, ending the year with a portfolio quite different from that of early 2018. In China, H1 2019 numbers will be extremely poor, while H2 could show potential signs of stabilization. Equity markets have derated, and the slowdown of the coming months is partially priced in, which leaves room for short-term rebounds. We do, however, believe that there will be further downward earnings revisions and keep finding opportunities in the market, especially on the short side. We are keen to increase our gross exposure and put more capital to work while continuing to be very focused on capital preservation at this stage of the cycle.

Thanking you for your trust and patience, we wish you all a good year,

The Parus Finance Team

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