

Memo to: Oaktree Clients
From: Howard Marks
Re: The Lessons of Oil

I want to provide a memo on this topic before I – and hopefully many of my readers – head out for year-end holidays. I'll be writing not with regard to the right price for oil – about which I certainly have no unique insight – but rather, as indicated by the title, about what we can learn from recent experience.

- Despite my protestations that I don't know any more than others about future macro events – and thus that my opinions on the macro are unlikely to help anyone achieve above average performance – people insist on asking me about the future. Over the last eighteen months (since Ben Bernanke's initial mention that we were likely to see some "tapering" of bond buying), most of the macro questions I've gotten have been about whether the Fed would move to increase interest rates, and particularly when. These are the questions that have been on everyone's mind.

Since mid-2013, the near-unanimous consensus (with credit to DoubleLine's Jeffrey Gundlach for vocally departing from it) has been that rates would rise. And, of course, the yield on the 10-year Treasury has fallen from roughly 3% at that time to 2.2% today. This year many investing institutions are underperforming the passive benchmarks and attributing part of the shortfall to the fact that their fixed income holdings have been too short in duration to allow them to benefit from the decline of interest rates. **While this has nothing to do with oil, I mention it to provide a reminder that what "everyone knows" is usually unhelpful at best and wrong at worst.**

- **Not only did the investing herd have the outlook for rates wrong, but it was uniformly inquiring about the wrong thing.** In short, while everyone was asking whether the rate rise would begin in December 2014 or April 2015 (or might it be June?) – in response to which I consistently asked why the answer matters and how it might alter investment decisions – few people I know were talking about whether the price of oil was in for a significant change.

Back in 2007, in *It's All Good*, I provided a brief list of some possibilities for which I thought stock prices weren't giving enough allowance. I included "\$100 oil" (since a barrel was selling in the \$70s at the time) and ended with "the things I haven't thought of." I suggested that it's usually that last category – the things that haven't been considered – we should worry about most. **Asset prices are often set to allow for the risks people are aware of. It's the ones they haven't thought of that can knock the market for a loop.**

- In my book *The Most Important Thing*, I mentioned something I call "the failure of imagination." I defined it as "either being unable to conceive of the full range of possible outcomes or not understanding the consequences of the more extreme occurrences." Both aspects of the definition apply here.

The usual starting point for forecasting something is its current level. Most forecasts extrapolate, perhaps making modest adjustments up or down. In other words, most forecasting is done incrementally, and few predictors contemplate order-of-magnitude changes. Thus I imagine that with Brent crude around \$110 six months ago, the bulls were probably predicting \$115 or \$120 and the bears \$105 or \$100. **Forecasters usually stick too closely to the current level, and on**

those rare occasions when they call for change, they often underestimate the potential magnitude. Very few people predicted oil would decline significantly, and fewer still mentioned the possibility that we would see \$60 within six months.

For several decades, Byron Wien of Blackstone (and formerly of Morgan Stanley, where he authored widely read strategy pieces) has organized summer lunches in the Hamptons for “serious,” prominent investors. At the conclusion of the 2014 series in August, he reported as follows with regard to the consensus of the participants:

Most believed that the price of oil would remain around present levels. Several trillion dollars have been invested in drilling over the last few years and yet production is flat because Nigeria, Iraq and Libya are producing less. The U.S. and Europe are reducing consumption, but that is being more than offset by increasing demand from the developing world, particularly China. Five years from now the price of Brent is likely to be closer to \$120 because of emerging market demand.

I don't mean to pick on Byron or his luncheon guests. In fact, I think the sentiments he reported were highly representative of most investors' thinking at the time.

As a side note, it's interesting to observe that growth in China already was widely understood to be slowing, but perhaps that recognition never made its way into the views on oil of those present at Byron's lunches. **This is an example of how hard it can be to appropriately factor all of the relevant considerations into complex real-world analysis.**

- Turning to the second aspect of “the failure of imagination” and going beyond the inability of most people to imagine extreme outcomes, the current situation with oil also illustrates how difficult it is to understand the full range of potential ramifications. **Most people easily grasp the immediate impact of developments, but few understand the “second-order” consequences . . . as well as the third and fourth.** When these latter factors come to be reflected in asset prices, this is often referred to as “contagion.” Everyone knew in 2007 that the sub-prime crisis would affect mortgage-backed securities and homebuilders, but it took until 2008 for them to worry equally about banks and the rest of the economy.

The following list is designed to illustrate the wide range of possible implications of an oil price decline, both direct consequences and their ramifications:

- Lower prices mean reduced revenue for oil-producing nations such as Saudi Arabia, Russia and Brunei, causing GDP to contract and budget deficits to rise.
- There's a drop in the amounts sent abroad to purchase oil by oil-importing nations like the U.S., China, Japan and the United Kingdom.
- Earnings decline at oil exploration and production companies but rise for airlines whose fuel costs decline.
- Investment in oil drilling declines, causing the earnings of oil services companies to shrink, along with employment in the industry.
- Consumers have more money to spend on things other than energy, benefitting consumer goods companies and retailers.
- Cheaper gasoline causes driving to increase, bringing gains for the lodging and restaurant industries.

- With the cost of driving lower, people buy bigger cars – perhaps sooner than they otherwise would have – benefitting the auto companies. They also keep buying gasoline-powered cars, slowing the trend toward alternatives, to the benefit of the oil industry.
 - Likewise, increased travel stimulates airlines to order more planes – a plus for the aerospace companies – but at the same time the incentives decline to replace older planes with fuel-efficient ones. (This is a good example of the analytical challenge: is the net impact on airplane orders positive or negative?)
 - By causing the demand for oil services to decline, reduced drilling leads the service companies to bid lower for business. This improves the economics of drilling and thus helps the oil companies.
 - Ultimately, if things get bad enough for oil companies and oil service companies, banks and other lenders can be affected by their holdings of bad loans.
- **Further, it’s hard for most people to understand the self-correcting aspects of economic events.**
 - A decline in the price of gasoline induces people to drive more, increasing the demand for oil.
 - A decline in the price of oil negatively impacts the economics of drilling, reducing additions to supply.
 - A decline in the price of oil causes producers to cut production and leave oil in the ground to be sold later at higher prices.

In all these ways, lower prices either increase the demand for oil or reduce the supply, causing the price of oil to rise (all else being equal). In other words, lower oil prices – in and of themselves – eventually make for higher oil prices. **This illustrates the dynamic nature of economics.**

- Finally, in addition to the logical but often hard-to-anticipate second-order consequences or knock-on effects, negative developments often morph in illogical ways. Thus, in response to cascading oil prices, “I’m going to sell out of emerging markets that rely on oil exports” can turn into “I’m going to sell out of all emerging markets,” even oil importers that are aided by cheaper oil.

In part the emotional reaction to negative developments is the product of surprise and disillusionment. Part of this may stem from investors’ inability to understand the “fault lines” that run through their portfolios. Investors knew changes in oil prices would affect oil companies, oil services companies, airlines and autos. But they may not have anticipated the effects on currencies, emerging markets and below-investment grade credit broadly. Among other things, they rarely understand that capital withdrawals and the resulting need for liquidity can lead to urgent selling of assets that are completely unrelated to oil. **People often fail to perceive that these fault lines exist, and that contagion can reach as far as it does. And then, when that happens, investors turn out to be unprepared, both intellectually and emotionally.**

A grain of truth underlies most big up and down moves in asset prices. Not just “oil’s in oversupply” today, but also “the Internet will change the world” and “mortgage debt has historically been safe.” Psychology and herd behavior make prices move too far in response to those underlying grains of truth, causing bubbles and crashes, but also leading to opportunities to make great sales of overpriced assets on the rise and bargain purchases in the subsequent fall. **If you think markets are logical and investors are objective and unemotional, you’re in for a lot of surprises.** In tough times, investors often fail to apply discipline and discernment;

psychology takes over from fundamentals; and “all correlations go to one,” as things that should be distinguished from each other aren’t.

- To give you an idea about how events in one part of the economy can have repercussions in other economic and market segments, I’ll quote from some of the analyses I’ve received this week from Oaktree investment professionals:
 - Energy is a very significant part of the high yield bond market. In fact, it is the largest sector today (having taken over from media/telecom, which has traditionally been the largest). This is the case because the exploration industry is highly capital-intensive, and the high yield bond market has been the easiest place to raise capital. The knock-on effects of a precipitous fall in bond prices in the biggest sector in the high yield bond market are potentially substantial: outflows of capital, and mutual fund and ETF selling. It would be great for opportunistic buyers if the selling gets to sectors that are fundamentally in fine shape . . . because a number of them are. And, in fact, low oil prices can even make them better.
 - An imperfect analogy might be instructive: capital market conditions for energy-related assets today are not unlike what we saw in the telecom sector in 2002. As in telecom, you’ve had the confluence of really cheap financing, innovative technology, and prices for the product that were quite stable for a good while. [To this list of contributing factors, I would add the not-uncommon myth of perpetually escalating demand for a product.] These conditions resulted in the creation of an oversupply of capacity in oil, leading to a downdraft. It’s historically unprecedented for the energy sector to witness this type of market downturn while the rest of the economy is operating normally. Like in 2002, we could see a scenario where the effects of this sector dislocation spread wider in a general “contagion.”
 - Selling has been reasonably indiscriminate and panicky (much like telecom in 2002) as managers have realized (too late) how overexposed they are to the energy sector. Trading desks do not have sufficient capital to make markets, and thus price swings have been predictably volatile. The oil selloff has also caused deterioration in emerging market fundamentals and may force spreads to gap out there. This ultimately may create a feedback loop that results in contagion to high yield bonds generally.
- Over the last year or so, while continuing to feel that U.S. economic growth will be slow and unsteady in the next year or two, I came to the conclusion that any surprises were most likely to be to the upside. And my best candidate for a favorable development has been the possibility that the U.S. would sharply increase its production of oil and gas. This would make the U.S. oil-independent, making it a net exporter of oil and giving it a cost advantage in energy – based on cheap production from fracking and shale – and thus a cost advantage in manufacturing. Now, the availability of cheap oil all around the world threatens those advantages. So much for macro forecasting!
- There’s a great deal to be said about the price change itself. A well-known quote from economist Rudiger Dornbusch goes as follows: **“In economics things take longer to happen than you think they will, and then they happen faster than you thought they could.”** I don’t know if many people were thinking about whether the price of oil would change, but the decline of 40%-plus must have happened much faster than anyone thought possible.
- “Everyone knows” (now!) that the demand for oil turned soft (due to sluggish economic growth, increased fuel efficiency and the emergence of alternatives) at the same time that the supply was

increasing (as new sources came on stream). Equally, everyone knows that lower demand and higher supply imply lower prices. Yet it seems few people recognized the ability of these changes to alter the price of oil. A good part of this probably resulted from belief in the ability of OPEC (meaning largely the Saudis) to support prices by limiting production.

A price that's kept aloft by the operation of a cartel is, by definition, higher than it would be based on supply and demand alone. Maybe the thing that matters is how far the cartelized price is from the free-market price; the bigger the gap, the shorter the period for which the cartel will be able to maintain control. Initially a cartel or a few of its members may be willing to bear pain to support the price by limiting production even while others produce full-out. But there may come a time when the pain becomes unacceptable and the price supporters quit. **The key lesson here may be that cartels and other anti-market mechanisms can't hold forever.** As Herb Stein said, "If something cannot go on forever, it will stop." Maybe we've just proved that this extends to the effectiveness of cartels.

- Anyway, on the base of 93 million barrels a day of world oil use, some softness in consumption combined with an increase in production to cut the price by more than 40% in just a few months. **What this proves – about most things – is that to Dornbusch's quote above we should append the words “. . . and they go much further than you thought they could.”**

The extent of the price decline seems much greater than the changes in supply and demand would call for. Perhaps to understand it you have to factor in (a) Saudi Arabia's ceasing to balance supply and demand in the oil market by cutting production, after having done so for many years, and (b) a large contribution to the decline on the part of psychology. (In the “conspiracy theory” department, consider the rumor that Saudi Arabia is allowing or abetting the price drop in order to either punish Iran, Iraq and ISIL; put the U.S. shale oil industry out of business; or discipline the more profligate members of OPEC . . . take your pick.)

The price of oil thus may have gone from too high (supported by OPEC and by Saudi Arabia in particular) to too low (depressed by negative psychology). It seems to me with regard to the latter that the price fell too far for some market participants to maintain their equanimity. I often imagine participants' internal dialogues. At \$110, I picture them saying, “I'll buy like mad if it ever gets to \$100.” Because of the way investor psychology works, at \$90 they may say, “If it falls to \$70, I'll give serious thought to buying.” But at \$60 the tendency is to say, “It's a falling knife and there's no way to know where it'll stop; I wouldn't touch it at any price.”

It feels much better to buy assets while they're rising. But it's usually smarter to buy after they've fallen for a while. **Bottom line, as noted above: there's little logic in investor psychology.**

- I said it about gold in *All That Glitters* (November 2010), and it's equally relevant to oil: **it's hard to analytically put a price on an asset that doesn't produce income.** In principle, a non-perishable commodity won't be priced below the variable production cost of the highest-cost producer whose output is needed to satisfy total demand. But in reality and in the short run, strange things can happen. It's clear that today's oil price is well below that standard.

It's hard to say what the right price is for a commodity like oil . . . and thus when the price is too high or too low. Was it too high at \$100-plus, an unsustainable blip? History says no: it was there for 43 consecutive months through this past August. And if it wasn't too high then, isn't it laughably low today? The answer is that you just can't say. Ditto for whether the response of the price of oil to the changes in fundamentals has been appropriate, excessive or insufficient. And if

you can't be confident about what the right price is, then you can't be definite about financial decisions regarding oil.

In the last few years, as I said in *The Role of Confidence* (August 2013), investor sentiment has been riding high. Or, as Doug Kass pointed out this past summer, there's been "a bull market in complacency." Regardless, it seems that a market that was unconcerned about things like oil and its impact on economies and assets now has lost its composure. Especially given the pervasive role of energy in economic life, uncertainty about oil introduces uncertainty into many aspects of investing.

"Value investing" – the form of investing Oaktree practices – is supposed to be about buying based on the present value of assets, rather than conjecture about profit growth in the far-off future. But you can't assess present value without taking some position on what the future holds, even if it's only assuming a continuation of present conditions or perhaps – for the sake of conservatism – a considerably lower level. Recent events cast doubt on the ability to safely take any position.

One of the things that's central to risk-conscious value investing is ascertaining the presence of a generous cushion in terms of "margin of safety." This margin comes from conviction that conditions will be stable, financial performance is predictable, and/or an entry price is low relative to the asset's intrinsic value. But when something as central as oil is totally up for grabs, as investors seem to think is the case today, it's hard to know whether you have an adequate margin. Referring to investing, Charlie Munger told me, "It's not supposed to be easy." The recent events surrounding oil certainly prove that it isn't.

On the other hand – and in investing there's always another hand – high levels of confidence, complacency and composure on the part of investors have in good measure given way to disarray and doubt, making many markets much more to our liking. For the last few years, interest rates on the safest securities – brought low by central banks – have been coercing investors to move out the risk curve. Sometimes they've made that journey without cognizance of the risks they were taking, and without thoroughly understanding the investments they undertook. Now they find themselves questioning many of their actions, and it feels like risk tolerance is being replaced by risk aversion. **This paragraph describes a process through which investors are made to feel pain, but also one that makes markets much safer and potentially more bargain-laden.**

In particular with regard to the distress cycle, confident and optimistic credit markets permit the unwise extension of credit to borrowers who are undeserving but allowed to become overlevered nevertheless. Negative subsequent developments can render providers of capital less confident, making the capital market less accommodative. This cycle of easy issuance followed by defrocking has been behind the three debt crises that delivered the best buying opportunities in our 26 years in distressed debt. We think it also holds the key to the creation of superior opportunities in the future.

We've argued for a few years that credit standards were dropping as investors – chasing yield – became less disciplined and less discerning. But we knew great buying opportunities wouldn't arrive until a negative "igniter" caused the tide to go out, exposing the debt's weaknesses. **The current oil crisis is an example of something with the potential to grow into that role. We'll see how far it goes.**

For the last 3½ years, Oaktree's mantra has been "move forward, but with caution." For the first time in that span, with the arrival of some disarray and heightened risk aversion, events tell us it's appropriate to drop some of our caution and substitute a degree of aggressiveness.

December 18, 2014

Legal Information and Disclosures

This memorandum expresses the views of the author as of the date indicated and such views are subject to change without notice. Oaktree has no duty or obligation to update the information contained herein. Further, Oaktree makes no representation, and it should not be assumed, that past investment performance is an indication of future results. Moreover, wherever there is the potential for profit there is also the possibility of loss.

This memorandum is being made available for educational purposes only and should not be used for any other purpose. The information contained herein does not constitute and should not be construed as an offering of advisory services or an offer to sell or solicitation to buy any securities or related financial instruments in any jurisdiction. Certain information contained herein concerning economic trends and performance is based on or derived from information provided by independent third-party sources. Oaktree Capital Management, L.P. (“Oaktree”) believes that the sources from which such information has been obtained are reliable; however, it cannot guarantee the accuracy of such information and has not independently verified the accuracy or completeness of such information or the assumptions on which such information is based.

This memorandum, including the information contained herein, may not be copied, reproduced, republished, or posted in whole or in part, in any form without the prior written consent of Oaktree.

© OAKTREE CAPITAL MANAGEMENT, L.P.
ALL RIGHTS RESERVED