Guinness Global Energy Fund

February 2017

GUINNESS ASSET MANAGEMENT LTD

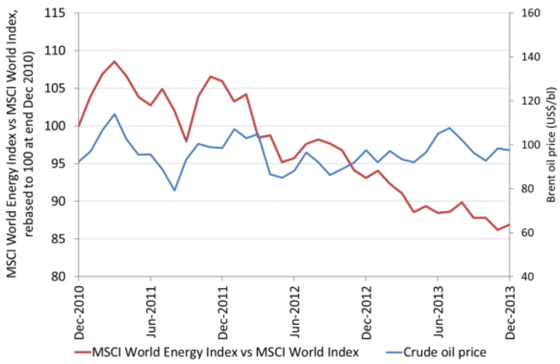
It's about return on capital as much as it is about the oil price

The energy sector is close to a cyclical low in terms of oil prices and profitability. Underlying profitability is starting to improve as a result of standardisation, efficiencies and technology plus cyclical cost deflation and we believe that return on capital employed (ROCE) will move back to long run average levels. If long term relationships hold true, energy equities will re-rate as ROCE normalises and the Guinness Energy portfolio has in excess of 30% upside if ROCE returns to mid-range levels.

Energy sector started to underperform well before the oil price collapsed

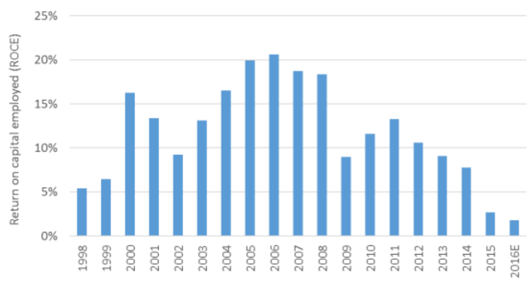
The oil price is often considered to be the largest driver of energy sector equity performance. While it is obviously a key factor, it is important to note that the energy sector underperformed broad markets for around 3 years from late 2010 until late 2013 despite oil prices remaining stubbornly at around $100/bl. So what caused the energy sector de-rating over this period? The view expressed in this note was that it was because return on capital employed (ROCE) metrics deteriorated.

Energy equities de-rating before oil price fall



Source: Bloomberg

ROCE of Guinness Energy Fund equities 1998-2016



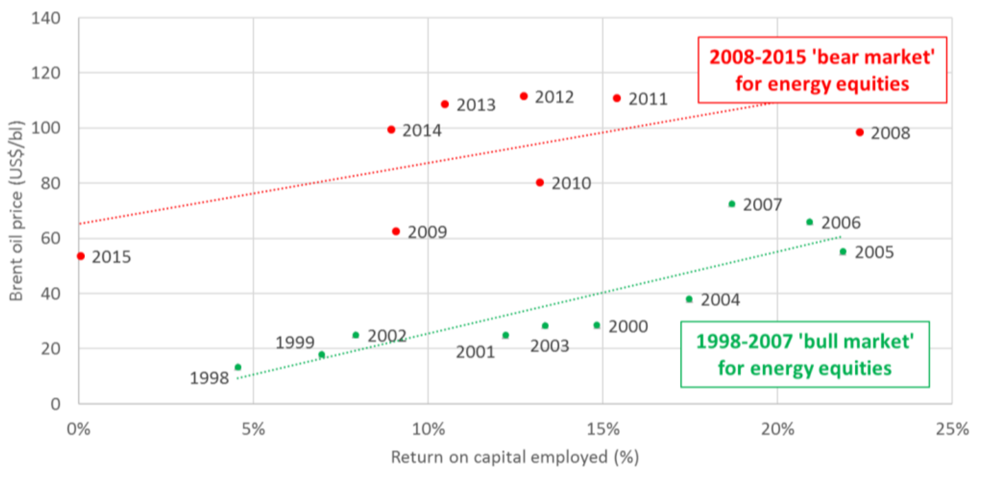
Source: Bloomberg, Company Data. Analysis includes all 'full position' holdings in the December 2016 Guinness Global Energy Fund and assumes they were held constant over the period

ROCE started to erode relative to the oil price after the 2008 crisis

The energy sector's underlying profitability started to fall at the end of the 2008/09 global financial crisis, when the companies increasingly found themselves forced to surrender part of their returns to a combination of governments, labour and third party service providers. This resulted in the companies requiring an increasingly higher level of oil price to deliver a steady level of ROCE in the subsequent years. Looking back over the whole cycle since 1998, as the next chart shows, the relationship between ROCE and the oil price was remarkably different in two periods: notably between the energy equity 'bull market' of 1998-2007 (when energy equities performed strongly) and subsequently the energy equity 'bear market' of 2008-2015 (when energy equities performed poorly). The difference between the two periods was that in the 'bear market' period oil companies required a much higher oil price to deliver the same ROCE that they used to deliver in 'bull market'.

The chart below clearly shows the sizeable shift in the relationship which was caused by capital and operating cost inflation, tax increases and balance sheets swelling (with low return on capital assets) as the companies invested heavily to deliver future growth. It is quite a thought that, on average, the industry required a $60/bl higher oil price in the 2008-2015 period than it did in the 1998-2007 period to deliver the same level of ROCE.

Large-cap oil companies' ROCE vs oil price (1998-2015)



Source: Bloomberg; data set comprises Exxon, Chevron, Hess, Occidental, Murphy, ConocoPhillips, Marathon Oil, BP and Royal Dutch Shell

The Guinness Energy portfolio was not immune from this effect, as shown below, with ROCE falling from 18% in 2008 (at a $100/bl oil price) to only 2.7% in 2015 (at a $54/bl oil price). We see reason to believe that underlying profitability has improved in the recent period, however, noting that ROCE fell only 0.6% (to 2.1%) in 2016 despite average oil prices falling a further $9/bl relative to 2015.

Historic ROCE of the current Guinness Global Energy Fund holdings

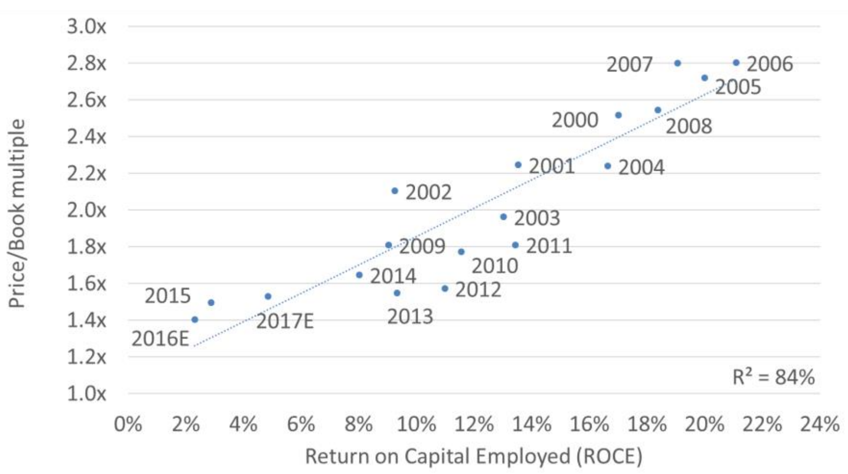
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ROCE	13.10%	16.50%	20.00%	20.60%	18.70%	18.30%	9.00%	11.60%	13.30%	10.60%	9.10%	7.70%	2.70%	2.10%

Source: Bloomberg, company data. Assumes December 2016 fund holdings were constant over the period

Not surprisingly, as the ROCE of the Guinness Energy portfolio has fallen through the energy bear market, so has the price/book valuation of the holdings. Indeed, the portfolio displays a strong relationship between ROCE and price/book valuation over time (84% r-squared from 2000 to 2015), as you might expect from a capital-intensive sector. The price/book valuation for 2017E is 1.53x, broadly speaking the lowest level of the entire period. The 15 year historic relationship implies that the Guinness Energy portfolio:

- is being valued as if it were going to deliver a 5% ROCE into perpetuity; a level which we believe is very conservative for a group of companies that has historically produced an average ROCE of 12%.
- would benefit in a 0.15x increase in price/book valuation for every 2% increase in ROCE
- would increase by over **30**% if the companies delivered average levels of ROCE again. The total return upside outlook could be as much as 50% when coupled with retained earnings and dividends generated over the next 2-3 years.

Historic ROCE vs P/B of the current Guinness energy strategy*



Source: Bloomberg; Company Data

But will ROCE really return to 12%?

We have conviction that energy sector ROCE will not remain at these depressed levels because we have no reason to believe that energy sector profitability has been structurally impaired.

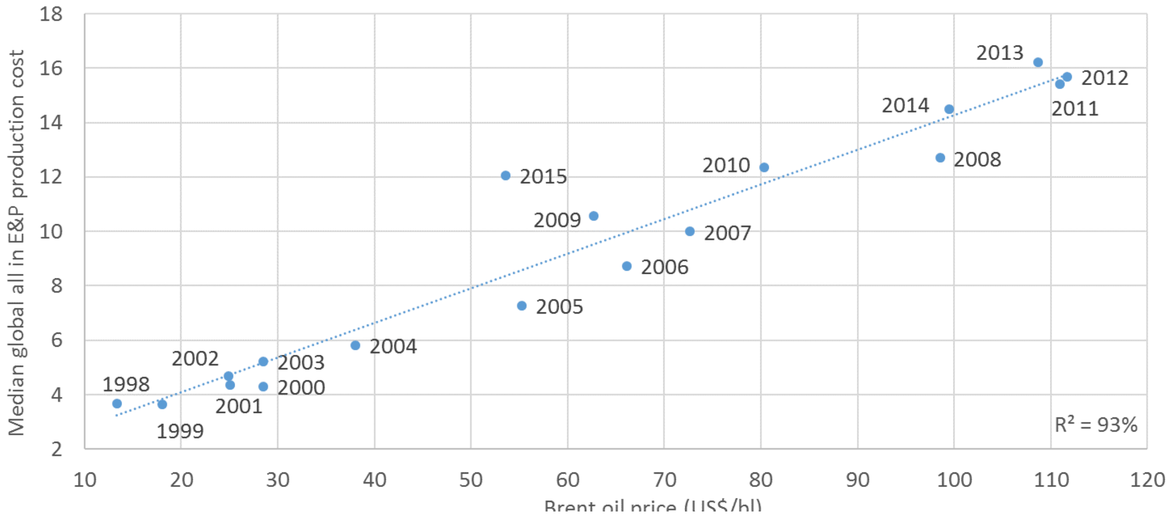
There are four main factors that should help ROCE to recover:

1. Cost deflation from service industry over-capacity, cheaper consumables and lower labour costs
2. Delivery of efficiency gains from use of technology/standardisation
3. Achievement of production from previously unutilised capital employed
4. Pursuit of 'cost cutting' M&A strategies

1. Cost deflation from service industry over-capacity and much lower labour costs

It is remarkable how strong the correlation has been between the operating cost of producing a barrel of crude oil and the annual average of the price of crude oil at any one time. For a group of 33 oil-oriented E&P companies that we follow closely, we found a 93% r-squared between the two metrics since 1998.

Oil prices and costs are tightly correlated but phased; margins peak before oil prices



Source: Bloomberg; Guinness Asset Management

As oil prices (and therefore the margins of the producing companies) expand, so do the various factors that impact the cost of supply, such as labour rates, the cost of consumables and service company margins. We see about an eighteen-month lag between oil price movements and production cost movements, such that:

- in the oil price 'up cycle' operating and capital costs permanently lag rising oil prices and the producers generate sustained excess economic rent and report higher than expected ROCE for any given level of oil price.
- In the oil price 'down cycle' operating and capital costs are slow to adjust such that the producers are permanently suffering from negative economic rent and reporting lower than expected ROCE for any given level of oil price.

2015 is a standout year in this correlation as oil prices fell sharply but production costs had not yet fully adjusted. It appears that operating costs were about $3-4/bl higher than they should have been. Reducing operating costs by $3-4/bl would increase current ROCE by around 1%.

2. Delivering efficiency gains from use of technology/standardisation

The oil and gas industry has long had to search for hydrocarbons in increasingly hostile regions or reservoir settings. For example, when the oil and gas majors were kicked out of the Middle East in the 1960s, they experimented with offshore drilling and platform construction in order to develop the North Sea and the Gulf of Mexico. The intent to deliver standardised solutions to reduce capital costs, and to use technology to deliver more efficient operations, is ever-present, but the complexity of the challenge has often trumped the intent. With ROCE depressed, we see a greater drive, and therefore likelihood, that efficiency improvements, standardisation and correctly-engineered solutions could be delivered. A reduction of 10% in capital costs and 10% in operating costs would typically increase a project's ROCE by over 2%. The industry has a greater chance now to deliver on these efficiency gains than it has had for the last 15 years.

3. Providing production from unutilised capital employed

Higher oil prices between 2003 and 2012 motivated the oil and gas industry to increase investment in new projects to deliver future production growth. According to Bernstein Research, upstream capex rose from under $300bn in 2005 to over $800bn in 2014 as the industry targeted these new projects. These projects are now increasingly in the production phase and this period will continue for another year or two. Prior to starting production, these partly developed projects have the effect of reducing ROCE by inflating the capital employed and then once in production, they improve ROCE by driving the 'net income' line higher. In a previous commentary 'Return of Returns' in June 2014 we highlighted that the negative effects of 'capital enlargement' have reduced sector ROCE by as much as 3%.

4. Pursuing 'cost cutting' M&A strategies

Cyclical commodity price troughs generally tempt greater levels of M&A activity as companies acquire cheap companies with the plan to strip out 'duplicate' costs and deliver more profitable growth. The oil and gas industry pursued this strategy with good success in 1998-2000 through a number of mega-mergers which created, among other things, the super-Majors: Chevron-Texaco, Exxon-Mobil, TOTAL-Fina-Elf and BP-Amoco-Arco. The Super Majors increased ROCE from 7.5% in 1998 to 14.3% in 2001 via a combination of higher oil prices (up $12/bl over the period) and a relentless focus on stripping out costs from their newly acquired entities.

At a $40/bl Brent oil price, a typical SG&A cost of $3 per barrel produced is meaningful when net income is only $5 per barrel produced and ROCE is only 2%. Merging with a similar sized peer and stripping out that SG&A and duplicated capital employed has a substantial effect on increasing margins and ROCE. Cost cutting has certainly been a more successful ROCE improvement strategy than growth for larger oil companies over the last decade; we would expect to see this return in the coming years.

The combined effect could be ROCE in the 12% range again

We think it is not unreasonable to postulate that the combined effect of these would be enough to allow the industry to return to an average level of ROCE generation (per dollar of oil price) as represented in Exhibit 3. If so we could expect to see ROCE in the 10-14% range as the industry fully adjusts to normalised long run oil prices.

Implications of these ROCE improvement strategies on energy equities

These ROCE estimates would imply that the energy sector is not a long-term value-destroying sector. And as commented above if the long-run relationship between ROCE and price/book valuation were to hold true, then it would imply a price/book valuation for the Guinness energy portfolio of around 2.0x, a 30% uplift to the current level of 1.53x which could be further enhanced by retained earnings and dividends to give an upside of around 50%.

If this analysis is correct there is an attractive outlook ahead of recovering energy sector profitability and valuations. We continue to try to position the Guinness Global Energy portfolio in names that offer an attractive combination of ROCE improvement and valuation.

Why the Guinness Global Energy Fund?

Best in class energy strategy since inception (18 years): annualised returns of 10.9% p.a. (in USD)*

Towers Watson on luck and skill: *"To be statistically significant, a performance record should be intact for nearly 15 years."*

LIPPER FUND AWARDS 2014 UNITED KINGDOM — Best Fund over 3 years, Equity Sector Natural Resources

INVESTMENT EUROPE FUND MANAGER OF THE YEAR AWARDS 2013-14 — Best Commodity Fund

The Guinness Global Energy strategy started in November 1998 and has been consistently run and managed by Tim Guinness and the wider team ever since. The portfolio is constructed on a "best ideas" basis in a concentrated manner comprising 30 equally weighted positions of 3.3% each. Our equal weighted approach is a 'Guinness House style' and it provides us with a structural sell discipline, a regular 'top slicing' premium and it keeps life simple so that we can focus our efforts on picking the best energy stocks. Our investment process is based on regular, detailed and disciplined macro analysis (to achieve the best possible understanding of the drivers of energy markets) and intelligent regular screening of all energy equities.

We initially screen for good quality companies that display attractive valuation with positive earnings momentum and then perform detailed due diligence on this group to select our preferred portfolio holdings. Our bias is towards value with cash returns as a preferred valuation methodology. We believe that our approach has been a key factor behind the long term outperformance of the Guinness energy strategy versus the MSCI World Energy Index and our strong performance relative to our peer group of competitor energy funds. We think our competitive edge lies in the following attributes:

Consistency of investment philosophy & process	Strategy developed in 1998, applied by the team for 18 years
Equally-weighted portfolio	Limits risk, gives concentration and keeps life simple
Top-down analysis	Shaping the portfolio towards different energy sectors
Value bias	Picking good quality stocks when valuation is attractive and allowing each idea to work
Team	Three managers with varied backgrounds and skills
Length of track record	According to Towers Watson, "To be statistically significant, a performance record should be intact for nearly 15 years."

Guinness Global Energy portfolio

Single sector	Companies producing or distributing energy
High conviction	Equally-weighted, concentrated portfolio (30 positions)
Low turnover	Buy and hold rather than trading philosophy
Unconstrained	No reference to index
Global	Diversified globally
Investment type	Listed equities (long-only)

**The value of an investment and the income from it can fall as well as rise as a result of market and currency movement; you may not get back the amount originally invested. Past performance is not a guide to future performance.*

Note: Simulated (composite) past performance prior to 31 March 2008, the launch date of this Fund. The Guinness Global Energy investment team has been running global energy funds in accordance with the same methodology continuously since 1998. These returns are calculated using a composite of the Investec GSF Global Energy Fund class A from 31 December 1998 to 29 February 2008 (managed by the Guinness team until this date); the Guinness Atkinson Global Energy Fund (sister US mutual fund) from 1 March 2008 to 31 March 2008 (launch date of this Fund), the Guinness Global Energy Fund class A (1% AMC) from launch to 02.09.08, and the Fund's E class (0.75% AMC) thereafter. *Source: Financial Express, bid to bid basis, total return.*

Guinness Asset Management

Guinness Asset Management provides a range of long-only actively managed funds to individual and institutional investors. Founded in 2003, Guinness is independent and is wholly owned by its employees. We have a variety of specialisms in global sector funds, Asian regional and country funds and global growth and global dividend funds. The Guinness equity funds are in a Dublin OEIC and sit alongside a range of similar SEC-registered funds offered to US investors by our US sister company, Guinness Atkinson Asset Management Inc. Having raised around $1bn in these vehicles, primarily from Family Offices, Private Banks and Wealth Managers, Guinness is now pursuing a new era of growth by presenting its capabilities to Pension Funds and other Institutional Investors.

We believe in: in-house research; intelligent screening for prioritisation of research; well-designed investment processes; concentrated, high conviction portfolios; low turnover; and the avoidance of benchmark constraints. Our in-house global economic and industry research allows us to take an independent view and not be led by the market. Our size and specialist nature also means we have the ability to act quickly and efficiently to any market movements. At heart Guinness Asset Management is a value, or growth at reasonable value, investor. We combine strategic sector-selection with a fundamental screening process to identify specific value-driven stock opportunities.

Please find further details at www.guinnessfunds.com

Guinness Global Energy team

Tim Guinness

Tim founded Guinness Asset Management in 2003 when he left Investec, who then appointed his new company as the outsource manager of the Investec Global Energy Fund. Tim has over 35 years' investment experience. He founded Guinness Flight Global Asset Management Ltd in 1987 and was joint CEO from 1987 to 1999 and a portfolio manager of the Global Equity Fund. After Investec acquired Guinness Flight in 1998, he was Chairman of the company during the transition into Investec, as well as lead manager of the Investec Global Energy Fund. Tim read engineering at Cambridge University and, upon graduation in 1968, completed a Master's Degree in Management Science at the Sloan School M.I.T. in the US.

Will Riley, CA

Will joined Guinness Asset Management in May 2007. Previously Will worked for six years for PricewaterhouseCoopers, first in the London Middle Market Assurance Team, then as a valuation specialist in the Valuation & Strategy division. Will qualified as a Chartered Accountant in 2003 and graduated from the University of Cambridge with a Master's Degree in Geography.

Jonathan Waghorn

Jonathan joined Guinness Asset Management in September 2013. He has 17 years' experience in the energy sector. He was a Shell drilling engineer in the Dutch North Sea and worked as an energy consultant with Wood Mackenzie before becoming co-head of Goldman Sachs energy equity research in 2000. He joined Investec as co-manager on the Investec Global Energy Fund in 2008 where he helped grow the energy franchise to a peak of nearly $3.5bn in 2011.

Guinness Global Energy Fund is an equity fund. Investors should be willing and able to assume the risks of equity investing. The Fund invests only in companies involved in the energy sector; it is therefore susceptible to the performance of that one sector, and can be volatile. Details on the risk factors are included in the Fund's documentation, available on our website.

The value of an investment and the income from it can fall as well as rise as a result of market and currency movement; you may not get back the amount originally invested. Past performance is not a guide to future performance.

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- the Manager: Capita Financial Managers (Ireland) Limited, 2 Grand Canal Square, Grand Canal Harbour, Dublin 2, Ireland; or,
- the Promoter and Investment Manager: Guinness Asset Management Ltd, 14 Queen Anne's Gate, London SW1H 9AA.

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Switzerland The prospectus and KIID for Switzerland, the articles of association, and the annual and semi-annual reports can be obtained free of charge from the representative in Switzerland, Carnegie Fund Services S.A., 11, rue du Général-Dufour, 1204 Geneva, Switzerland, Tel. +41 22 705 11 77, www.carnegie-fund-services.ch. The paying agent is Banque Cantonale de Genève, 17 Quai de l'Ile, 1204 Geneva, Switzerland.

Guinness Asset Management Ltd

Authorised and regulated by the Financial Conduct Authority

14 Queen Anne's Gate, London SW1H 9AA
+44 (0)20 7222 5703 / info@guinnessfunds.com / guinnessfunds.com

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ASSET MANAGEMENT LTD