

**GUINNESS  
ATKINSON**

F U N D S

INVESTING IN HUMAN PROGRESS



# 10 OVER 10 DIVIDEND<sup>TM</sup> INVESTMENT STRATEGY

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*Fund Co-managers*



I N V E S T M E N T   R E S E A R C H   S E R I E S

# 1 . I N T R O D U C T I O N

The aim of this paper is to introduce the investment process which underpins the Guinness Atkinson Dividend Builder Fund\*.

Although this fund is designed to invest in dividend paying companies, we do not start by screening for companies with a high yield. Instead, our starting point is to screen for high quality companies that have generated top quartile returns on capital consistently over the previous 10 years. We call this our 10 over 10 methodology.

Only then do we analyze this smaller sample (around 300 companies) for companies with the ability to pay a healthy and preferably growing dividend. With this approach, we avoid the temptation to simply trawl the market for high yielding companies which are potentially higher risk.

**Our starting point is to screen for high quality companies that have generated top quartile returns on capital consistently over the previous 10 years. We call this our 10 over 10™ methodology.**

We carefully select companies that are best placed to continue to earn consistently high returns on capital, that can continue to grow their free cash flow and that have a robust history of returning that cash to shareholders. We create a balanced portfolio across sectors and geographies which will provide our investors with a steady dividend distribution, together with the potential for capital appreciation over the longer term. The diagram in Figure 1 illustrates the main steps involved in our investment process which allows us to assess the 14,000+ companies in the global equity universe and select just 30-40 for inclusion in the fund portfolio. In the rest of this paper we discuss each step in detail and describe the reasoning behind, and consequences of, each one.

\* This fund was previously named the Guinness Atkinson Inflation Managed Dividend Fund

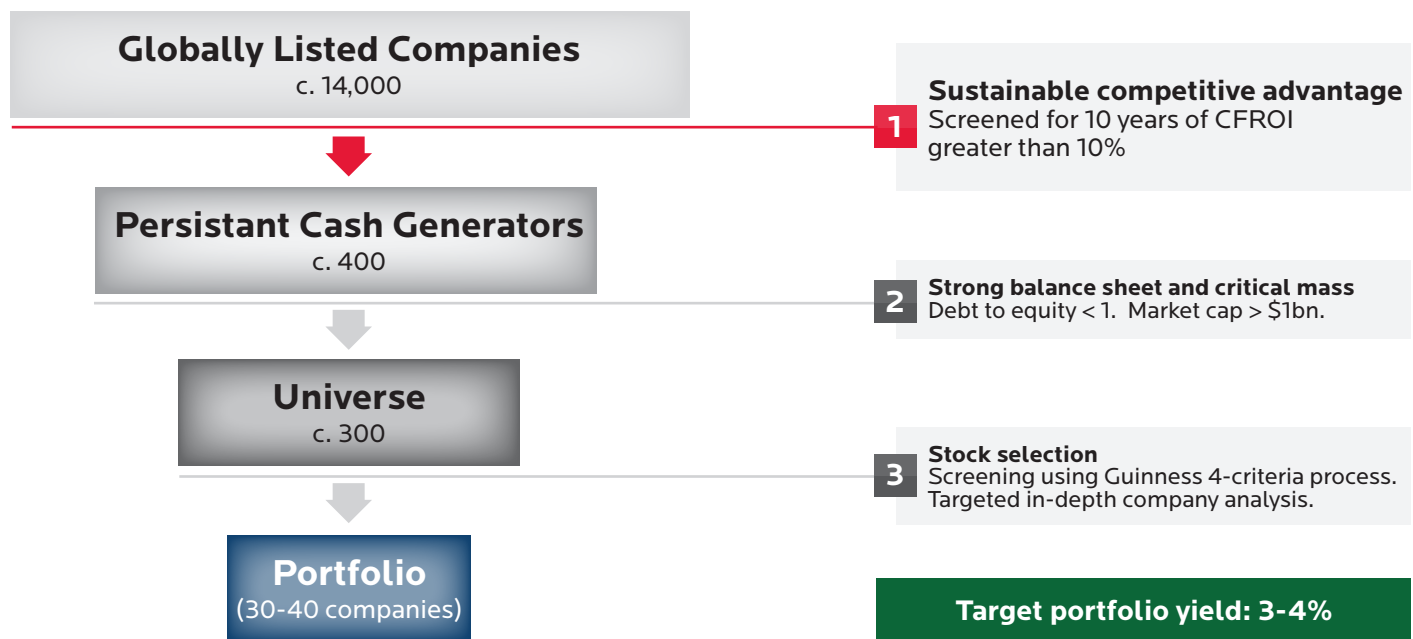


Figure 1: Overview of investment process

CFROI stands for Cash Flow Return on Investment & is explored in detail in the section below.

## 2. DEFINING THE UNIVERSE

How we define our investable universe of companies is a key part of our investment process. This is where we try to narrow down the global universe of companies to a small investable subset which all share the following characteristics:

### 1. Sustainable competitive advantage

A proven track record of generating high real returns on capital consistently over a 10 year period. (Our 10 over 10 methodology.)

### 2. Strong balance sheet

We want to avoid companies with large amounts of debt on the balance sheet. We prefer companies that have managed to finance their growth without resorting to excessive external financing. We are, after all, looking for companies that are stable cash generators whose priority is to return cash to shareholders rather than using it to de-lever an over stretched balance sheet.

**The first step is to look for companies which consistently earn high real returns on capital and therefore, which we think, have a sustainable competitive advantage.**

### 3. Critical mass

Companies must have a market capitalization<sup>1</sup> greater than \$1billion. We do not want to invest in higher risk, small capitalization companies. Companies smaller than \$1 billion are not only potentially more exposed to economic shocks but also less likely to pay steady dividends.

<sup>1</sup>Market Capitalization is the total market value of all outstanding shares



## Sustainable competitive advantage

The first step is to look for companies which consistently earn high real returns on capital and therefore, which we think, have a sustainable competitive advantage. We do this by screening to identify only those companies that have achieved an inflation adjusted cash flow return on investment (CFROI) of greater than 10% every year for the previous 10 years. There are four key elements to this screening process:

**a. Why do we use CFROI?**

**b. Why must the CFROI be greater than 10%?**

**c. Why do we look at a period of 10 years?**

**d. Why must a company achieve a CFROI greater than 10% every discrete year?**

### (a) Why do we use CFROI ?

There are various metrics that we could have used that seek to define a company's return on capital such as Return on Equity (ROE), but in our view, CFROI is the most robust metric. The real advantage of CFROI compared to ROE is the fact that we can compare companies in different countries on a truly like for like basis. There are two main elements to this:

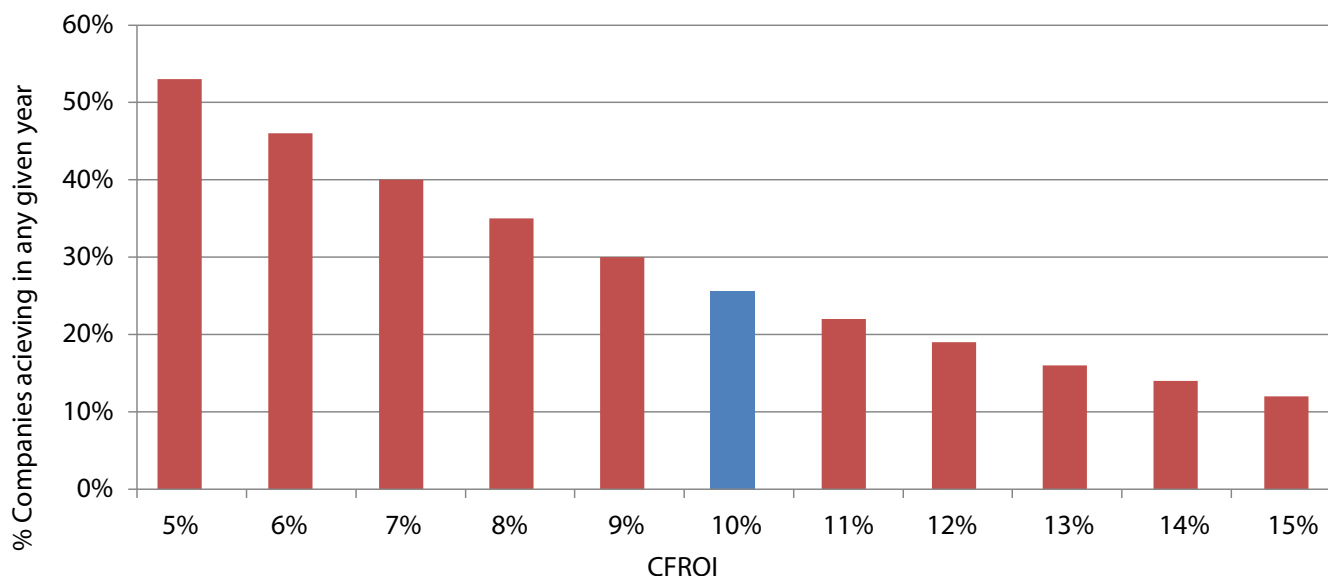
1. Different accounting standards around the world can influence the calculation of metrics, such as ROE, such that if a company reported its results according to two different accounting standards the calculation of ROE would not necessarily be the same under both standards. This makes it hard to directly compare the true earnings potential of a company say in Hong Kong with a company in the US. The CFROI metric takes into account different accounting standards around the world and normalizes them all to a common standard, so we can compare CFROI from companies in different geographies.

2. ROE is calculated on a nominal basis, which means different inflation rates affect their calculation. A company reporting its earnings in a high inflation currency can lead to ROE being higher than the real earnings power of the company. CFROI adjusts for these different inflation rates and allows us to look at the true profitability of a company on a real (before inflation) basis.

### (b) Why must the CFROI be greater than 10%?

The chart below shows the average proportion of companies which, over the last 20 years, have achieved a minimum CFROI level in any one year.

Figure 2: Average proportion of companies achieving a minimum CFROI level in any one year  
Source: Guinness Atkinson Asset Management



As can be seen from the chart, by applying a cutoff of 10% we are only looking at those companies that achieve top quartile real returns on capital. We are therefore only identifying high achievers.

10% also represents approximately twice the average real cost of capital under the CFROI model and as such we can be confident that if a company is generating real returns on capital higher than 10% they will be creating value for shareholders.

### (c) Why do we look at a period of 10 years?

Since 1854 there have been 33 business cycles in the US. The majority of these business cycles have lasted between 2 and 6 years – as can be seen in Figure 3. Therefore, by using a period of ten years in our initial screening process we can be sure that the companies we have identified have managed to maintain high levels of return on investment through both an economic expansion and contraction. We want to invest in strong companies that have demonstrated their ability to weather fluctuations in the global economy.

Length of Cycle	Occurrences
> 10 years	1
8-10 years	3
6-8 years	4
4-6 years	6
2-4 years	19
<b>Total # of cycles (1854 - 2009)</b>	<b>33</b>

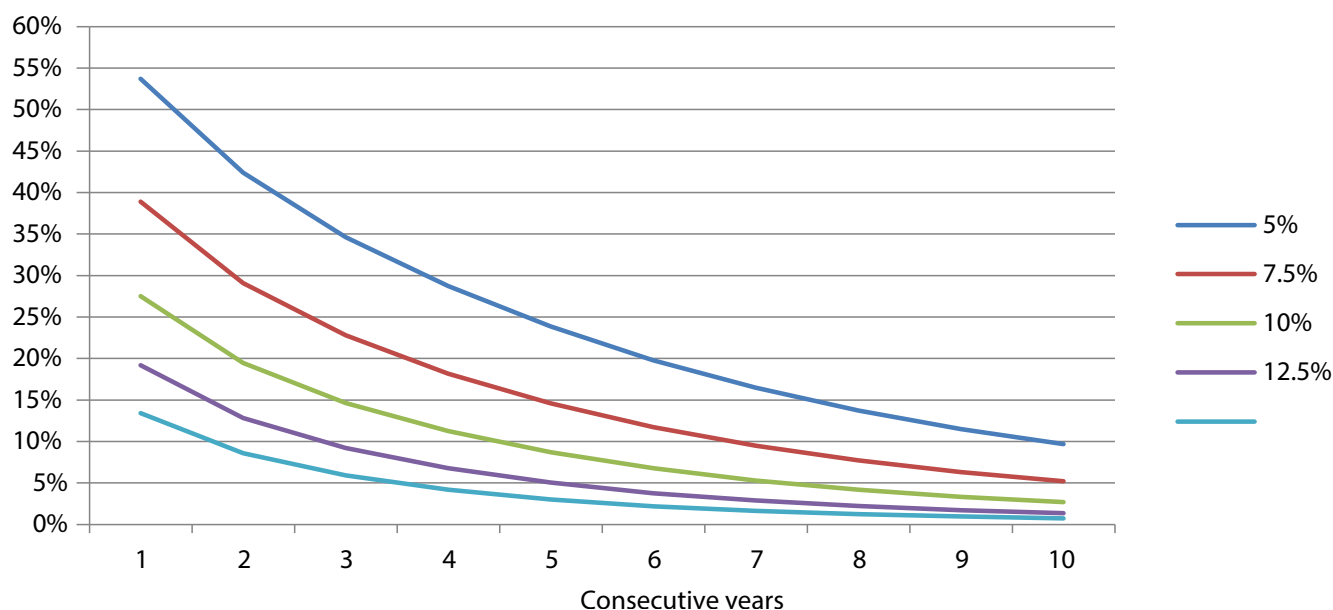
Figure 3: US business cycles 1854-2008  
Source: NBER

### (d) Why must a company achieve a CFROI greater than 10% every discrete year?

This is perhaps the hardest hurdle for companies to jump for inclusion into our universe. Historically, only 3% of globally listed companies achieve ten consecutive years of CFROI greater than 10%, as the chart in Figure 4 shows. This equates to around 400 companies out of an initial pool of c. 14,000.

2 Average real cost of capital of 5-6%

Figure 4: Proportion of global companies achieving consecutive years of CFROI of greater than 10%  
Source: Guinness Atkinson Asset Management



If we softened our selection criteria and instead used the constraint that companies needed only to achieve an average CFROI of greater than 10% over a ten year period, then we would run the risk of including highly cyclical companies whose returns on capital swing wildly from year to year, but on average remain high. We would also run the risk of including companies where the CFROI was historically very high but had started to decline in recent years. Similarly, we could have employed the constraint of achieving a CFROI greater than 10% in 'x' out of the last 10 years, but this method would suffer from similar issues.

**We end up with a small subset of around 300 companies; all of which have consistently earned high returns on capital through an economic cycle and which we believe are good contenders for continuing this trend in the future.**

By applying all these constraints, we end up with a small subset of around 300 companies; all of which have consistently earned high returns on capital through an economic cycle and which we believe are good contenders for continuing this trend in the future. In summary, we see a number of trends. Firstly, the number of companies that meet our criteria has been increasing steadily, with a total of 105 companies in 2000 and 325 in 2011. The sector breakdown has remained fairly constant over time, with the exception of financials in 2010, where many dropped out of our universe after failing to achieve a CFROI greater than 10%. In broad terms the majority of sectors are well represented, allowing us to create a well balanced portfolio, but the sectors that are more cyclical in nature (energy, materials) have a much lower weighting, as do utilities which are often unable to achieve decent returns on capital due to imposed pricing constraints. In terms of size, historically just over 50% of companies in our investment universe have had a market capitalization less than \$10 billion, and at least 80% are less than \$50 billion in size.

### **Strong balance sheet and critical mass**

We then assess the balance sheet of each company in order to avoid any companies that have used excessive leverage to achieve high returns on capital, which may not be sustainable in the future. To do this we simply screen out companies that have a debt to equity ratio of greater than 1. Finally, we only select companies with a market capitalization of greater than \$1 billion, as we want to avoid higher risk small capitalization stocks.

### 3. UNIVERSE CHARACTERISTICS

We have applied these constraints historically since 2000, and the following charts show how the universe of companies meeting these criteria has evolved.

#### (i) Number of companies in investment universe

The number of companies meeting the criteria of our investment universe has steadily increased over time. We see a fairly rapid rise in the number of companies meeting our criteria from 2001 to 2007, as this was a period of relatively strong economic growth with particularly rapid growth in emerging markets. The financial crisis that began in 2007 caused a number of companies to fall out of the universe in 2009, but the growth in size has continued in 2010 and 2011.

The year over year (Y-O-Y) turnover of the universe (that is, the proportion of companies that drop out in any given year) has been 14% on average, including the spike in 2009. The spike that appeared in

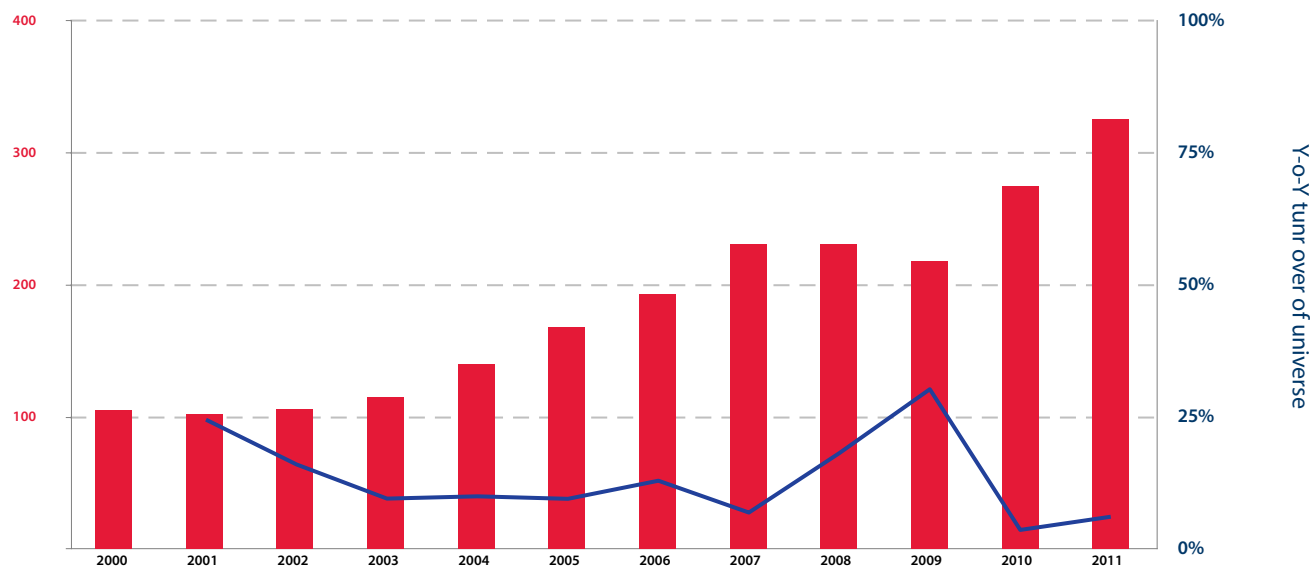
2009 was largely due to companies failing on the Debt to Equity less than 1 test rather than the CFROI >10% test. In fact, if we look at the proportion of companies that fall out in any given year due to failing the CFROI >10% test, the average fall out is 5% over the 2000 to 2011 period.

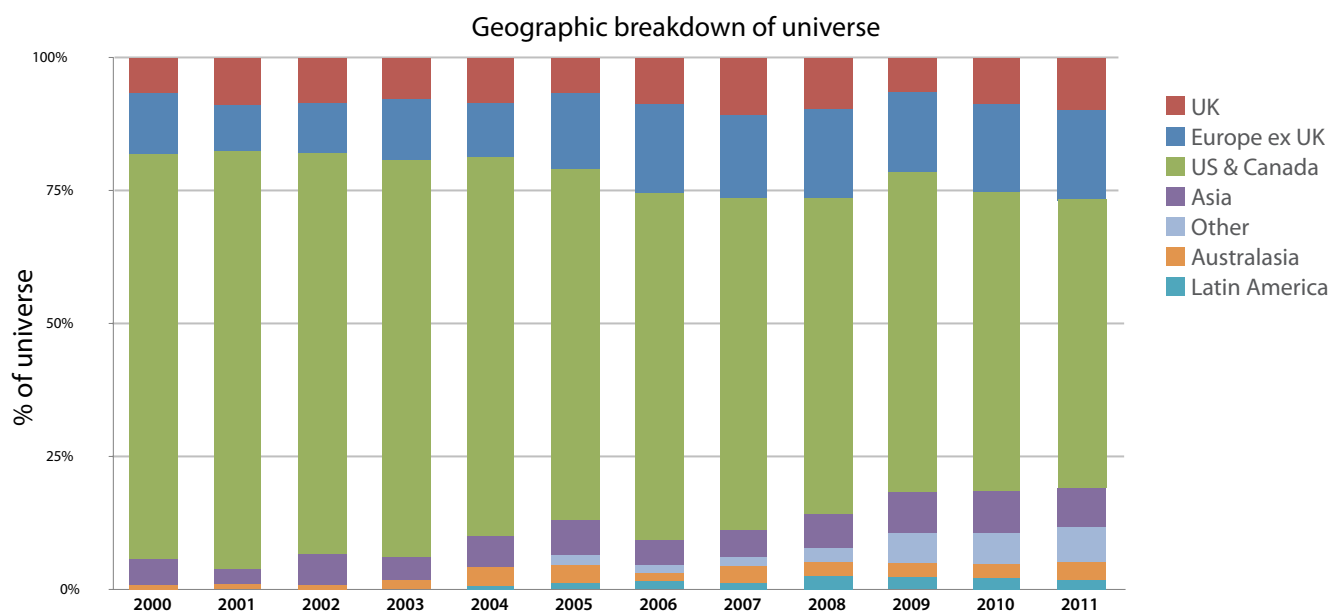
#### (ii) Distribution of country of domicile of companies in investment universe

Perhaps the most interesting analysis is that which investigates the breakdown of country of domicile over time. When we look at our investment universe broken down this way three trends become clear; firstly, the percentage of companies from the UK and Europe have been relatively stable over the past ten years; secondly, North American companies made up 70% of the universe in 2001 but make up only 45% today; and thirdly, Asian and other emerging market companies that meet our criteria have been increasing in number quite rapidly over the last ten years. The emergence of more and more high quality emerging market companies is a trend we expect to continue.

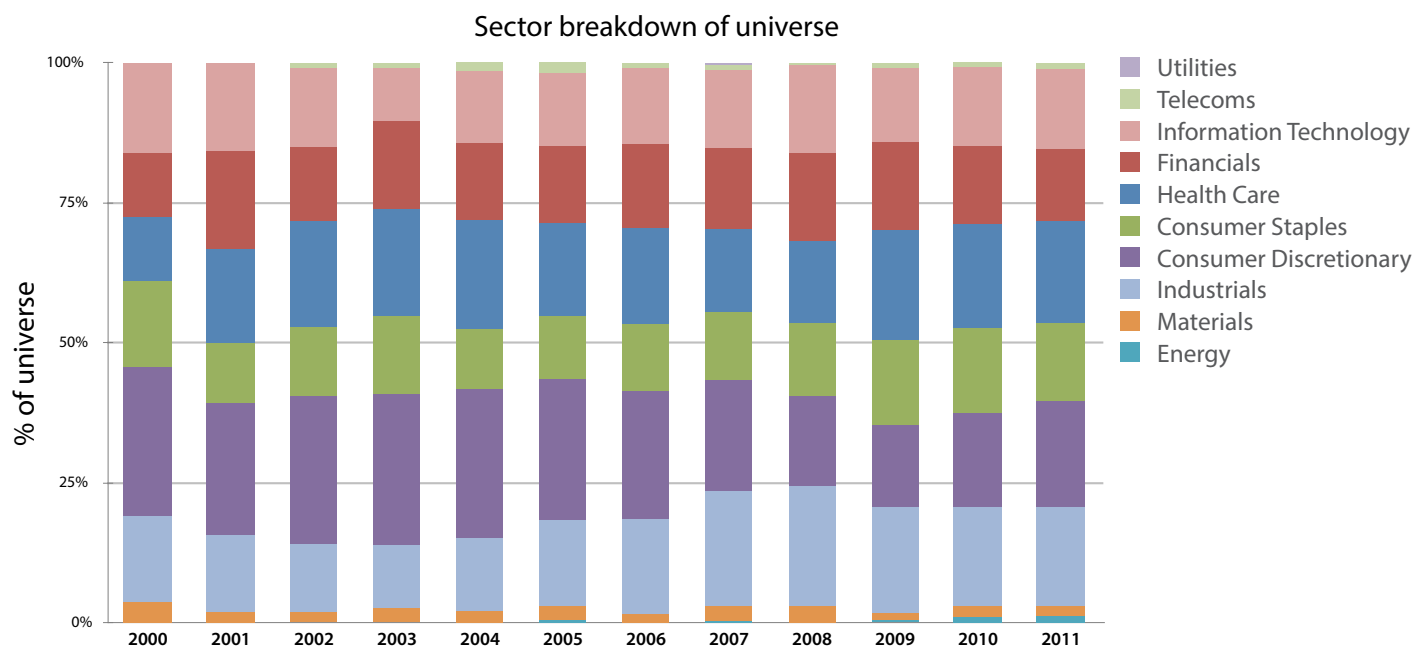
Figure 5: Number of companies meeting criteria for investment universe over time

Source: Guinness Atkinson Asset Management





*Figure 6: Distribution of domicile for investment universe over time*  
Source: Guinness Atkinson Asset Management, Bloomberg



*Figure 7: Breakdown of sector distribution within investment universe over time*  
Source: Guinness Atkinson Asset Management, Bloomberg



### (iii) Sector breakdown

When we look at the sector breakdown, we see a steady and diverse distribution across different sectors, including cyclical sectors such as IT and Financials. The process does tend to exclude more companies in highly cyclical sectors, such as Energy and Materials, where fluctuations in commodity prices lead to volatile returns on capital. It also excludes more companies in regulated industries, such as Utilities and Telecoms, whereby these companies are not allowed to consistently achieve top quartile returns on capital.

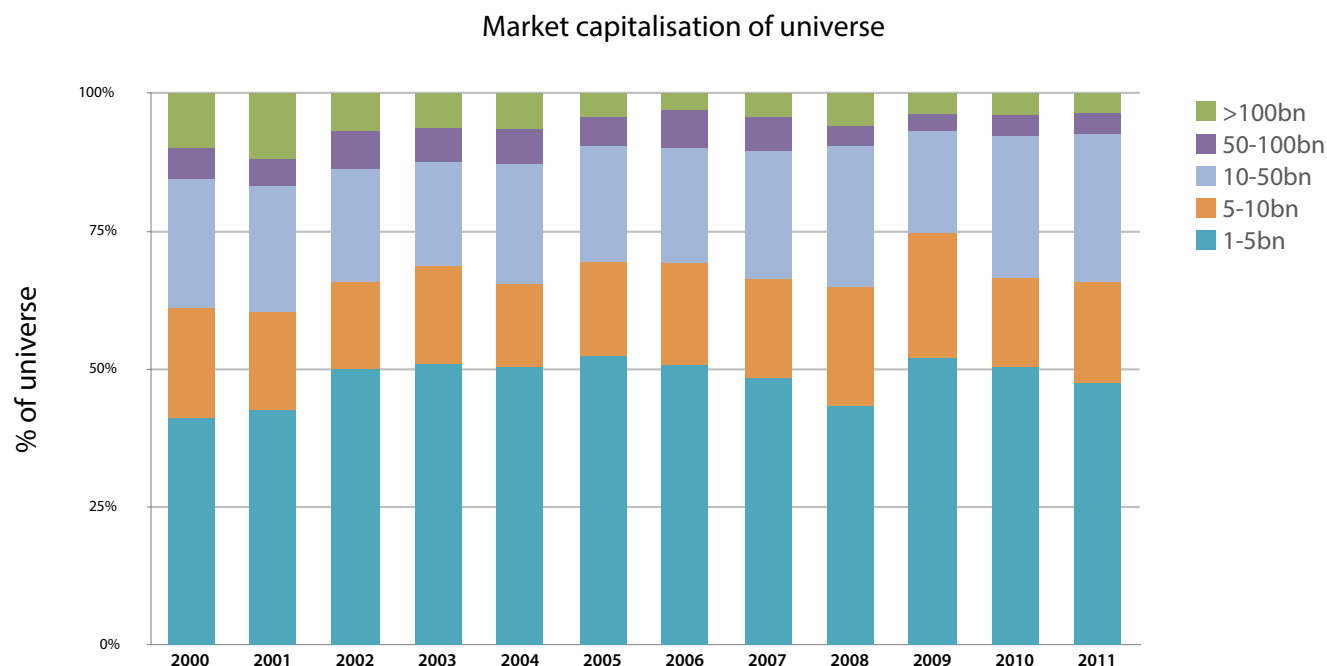
### (iv) Market capitalization breakdown

One might expect that our strict criteria for entry to the investment universe might result in a bias towards large capitalization companies which appear most able to weather the ups and downs of the market over a ten year period. However, as we show in Figure 8, the majority of companies each year have a market capitalization less than \$10 billion, and at least 80% are less than \$50 billion in size.

### (v) Dividend breakdown

Our screening process deliberately avoids any inclusion of dividend yield in the initial stages, but the universe we create by screening for consistent, high quality companies provides an abundance of dividend paying companies. Companies that are consistently earnings top quartile returns on capital are likely to be generating significant amounts of cash and therefore are well placed to pay a dividend. Figure 9 shows the dividend yield breakdown of the universe over the past 11 years. However, we don't just look for companies with a high absolute yield - we focus on those companies that have the ability to grow their dividends year on year.

*Figure 8: Distribution of market capitalizations in investment universe over time*  
Source: Guinness Atkinson Asset Management



Yield breakdown of universe

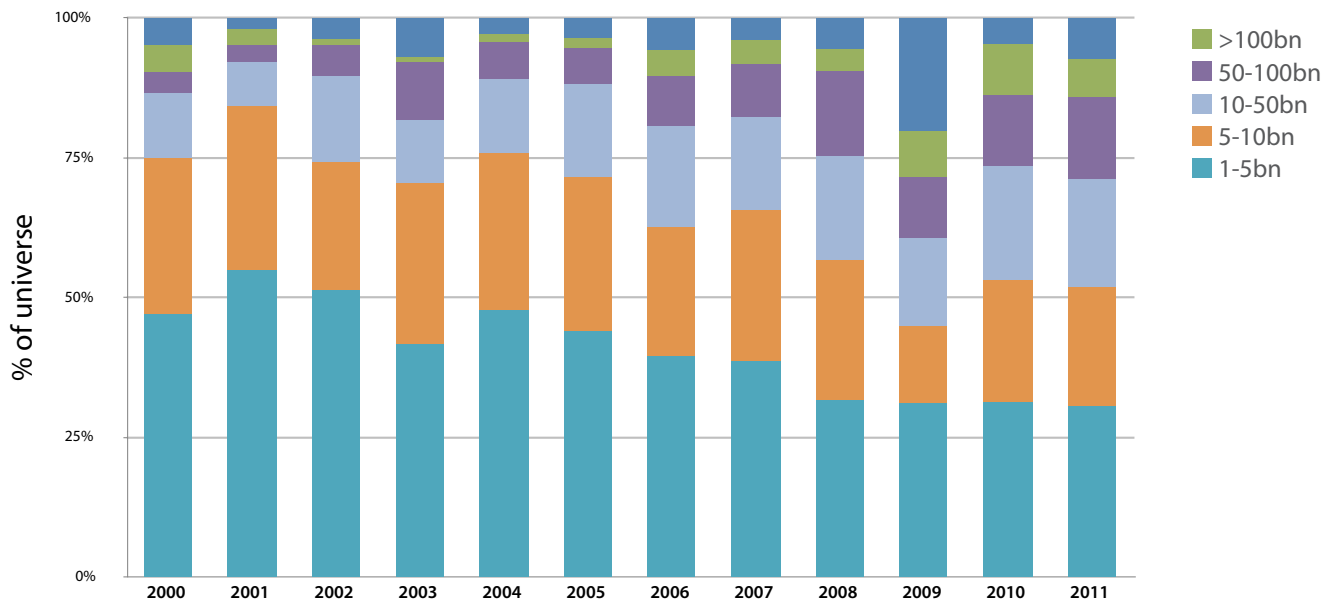


Figure 9: Dividend yield breakdown of investment universe over time  
Source: Guinness Atkinson Asset Management, Bloomberg

#### 4. IDEA GENERATION USING FOUR CRITERIA SCREENING

Once we have identified the select band of companies that meet our rigorous criteria, we then have to further identify which of those companies are (a) undervalued, and (b) have the potential to reverse that undervaluation in the near future. Or vice versa, companies we own in the fund that are now overvalued and should be sold must be identified.

Here our starting point is to analyze all stocks in our investment universe against four fundamental criteria that encapsulate both long-term and short-term drivers of share prices. This approach is employed company wide, with all Guinness Atkinson Asset Management funds using the same methodology to effectively rank the companies in their respective universes and prioritize the due diligence process. The four criteria we use are:

##### 1. Quality

Measured by reference to a company's past and projected returns on investment (ROI). We consider

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the higher the average ROI, the better the company. By looking at projected ROI, this criteria also allows forward looking estimates to be made and gives an indication of the potential future direction.

##### 2. Value

Measured by comparing the current market valuation with a valuation derived from a discounted cash flow from existing and future investments. Is the

company cheap or expensive based on its predicted cash flows in the future?

### 3. Earnings trends

Analyzed over the short term to gauge changes in market attitude about a given company's prospects. Here we look at analysts' consensus estimates for the companies' earnings to see whether those estimates have been trending upwards or downwards over time.

### 4. Price momentum

Measures relative market performance over 3, 6 and 12 months. Different from strict technical analysis, price momentum can indicate market sentiment and helps us time purchases and sales.

By ranking companies using these 4 criteria, we can sift through the data to prioritize candidates for extended due diligence, testing and research. This ranking approach is not a 'black box' exercise; we do not blindly follow the output of the data. We use this approach as much to generate ideas for the fund as we do to select specific candidates for purchase

or sale: which sectors are higher up the table, which companies have been moving up or down over time, where do our current portfolio of companies sit in relation to the rest of the universe? We perform this ranking exercise on a weekly basis to incorporate all the latest data and make sure we are aware of how the valuations of our universe of companies is changing in relation to market movements. We think the process is unbiased, repeatable and scalable, and by narrowing and defining the list of candidates for

potential purchase, we can focus our detailed stock research efforts where it is most warranted.

### 5. STOCK SELECTION

All our ideas for identifying candidates for further due diligence are generated in-house using the process outlined above. We use brokers for information, data and company access, but we are not influenced by their Buy and Sell ratings. We run our metrics weekly to identify companies that warrant further due diligence and analysis.

Having identified candidates for further due diligence, we subject all potential investments to detailed fundamental analysis. Above all, we want to understand what competitive advantages or barriers

to entry are sustaining a company's return on investment in order to determine whether the returns will persist. By modeling companies, we seek to identify the assumptions that lead to consensus earnings estimates and then consider if they are realistic in light of the margins and growth neces-

sary to achieve them. We pay particular attention to historical sources and uses of cash. We want to understand a company's dividend policy and be comfortable with the sustainability of its dividend and its dividend growth rate. We want to understand its capital budgeting policy and see evidence of its execution.

Having considered the above factors, we then consider value. We are value biased, and we do not like

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to pay up for uncertain future growth. We like to see companies offering value relative to their sector, to their historic valuations and in absolute terms.

We also spend time understanding macro factors and consider our holdings in light of our macro outlook. While we focus mainly on a bottom-up approach, our macro outlook is an important consideration for our portfolio construction and sector allocation decisions.

## 6. PORTFOLIO CONSTRUCTION

The Fund is fairly concentrated and will own approximately 30-40 stocks (typically 35) at any one time. We aim to run an equally weighted portfolio so each company held represents the same proportion of the net asset value. We think this provides a number of useful attributes to the fund; It reduces stock-specific risk as we cannot be 'overweight' in a small number of favorite securities. We cannot run a portfolio with a long tail of small holdings, which can be a distraction and drag on performance. It instills a strong sell discipline, as we must sell a

position in order to make way for any new positions. This also provides an additional benefit, in that we, as managers, must constantly assess the companies we own in the portfolio in comparison to the rest of the universe available to us. We are truly index independent—we are unconcerned by the weightings of the benchmark index as we cannot adjust the fund weightings beyond the set limits defined by the equal weighting.

## 7. SUMMARY

Our aim is to give investors the ability to invest in a good value, well diversified, high conviction, equally weighted, low turnover portfolio that provides a moderate and growing income over time. We think our strict quantitative screening process identifies those few companies worldwide who have achieved above average returns on capital through the good times and the bad, and, through active management, we are able to further sift through those companies to select only those that we think offer good upside potential and that could create a portfolio with an above market income return.

## ABOUT THE FUND MANAGERS



### DR. IAN MORTIMER

Co-manager

Joined Guinness Atkinson Asset Management in 2006.

Ian graduated from the University of London in 2003 with a First Class Honors Masters degree in Physics. He then completed a Doctorate in Physics from the University of Oxford in 2006.



### MATTHEW PAGE, CFA

Co-manager

Joined Guinness Atkinson Asset Management in 2005

Matthew graduated from New College, University of Oxford, with a Masters degree in Physics.

Matthew worked at Goldman Sachs before joining Guinness Atkinson.

**Mutual fund investing involves risk and loss of principal is possible. 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. The Fund also invests in smaller companies, which will involve additional risks such as limited liquidity and greater volatility. The Fund may invest in derivatives which involves risks different from, and in certain cases, greater than the risks presented by traditional investments.**

*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](http://gafunds.com). Read it carefully before investing.*

Opinions expressed are those of Guinness Atkinson Funds, are subject to change, are not guaranteed and should not be considered investment advice.

Current and future portfolio holdings are subject to risk.

**Past performance is no guarantee of future results.**

Diversification does not assure a profit nor protect against loss in a declining market.

Cash Flow Return on Investment (CFROI\*) is a valuation model that assumes the stock market sets prices on cash flow, not on corporate earnings. It is determined by dividing a company's gross cash flow by its gross investment.

'Return On Investment - ROI' is a performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. To calculate ROI, the benefit (return) of an investment is divided by the cost of the investment; the result is expressed as a percentage or a ratio.

Debt to Equity Ratio is a measure of a company's financial leverage calculated by dividing its total liabilities by stockholders' equity. It indicates what proportion of equity and debt the company is using to finance its assets.

Return on Equity (ROE) is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is expressed as a percentage and calculated as:  $\text{Net Income} / \text{Shareholder's Equity}$

Return on Invested Capital (ROIC) is a calculation used to assess a company's efficiency at allocating the capital under its control to profitable investments. ROIC gives a sense of how well a company is using its money to generate returns. The general equation for ROIC is as follows:  $\text{Net Income} - \text{Dividends} / \text{Total Capital}$

\*CFROI is a proprietary metric prepared by HOLT, a division of Credit Suisse. CFROI is a registered trademark of Credit Suisse AG or its affiliates in the United States and other countries. For more information on HOLT, a corporate performance and valuation advisory service of Credit Suisse, please visit their website at [https://www.credit-suisse.com/investment\\_banking/holt/en/index.jsp](https://www.credit-suisse.com/investment_banking/holt/en/index.jsp)

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