Taking Stock
Q2 2018

FUNDAMENTAL VALUE EQUITIES
Concentrating on long-term Value

02 THE BIG PICTURE
Increased volatility has hit value stocks. But volatility can also reward disciplined value investors.

04 FINDING VALUE
The growth in China’s high speed rail network supports prospects for Zhuzhou, a traction systems maker.

06 RESEARCH BRIEFING
Will recently-announced tax cuts actually have a material impact on returns?
Fundamental Value Equities Q2 2018

THE BIG PICTURE

Value Investing: Capitalising on Uncertain Times

The last decade has been a torrid time for the average value investor. Apart from a brief respite in 2016 when value benchmarks emphatically outperformed growth, the under-performance of value has led many observers to seemingly capitulate on value as an effective investing style.

In 2018, value is yet again out of favour, and we recognise that the relative performance of our own funds has been challenging this year. So what is the proximate cause of this latest bout of underperformance? The threat of a trade war and the return of eurozone political uncertainty have led to a spike in volatility that has rattled many value stocks. It is unclear how this heightened volatility might translate into a material change to the fundamental earnings power of these companies. However, value stocks are evidently pricing in a pretty bleak outcome.

As a value investing team with 10-year plus track record of out-performance, we have several strongly held investing convictions. Here are two. Firstly, how you define ‘value’ is important — an investing strategy that ranks stocks by (say) price/book is probably too simplistic. We tend to find that just cheap is rarely enough. Earnings power is also important. Secondly, in our experience, long-term company prospects do not change as rapidly as sentiment, and often when negative outcomes are rapidly priced in, it creates a clear value investing opportunity. Right now feels like such an opportunity.

Value Investing: Defining Value

While definitions vary, we believe value is most effectively defined as the trade-off between the rating of capital and the earnings power of that capital. By investing in companies that can generate strong earnings power above their cost of capital, we try to avoid value traps. We then build concentrated, high active share portfolios where (typically) stock-specific risk tends to dominate top-down, factor risk.

By definition, our value proposition assumes a strong relationship between market rating and earnings power over time. One might well ask whether this relationship generally holds. Figure 1a is a snapshot of the relationship for June 2018. Each dot represents one of 1600 companies in the MSCI World Index. Value stocks screen below the line and to the right, typically with a ROIC above 6%, where the rating of capital does not fully reflect the earnings power of capital. The R-squared, or fit, of 63% suggests a strong relationship and a high level of market efficiency.

But how does this relationship hold up over time? Figure 1b shows the relationship between average capital rating of all stocks in the MSCI World Index and their respective forward earnings power for each quarter over the last ten years. The line is the R-Squared.\(^1\)

Figure 1a: Rating of Capital and Productivity of Capital, MSCI World (June 2018)

![Figure 1a](image)

Source: MSCI World, State Street Global Advisors (SSGA), Data as of 29 June 2018.

Figure 1b: R-Squared from Regression between MSCI World EV/IC and ROIC: Q2 2009–Q2 2018

![Figure 1b](image)

Source: SSGA, FactSet, CSFB Holt — A Trademark of Credit Suisse.
As is clear, on average, the market rating of stocks is firmly anchored with the earnings power of companies. Periods of higher fit are broadly associated with increasing market confidence and the willingness to rate capital more in line with earnings power. Periods when this relationship is weaker are typically associated with macroeconomic volatility, as in the late-2011 eurozone crisis.

Sometimes this flux can be difficult to rationalise, but in our experience, periods when the market becomes agnostic to stock-specific earnings power tend to coincide with value being out of favour. During those times, factor risk tends to become more dominant in our portfolios, and stock-specific returns struggle to overcome style headwinds. Such is the case in 2018. These periods tend to spell risk and opportunity in equal measure. Being able to identify reference points for the extent of this opportunity is important.

**Measuring the Value Opportunity**

A useful measure of the potential value opportunity is the extent of premium being paid for stocks in the MSCI World Growth Index versus those in the MSCI World Value Index. As Figure 2 shows, growth stocks on average tend to trade at about a 30% Price/Earnings (P/E) premium to value stocks. When dispersion is expanding, as in 2018, we find such times are usually synonymous with the relative underperformance of value. When the premium between growth and value indices diminishes, we typically find these to be periods of strong relative performance for value. Such was the case in the period of recovery in equity markets after the tech collapse (commencing 2003). Figure 2 tells us that this P/E disparity is currently at an extreme, suggesting the opportunity in value has rarely been greater.

**Managing Concentrated Portfolios in High Volatility Environments**

Let’s not kid ourselves – actually living through such dislocations is pretty difficult! It turns out that investors are defined not by how they behave when performance is strong, but by how they behave when performance is challenging. It is also true that all investing styles go through periods of under-performance. Such bouts are not unique to value investing!

In the last decade, we have lived through two significant episodes where value has been out of favour— the eurozone crisis of 2011 and the long-duration defensive rally in 2014. Our investment process demands a deliberate approach to such bouts of dislocation, and generally we take three courses of action:

- Scrutinise each investment case for potential thesis violation: periods of macro volatility can test balance sheets and business models.
- Weigh fresh ideas that may have been unfairly de-rated.
- Reinvest in existing portfolio ideas that have been marked down.

Our job is to identify undervalued, investable bottom-up opportunities. Buying stocks in the teeth of bad news is part of our DNA. We find we often have our strongest periods of relative performance after a market drawdown. Whilst the concentrated nature of our portfolios means we are sometimes unable to avoid value style factor headwinds in the short-term, when we embrace the opportunity presented by market volatility, our stock selection skills have allowed us to generate a very solid long-term track record.

**Figure 2: P/E Rating Premium — MSCI World Growth and MSCI World Value**

![Graph showing P/E rating premium](image)


1 The R-Squared measures amount of variance in market rating (Enterprise Value/Invested Capital) that is explained by earnings power (ROIC). EV/IC = Enterprise Value divided by Invested Capital, or more simply, a debt-adjusted Price/Book ratio; ROIC = Return on Invested Capital.
The Company

Zhuzhou is a component supplier to the Chinese rolling stock industry, providing traction systems for multiple train types including locomotives, metros and high-speed rail. Their primary customer is CRRC, the world’s largest train manufacturer. For much of the past decade, the company commanded a high valuation due to consistent earnings growth and industry-leading returns.

During this time, China’s government commenced the build-out of a high speed rail network to combat traffic congestion and pollution. By 2017, 22,000km of track had been installed, accounting for two-thirds of all high speed rail tracks worldwide; demand for rolling stock — including Zhuzhou’s traction systems — grew strongly, driving earnings growth of 29% per annum. This growth was accompanied by a ROIC of over 40%, achieved due to the critical importance of traction systems and the duopolistic nature of traction system supply in China. Investors applied a valuation that assumed these record levels of growth and ROIC would be sustained.

Valuation Opportunity

Between 2015 and 2017, the shares de-rated significantly, and went from trading at over 5.5x Enterprise Value/Invested Capital (EV/IC) to just 2.9x. Slowing sales growth drove ROIC down to 22% — a fallout from a pause in new track commencements in 2011 following a high speed rail collision. In addition, Zhuzhou’s asset intensity increased as working capital rose markedly. The company’s valuation in late 2017 implied that the market was extrapolating the recent trend and forecasting a continued deterioration in returns. Our analysis came to a different conclusion, determining instead that Zhuzhou’s returns would stabilise at close to current levels. We see earnings recovering as sales growth resumes after the temporary lull, while working capital trends should stabilise. This implies significant ‘margin of safety’ versus market implied returns. With a valuation of just below 3x EV/IC at the end of 2017 and a ROIC of over 20%, this is attractive to us as value investors.

Revenue Outlook

We believe that the recent weakness in HSR orders is temporary and will recover due to:

Replacement Demand for Traction Systems

Zhuzhou’s products have a useful life of 8–10 years. The ramp-up in annual deliveries of rolling stock from 2008 provides clear visibility on the replacement opportunity that should drive future revenue from 2018 (Figure 3).

Figure 3: History of Annual High Speed Rail Rolling Stock Deliveries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>350</td>
<td>400</td>
<td>450</td>
<td>500</td>
<td>550</td>
</tr>
</tbody>
</table>

Source: CRRC Company Data.
Increasing High Speed Rail Track Completions

The construction of new rail infrastructure takes approximately 5 years to complete, with new rolling stock ordered towards the end of this period. By monitoring previous track commencements, as well as the Chinese government’s long-term rail infrastructure plan, we have good line of sight on likely new orders.

In 2011, the government paused construction of new rail infrastructure while they investigated the cause of a high speed rail collision in that year. Given the 5 year time lag between track commencement and rolling stock orders, the decline in rolling stock deliveries seen in 2016/17 should have been foreseeable by investors (see Figure 3). Following a year-long safety review, track roll out recommenced in 2012/13. This will drive a rebound in track completions and should result in a recovery in new rolling stock orders in 2018/2019.

Longer-term, track completions, and thus requirements for rolling stock, will be driven by government plans to double today’s rail network by 2030 (Figure 4); this is necessary to bring the density of China’s high speed rail network into line with other developed nations.

Overseas Opportunities

Although not baked into our assumptions, there is upside potential from CRRC’s overseas ambitions. CRRC is targeting 10–15% global market share and $15bn of international orders by 2020, which, if successful, will bolster demand for Zhuzhou’s traction systems.

Invested Capital

Increasing working capital has been a major contributor to the decline in Zhuzhou’s returns. Over the past decade, working capital has increased to 54% of sales, led by growth in accounts receivable as Zhuzhou’s main customer, CRRC, has delayed payment. Despite this headwind, Zhuzhou has delivered strong free cash flow and remains in a net cash balance sheet position.

The valuation suggests that if working capital stabilises, the stock is attractively valued. A normalisation of accounts receivable back to historic levels would make the current valuation even more appealing.

So how do we assess the risk that working capital continues to increase, or worse, that Zhuzhou does not get fully paid by its customers?

- Our analysis revealed that movements in working capital have been cyclical in the past, peaking at similar levels in 2008 before falling again to a trough of 25% in 2011 as customers resumed normal payment patterns.
- The increase in working capital intensity has brought returns in line with similar key component suppliers in industries such as aerospace or electrical equipment. This suggests that the company is not ‘over-earning’ from a returns perspective and should not face pressure for better contract terms from its customers.
- Our financial analysis of Zhuzhou’s main customer CRRC, as well as CRC, the state rail operator, highlighted minimal risk of default. CRRC has consistently maintained a strong net cash balance sheet. While CRC is more levered due to the funding of the high speed roll-out, they have multiple options to de-lever if required through actions such as fare reform and land commercialisation — a model employed successfully by rail operators in Japan.

We assume a stabilisation of working capital at these levels, but note that should customer payment terms return to historic norms, this would drive even better cash flow to the benefit of equity holders.

Summary

The current valuation implies further deterioration in Zhuzhou’s returns profile. In contrast, our analysis suggests that returns should stabilise as revenue recovers and working capital stabilises. On this thesis, the shares are cheap, and very cheap if returns were to improve from here.

Figure 4: Chinese High Speed Rail Network Plan (Kms)

Tax Holidays or Tax Returns?
Tax is typically one of the largest expenses incurred by a business, often taking 20–30% off the bottom line; however, in our experience it is often overlooked as a material issue to analyse. Cuts in headline corporate tax rates have recently been announced in many jurisdictions around the world (USA, Japan, UK, France and the Netherlands to name just a few).

However, effective tax rates globally have actually been falling for years. Figure 5 illustrates the median tax rate for the 500 largest non-financial services businesses in the US over the last 20 years. While declining taxes may have boosted earnings, this has not always flowed through to higher returns on invested capital.

Determining a Reasonable Forecast Tax Rate
As returns-based investors, it is important for us to determine a reasonable and sustainable return on invested capital (ROIC). Given the materiality of typical tax charges to returns — ROIC = Net Operating Profits After Tax (NOPAT)/Invested Capital (IC) — it is important to understand what a sustainable future tax rate may be. This might include analysis of:

- The historic tax rates implied by the marginal rates in the countries where profits are made, revenues are booked and/or assets are located.
- The differences between historic marginal and effective tax rates, and how sustainable they may be going forward given the impacts of tax holidays, the utilisation of tax losses and the accelerated depreciation of capital expenditure, as well as the potential for repatriation of profits.

Figure 6 shows the range of tax charges for the same businesses as detailed in their last reported financial statements.

Judgement is required in determining a reasonable forecast rate, and anchoring on an unsustainably high or low effective tax rate can materially distort valuations. As a team, we estimate the marginal tax rate and then separately value material distortions to the marginal tax rate, such as Deferred Tax Assets and Liabilities. While much of the focus on tax changes tends to reside in the impacts on Profit and Loss and Earnings per Share, there are also important impacts on cash flow and balance sheets impacting invested capital; the valuations of non-operating assets and liabilities may be material to intrinsic value as well.

Figure 5: Median Tax Rates for Large US Businesses vs Federal Rate (ex State Taxes) (1997–2018)

![Figure 5: Median Tax Rates for Large US Businesses vs Federal Rate (ex State Taxes) (1997–2018)](image-url)

Source: Credit Suisse Holt, SSGA.
Forecasting Sustainable Returns — Further Judgement Required

Even when an apparently conservative blended marginal tax rate has been determined and applied, it is important to note that there are other considerations that impact long-term corporate returns on invested capital.

**BEPS**

While attention has focused on the recent tax cuts, less thought has been paid to an OECD/G20 initiative called Base Erosion and Profit Sharing (BEPS), which is endorsed by 116 countries and jurisdictions representing over 95% of global GDP. This has identified 15 actions aimed at reducing the ability of businesses to arbitrage international tax asymmetries by artificially shifting profits to low-tax locations where there is little or no economic activity.

Both the recent US tax reforms and EU legislation have adopted interest limitation rules consistent with BEPS recommendations. As such, this initiative is already working to increase corporate tax rates — and acting as a headwind to the tax cut moves. Consideration of this initiative may prompt analysts to think about how businesses have achieved historic low tax rates and whether they are sustainable or merely a temporary ‘holiday.’

**Stakeholder Interests**

Consideration also needs to be given to how much of the tax savings will be passed on to other stakeholders, such as customers (via lower pricing), suppliers (via changing payment terms) or employees (via wages); this will ultimately depend on the competitive forces within the industry that the company operates in. Declining tax rates over recent decades without a commensurate boost in ROIC (on average) might suggest that other forces at work.

**Summary**

One of the benefits of working in a team of experienced analysts who are global industry experts focused on long term, sustainable returns, is that we are able to challenge each other. This helps us to avoid cognitive bias towards simply inputting the current effective tax rate, or applying the next year’s company guided tax rate to the long-term rate. To quote Benjamin Franklin “in this world there may be nothing certain except death and taxes.” But that certainty does not apply to the rate of tax and its impact on sustainable ROIC, and thus the intrinsic value of a business.

---

2 Data to construct the graphs was received from Credit Suisse Holt in July 2018. Market capitalisation data is as of 27 July 2018. Tax rates were computed for the same companies over time by dividing the reported tax charge by pre-tax income.
Marketing communication.

State Street Global Advisors Worldwide Entities


China: State Street Bank and Trust Company (Representative Office), Boulevard Plaza 1, 17th Floor, Office 1703 Near Dubai Mall & Burj Khalifa, PO Box 26838, Dubai, United Arab Emirates. T: +971 (04) 4372800. F: +971 (04) 4372818.

France: State Street Global Advisors Ireland Limited, Paris branch is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson’s Quay, Dublin 2. State Street Global Advisors Ireland Limited, Paris branch is registered in France with company number RCS Nanterre 832 734 602 and whose office is at Immeuble Défense Plaza, 23-25 rue Delarivière-Lefoullon, 9204 Paris La Défense Cedex, France. T: (+33) 1 44 45 40 00. F: (+33) 1 44 45 41 92.

Germany: State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. Authorised and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (“BaFin”). Registered with the Register of Commerce Munich HRB 121381. T: +49 (0)89 55676 400. F: +49 (0)930 446 449.

Hong Kong: State Street Global Advisors Asia Limited, 6/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103 0288. F: +852 2103 0200.


Italy: State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Limited, a company registered in the UK, authorised and regulated by the Financial Conduct Authority (FCA), with a capital of GBP £2,350,000, and whose registered office is at 20 Churchill Place, London E14 5HJ. State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 06353340988 - R.E.A. 1887090 and VAT number 06353340988 and whose office is at Via dei Bassi, 4 - 20121 Milano, Italy. T: 39 02 32066 100. F: 39 02 32066 155.


Netherlands: State Street Global Advisors Netherlands, Apollo Building, 7th floor Harkenborgweg 29 1101 CN Amsterdam, Netherlands. T: 31 20 718 781. SSAGA Netherlands is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.


United States: State Street Global Advisors, One Iron Street, Boston MA 02210. T: +1 617 782 3000.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor’s particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor. All material has been obtained from sources believed to be reliable. There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected. Investing involves risk including the risk of loss of principal. The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.