GUINNESS ATKINSON FUNDS

Energy brief


Tim Guinness


Will Riley


Jonathan Waghorn

November 2013

Commentary and Review by portfolio managers
Tim Guinness, Will Riley & Jonathan Waghorn

Subscribe to other Guinness Atkinson E-mail services

View Archive Briefs

REPORT HIGHLIGHTS

FUND NEWS

• Fund size $75 million at end of October

OIL

• Brent flat and WTI down as US inventories build

WTI fell from $102 to $96 in October. Brent was flat at around $109. Global inventories continue to look balanced, but US stocks of crude and refined product have built more than seasonally expected.

NATURAL GAS

• US gas price broadly unchanged

Henry Hub spot was broadly flat on the month, ending October at $3.58 (well up from April 2012 low of $1.84), as the market was balanced between stronger supply data and an improving demand outlook. The 12-month gas strip price fell 3% to $3.70.

EQUITIES

• Energy keeps pace with broad market

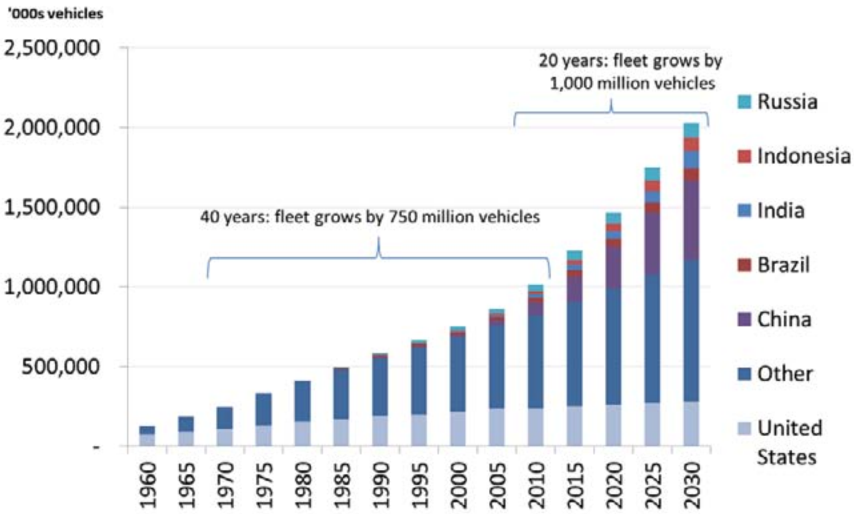
The MSCI World Energy Index rose by 3.9% and MSCI World Index rose by 3.8% in October (all in US dollar terms).

Chart of the Month:

World vehicle population set to double by 2030

Oil demand to 2020 and beyond will be driven by the adoption of mass transportation in the non-OECD (Organization for Economic Co-Operation and Development) world. 65% of the demand for oil comes from transportation – this % is set to rise as the global vehicle population goes from 1 billion today to circa (c) 1.4 billion in 2020, then c 2 billion in 2030.

World vehicle population (1960 – 2030e)

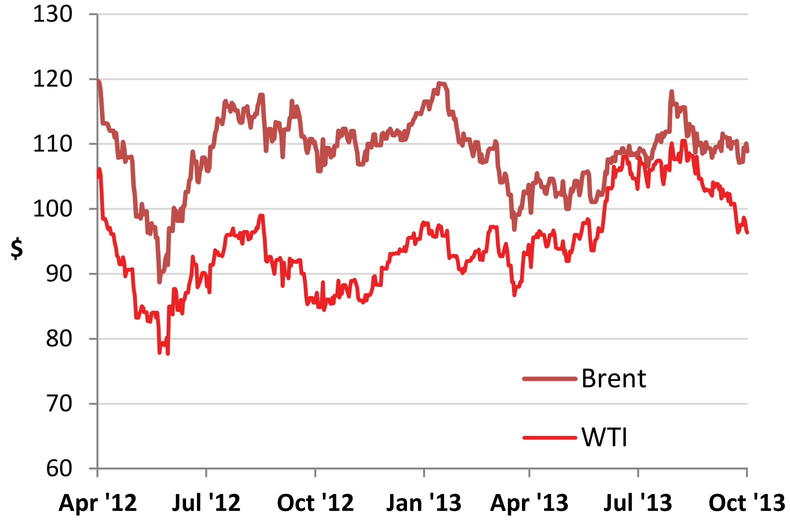


Source: US Department of Energy (DoE) (actual); Guinness Atkinson Asset Management (estimates) (November 2013)

1. October 2013 Review

Oil market

Figure 1: Oil price (WTI and Brent $/barrel) 18 months April 30, 2012 to October 31, 2013



Source: Bloomberg LP

The West Texas Intermediate (WTI) oil price started October at $102.33 and remained steady in the $100-104 range for the first three weeks of the month before falling in the final week, closing down more than $5/barrel(b) at $96.38. So far this year, WTI has averaged $98.39. WTI averaged $94.12 in 2012 and $95.04 in 2011.

The Brent oil price was firmer in October, declining slightly from $109.22 to $108.89. The gap between the WTI and Brent benchmark oil prices, which opened at the beginning of 2011, compressed during September but opened up again in October, ending the month at around $12. The spread, caused by high stock levels and infrastructure bottlenecks resulting from increased US onshore production, was as high as $20+ but has generally been narrower in 2013 following pipeline capacity expansions that have allowed inventory levels in Cushing, Oklahoma, to fall significantly.

Factors which strengthened the WTI oil price in October:

- **Global demand forecasts raised**

  Global oil demand growth in 2013 is now forecast by the International Energy Agency (IEA) to rise by 1m b/day versus 2012. At the start of the year, the IEA were expecting growth in 2013 of 0.8m b/day: the upwards revisions since then reflect both non-OECD and OECD demand (particularly in the US) being stronger than anticipated.

- **Libyan production shut-ins**

  Libyan oil production for October is estimated to be 450,000 b/day, up from 300,000 b/day in September but still well down from 1.4m b/day in July. The complexity of the disruption in Libya means that some production is likely to be volatile but likely remaining below 1m b/day for a number of months. Libya's oil production had recovered quickly from the 2011 civil war: capacity is around 1.6-1.8m b/day.

Factors which weakened the WTI oil price in October:

- **Non-OPEC (Organization of the Petroleum Exporting Countries) supply forecasts raised for 2014**

The IEA has increased their forecast for non-OPEC supply 2014, with growth of 1.7m b/day now being anticipated. While the IEA have a long history of over-optimism towards oil supply growth, it seems plausible that 2014 will see non-OPEC supply grow better than at any time over the last decade. The expected supply is dominated by North America (+1.1 m b/day) and supported in particular by Brazil (+0.2m b/day), Africa (+0.2m b/day) and China (+0.1m b/day). Should non-OPEC supply grow this strongly in 2014, we expect it to have a small loosening effect on the global oil balance, with the growth largely absorbed by rising demand and a slight reduction in OPEC supply.

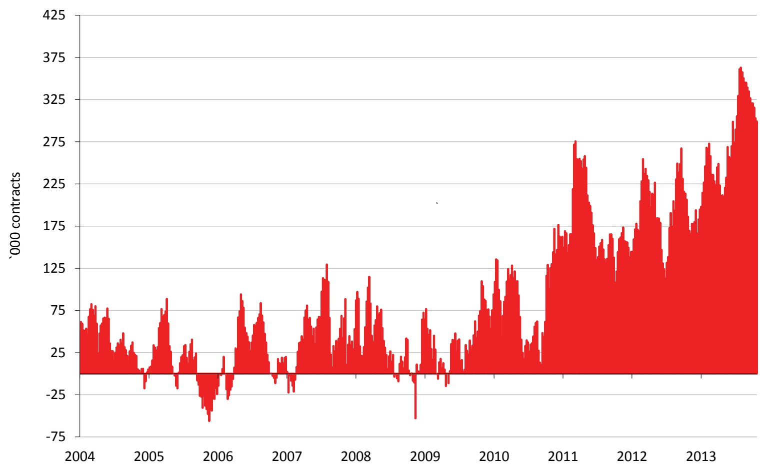
- **Improving political tensions in Iran**

Following signs of improving political relations between the US and Iran over the past two months, there are indications that the restrictions on Iran's oil exports are relaxing a little. China, India and Japan, which account for around half of Iran's oil exports, have all increased purchases of Iranian oil. The IEA reports that Iranian oil exports were up by nearly 0.2m b/day in October, but at 1.2m b/day, they are still around 1m/day lower than the peak. We believe that Iranian production infrastructure is in a poor state of repair, so we would be more cautious about a full recovery in production – a lifting of sanctions might instead bring around half of the lost production (0.5m b/day) back to the market.

Speculative and investment flows

The New York Mercantile Exchange (NYMEX) net non-commercial crude oil futures open position continued to decline in October. It started the month at 321,000 contracts long and decreased to end the month at 302,000 contracts. We regard a net long position over 302,000 contracts to still be relatively high – any unwinding is likely to dampen the WTI price.

Figure 2: NYMEX Non-commercial net futures contracts: WTI January 2004 – October 2013



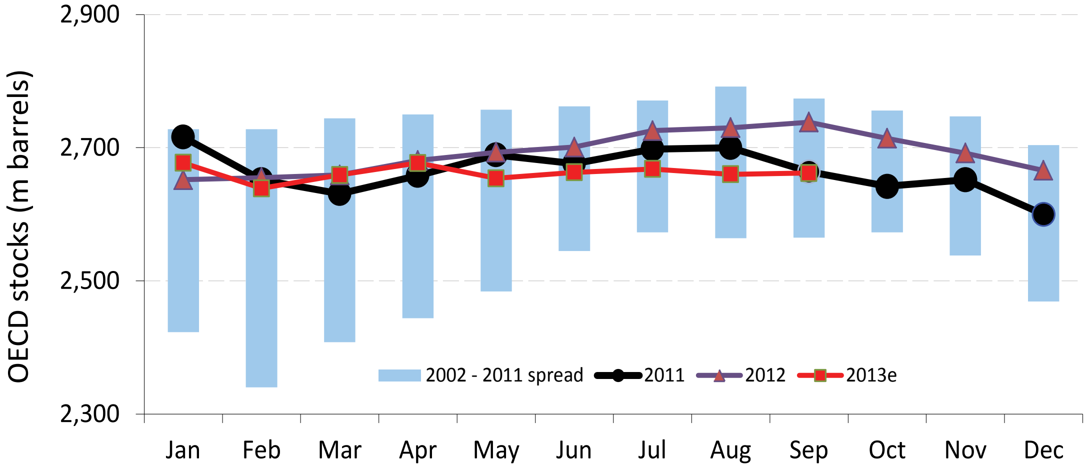
Source: Bloomberg LP/Nymex (October 2013)

OECD stocks

OECD estimated total crude and product stocks for September 2013 (published in the October 2013 IEA Oil Market Report) reversed the recent run of counter-seasonal declines, rising by 2 million barrels from 2,660 million barrels, giving a total stock of 2,662 million barrels at the end of the month. Over the preceding ten years, the average inventory draw in September was 6 million barrels.

Since April, OECD oil inventories have tightened, an indication that strong global demand growth and various supply disruptions are showing up in the physical market. Total OECD inventories now sit just in the bottom half of the 10 year high-low range and at their (seasonal) lowest since 2008. We believe that OPEC would like to manage supply so that OECD inventories remain comfortably within the 10 year range: a further tightening could prompt to Saudi et al to raise production.

Figure 3: OECD total product and crude inventories, monthly, 1998 to 2013



Source: IEA Oil Market Reports (September 2013 and older)

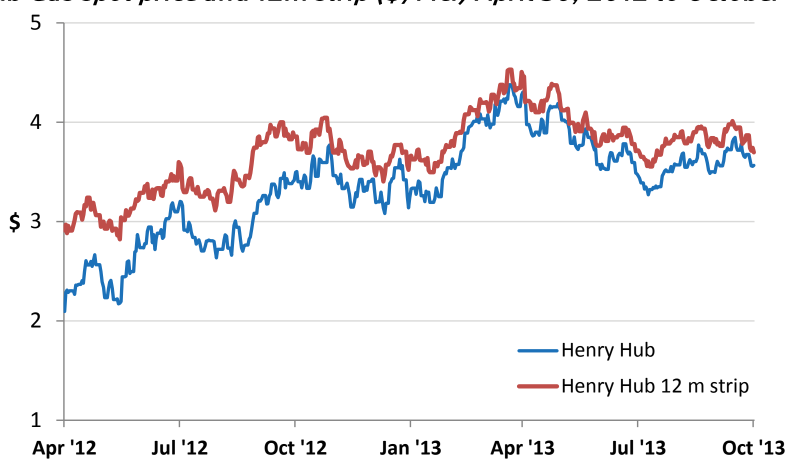
2. Natural Gas Market

The US spot natural gas price (Henry Hub) started October at $3.56 per Mcf (1000 cubic feet), rose to reach a high for the month of $3.82, before falling to close October broadly unchanged at $3.58.

The spot gas price has nearly doubled from a low of $1.84 in April 2012. The price has averaged $3.68 so far in 2013, well above the 2012 average of $2.75 but down on the 2010 and 2011 averages of $4.38 and $4.00 and significantly below the average in each of the previous 5 years (2005-2009).

The 12-month gas strip price (a simple average of settlement prices for the next 12 months' futures prices) fell over the month by 3% from $3.80 to $3.70. The strip price has averaged $3.90 so far this year, having averaged $3.28 last year, $4.35 in 2011, $4.86 in 2010 and $5.25 in 2009.

Figure 4: Henry Hub Gas spot price and 12m strip ($/Mcf) April 30, 2012 to October 30, 2013



Source: Bloomberg LP

Factors which weakened the US gas price in October included:

- **US onshore production**

The August data (latest available) from the Energy Information Agency (EIA) indicated that total US natural gas production (Lower 48 States) was up, increasing by 0.2 Bcf/day month-on-month. Total onshore production rose by 0.4 Bcf/day month-on-month, implying that offshore production decreased by around 0.2 Bcf/day. Total production for August 2013 grew to a new high of 74.8 Bcf/day – above the previous peak of 73.8 Bcf/day in November 2012.

Factors which strengthened the US gas price in October included:

- **Signs of a positive natural gas demand response**

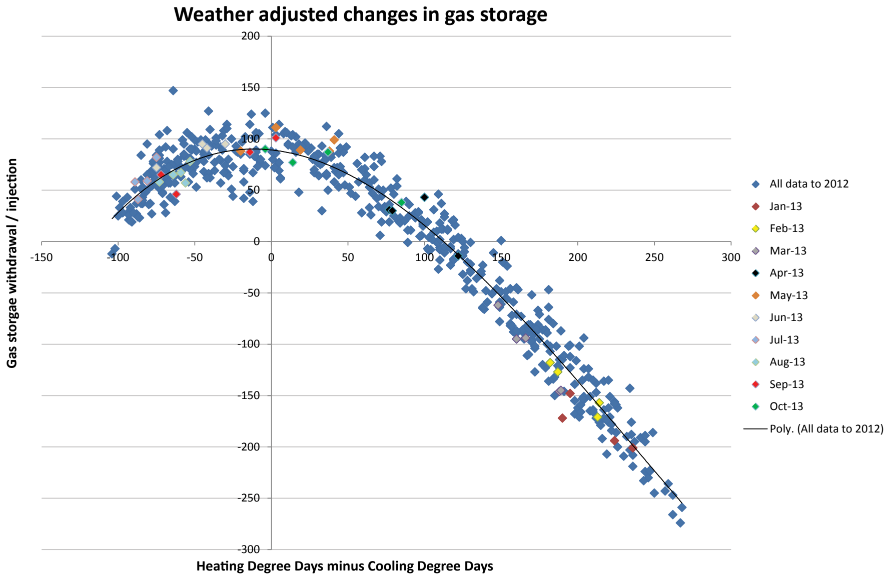
The most recent EIA natural gas data does give a glimmer of hope with respect to improving natural gas demand fundamentals. Industrial gas demand in August 2013 was at the highest level (for the month of August) since 2002. Power generation demand was down year on year but we noted that August power generation gas demand was actually up year on year, when adjusted for the number of cooling degree days in the month.

Factors which neither strengthened nor weakened the US gas price in October included:

- **Overall market broadly balanced**

Our analysis of injections of gas into storage implies that the market has shifted over the past 6 months from slight oversupply (May to July) to slight undersupply (August) to broadly balanced (September and October). The following chart indicates the move in recent months from oversupply (above the line) to undersupply (below the line), to balanced.

Figure 5: Weather adjusted changes in gas storage

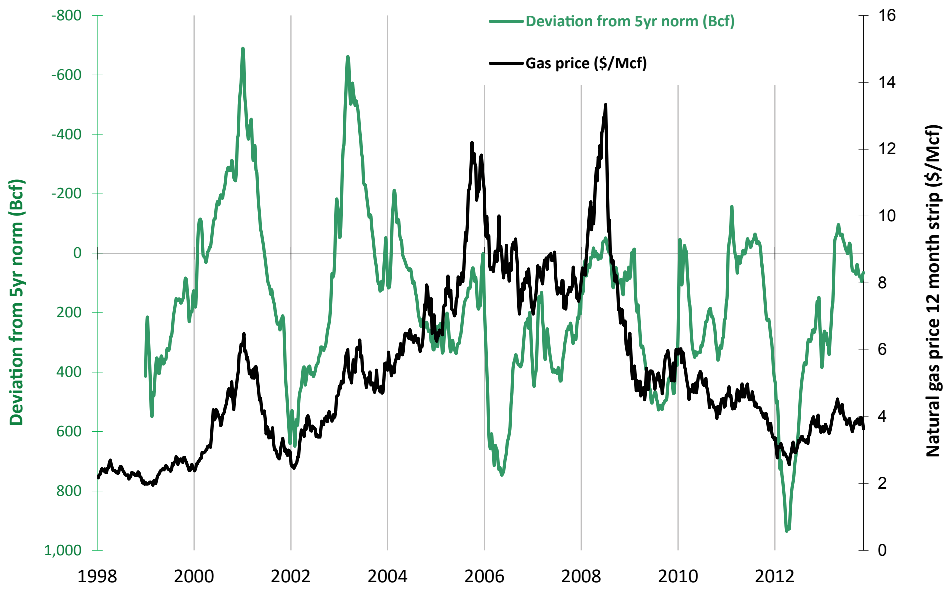


Source: Bloomberg

Natural gas storage

Swings in the supply/demand balance for US natural gas should, in theory, show up in movements in gas storage data. The following graph shows the 12 month gas strip price (in black) against the amount of gas in storage expressed as the deviation from the 5 year storage average (in green). Swings in storage have frequently been a leading indicator to movements in the gas strip price.

Figure 6: Deviation from 5yr gas storage norm vs. gas price 12 month strip (H. Hub $/Mcf)



Source: Bloomberg, EIA (November 2013)

The surplus of gas in the second half of 2008 and 2009, a result of oversupply during the recession, can be seen in gas storage data, with the inflection point in storage occurring in July 2008 and the storage line moving from negative (i.e. deficit) to positive (i.e. surplus) territory over this 18 month period. This coincided with the gas strip price falling from a peak of over $13 in July to below $5. An unusually cold 2009/10 winter boosted demand and pushed the gas storage level back into balance, only for oversupply to persist again for much of the rest of 2010. A cold 2010/11 winter followed by a hot 2011 summer tightened storage again, with storage levels staying around the 5 year average for much of this period.

The very mild 2011/12 winter (in combination with rising production) caused gas storage levels to balloon to record levels, driving prices down to their lowest levels for a decade. Since then, coal-to-gas switching and shut ins and the sharp rig count drop have worked in the other direction, seeing gas prices rising from their sub $2 lows in April 2012 to around $3.70 now.

We watch movements in gas storage closely as a tightening from here, weather adjusted, is likely to be a coincident indicator for the start of a sustained gas price recovery.

3. Manager's Comments

The broader macro outlook for oil continues to be range bound, with five year future oil prices in the $80 range for WTI and $90 range for Brent. Front month oil prices have fluctuated as a result of the ebb and flow of supply and demand data and macro concerns over economic growth and political risk. We believe that the market still maintains significant concern over Iranian production starting to increase substantially in the near future and over the potential for the US to 'flood' the oil market with large volumes of light sweet shale oil.

We note that Iran is producing around 1m b/day less than it was at the end of 2010 and that production could increase back to pre-sanction levels if the positive momentum of recent nuclear discussions continues. The sanctions appear to have worked, in that they have brought the two sides together in discussion, but they have also worked in that Iranian production facilities have fallen into a state of disrepair. Even if the talks reach a swift positive outcome, we would caution that Iranian production will recover more slowly than most expect as the infrastructure comes under pressure. With Saudi producing at a 32 year high of over 10m b/day, we would fully expect it to reduce production to accommodate Iranian volumes, and this burden will likely be shared with Kuwait and the United Arab Emirates (UAE).

The recent onslaught of third quarter earnings announcements has shown that production efficiency gains in the North American shale oil business continue apace, and we think that in all likelihood, the best news is still to come. There have been a handful of disappointments from companies lowering their oil and liquids volume growth expectations, mostly as a result of infrastructure problems rather than reservoir or down-hole issues. We fully expect significant growth in North American shale oil production over the next five years (growth of another 2-3m b/day), which will keep North American crude oil prices at a discount to world benchmarks.

While all the attention appears to be on supply risks, we highlight that recent US oil product demand data (4wk average) remains robust and that Chinese oil imports are close to record levels again (just under 6m b/day), while total vehicle sales growth continues at a robust rate. In terms of energy, China is not suffering any kind of hard landing and the outlook for world oil demand continues to appear very robust indeed.

What does this mean for price? Despite the disruption, we think the most likely scenario going forward is that we will see the average price of Brent and WTI in the trading range of $90-110. Should the oil price raise much over $125, we think demand will start to weaken, putting a ceiling on the price for the time being (absent a more serious supply shock). If the floor of our range looks threatened, OPEC will start to reduce supply and any significant price weakness below $100 (Brent) will be prevented by OPEC cuts. At the heart of it all, we believe that the Saudis are working hard to try and maintain a 'good' oil price (Brent at $100-110). So far, they are succeeding.

Even with oil demand strong, we would add concerns that global refining could well be an area of weakness over the near term. We see significant new global refining capacity coming on-stream in the next two years, at a time when US refiners are operating at exceptionally high levels. We believe that the European refining system will suffer most in this environment.

The US gas price continues to bumble along in the $3.50-$4.00 range, as the 2013 natural gas injection season comes to and end and market attention turns more towards long-term winter weather forecasting. While the winter has been warmer than usual so far, we believe that the market looks in much better fundamental balance than a year ago, with a flatter production growth profile and robust demand outlook. Production continues to grow and clearly the natural gas/coal switching dynamic will be a key driver of near-term natural gas prices from here.

A wall of new US gas demand is coming, starting in 2015: exports of gas via LNG; expanded export capacity into Mexico; coal plant retirements; gas's share of electricity generation growing; industrial in-shoring; and natural gas vehicles. The question is: what price does a wall of supply need to meet this demand outlook? Our hunch is that in three years the gas price will be moving from 20% of the oil price ($3.50 gas is like $21/barrel oil) to 33% (if oil is $110 that is $36/barrel or $6.00 gas). That is 71% up on the $3.50 today and 118% up on 2012 average price of gas of $2.75.

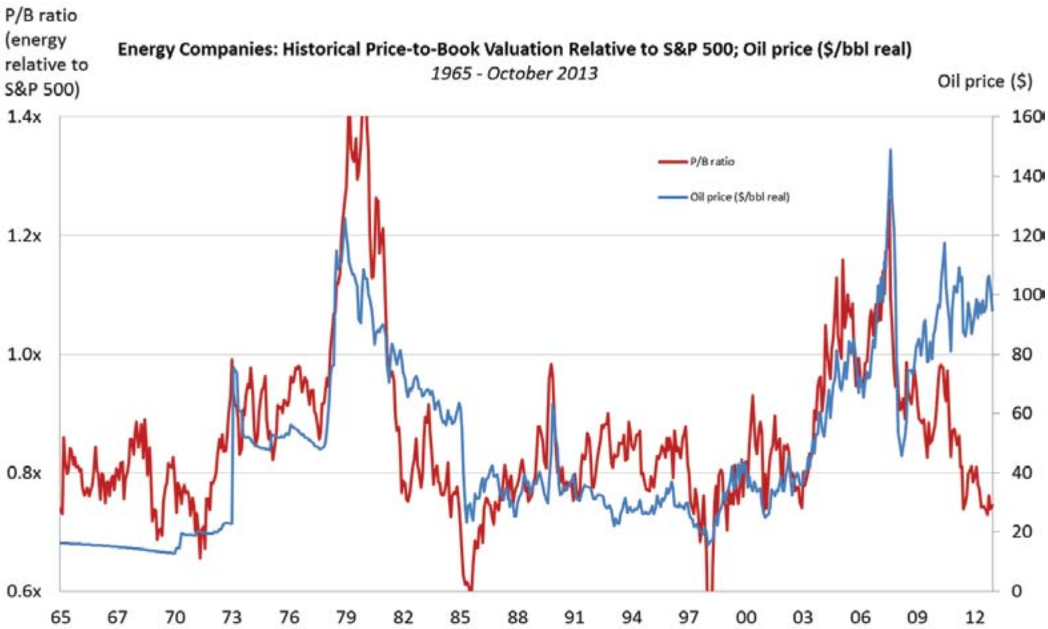
Outlook for energy equities

Energy equities this year have been ahead of general natural resources but behind the broad equity market (although our Fund has been ahead of the energy index and has kept pace with the broad market).

We believe that energy equities in general have underperformed the broad market because various factors are misunderstood. Principally, we think that energy equity valuations reflect an expectation that international oil prices return in the longer term to around $80 (driven by concerns of oversupply), something we do not expect to happen, based on the fundamentals for the commodity.

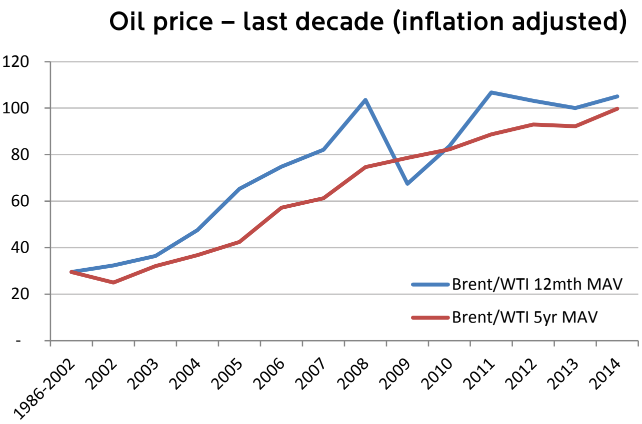
As a result, on traditional metrics of P/E ratio, price to discounted cash flow (e.g. the SEC's PV-10 calculation) or Enterprise Value to Reserves, many energy companies are at historically low levels. The 2013 P/E ratio of our Fund at October 31st is 12.1x versus 16.5x for the S&P500.

Considering valuations another way, the graph below shows the price to book ratio of the energy sector relative to the S&P 500 since 1965 (in red). The ratio today is low and looks very attractive versus history. We also show the oil price in today's dollars (in blue). The only periods when the price to book ratio has been lower than today (1970; 1986; 1998) coincided with the oil price at extreme lows. This dislocation (directionally) over the last 24 months between the oil price and energy valuations is striking:



Source: Bernstein; Guinness Atkinson Asset Management

We expect the dislocation to correct when the current oil price and long-run market expectations come together. $100 oil is around where that could happen.

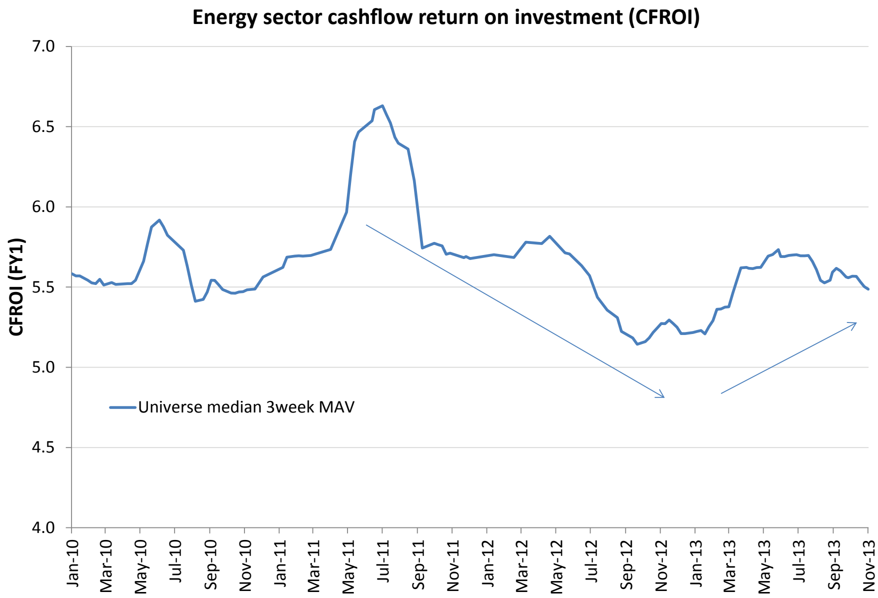


Oil Price (inflation adjusted)													*Forecast*	
12 month MAV	1986-2002	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	*2013*	*2014*
WTI	30	33	38	49	66	75	82	104	68	84	99	94	95	100
Brent	30	32	35	46	64	75	82	103	67	84	115	112	105	110
Brent/WTI 12mth MAV	**30**	**32**	**36**	**48**	**65**	**75**	**82**	**103**	**67**	**84**	**107**	**103**	**100**	**105**
Brent/WTI 5yr MAV	30	25	32	37	42	57	61	75	79	82	89	93	92	100

Source: Bloomberg (actuals); Guinness Atkinson Asset Management (forecasts)

Energy equity valuation sentiment

For considering a good entry point at which to buy energy equities the following may be helpful. Two of the energy sector specific headwinds over the last 24 months have been 1) the pull back in the oil price from the highs reached at the time of the Libyan crisis and more recently as embargoes were placed on Iranian exports and 2) the weakness in the US natural gas price which troughed a year ago. Earnings estimates (and cash flow return on investment - CFROI) for energy companies, as a result, were generally trending down from mid-2011 to late 2012. A good entry point may well be when earnings estimates stop falling. We have been looking at this for several months, and as the graph below indicates, the most recent 12 month move is a trend higher (albeit with some weakening in the last few weeks as a result of CFROI estimates for the major oils starting to decline). We hope that energy equities will follow.



Source: CSFB HOLT; Guinness Atkinson Asset Management

All this of course assumes the oil price stabilizes around the five year moving average price of $100 (blended Brent/WTI) and the gas price in due course recovers, which is what we believe is increasingly likely to occur.

Energy equities also remain one of the better inflation hedges. If we see dollar inflation of 30/50% over the next decade it will be surprising if oil and gas prices do not rise by a comparable percentage.

4. Performance – Guinness Atkinson Global Energy Fund

The main index of oil and gas equities, the MSCI World Energy Index, was up by 3.89% in October. The S&P 500 was up by 4.46% over the same period. The Fund was up by 5.85% over this period, outperforming the MSCI World Energy Index by 1.96% (all in US dollar terms).

Within the Fund, October's stronger performers QEP Resources, Carizzo, Penn Virginia, Patterson and Valero. Poorer performers were OMV, Ultra petroleum, Helix, Trina Solar and JA Solar.

Performance as of September 30, 2013

Inception date 6/30/04	Full Year 2009	Full Year 2010	Full Year 2011	Full Year 2012	1 year (annualized)	Last 2 years (annualized)	Last 5 years (annualized)	Since Inception (annualized)
Global Energy Fund	63.27%	16.63%	-13.16%	3.45%	15.69%	16.85%	5.85%	13.11%
MSCI World Energy Index	26.98%	12.73%	0.71%	2.54%	8.80%	15.27%	5.32%	10.00%
S&P 500 Index	26.47%	15.06%	2.09%	15.99%	19.22%	24.59%	10.00%	6.47%

Performance as of October 31, 2013

Inception date 6/30/04	Full Year 2009	Full Year 2010	Full Year 2011	Full Year 2012	1 year (annualized)	Last 2 years (annualized)	Last 5 years (annualized)	Since Inception (annualized)
Global Energy Fund	63.27%	16.63%	-13.16%	3.45%	25.15%	9.85%	14.15%	13.67%
MSCI World Energy Index	26.98%	12.73%	0.71%	2.54%	14.93 %	8.60%	10.28%	10.36%
S&P 500 Index	26.47%	15.06%	2.09%	15.99%	27.15%	20.99%	15.14%	6.92%

Source: Bloomberg
Gross expense ratio: 1.35%

Performance data quoted represent past performance and 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. For most recent month-end and quarter-end performance, visit www.gafunds.com or call (800) 915-6566.

The Fund imposes a 2% redemption fee on shares held for less than 30 days. Performance data does not reflect the redemption fee and, if deducted, the fee would reduce the performance noted.

Performance data does not reflect the redemption fee and, if deducted, the fee would reduce the performance noted.

5. Portfolio – Guinness Atkinson Global Energy Fund

Buys/Sells

There were no buys or sells in October.

Sector Breakdown

The following table shows the asset allocation of the Fund at **October 31, 2013.**

(%)	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012	31 Oct 2013	*Change YTD*
Oil & Gas	**103.5**	**96.4**	**96.1**	**93.2**	**98.5**	**98.6**	**96.1**	***-2.5***
Integrated	66.2	53.7	47.2	41.2	39.6	39.1	38.7	*-0.4*
Exploration and production	25.8	28.7	32.0	36.9	41.5	41.6	38.0	*-3.6*
Drilling	8.1	5.2	8.4	6.3	6.0	7.4	6.8	*-0.6*
Equipment and services	3.4	6.4	5.4	5.3	6.6	7.1	9.3	*2.2*
Refining and marketing	0.0	2.4	3.1	3.5	4.8	3.4	3.3	*-0.1*
Coal and consumables	**2.5**	**2.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Solar	**0.0**	**0.0**	**0.0**	**3.2**	**1.2**	**1.2**	**3.5**	**2.3**
Construction and engineering	**0.0**	**0.4**	**0.4**	**0.4**	**0.4**	**0.6**	**0.7**	**0.1**
Cash	**-6.0**	**0.9**	**3.5**	**3.2**	**-0.1**	**-0.4**	**-0.3**	**0.1**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**0.0**

Source: Guinness Atkinson Asset Management
Basis: Global Industry Classification Standard (GICS)

Guinness Atkinson Global Energy Fund Portfolio

The Fund at October 31, 2013 was on an average price to earnings ratio (PE) versus the S&P 500 Index at 1,757 as set out in the table. (Based on S&P 500 'operating' earnings per share estimates of $49.5 for 2008, $56.9 for 2009, $83.8 for 2010, $96.4 for 2011, $96.8 for 2012 and $106.5 for 2013). This is shown in the following table:

	2007	2008	2009	2010	2011	2012	2013
Fund PER	10.3	9.2	16.4	10.7	10.4	11.6	12.1
S&P 500 PER	21.3	35.5	30.9	21.0	18.2	18.1	16.5
Premium (+) / Discount (-)	*-52%*	*-74%*	*-47%*	*-49%*	*-43%*	*-36%*	*-27%*
Average oil price (WTI $)	$72.2/bbl	$99.9/bbl	$61.9/bbl	$79.5/bbl	$95/bbl	$94/bbl	$98/bbl

Source: Standard and Poor's; Guinness Atkinson Asset Management

Portfolio Holdings

Our integrated and similar stock exposure (c.39%) is comprised of a mix of mid cap, mid/large cap and large cap stocks. Our five large caps are Exxon, BP, Chevron, Royal Dutch Shell and Total. Mid/large and mid-caps are ENI, Statoil, Hess and OMV. As at October 31 2013 the median PE ratio of this group was 8.5x 2012 earnings. We have one Canadian integrated holding, Suncor, which merged in 2009 with PetroCanada. The company has significant exposure to oil sands and stands on an attractive PE of 11.8x 2012 earnings, given the company's good growth prospects.

Our exploration and production holdings (c.38%) give us exposure most directly to rising oil and natural gas prices. We include in this category non-integrated oil sands companies, as this is the GICS approach. The stock here with oil sands exposure is Canadian Natural Resources. The pure exploration & production (E&P) stocks are all largely in the US (Newfield, Devon, Chesapeake, Carrizo, Stone, Penn Virginia, Ultra, QEP and Bill Barrett) and three more (ConocoPhillips, Apache and Noble) which have significant international production. One of the key metrics behind a number of the E&P stocks held is low enterprise value / proven reserves. All of the E&P stocks held also provide exposure to North American natural gas and include two of the industry leaders (Devon and Chesapeake). In PE terms, the group divides roughly into two: (i) ConocoPhillips, Apache, Chesapeake, Devon, Newfield, Carrizo, Ultra and Stone all with quite low PEs (10x – 16x 2013 earnings); and (ii) Noble, Bill Barrett, Penn Virginia and QEP with higher PE ratios. However, all look reasonably attractive on EV/EBITDA multiples.

We have exposure to four (pure) emerging market stocks in the main portfolio, though two are half-positions. Two are classified as integrateds by the GICS (Gazprom and PetroChina) and two as E&P companies (Dragon Oil and SOCO International). Gazprom is the Russian national oil and gas company which produces approximately a quarter of the European Union gas demand and trades on 3.1x 2012 earnings. PetroChina is one of the world's largest integrated oil and gas companies and has significant growth potential and advantages as a Chinese national champion. Dragon Oil is an oil and gas E&P company focused on offshore Turkmenistan in the Caspian Sea and trades on 7.6x 2012 earnings. SOCO International is an E&P company with production in Vietnam and exploration interests across East Africa in Angola, Democratic Republic of Congo and the Republic of Congo.

We have useful exposure to oil service stocks. The stocks we own are split between those which focus their activities in North America (land drillers Patterson and Unit on 13.6x and 12.4x 2012 earnings) and those which operate in the US and internationally (Helix, Halliburton and Shawcor on 12.7x – 19.7x 2012 earnings).

Our independent refining exposure is currently in the US in Valero, the largest of the US refiners, which is currently trading at significant discount to book and replacement value. Valero has a reasonably large presence on the US Gulf Coast and is benefitting from the rise in US exports of refined products seen in recent times.

Our alternative energy exposure is currently a single unit split equally between two companies: JA Solar and Trina Solar. Both were loss making in 2012 due to sharp falls in solar prices during the year but the prospects for a return to profitability over the next 12 months are improving. Trina is a Chinese solar module manufacturer and JA Solar is a Chinese solar cell manufacturer. Some measure of their continued recovery potential may be indicated by their 2010 PEs of 4.4x and 1.3x respectively.

Portfolio at October 31, 2013

Stock	ID_ISIN	Curr.	Country	% of NAV	2006 B'berg mean PER	2007 B'berg mean PER	2008 B'berg mean PER	2009 B'berg mean PER	2010 B'berg mean PER	2011 B'berg mean PER	2012 B'berg mean PER	2013 B'berg mean PER
Guinness Atkinson Global Energy Fund 31 October 2013												
Integrated Oil & Gas												
Exxon Mobil Corp	US30231G1022	USD	US	3.18	13.68	12.3	10.6	23.0	15.0	10.6	11.4	12.0
Chevron Corp	US1667641005	USD	US	3.02	15.4	13.7	10.5	23.4	12.9	8.9	9.7	10.4
Royal Dutch Shell PLC	GB00B03MLX29	EUR	NL	3.12	8.3	6.6	7.7	15.2	10.7	8.0	7.9	9.1
BP PLC	GB0007980591	GBP	GB	3.40	7.1	7.1	5.7	9.9	6.9	6.8	8.5	10.2
Total SA	FR0000120271	EUR	FR	3.36	8.3	8.4	7.3	13.1	9.7	8.7	8.3	9.1
ENI SpA	IT0003132476	EUR	IT	3.34	6.6	7.2	6.7	13.1	9.9	9.5	9.3	13.2
Statoil ASA	NO0010096985	NOK	NO	3.22	7.5	10.2	7.7	14.0	10.5	9.1	8.5	9.4
Hess Corp	US42809H1077	USD	US	3.25	14.7	13.6	11.1	42.4	15.7	13.5	13.7	13.3
OMV AG	AT0000743059	EUR	AT	3.10	6.9	6.7	5.5	14.1	8.8	11.0	7.7	8.3
				29.00								
Integrated Oil & Gas - Canada												
Suncor Energy Inc	CA8672241079	CAD	CA	3.20	15.4	15.9	11.9	35.9	23.9	10.6	11.8	11.5
Canadian Natural Resources Ltd	CA1363851017	CAD	CA	3.18	22.6	15.7	10.1	13.7	13.6	14.3	20.8	13.8
				6.37								
Integrated Oil & Gas - Emerging market												
PetroChina Co Ltd	CNE1000003W8	HKD	HK	3.08	8.8	8.6	11.1	11.8	9.5	9.3	10.7	10.1
Gazprom OAO	US3682872078	USD	RU	3.36	nm	nm	nm	5.5	4.3	2.9	3.1	3.2
				6.44								
Oil & Gas E&P												
ConocoPhillips	US20825C1045	USD	US	3.27	7.39	7.57	6.88	20.26	12.37	8.63	12.85	12.37
Apache Corp	US0374111054	USD	US	3.16	12.1	10.3	7.9	16.0	9.6	7.5	9.3	10.9
Bill Barrett Corp	US06846N1046	USD	US	1.17	19.5	28.5	10.2	16.3	13.7	15.7	522.1	nm
QEP Resources Inc	US74733V1008	USD	US	1.26	nm	nm	nm	nm	23.9	20.2	26.6	22.0
Ultra Petroleum Corp	CA9039141093	USD	US	0.97	12.8	16.1	6.9	10.2	8.2	7.2	10.0	11.3
Devon Energy Corp	US25179M1036	USD	US	3.31	10.1	9.1	6.4	17.5	10.7	10.5	19.6	14.7
Chesapeake Energy Corp	US1651671075	USD	US	3.36	7.7	8.7	7.9	11.3	9.5	10.0	57.6	16.9
Noble Energy Inc	US6550441058	USD	US	3.48	39.5	27.5	21.3	44.3	36.2	28.5	32.7	21.9
Newfield Exploration Co	US6512901082	USD	US	3.58	8.7	9.5	9.7	6.0	6.6	7.5	12.5	16.5
Stone Energy Corp	US8616421066	USD	US	1.73	12.7	6.8	6.2	15.1	17.2	9.0	12.6	11.3
Carrizo Oil & Gas Inc	US1445771033	USD	US	2.00	61.7	62.6	24.4	29.8	34.5	42.6	30.1	17.0
Penn Virginia Corp	US7078821060	USD	US	2.09	4.7	4.7	3.3	nm	nm	nm	nm	nm
Trinity Exploration & Production PLC	GB00B8JG4R91	GBP	GB	0.31	nm	nm	nm	nm	nm	nm	nm	24.1
Ophir Energy PLC	GB00B24CT194	GBP	GB	0.33	nm	nm	nm	nm	nm	nm	nm	nm
Triangle Petroleum Corp	US89600B2016	USD	US	0.35	nm	nm	nm	nm	nm	nm	nm	nm
Pantheon Resources PLC	GB00B125SX82	GBP	GB	0.11	nm	nm	nm	nm	nm	nm	nm	nm
Cluff Natural Resources PLC	GB00B6SYKF01	GBP	GB	0.15	nm	nm	nm	nm	nm	nm	nm	nm
				30.63								
Oil & Gas E&P - Emerging markets												
Dragon Oil PLC	IE0000590798	GBP	GB	1.52	26.7	15.9	13.2	19.1	13.9	7.5	7.6	8.2
Soco International PLC	GB00B572ZV91	GBP	GB	1.45	60.7	55.8	60.0	37.4	51.5	33.3	9.2	9.6
JKX Oil & Gas PLC	GB0004697420	GBP	GB	0.92	2.4	1.9	2.4	2.5	2.8	3.4	4.6	7.2
WesternZagros Resources Ltd	CA9600081009	CAD	CA	0.30	nm	nm	nm	nm	nm	nm	nm	nm
				4.19								
Drilling												
Patterson-UTI Energy Inc	US7034811015	USD	US	3.45	6.0	9.6	10.3	nm	35.8	11.3	13.6	20.6
Unit Corp	US9092181091	USD	US	3.33	7.7	9.0	7.6	19.5	16.9	12.6	12.4	13.0
				6.77								
Equipment & Services												
Halliburton Co	US4062161017	USD	US	3.40	24.2	20.9	24.4	40.5	26.4	15.9	17.8	17.0
Helix Energy Solutions Group Inc	US42330P1075	USD	US	2.87	8.3	7.1	9.7	40.8	44.8	15.8	12.7	22.4
ShawCor Ltd	CA8204391079	CAD	CA	2.98	35.1	27.4	22.6	24.0	35.1	60.0	19.7	10.7
Shandong Molong Petroleum Machinery Co L	CNE1000001N1	HKD	HK	0.08	9.6	6.7	4.4	12.3	4.8	6.7	nm	nm
				9.33								
Solar												
Trina Solar Ltd	US89628E1047	USD	US	2.03	nm	20.2	12.1	9.0	4.4	543.3	nm	nm
JA Solar Holdings Co Ltd	US4660902069	USD	US	1.44	10.9	29.4	43.5	nm	1.3	nm	nm	nm
				3.46								
Oil & Gas Refining & Marketing												
Valero Energy Corp	US91913Y1001	USD	US	3.32	5.0	5.3	7.6	nm	25.9	10.3	8.4	12.7
				3.32								
Construction & Engineering												
Kentz Corp Ltd	JE00B28ZGP75	GBP	GB	0.74	nm	33.7	34.1	33.6	23.2	17.5	14.8	12.8
			Cash	-0.26								
			Total	100								
				PER	10.5	10.3	9.2	16.4	10.7	10.4	11.6	12.1
				Med. PER	9.8	9.9	9.7	16.0	12.9	10.4	12.1	12.2
				Ex-gas PER	10.5	10.4	9.8	17.3	10.4	10.2	10.4	11.2

The Fund's portfolio may change significantly over a short period of time; no recommendation is made for the purchase or sale of any particular stock.

Tim Guinness
Chairman & Chief Investment Officer

Will Riley & Jonathan Waghorn
Fund investment team

For more information on the factors affecting the global energy market read our Global Energy Outlook.

Commentary for our views on Alternative Energy and Asia markets is available on our website. Please click here to view.

The Fund's holdings, industry sector weightings and geographic weightings may change at any time due to ongoing portfolio management. References to specific investments and weightings should not be construed as a recommendation by the Fund or Guinness Atkinson Asset Management, Inc. to buy or sell the securities. Current and future portfolio holdings are subject to risk.

Mutual fund investing involves risk and loss of principal is possible. The Fund invests in foreign securities which will involve greater volatility, political, economic and currency risks and differences in accounting methods. The Fund is non-diversified meaning it concentrates its assets in fewer individual holdings than a diversified fund. Therefore, the Fund is more exposed to individual stock volatility than a diversified fund. The Fund also invests in smaller companies, which involve additional risks such as limited liquidity and greater volatility. The Fund's focus on the energy sector to the exclusion of other sectors exposes the Fund to greater market risk and potential monetary losses than if the Fund's assets were diversified among various sectors. The decline in the prices of energy (oil, gas, electricity) or alternative energy supplies would likely have a negative effect on the funds holdings.

MSCI World Energy Index is the energy sector of the MSCI World Index (an unmanaged index composed of more than 1400 stocks listed in the US, Europe, Canada, Australia, New Zealand, and the Far East) and as such can be used as a broad measurement of the performance of energy stocks. Indices do not incur expenses and are not available for investment.

The S&P 500 Index is a broad based unmanaged index of 500 stocks, which is widely recognized as representative of the equity market in general.

One cannot invest directly in an index.

Price to earnings (P/E) ratio (PER) reflects the multiple of earnings at which a stock sells and is calculated by dividing current price of the stock by the company's trailing 12 months' earnings per share.

Earnings per share (EPS) is calculated by taking the total earnings divided by the number of shares outstanding.

Book Value is the net asset value of a company, calculated by subtracting total liabilities from total assets.

Enterprise value (EV) is defined as the market capitalization of a company plus debt minus total cash and cash equivalents.

EV/EBITDA is EV divided by "Earnings Before Interest, Taxes, Depreciation and Amortization" (EBITDA)

Cash Flow Return on Investment (CFROI) is a valuation model that assumes the stock market sets prices based on cash flow, not on corporate performance and earnings. CFROI is a proprietary metric prepared by HOLT, a division of Credit Suisse.

Price to Discounted Cash Flow (DCF) is a valuation method used to estimate the attractiveness of an investment opportunity and calculated by dividing current price of the stock by DCF, which is an analysis that uses future free cash flow projections and discounts them (most often using the weighted average cost of capital) to arrive at a present value.

PV-10 is the present value of estimated future oil and gas revenues, net of estimated direct expenses, discounted at an annual discount rate of 10%.

This information is authorized for use when preceded or accompanied by a prospectus for the Guinness Atkinson Funds. The prospectus contains more complete information, including investment objectives, risks, charges and expenses related to an ongoing investment in the Fund. Please read the prospectus carefully before investing.

Distributed by Quasar Distributors, LLC