



Research Report by the Wealth Daily Network

# THE DEATH OF CHEAP OIL

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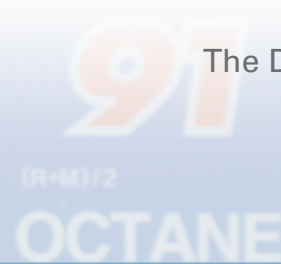
## The Death of Cheap Oil

Oil is news. We read about it nearly every day in the financial press. We hear it discussed at length by weighty financial commentators on TV. We see the price per barrel updated on the CNBC ticker. But oil hasn't always been the center of attention. In fact, until very recently, crude oil barely registered. Americans took plentiful, cheap oil for granted. When prices did spike, they usually didn't stay high for very long. Crude tended to fall back to its long-term average price of just under \$20 per barrel within six months to a year. These spikes and the upheaval they caused were quickly forgotten.

Those days are over . . .

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## The Death of Cheap Oil

In the late 1990s, Robert H. Meier and I wrote a report entitled *Oil Shock: How to Protect Yourself and Profit from the Coming Oil Crisis*. Back then, oil prices didn't even rate a mention on tech-stock obsessed CNBC, never mind their own place on the ticker. Analysts were confidently predicting \$5-per-barrel crude and the availability of plentiful supplies well into the future. That was then . . .

Fast forward to the present, and the "crisis" we spoke of in that timely report is here. So is the potential to profit from even higher prices. All the factors we forecast in that report—perpetual war in the Middle East, the exploding Chinese economy and the end of easily accessible new supplies—mean the \$40-per-barrel peaks of the past decade could easily become the price floor of the next. Oil at \$80 or even \$100 per barrel is not only possible but, in our view, probable in the coming decade.

That's why I've decided to put together this follow-up report. We'll outline the evolution of this market and revisit the fundamental factors that make oil prices vulnerable to a perpetual state of shock—a new era of exploding demand, reduced supply and global instability, especially in the areas where this most precious of all commodities matters most: the Middle East and the developing world.

I'll also show you a simple, low cost, fixed-risk professional trading technique that will help you capitalize on this new, perpetual state of shock. You'll learn how to use the inevitable downward corrections in this market to buy oil for "pennies on the dollar" just like professional hedge fund managers, without the high cost of entry and the rich management and performance fees many of these managers command.

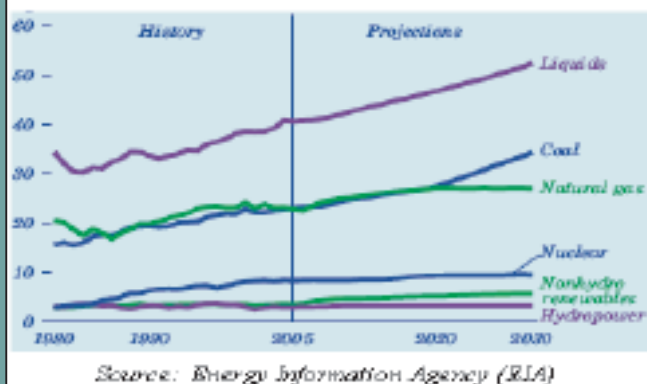




## The World's Most Essential Commodity

Crude oil is often referred to as the world's most essential commodity, with good reason. Close to 40% of global energy consumption is based on crude oil. Without crude oil, manufacturing, power generation, transportation and global commerce effectively stop. There has been a lot of talk recently about alternative energy sources like coal, natural gas, nuclear—and all are critical parts of the total energy picture. Nevertheless, as *Figure 1* illustrates, crude oil is still the biggest supplier of energy as measured in BTUs (British Thermal Units) by a long shot. It is expected to remain that way well into the next decade.

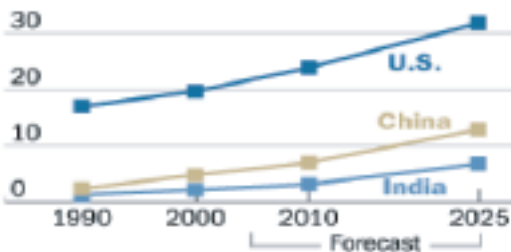
**Figure 1: Energy Consumption by Fuel (quadrillion BTU)**



**Figure 1A: Sources of Demand**

### World Oil Consumption

Assuming high economic growth  
In millions of barrels per day



Source: EIA, U.S. Dept. of Energy 2003 report

The biggest source of global oil demand is the United States. The U.S. has approximately 4% of the world's population, but accounts for roughly 21% of global oil use. Nearly 44% of this demand goes to powering cars and trucks. At the same time, the average fuel economy of the American fleet is at the lowest level in two decades, because advances in internal combustion engine technology are being used to improve things like horsepower and towing capacity rather than gas mileage. High-mileage gasoline/electric "hybrids" like Toyota's Prius are popular, but make up such a small portion of the U.S. fleet as to be statistically meaningless.



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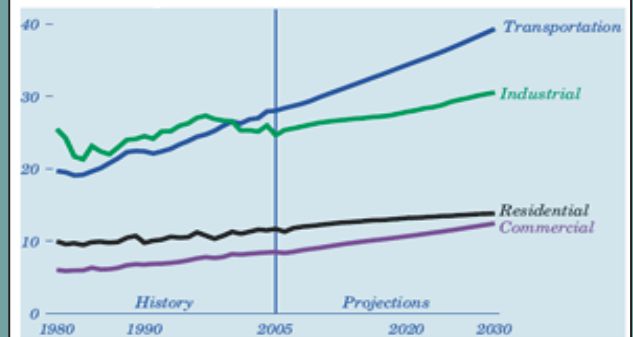
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## The World's Most Essential Commodity

Meanwhile, the American love of big cars and sport utility vehicles (SUVs) continues—even with \$60 oil. We find it instructive that the planned American entries into the hybrid market are almost all large, heavy SUVs. Ford has come out with its hybrid SUV launch, the Ford Escape, and has a new model coming out next year. The Ford Escape is very similar to its popular Explorer model. General Motors has begun to pave its own path into hybrid technology. In 2004, GM introduced the world's first full-sized hybrid pickup, and in 2006 launched a hybrid SUV called the Saturn VUE. Japanese manufacturers are driving in the same lane. Toyota has entered the SUV hybrid market with the launch this year of their Highlander SUV hybrid line.

Figure 2 shows that transportation will continue to demand the lion's share of global energy use. The age of suburban sprawl means that Americans are spending more time in their cars and burning more gasoline as a result. At current rates of demand growth, the average fuel economy of cars and light trucks would need to improve to 55 mpg by 2025 just to keep U.S. oil consumption flat. Hybrids will certainly help, and some of the latest models coming out in 2007 will average between 26 and 40 mpg. But unless prices rise far enough, fast enough to cause Americans to cut back on their trips to the mall, we don't see U.S. oil demand slackening anytime soon.

**Figure 2: Delivered Energy Consumption by Sector (quadrillion BTU)**



Source: Energy Information Agency (EIA)



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## Biggest Source of New Demand to Come From Asia

Total global demand this year for crude oil is expected to average just over 84 million barrels per day (MPD). Of those, America's 300 million people consume roughly 20 MBD. Meanwhile, Asia's 3.6 billion people—twelve times the U.S. population—consume just 20 MBD. Should Asian per capita consumption rise from its measly 7% of U.S. demand to a mere 14%, the market would have to supply an additional 20 million barrels of oil per day. This is around *one fourth* of today's entire global demand. And that assumes U.S. consumption stays flat! That is not likely unless prices rise enough to make Americans sit up and take notice.

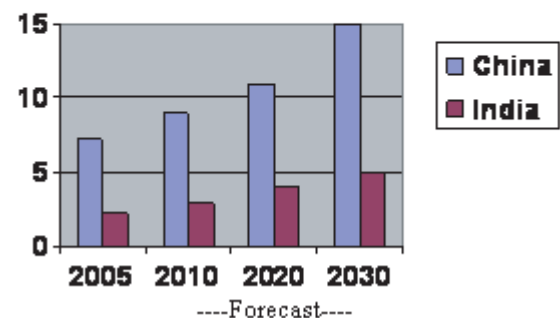
Let's look at it another way. U.S. consumption of crude oil is roughly 24 barrels per person, per year. South Korea's annual per capita consumption is 17 barrels and so is Japan's. These are both developed Asian nations. China is rapidly becoming a developed Asian nation, yet its per capita consumption of crude is only 1.9 barrels per year. Nearly-as-populous India consumes only 0.8 barrels of oil per person per year.

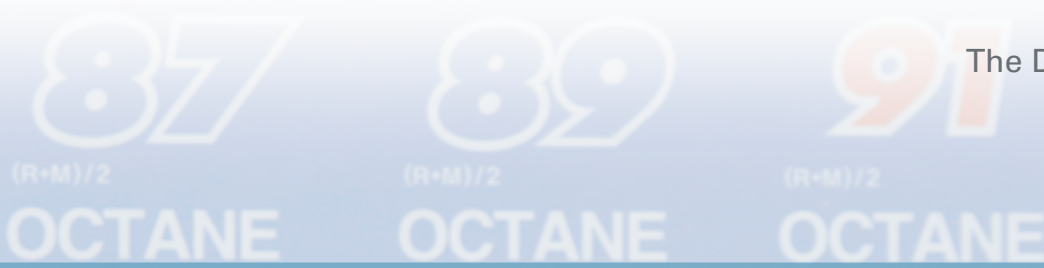
The 2004 price spike to \$55 per barrel was blamed partially on increasing Chinese demand. A doubling of Chinese demand would still represent just *one fifth* the usage of Japan and South Korea. With its 1.3 *billion* people, a doubling of Chinese per capita demand means an increase of 2.5 billion barrels per year or 7.2 million barrels *per day*. Yet today's supply cushion of only 1 million barrels per day is unchanged from 1973, when global oil demand was half what it is now. The 2.5% global supply cushion that existed during the Arab oil embargo has shrunk to 1.25%. According to OPEC estimates, a supply cushion of as much as 4% is required to keep prices stable.

**Figure 3: Thirsty Asia**

### Ever Rising

Oil Demand, in millions of barrels per day

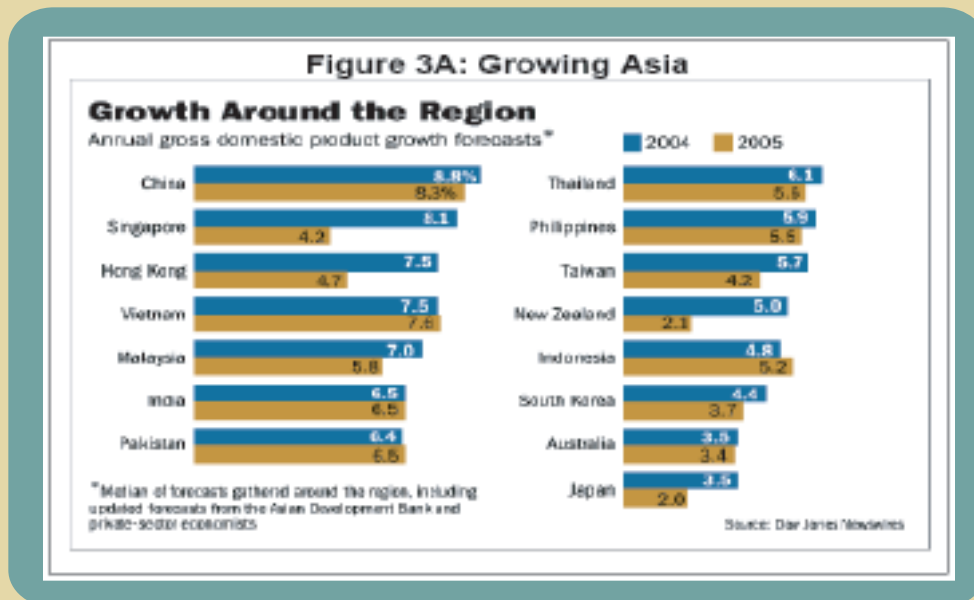




## Biggest Source of New Demand to Come From Asia

The average American uses 12.63 times the oil of the average Chinese and 30 times the oil of the average Indian. Just a fractional increase in Chinese and Indian usage could have a powerful impact on demand and, by extension, price. Both of these economies have undergone explosive growth and should continue to grow despite expected slowdowns in each. China expects GDP growth of 10.2% by the end of 2006, and is projecting 9.5% in 2007. This is red hot when compared with the more developed nations of Europe and North America. So far in 2006, India's GDP has grown 8%, and although China gets all the press, it's India that has the fastest-growing car market in the world.

According to the IEA's International Energy Outlook in 2006, global demand for oil will average a 1.4% increase per year between 2003 and 2030. That means that 2004's 80 MDB consumption rate would rise to 81.6 MDB in 2005 and to 83.23 MBD in 2006; yet global demand for 2006 is set to break over 84 MBD. Given the current tightness in the crude oil market, these kinds of growth rates are troublesome enough. The International Energy Agency expects Asian demand to grow by 3.3% per year from now until 2030. With its huge population and faster-than-expected economic growth, Asia could easily add another 1 to 5 percentage points to overall global demand.



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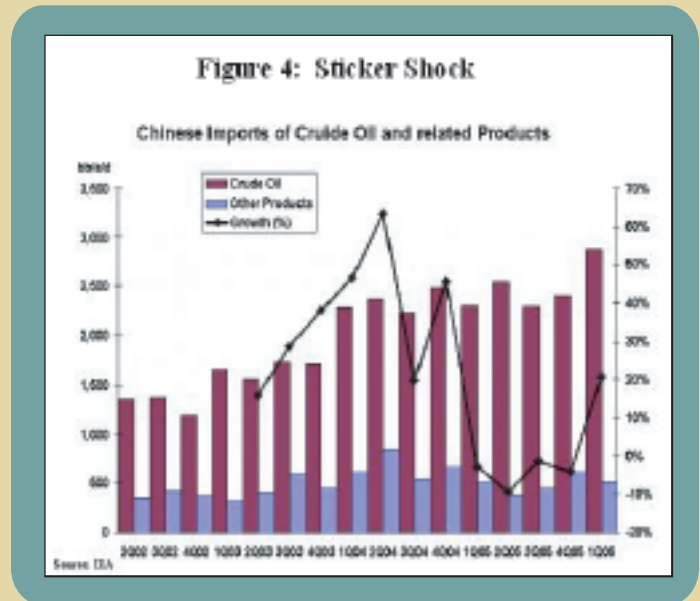
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## China's Exploding Demand

In 2005, China sustained its position as the world's third largest crude oil importer, and just two years ago accounted for 40% of the growth in global oil demand. This was mostly due to their burgeoning economy. China's crude imports for 2004 were estimated at 2.4 million barrels per day—up a whopping 33% from 2003's 1.8 MBD. Even as demand increased, imports slowed in 2005, with crude oil imports rising only 3.3% to 127 million tons and accounting for 10% of the world's overall growth. Experts attribute the decline to the growth in Chinese domestic oil output. But China's thirst will only grow; according to the EIA, consumption will grow an average of 3.8% every year until 2030, when it will reach nearly 15 million barrels of oil per day. This projection means that China will account for 13% of the world's oil demand in 2030, double its 2003 share of 7%.

As we predicted in our original *Oil Shock* report, the Chinese have discovered the automobile to the point where they've gone certifiably car-crazy. Since 2003, China has become the third largest automobile market, growing a remarkable 44.4% year after year. The number of cars on Chinese roads is expected to grow fivefold—to half the U.S. total—in the next decade, further increasing Chinese demand for oil.



Unlike Europe, Japan and the United States, which have been importing the bulk of their oil for years, China is late to the game when it comes to securing new supplies. Not surprisingly, China has been making deals with Middle Eastern and African suppliers at a furious pace. Just last week, China and "axis of evil" member Iran were poised to sign a monumental energy deal worth almost \$100 billion. Under the accord, China's Sinopec would pay Iran \$100 billion over the next 25 years for oil and gas purchases and a 51% stake in the Yadavaran oil field. This would allow China to buy around 150,000 barrels of Iranian oil per day. The Yadavaran oil field holds an estimated three billion barrels with the ability to produce 300,000 barrels per day, roughly the same volume China imports from Iran.



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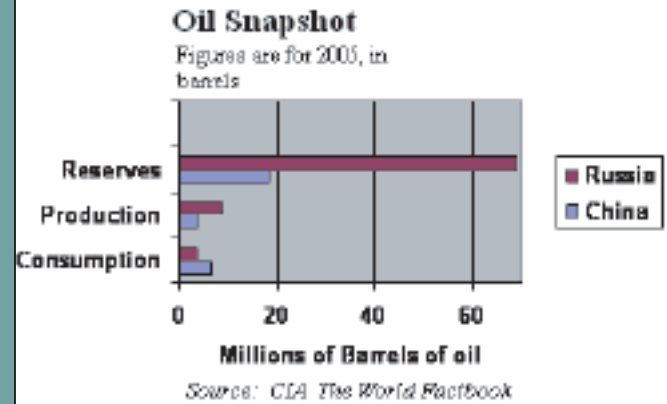
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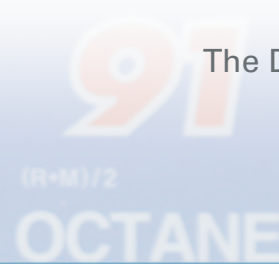
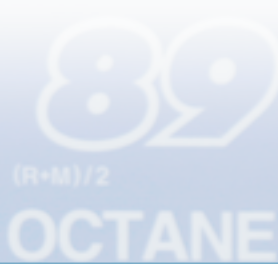
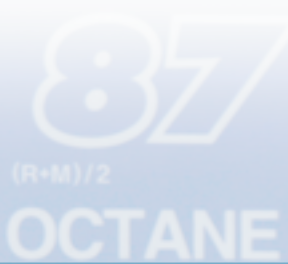
## China's Exploding Demand

On a more ominous note, one wonders if a secret military technology transfer was part of that agreement. China is desperate for new supplies. Therefore we are not surprised that Iran, along with Saudi Arabia, Oman and Angola, are China's top four crude oil suppliers. None of these nations are paragons of virtue. All are either dictatorships or, in the case of Saudi Arabia, dictatorships posing as kingdoms. Saudi Arabia may buy U.S. military hardware and invest in U.S. markets, but it also actively promotes Wahabbi Islamic fundamentalism that brands "infidels" as evil and the United States as the Great Satan. Remember, 15 of the 19 September 11th hijackers were Saudis.

China's need for oil now makes it nearly as vulnerable to problems in the Middle East as the U.S. China is well on its way to constructing a 90-day petroleum reserve and will need to fill it, adding yet another 35,000 to 65,000 barrels per day to its growing demand. Construction of the storage facilities is expected to be completed between 2006 and 2008. Ironically enough, the Chinese economy is now dependent on the U.S. to protect Persian Gulf shipping lanes. Could this be part of the reason why U.S.-Chinese relations have improved so much over the past few years?

**Figure 4A: A Perfect Fit?**





## Russia, China, & Yukos

When it comes to the classic relationship between a natural resource producer and a natural resource consumer, no two nations appear more perfectly matched than Russia and China. Russia produces far more oil than it consumes. China consumes far more oil than it produces. Both share a Communist past, a long border complete with road and rail links, and a history of uneasy relationships with the world's largest oil consumer, America.

In what turned out to be a blatant attempt to nationalize oil production in late 2004, Russia premier Vladimir Putin and his government slapped a \$28 billion tax lien on the country's biggest oil producer, Yukos, throwing its president Mikhail Khodorkovsky in jail and causing shareholders billions in losses. The Kremlin then put Yukos's biggest oil-producing subsidiary, Yuganskneftegaz, on the block. When temporarily thwarted from selling it on the open market by a Houston bankruptcy court, the Russian government resorted to selling it to a shell company controlled by the state—in effect nationalizing both the company and its reserves.

In November of 2006, China and Russia signed a series of agreements aimed at setting up two joint venture companies, including the China National Petroleum Corporation. These deals would take advantage of oil and gas resources and construct a pipeline from Russia to the Chinese border. So far in 2006, Russia's oil output was 358 million tons, while China's was only 140 million tons. One wonders how many more of these deals China has up its sleeve. How many other players besides Russia and Saudi Arabia are the recipients of Chinese advances? The U.S. still needs Saudi and Russian oil. The question is, what happens when growing Chinese demand gets to the point where these nations no longer need the U.S. as a consumer? Indeed, this is the environment the U.S. will increasingly face. As the top consumer of crude oil in the 20th century, the U.S. was in a powerful position to dictate the terms of trade. Now that China has entered the game, America will find itself competing for shrinking supplies at every level. Over the long haul that can mean only one thing—higher prices.



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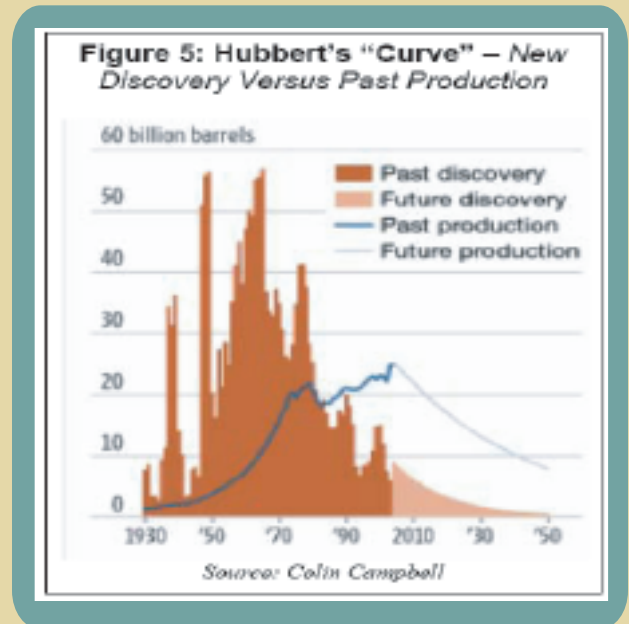
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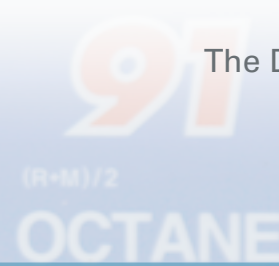
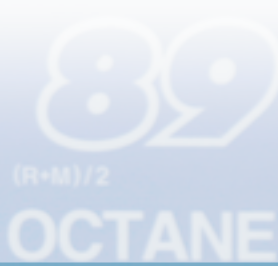
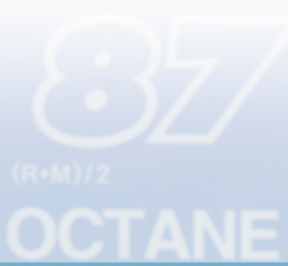
## Hubbert's Curve

The world has consumed over 900 billion barrels of oil since the drilling of the first well in the mid 1800s—roughly half of recoverable supplies. Twenty percent of the world's daily crude supply comes from just 14 giant oilfields with an average age of 60 years. No new giant oilfields have been discovered recently. In fact, discovery of new oil reserves peaked in the 1960s and has been declining rapidly ever since.

In the 1950s, Shell Oil geophysicist M. King Hubbert calculated that the production of an oil field would follow the classic "bell curve" shape. Hubbert predicted production would increase at an accelerated rate soon after oil was struck, but once the half-way point was reached, it would begin declining at roughly the same accelerated rate. He used this model to predict that the U.S. would peak in the 1970s and was derided. Nevertheless, his prediction turned out to be surprisingly accurate.

Hubbert anticipated that oil explorers would "cherry-pick" the largest, most accessible fields first, in order to maximize returns, delaying the harder, more expensive work until later. *Figure 5* shows the bell curve shape of new discoveries with the curve peaking in the mid 1960s. Notice how the past production line matches the new discovery line with a 20 to 25 year lag. If this trend continues and M. King Hubbert is proven right again, the world has either reached or will soon reach peak global production.





## Hubbert's Curve

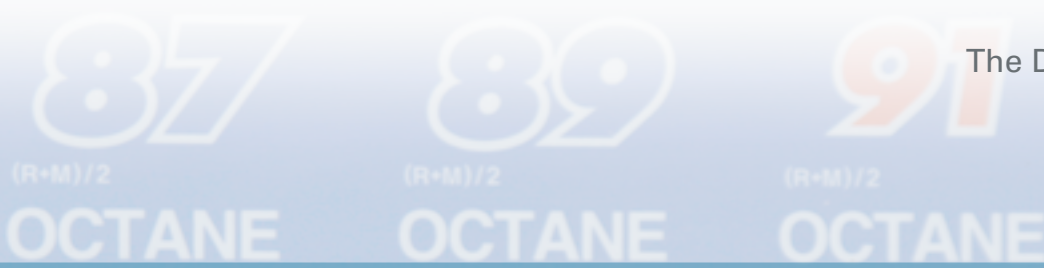
U.S. oil production peaked in 1970. North Sea oil production peaked in 1999. Current global crude reserves are depleted by 4% to 5% each year. That means drillers must find that much new oil each year just to stay at current production levels.

Just over the past year and a half, short-term global oil production has declined. In fact, two of the world's three largest oil fields have peaked. In 2005, Kuwait's Burgan field entered depletion, and the same happened in March 2006 to Mexico's Cantarell oilfield. The trouble, however, is that no significant new oil discoveries have been made. Even Chevron's most recent Jack 2 well in the Gulf of Mexico has merely got the potential to match the U.S. consumption rate for two years, assuming it stays at present levels.

Add this to industry estimates of 2% growth in global demand and simple math will tell you that new discoveries must total 6% to 7% of consumption just to keep the market in balance.

Could the recent run-ups in prices mean the market is finally coming to terms with this reality? Perhaps. But unanticipated increases in demand or reductions in supply could easily create conditions that lead to even higher prices down the road. How high? That's the \$100 question . . . or should we say the \$100-per-barrel question . . .





## Oil Companies Spending Less to Find More Expensive Oil

Hubbert's predictions for exploration are also proving to be true. Now that all the cheap sources of oil have been found, oil companies are cutting spending for new exploration. The windfall profits generated by the three-year run-up in crude prices are not being spent on finding new oil but rather on share buy-backs, dividends or efforts to purchase already-discovered reserves. Exploration is decreasing because today's smaller, harder-to-drill fields provide less bang for the exploration buck.

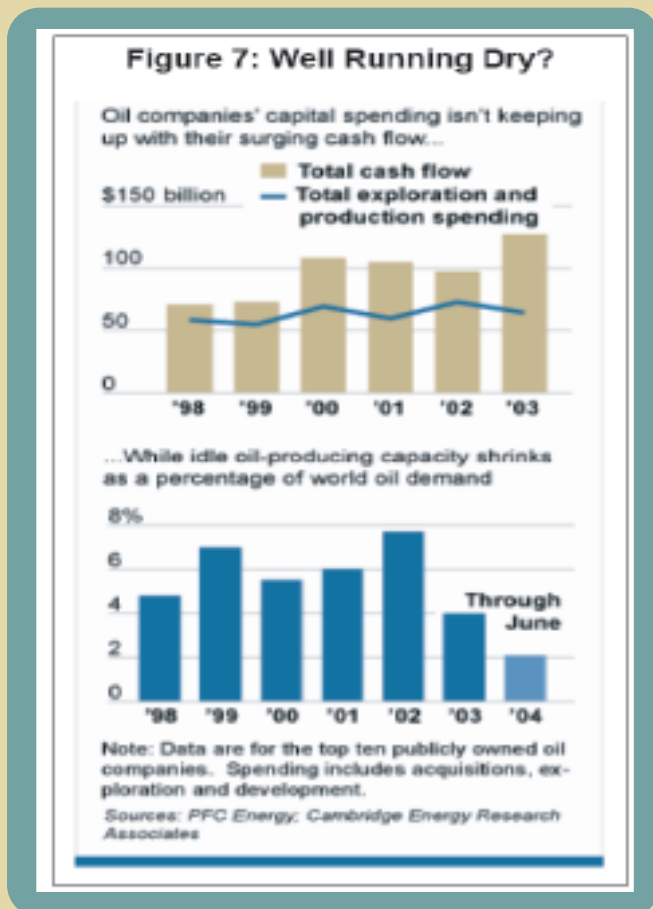
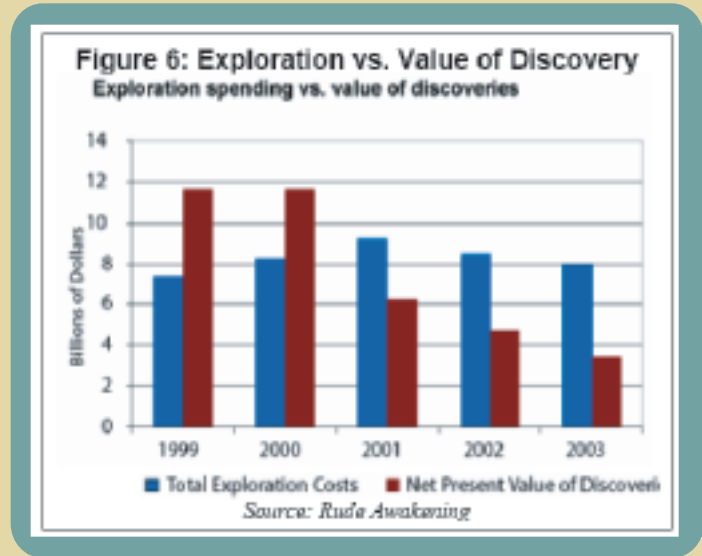


Figure 6 shows exploration spending versus the value of new discoveries. The only way to increase exploration is to increase the return on investment by making the value of the discovery worth more. The way a free market achieves this is through higher prices. Increase the value of new discoveries and the amount of money chasing them will also increase. Most geologists agree that there is still plenty of oil left to be discovered, but given the cost of extraction, it is not economically feasible at current prices. The world may not running out of oil. It is, however, running out of cheap oil.



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## Saudi and Persian Gulf

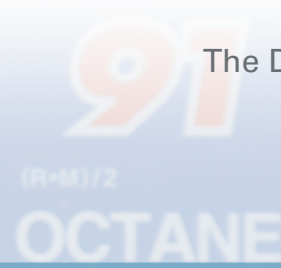
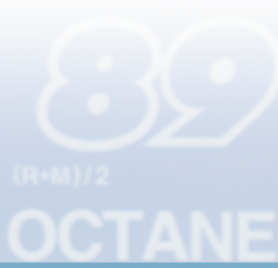
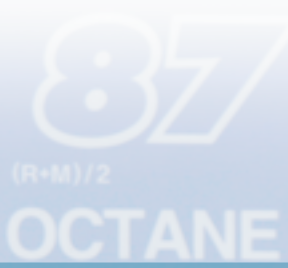
Saudi Arabia pumps 10.4% of the world's oil and holds 20.5% of the globe's reserves, making it the most important player on the supply side, followed by Iran with 10% of the world's reserves and Iraq with 8.3%. The U.S. Geological Survey estimates the median value of Saudi Arabia's undiscovered reserves to be roughly 127 billion barrels. According to official Saudi calculations, the country could produce at current levels of 10 to 11 million barrels per day for 50 years. However, we view that number with a certain degree of skepticism. Most mature oil wells have an annual depletion rate of 4% to 10%. The Saudis say they deplete their fields at a rate of 1%.

Matthew Simmons, chairman of Simmons and Company International—an investment bank specializing in the oil industry—says the official Saudi reserve numbers are too high and that Saudi fields are aging much faster. In a book called *The Twilight in the Desert*, Simmons focuses his argument on several points, the first being that Saudi Arabia produces its oil from four to five giant oilfields. He points out that these were developed 40 to 50 years ago and have since given up most of the oil that can be extracted easily. To sustain production levels, Saudi Arabia has relied on other methods to recover the oil, including water injection. Eventually, the ratio of water-to-oil in these fields will reach a point where oil production will be extremely difficult, thus driving the price higher. Also, there is water in Saudi crude—a lot of water. According to Simmons, the Saudis need to strip water out of nearly every well. This is a sign that Saudi fields are aging much faster than the industry has planned for.

**Figure 8: Reserves & Production 2005**

Country	Proved Oil Reserves (bil/bbl)	Share of World Total	2005 Oil Production (Millions of barrels/day)	2005 Share of World Total
Saudi Arabia	264.3	20%	9.475	11.8%
Canada	178.8	13%	2.400	3%
Iran	132.5	10%	3.979	4.9%
Iraq	115.0	8%	2.010	2.5%
Kuwait	101.5	7%	2.418	3%
UAE	97.8	7%	2.396	3%
Venezuela	79.7	6%	3.081	3.8%
Russia	60.0	4%	9.150	11.4%
Libya	39.1	3%	1.643	2%
Nigeria	35.9	2.7%	2.451	3%
United States	21.4	1.6%	7.610	9.5%
China	18.3	1.4%	3.504	4.3%
Total World	1,292.5		79.650	

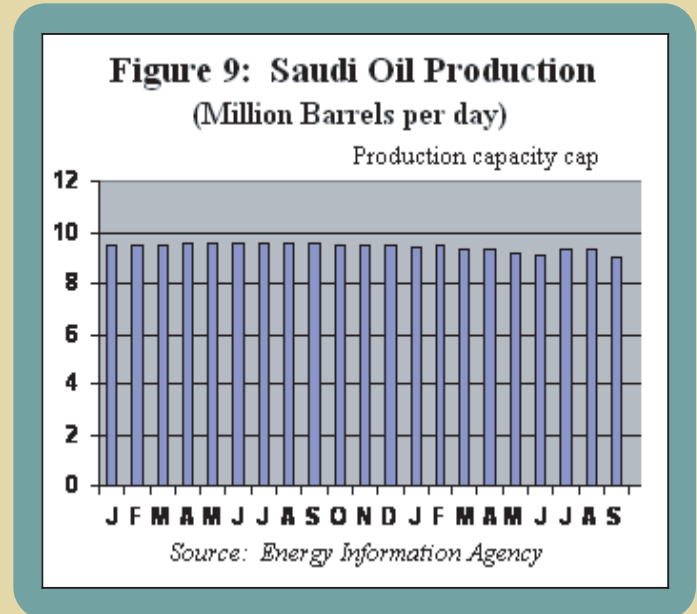




## Are Saudi Fields Depleting Faster Than Expected?

Almost every oil field sits on top of water. New oil wells draw up the crude first and have almost no water content. As a field ages, more and more water gets mixed with the crude oil. Wells that are almost dead will reach a “water cut” of 40%. According to Nasen Saleri, reservoir manager at Saudi Aramco, the “water cut” for Saudi wells in 2003 was 27%.

Simmons also believes that the Saudis’ pledge to increase production has forced them to drill horizontal wells to produce more oil, depleting their fields faster as a result. Maximum Saudi production is widely estimated to be 12 million barrels per day. The Saudis counter by saying they have plenty of supply as well as the potential to push production to the 12 to 15 million barrel per day levels over the next few years. Considering the problems they had ramping up production during 2004’s oil price spike, these numbers remain in doubt.



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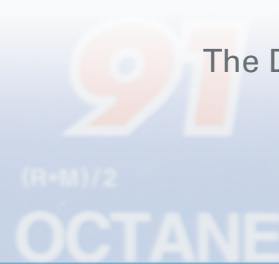
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## Oil Facilities a Prime Target

A tape sent to his followers by Osama Bin Laden in mid December 2004 urged attacks again Middle Eastern oil facilities. The voice on the tape warned radical Muslims that, *"The main driving reason behind the enemy's hegemony over our countries is to steal our oil, so do your utmost to stop the biggest robbery of our resources in history,"* and, *"Be active and prevent them from getting hold of our oil and concentrate your operations on it (oil), in particular in Iraq and the Gulf."*

Most Saudi crude is processed at just one facility and shipped through just two terminals. It is not hard to imagine what would happen to oil prices should Osama's followers or any other radical Islamic group launch a successful attack on any of those fields. We should not be surprised to see a marked increase in attacks or attempted attacks inside Saudi Arabia. This is already happening. On February 24, 2006, terrorists attacked the world's largest oil processing facility, but fortunately failed in their attempt.





## Latin America

The U.S. is dependent on Saudi Arabia and the rest of the Middle East for oil. However, the Saudi kingdom's biggest impact is its power to set prices. Saudi pumping capacity and reserves make it the biggest dog on the block. Saudi crude is "sour," which means it has a high sulfur content. Most U.S. refineries are not equipped to process Saudi crude. That makes the world's largest oil consumer dependent on Latin America.

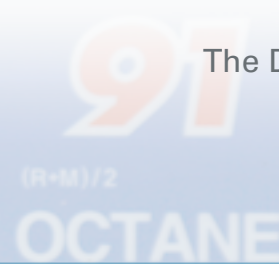
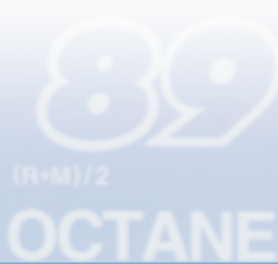
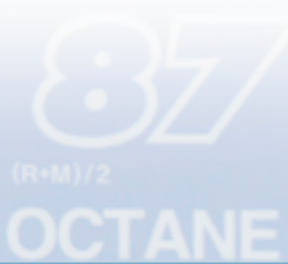
Like Saudi Arabia, Latin America produces nearly 10.0 MDB or roughly 12% of the world's oil. It has the potential to produce more, but its impoverished or unstable governments do not have the cash to develop it. Big-producing Latin American nations like Mexico and Venezuela tend to be very nationalistic. Political considerations keep many of these nations from requesting developmental help from U.S. oil companies.

Latin American nations are also very vulnerable to internal strife. For example, Petroleos de Venezuela SA (PDVSA) has still not recovered from the anti-Chavez strikes two years ago. As we write this, the IEA states that PDVSA is producing only 2.5 million barrels per day, despite its claims that production is actually 3.3 MBP. The reason for the gap is the lack of cooperation from Chavez's government in allowing the IEA to verify oil levels. International oil companies make up most of PDVSA's declining output but, in keeping with Latin American tendencies, President Hugo Chavez is increasing the cost of doing business by raising royalty payments.

Mexico is not much better. According to an article in the Wall Street Journal published 11/29/04, the Mexican state oil company, Pemex, has neither the expertise nor the money for deep water drilling. This fact was evidenced on November 26, 2006, when the International Herald Tribune reported that Pemex expects production at its Cantarell oil field to decline by 14% a year between 2007 and 2015. Pemex announced that the decline is equal to nearly 150,000 barrels a day. This decline, they said, began in 2005, just one year after their record production of 2.13 million barrels a day. According to CEO Ramirez Corzo, the problem is the inability to secure the estimated \$18 billion a year in exploration and production costs required to keep oil production consistent at around 3.3 MBD between now and 2015.

Lack of funding, nationalism and depletion mean the world cannot count on Latin America to provide the supply cushion needed to feed the expanding global economy—at least not at these prices. Yet the oil has to come from somewhere. The role of the market is to supply it. Since all the cheap oil has already been found, we believe that can mean only one thing: higher prices.





## The Age of Perpetual Shock

There have been energy price shocks in the past, but today's energy crisis is different. Previous crises were political; this one has a political component, but it is essentially driven by supply and demand. As we said earlier, the world may not be running out of oil, but it is running out of cheap oil.

Stable democratic nations have already pumped out their easily recoverable crude, leaving only hard-to-get and expensive-to-process reserves to fuel new demand. Virtually all the globe's cheap oil has already been discovered and most of it is in politically unstable nations. Ditto for most new supplies

...

Consequently, we may have entered an era of perpetual shock where supply and demand are balanced so precariously that the slightest disruption sends prices soaring. The world is currently using 98% of its production capacity. OPEC was pumping flat out in 2004 yet prices remained stubbornly high. This was unprecedented in the history of crude oil production.

### Oil Price Shocks

*The past 31 years have seen seven price shocks. Four of these shocks have occurred within just the last few years. This leads us to believe that crude oil has now entered the age of "perpetual shock."*

**1973:** OPEC announces embargo of oil shipments to the United States in retaliation for its support of Israel during the Yom Kippur War. Prices top out at roughly \$15 per barrel.

**1978:** The Iranian revolution, the ousting of the Shah of Iran and the Iranian Hostage Crisis in combination with roaring U.S. inflation and plummeting dollar cause oil prices to rise to \$39 per barrel.

**1990:** Gulf War I: Iraq invades Kuwait. The U.S. and NATO allies intervene, Saddam burns oil wells and crude spikes to \$41.15 per barrel.

**2000:** Saddam Hussein and Iraq threaten to hold back supply from the market. At the time, Iraq is pumping 3 million barrels per day. Prices top out at \$35.94 per barrel.

**2003:** Gulf War II: The U.S. invades Iraq looking for weapons of mass destruction. Iraq's production is temporarily halted. Chinese demand begins to accelerate rapidly. Crude oil tops out at \$39.99 per barrel.

**2004:** Chinese Demand continues to explode, rising 33% (estimated) for all of 2004. Tensions in Iraq mount as organized insurgency targets Americans and Iraqis thought to be working for Americans. Oil soars to \$55.70 per barrel.

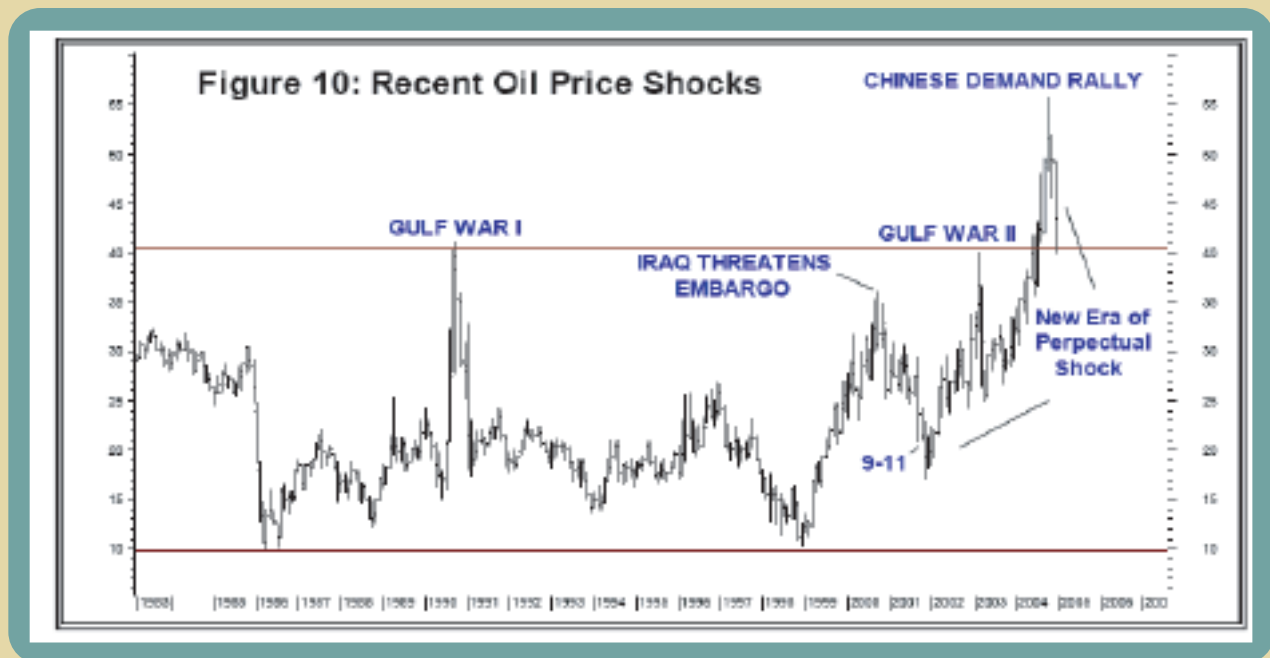


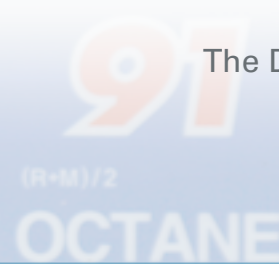
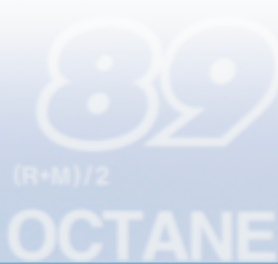
## The Age of Perpetual Shock

Figure 10 shows the history of crude oil going back to the beginning of 1983. From 1987 through 2006, the price of light, sweet, intermediate crude oil traded in a range bounded by \$10 per barrel on the low side and roughly \$70 per barrel on the high side, with an average of around \$40 per barrel. A few short years ago, the only time crude oil challenged the \$40-per-barrel level was during the two Gulf Wars.

Prices crashed after Gulf War I, plunging below \$20 per barrel and eventually challenging \$10 per barrel in the late 1990s. Fear that the same thing would happen again sent prices tumbling after Gulf War II. However, unlike what happened after the first Gulf War, crude prices didn't keep tumbling for the next eight years. Fifteen months after spiking to \$40 per ounce in February of 2003, the price of West Texas intermediate skyrocketed again, cutting through the \$40-per-barrel mark like a hot knife through butter.

Today's climate is marked by constant violence and instability in Iraq, not to mention the lingering effects of hurricane Katrina. In 2005, Katrina created fears that production would be cut by more than one third, pushing crude oil prices above \$70 per barrel. The average price of oil in 2006 was a staggering \$66.





## 9/11 Changed the World

The destruction of the World Trade Center on September 11, 2001, fundamentally changed the world. Not only did it provide the catalyst for the Bush doctrine of preemption, which gives the U.S. the “moral authority” and some would argue even the “duty” to attack anyone, anywhere if it believes its national security is threatened, it also signaled U.S. engagement in what many view to be a new religious war, pitting the oil-producing nations of Islam against the oil-consuming nations of Christianity (or post-Christianity, as some see it).

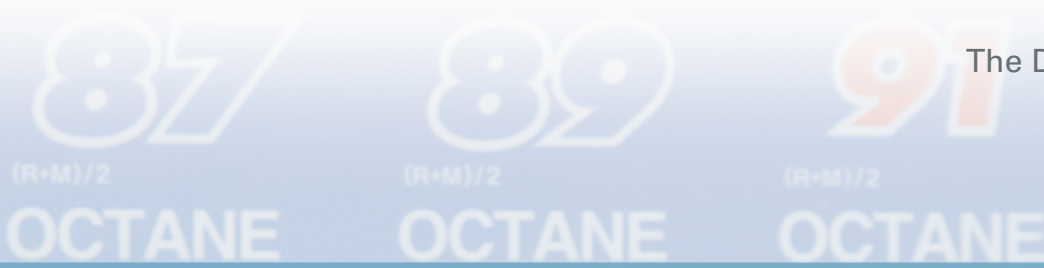
Will the destruction of the Twin Towers be remembered as a disastrous but eerily symbolic coda to the American Century? Will it be seen as a metaphor for the end of American economic dominance and beginning of a new era in which Asia and her huge populations take over the reins of global growth? There is no doubt that the 20th century belonged to America. The history of the 21st hasn't yet been written. However, if economic trends follow their current path, this century may well belong to Asia.

Most new oil demand will come from Asia, but most existing reserves and potential new supplies are in unstable nations. Iraq and Iran are two of the globe's largest oil producers. They were also members of the now infamous “axis of evil” that George W. Bush identified in his post-9/11 speech. The U.S. has already attacked and occupied Iraq because of suspicions that Saddam Hussein was developing weapons of mass destruction—suspicions later proved false.

The world knows for a fact that Iran is developing nuclear weapons. If that is not a threat to American national security, we don't know what is. If diplomatic measures fail, as they did prior to the invasion of Iraq, will Iran be the next target? No matter what happens with Iran, we expect that the threat of war—for whatever reason—in major oil-producing regions will place a constant premium on oil prices that could fluctuate from \$2 to \$15 per barrel, depending on the level of tension.

So what's the next stop for prices? As we said at the beginning of this report, we would not be surprised to see crude oil rise to \$100 on supply and demand factors alone. Add in another major war in the Middle East or a successful terrorist attack on a Saudi oil terminal and \$150 per barrel is perhaps not out of the question. This may seem a bit outrageous now, but the fact remains that crude is relatively cheap—even at \$66 per barrel—when you factor in inflation. In 1979, crude soared well over \$80 per barrel using today's dollars, at a time when global demand was roughly half of today's expanding levels.

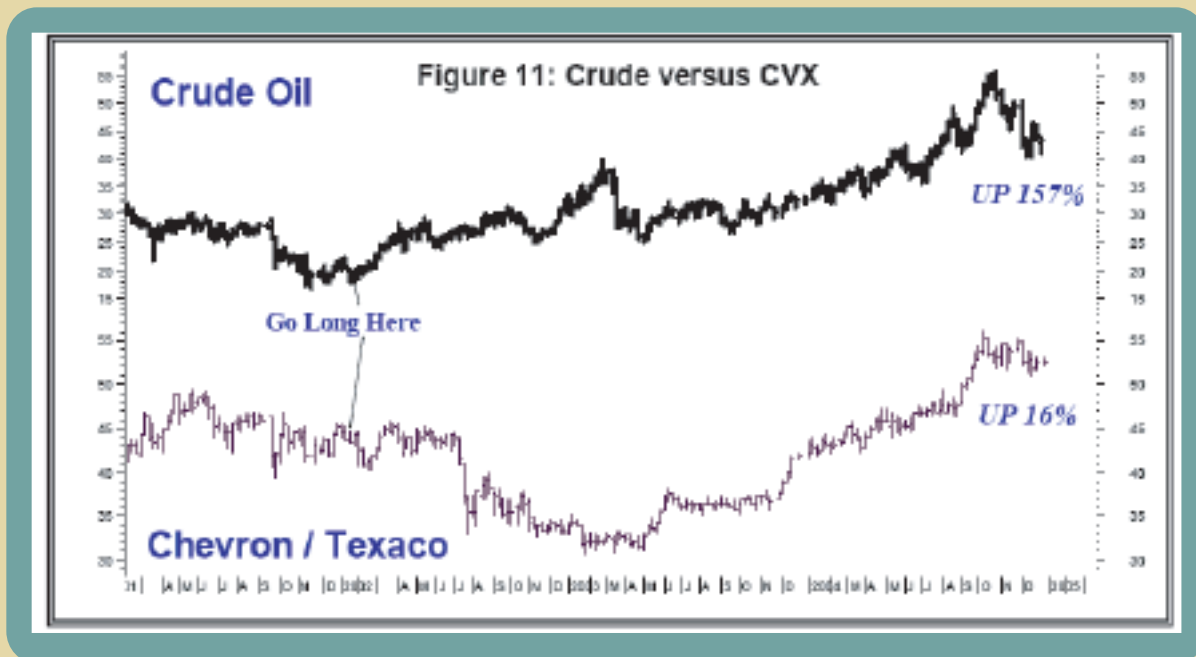




## Energy Stocks Not Necessarily the Best Way to Play Crude

Most investors think of energy stocks first. However, if you own the better-known stocks you also know that they haven't kept pace with crude oil itself. History has shown that an investment in energy stocks is not necessarily an investment in crude oil. In fact, in the recent bull market, traditional energy stocks have not returned anywhere near the amount of an investment in crude oil itself—not by a long shot.

Crude oil gained 111% just prior to the American invasion of Iraq that began Gulf War II. Exxon Mobil (XOM) lost 11.25%. How is this possible? Exxon Mobil is not oil, but an oil company. There is a huge difference. XOM makes its money from operations, not necessarily from crude oil. Since it is a stock, it is vulnerable to the vagaries of the overall market and to the decisions made by its management. Crude oil, on the other hand, is crude oil.



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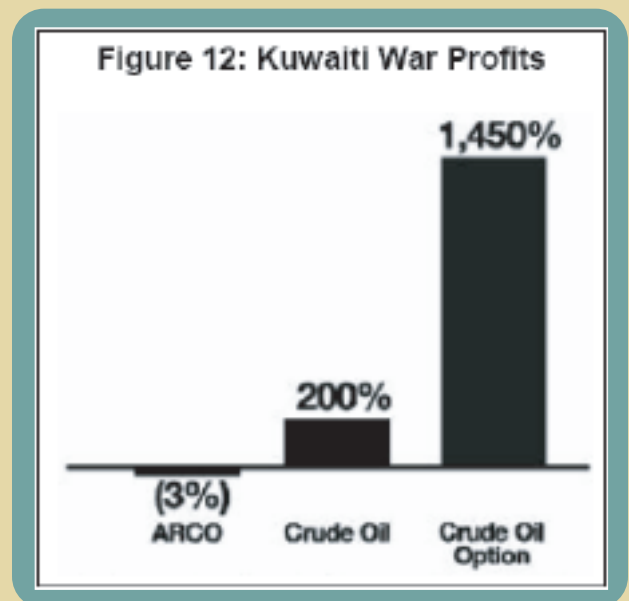
## Energy Stocks Not Necessarily the Best Way to Play Crude

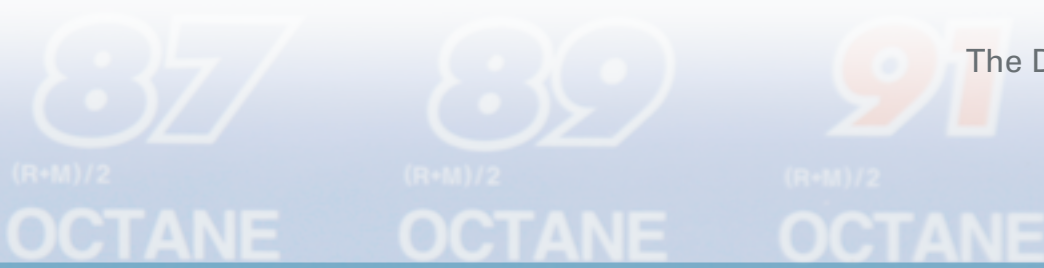
Here is another example. Figure 11 shows the relative performance of crude oil and Chevron Texaco since early 2002, a period that encompasses most of the bull market. As of late December 2004, crude oil had gained 157%. Chevron Texaco had gained only 16%. There are numerous other examples.

It stands to reason that the best way to play crude oil is to play it directly. NYMEX crude oil futures and options allow investors to make bets directly on the movement of crude oil, offering the cleanest possible play on this most essential of all commodities. Crude oil futures are extremely volatile, so we would not recommend trading them directly for most investors. Crude oil call options are another story. Crude oil call options trade on the New York Mercantile Exchange or NYMEX.

The NYMEX is the largest and most liquid energy market in the entire world. NYMEX crude oil options often trade in excess of 250,000 contracts per day, making them as easy to buy and sell as most stocks. Figure 12 shows the return on three energy investments prior to Gulf War I. Note the superior return on the call options. The reason is what is known in financial circles as "leverage."

Leverage is power. The ancient Greek mathematician Archimedes once said, "Give me a lever long enough and a fulcrum on which to place it, and I shall move the world." A small amount of force placed at the end of a properly constructed lever can do an incredible amount of work. It's the same in investing: a relatively small amount of capital properly invested can do an incredible amount of heavy lifting in your portfolio. In this case, the "lever" we will use is crude oil options.



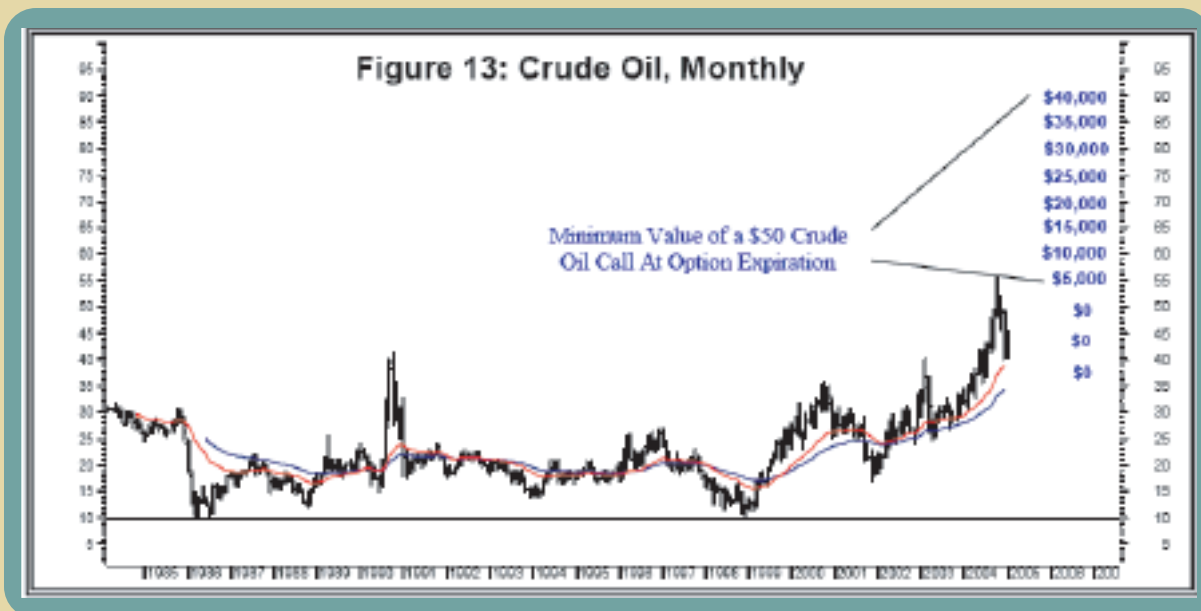


## NYMEX Crude Oil Options

Buyers of call options pay money, known as a “premium,” for the right but not the obligation to be long the underlying market at a specific price for a specific period of time. The key phrase is “*but not the obligation.*” Since a call options holder does not have the obligation to be long, all he has at risk is the cost of the call options. Should the underlying market (in this case, crude oil) decline or fail to rally before the options expire, the options buyer will simply not exercise the right to buy. That means all he or she has at risk is the premium paid (plus any transaction costs) for the options.

Each NYMEX crude oil call gives the buyer the right but not the obligation to buy a futures contract covering 1,000 barrels of light, sweet West Texas intermediate grade crude oil at a specific price, known in options jargon as the “strike price.” This right is good for a fixed period of time.

For example, as we write this, spot (front) contract West Texas intermediate crude oil futures are trading at roughly \$62.43 per barrel. Long-dated, December 2007 \$68.60 crude oil call options are going for roughly \$3.375 (assuming the buyer receives the premium at a non-member initial price.) Multiply times the 1,000 barrel contract size to get a total cost of \$3,375 per options contract.



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## NYMEX Crude Oil Options

The December 2007 \$68.60 call buyer pays a \$3,375 “premium” for the right but not the obligation to be long 1,000 barrels of West Texas Intermediate crude oil at a “strike price” of \$68.60 per barrel. This right is good through mid November 2007. *Figure 13* shows an example of how much a \$50 crude oil call a little over a year ago would be worth at a series of prices.

At \$80 per barrel, a \$68.60 call would be worth at least \$11,400. Why? Because the holder of a \$68.60 call could simply exercise the right to be long at \$68.60 per barrel and then turn right around and sell his 1,000 barrels into the market for the going rate of \$80 per barrel. Multiplying the \$11.40 per barrel difference times the contract size of 1,000 barrels yields a gross profit of \$11,400. Since our hypothetical options holder paid a premium of \$3,375 for the right to be long, the net profit on this position would be \$11,400 minus the \$3,375 premium, or \$8,025.

It gets even better at \$90 per barrel. The call holder’s right to buy at \$68.60 per barrel minus a \$90 per barrel market price yields a gross profit of \$21,400 (\$90 minus \$68.60 times 1,000 barrels). Using the same math, a rally to \$100 per barrel would result in a gross profit of \$31,400 per options contract. This is the “leverage” imbedded in crude oil options. Best of all, at no time did the call holder’s initial risk exceed the \$3,375 plus transaction costs (typically no more than \$80 per contract) he paid for his options. And because the December 2007 calls do not expire until November 2007, the call holder has plenty of time for crude to rally.

Also, since the holder of \$68.60 crude oil call options has the ability to exercise the right to be long at \$68.60 per barrel at any time prior to expiration, profits are reflected in the price of the option itself. The fact that exercise can take place doesn’t mean it has to. To take profits, the call holder can simply choose to sell the call option just like he or she would sell a profitable stock.



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## How to Buy Crude Oil for 4.9 Cents on the Dollar

NYMEX options offer a cheaper (and perhaps safer) way to play the crude oil market than purchasing crude or an equivalent dollar amount of energy stocks outright—especially since we know that the vast majority of energy stocks do not keep pace with crude oil. The current \$68.60 crude oil call gives you the right to buy 1,000 barrels of crude oil at \$68.60 per barrel. For that right you currently have to pay \$3,375. An equivalent amount of crude or stocks would set you back \$68,600. Since \$3,375 is only 4.9% of this, *buying the NYMEX call is like “buying,” or “leasing” crude for 4.9 cents on the dollar.* Your \$3,375 is doing the work of a \$68,600 investment. Better still, \$3,375 plus transaction costs per options contract are all you can lose, *AND* you get upside exposure to crude oil good until November 2007.

**You also get to earn interest on the \$65,225 you didn't have to pay for your energy stocks!** Two years of interest compounded at a rate of 3%, placed in a safe, FDIC-insured CD, put \$3,913.50 in your pocket.

This is what professionals do. Think of long-dated NYMEX crude oil options as your own personal “mini hedge funds” on crude oil. Like hedge funds, they give you big upside exposure to a continuation of the rally in crude oil. Unlike hedge funds, they don't cost an armored car full of cash—and you won't be charged the 2% management fee and 20% incentive fee common for hedge funds. In this sense, they function as a cheaper replacement for an entire asset class in your portfolio. We like to think of them as “opportunity insurance.”

*Figure 14* shows how a \$68.60 crude call purchased for \$3,375 stacks up against oil or an equivalent energy stock, assuming a one-to-one relationship between the price of crude and the price of the stock. Since we know that most energy stocks don't track crude directly, this represents a best-case scenario for energy stocks on the upside and a worst-case scenario on the downside.

So why doesn't everyone do this? Most investors are unaware that crude options exist or unclear on how to use them properly. Also, options are not for everybody. They may cost a lot less and give you much more bang for your buck than an equivalent energy stock position, but they do have limited life. The good news is you can buy crude oil calls as far as two years into the future, making them like LEAPs in stocks. However, calls eventually expire; energy stocks don't.



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## What to Do Now

**Recommended Action:** If you have risk capital, *establish a core position in your portfolio. Buy NYMEX crude calls in multiples of two, holding one for the long term and using the other as a trading position. Should they double in value, consider selling one. That way, your remaining risk is essentially zero. Repeat this process every 15 months.*

*Use three simple rules for purchasing your crude oil calls:*

- 1)** *Buy NYMEX calls with at least 15 months until expiration.*
- 2)** *Buy calls with strike prices no higher than 10% above the spot crude price.*
- 3)** *Pay no more than \$3,500 for each option.*

You cannot purchase crude oil options for your stock account. You need a separate commodity account. Crude oil prices move fast, so the \$68.60 call we used as a real-time example may have changed in price. That's where a good commodity options broker comes in. If you don't have one, **Sue Rutsen** and her staff at **Rutsen Meier Belmont Group LLC**, a division of Man Financial Inc. in Chicago, know this strategy inside and out.

Tell Sue that you are a subscriber and she will send you the *IPS Short Course in Futures and Options* (a \$14.99 value) absolutely free. You can reach Sue and her staff at **800-345-7026** or **312-528-3494** during market hours.

