GUINNESS ATKINSON FUNDS

Guinness Atkinson
Asia Pacific Dividend Builder Fund
Review of August 2018

Summary Review & Outlook

Fund & Market

- The best-performing stocks in August were Yangzijiang Shipbuilding (+12.3%), Hanon Systems (+11.6%) and Corporate Travel Management (+10.1%). All three benefited from good recent results.
- Hanon Systems reported second quarter sales up 11% year-on-year, with a small (2%) decline in operating profit. Growth in new orders from several customers has allowed the company to continue to reduce its dependence on Hyundai Motor Group. We think the long-term outlook is excellent for the company, which is a key supplier of thermal management components and systems for both internal combustion engine and electric vehicles.
- We discuss Corporate Travel Management in detail later in this brief.
- The weakest performers were Li & Fung (–16.2%), AAC Technologies (–13.0%), and Janus Henderson (–13.0%).
- Li & Fung suffered after releasing disappointing results. The difficulties being faced by US retailers are leading to store closures and inventory de-stocking, which have harmed Li & Fung's core business. Management's strategy has been to slim down and refocus the business, and a planned IPO of its logistics business – a part of the company that is showing good growth – is further evidence of this process.
- AAC has struggled this year, but we attribute a large part of the underperformance to expectations having gone too far ahead of themselves. Results in the second quarter disappointed after the company faced foreign exchange headwinds and an adverse product mix. We expect the company's results to improve in the second half of 2018 on increased adoption of the company's products by Android manufacturers and as a result of the new iPhone launches.

Events in August

- Trade concerns continued to dominate the headlines. Tariffs on $16bn of Chinese goods were applied (in addition to the $34bn that was already affected). China responded by applying tariffs on US goods in an equal amount.
- President Trump upped the ante by threatening to increase proposed tariffs on an additional $200bn of Chinese imports from 10% to 25%.
- The Turkish lira continued to fall, heightening fears over inflation and the country's external debt balance.
- Concerns over contagion increased as a broad range of emerging market currencies weakened against the dollar. However, so far, severe economic difficulties have been largely confined to two countries: Turkey and Argentina.
- The Chinese yuan stabilized in the month, falling 0.3% against the dollar.
- The US reached agreement on a revised trade deal with Mexico. Talks with Canada ended without agreement.

Outlook

- Asian and emerging markets still offer attractive earnings growth compared to developed markets, while trading at reasonable valuations.
- Over the course of this year, the performance of developed and emerging markets has diverged, as concerns over trade have weighed more heavily on the latter.
- Most of the impact has been on sentiment, resulting in lower valuations in Asia. From a fundamentals perspective, the picture still looks attractive.
- At a time of uncertainty, we think that holding quality companies that have achieved consistently higher returns on capital is a sensible approach.

What's their edge?

This month, we review several of the stocks held in the portfolio. Our investment approach identifies companies with competitive advantages over their peers, which result in them producing consistently high returns on capital. But what are the competitive advantages our companies are able to exploit?

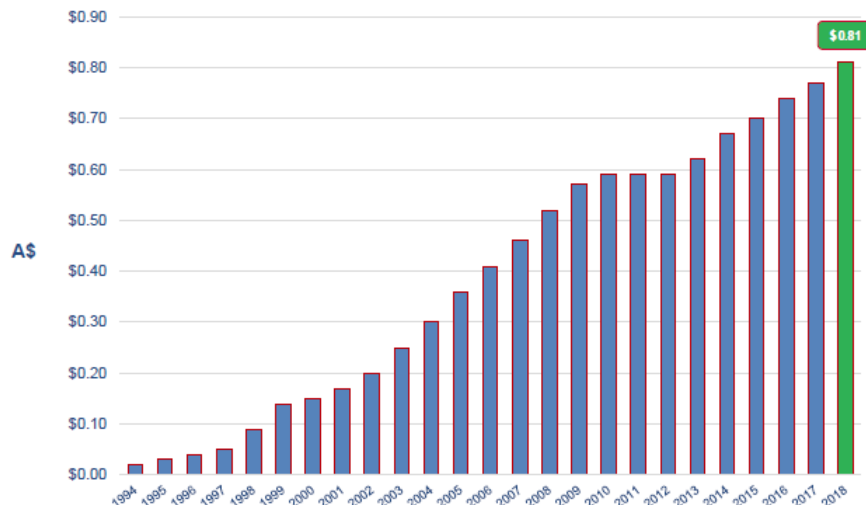
Standard economic theory would suggest that a company earning high returns on capital is likely to find its returns diminish as competitors enter the industry and take market share. But our companies have earned high returns persistently over time that have not been competed away. What is it about our companies that allows them to fend off the forces of competition?

We answer these questions for three of the companies we hold in the fund: Sonic Healthcare, Corporate Travel Management and Taiwan Semiconductor Manufacturing Company (TSMC).

Sonic Healthcare

Sonic Healthcare operates in the medical services business, running laboratories that perform diagnostic testing. The company recently reported full year results for the year ending June 30, 2018, during which it achieved an attractive combination of profitability and growth. Profit margins (measured by underlying EBITDA (earnings before tax, interest, depreciation and amortization)) were around 17%, and both revenues and underlying EBITDA grew at 8%. Both measures have also been quite consistent over time. Over the past twenty years, Sonic has been profitable each year and achieved high returns on capital. Growth has been more volatile, but looking at the growth in the dividend provides an indication of how the company has scaled over time:

Sonic Healthcare – dividends per share



Source: Company presentation

Growth is expected to continue next year, with management providing guidance of 5-7% growth in EBITDA (on a constant currency basis).

Sonic is certainly among the most consistent of the companies in our portfolio in its profitability and growth: the company has reliably achieved good results and has shown a pattern of moderate and steady growth.

How has Sonic been able to achieve this? Its business model is fairly straightforward. Pathology testing and diagnostic services is a fragmented market, with numerous small laboratories. Sonic has acquired many of these smaller labs and improves their operating efficiency by using the benefit of scale to reduce costs. For example, increasing the level of automation used in labs is one way the company has gone about achieving reductions in operating costs.

Over time, by making these acquisitions Sonic has diversified outside its home market, with pathology services in Australia now accounting for only one quarter of the company's revenue. Germany and USA are the next two largest countries for the company and account for 21% and 20% of 2018 revenues respectively. By diversifying away from operating in a single country, Sonic reduces the risk of being negatively affected by changes in healthcare regulations in any one country or changes to the prices it can charge for its services. While the company's results (reported in Australian dollars) are now more susceptible to currency movements, the currency risk to an international investor is more diversified.

Sonic has also benefitted from the trend for more complex diagnostic testing in healthcare which corresponds with higher prices for the company's services. For example, testing in genetics tends to attract higher prices (though it also incurs higher costs). Sonic also highlighted the example of a non-

invasive prenatal test for down syndrome that it offers around the world. By moving into the upper end of the market, the company is able to increase its pricing power.

Using this business model – making acquisitions (at reasonable prices) and expanding overseas while operating efficiently – the company has achieved high returns on investment and received consistent cash inflows. The cash is then used to support further acquisitions (in conjunction with modest levels of debt). A high level of profitability also supports the payment of a meaningful dividend that is sustainable over time (and can grow with the business).

It is this virtuous circle of receiving cash and reinvesting it in attractive opportunities that supports the growing dividend, ensuring that shareholders earn an attractive return from the company's endeavors.

It is worth considering the inverse situation for an acquisitive company. If Sonic were less profitable, or even loss-making, in order to continue to grow it would need to be far more dependent on issuing debt or equity. Issuing debt would cause the balance sheet to deteriorate and further reduce profitability as cash flows would be consumed by higher interest payments. At some point, future cashflows would need to be dedicated to paying down debt to bring the balance sheet back into shape. Issuing equity could dilute the returns to existing shareholders. And dividends, if there were any in a loss-making scenario, would not be sustainable for long. In any case, returns to shareholder would diminish.

Corporate Travel Management

Corporate Travel Management (CTM) is one of the more recent additions to our portfolio which we invested in early this year. The company provides travel services to corporations, allowing them to book and manage travel bookings for employees.

CTM also recently reported results for 2018 to June 30th. Similarly to Sonic Healthcare, CTM earns good profit margins and is growing, although in CTM's case the numbers are more impressive. Underlying EBITDA margin in 2018 was 34% and revenue growth was 14%. Underlying EBITDA growth was even higher at 28% for the year on a constant currency basis. A 20% increase in the dividend was also announced.

The difference in margins between Sonic and CTM is partly explained by the difference in industries: CTM is a technology company operating in the travel sector and so it clearly benefits from scale advantages: the more customers use the company's booking software, the better overall profitability (see below). The company is also relatively capital-light, accordingly earning returns on capital at a much higher level.

CTM is at an earlier stage in its lifecycle compared with Sonic, and able to grow more quickly. As with Sonic, its model is a combination of organic and acquisitive growth, expanding beyond its home country. Again, the market is fragmented, providing the opportunity for consolidation and increasing market share.

What, then, are the downsides that accompany these higher margins and faster growth? There are two main negatives. First, as might be expected, the company trades at a relatively high valuation – not excessive, in our view, given the growth potential, but high nonetheless. Accordingly, we expect less of our overall total return to come from multiple expansion, and more to come from earnings growth. (It's worth pointing out that Corporate Travel is at the upper end of the growth range that we typically target

– higher growth rates tend to be accompanied by either too great a level of uncertainty or a stock price that is too expensive.)

The second downside is that as with many technology-based business models, the company faces a relatively high risk of being disrupted by a competitor. So far, CTM has actually been the beneficiary of technological disruption. Part of the reason for the company's success is the software it has developed to allow its customers to make and amend travel bookings. This software reduces the company's reliance on human travel booking agents and plays a key role in allowing the company to improve margins in newly-acquired businesses. While technology provides the company with a competitive edge, it is important that CTM continues to invest in software development so that it can maintain a lead over competitors.

Aside from software, another factor that has contributed to CTM's success has been management's ability to drive efficiencies. The relentless focus on efficiency is crucial for offering its customers prices that are lower than those of competitors while still generating high margins. The founder, Jamie Pherous, plays an important role at the company as CEO and has shown an impressive ability to scale the top-line while keeping costs under control. Moreover, his interests are clearly aligned with shareholders, as he holds roughly 19% of the company.

And as with Sonic, one last factor in determining CTM's success has been the ability to acquire companies at good prices. After the acquisition and when expanding into new areas, management then focuses on increasing margins to the same level as the rest of the group. For example, the company has recently seen an increase in margins in the Asia region after rolling out its technology to local offices. North America is next to receive the same treatment, with a roll-out planned for later this year.

TSMC

TSMC also announced results recently, but it was an announcement from a competitor that is particularly relevant to understanding TSMC's competitive edge. GlobalFoundries, a semiconductor foundry like TSMC, announced that it was putting on hold its development of a 7 nanometer (7nm) process.

The 7nm process is the latest in semiconductor production capabilities that TSMC is in the process of ramping up. With one of the company's main competitors dropping out of the race, TSMC will potentially receive 100% of its customers' order allocations for newer chips.

TSMC has a history of operating at the leading edge of technology and has built its business around being a cutting-edge, independent semiconductor foundry. Semiconductor manufacturing is a scale business, requiring huge – and sustained – capital investment in order to stay at the forefront of innovation. Many competitors are simply unable to invest at the scale needed, as the GlobalFoundries example illustrates. As an indication of the levels required, the move by GlobalFoundries to effectively drop development of the 7nm process will save the company between $1.5-2bn in annual capital expenditure.

A recent Financial Times article quoted two Credit Suisse analysts that offer a similar assessment of the market dynamics:

"TSMC is potentially the primary beneficiary… as advanced technology investment grows too expensive for all but the leading industry players with most of the market share as advanced technology becomes more of a 'winner takes all' business," said Credit Suisse analysts Randy Abrams and Haas Liu.

Source: Financial Times – "GlobalFoundries' exit a boon for chipmaker TSMC"

Being independent is another crucial part of TSMC's business model. Samsung, who will be TSMC's main competitor in 7nm, is vertically integrated, meaning it is both a chipset designer and manufacturer. However, many of TSMC's customers (the 'fab-less' chipset designers, which lack a fabrication facility) would prefer not to give order allocations to Samsung because it is a competitor. The industry structure therefore also provides a key advantage to TSMC.

By maintaining its competitive edge, TSMC has been able to earn high margins and consequently high returns on capital. Moreover, in a typically cyclical industry, management has been able to maintain returns at a relatively stable level. As the business has grown significantly over the past 20 years, so returns to shareholder have been very impressive. We think that the recent strengthening of the company's competitive positioning will help to sustain shareholder returns in future.

Summary and conclusion

Companies that are consistently profitable and earn high returns on capital have several advantages. They can often afford to pay out some of the cash they generate as a dividend, while retaining some for future investment. They often have profitable lines of business to invest in which create value for shareholders and allow the dividend to grow over time. They can often self-fund, with less reliance on issuing debt or equity. They have also typically demonstrated an ability to withstand competitive forces and to perform through the business cycle.

We expect some of our overall total returns to come from dividends and some to come from earnings growth (and thus dividend growth) – these factors being a direct results of a company's financial results over time. We also expect some of our return to come from the market; by investing in quality companies when they are trading at attractive valuations, we expect the multiples to re-rate upwards over time, boosting our returns.

By understanding how a business has achieved high returns on capital, we can better assess its prospects for continuing to do so in future (a feat upon which the valuation, and our investment case, hang). Provided the economic conditions which the business faces have not changed, and the company maintains its competitive positioning, we believe it is very likely to continue to earn high returns in future. That is why we repeat our belief that at times when the market is signaling a high level of uncertainty, holding quality companies is a sensible approach.

Edmund Harriss and **Mark Hammonds** (portfolio managers)
Sharukh Malik (analyst)

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Performance

After recovering strongly in July, the MSCI AC Pacific ex Japan Index declined in August, falling 1.31% in USD terms. The fund again outperformed, falling only 0.30%. The outperformance over the past two months puts the fund 0.39% ahead of the benchmark over the year to August 31, 2018.

As of 8/31/2018	YTD	1 Year	3 Year	5 Year	10 Year
Asia Pacific Dividend Builder Fund (GAADX)	-3.85%	1.51%	12.64%	8.38%	5.85%
MSCI AC Pacific ex Japan Index	-4.24%	3.23%	13.73%	7.42%	7.08%

All returns over 1 year annualized. *Source: Bloomberg, Guinness Atkinson Asset Management*.

Expense Ratio: 1.12% (net); 3.48% (gross)

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 800-915-6566 and/or visiting www.gafunds.com. Performance data does not reflect the 2% redemption fee for shares held less than 30 days and, if deducted the fee would reduce the performance noted. Total returns reflect a fee waiver in effect and in the absence of this waiver, total returns would be lower.

The Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectus contains this and other important information about the investment company, and it may be obtained by calling 800-915-6566 or visiting gafunds.com. Read it carefully before investing.

Investments in foreign securities involve greater volatility, political, economic and currency risks and differences in accounting methods. These risks are greater for emerging markets countries. Non-diversified funds concentrate assets in fewer holdings than diversified funds. Therefore, non-diversified funds are more exposed to individual stock volatility than diversified funds. Investments in debt securities typically decrease in value when interest rates rise, which can be greater for longer-term debt securities. Investments in derivatives involve risks different from, and in certain cases, greater than the risks presented by traditional investments. Investments in smaller companies involve additional risks

such as limited liquidity and greater volatility. Funds concentrated in a specific sector or geographic region may be subject to more volatility than a more diversified investment. Investments focused in a single geographic region may be exposed to greater risk than investments diversified among various geographies. Investments focused on the energy sector may be exposed to greater risk than investments diversified among various sectors.

MSCI AC Pacific Ex-Japan Index is a market capitalization weighted index that monitors the performance of stocks from the Pacific region, excluding Japan consisting of Australia, China, Hong Kong, Indonesia, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, and Thailand.

One cannot invest directly in an Index.

Price/Earnings Ratio (P/E) is an equity valuation multiple. It is defined as market price per share divided by annual earnings per share.

Payout ratio refers to the proportion of company profits paid out to shareholders as a dividend.

The trade surplus is the difference between the value of a country's exports and imports. The current account surplus adds income and remittances to the trade surplus.

Opinions expressed are subject to change, are not a guarantee and should not be considered investment advice. Past performance is not indicative of future results.

Top Fund Holdings as of 08/31/18:

1	Public Bank Bhd	3.20%
2	Corporate Travel Management Ltd	3.18%
3	Taiwan Semiconductor Manufacturing Co Ltd	3.15%
4	BOC Hong Kong Holdings Ltd	2.98%
5	PTT PCL /Foreign	2.91%
6	Asustek Computer Inc	2.91%
7	The Link REIT	2.87%
8	Catcher Technology Co Ltd	2.87%
9	China Merchants Bank Co Ltd - H Shares	2.86%
10	Delta Electronics Thailand PCL /Foreign	2.85%

Fund holdings and sector allocations are subject to change and are not recommendations to buy or sell any security.

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