

MARKETS AT A GLANCE

Sprott Asset Management^{LP}

Oil or Not, *Here They Come*

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Oil has been markedly absent in the financial headlines lately. While the recent clamor over EU solvency and weak global growth has temporarily displaced its media attention, oil's crucial importance to the world economy has not dwindled in the slightest. Oil remains the world's greatest single energy source today, providing over 1/3 of our energy supply. Although it is well understood that the oil price is critical to the global economy, we sometimes neglect to appreciate how tightly oil supply is correlated to global growth. By historical standards, the world has been coping with constrained oil production and high oil prices for most of the past six years. This tightness in oil supply has been a significant factor limiting global growth, and it would appear that no matter what financial solutions are eventually engineered by our politicians, global growth will remain significantly restricted by the real economy's ability to produce oil. Limited global supply growth means that the Western world now faces significant competition for oil from emerging markets whose citizenry are willing to work much harder for far less. This will continue to result in a narrowing gap of per capita consumption between emerging and developed economies as the emerging economies continue to gain relative economic strength, wage growth, currency appreciation and purchasing power. We believe strategic investments in oil producers and service companies will offer an effective way to profit from this trend.

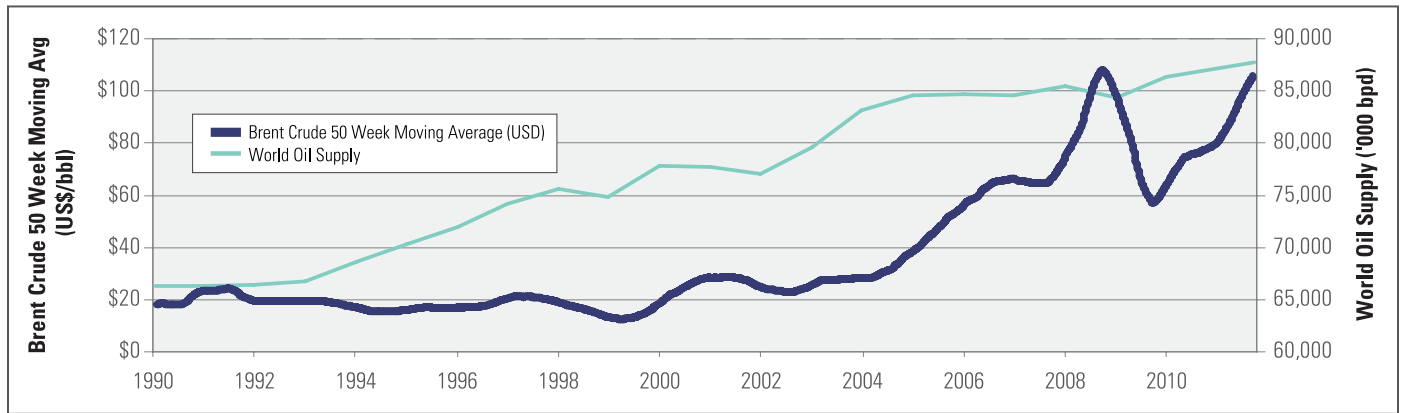
Production – Where's the Growth?

We begin with a review of global oil production. We first wrote about Peak Oil back in 2005; and speculated that we were approaching the pinnacle of global crude oil production.¹ As Figure 1 below illustrates, since that time, global oil production has grown very little, appreciating by a mere 2% in total production. This production plateau generated the 2008 oil price spike to nearly \$150 per barrel. Subsequently, despite the economic stagnation experienced by developed economies, the price of Brent Crude Oil has averaged over \$78 per barrel, four times higher than the ~\$18 average that Brent traded at in the 1990s.²

¹ Eric Sprott & Sasha Solunac, "Peak Oil – Are We There Yet?" (April 18, 2005) Markets At A Glance.

² ICE Futures Exchange.

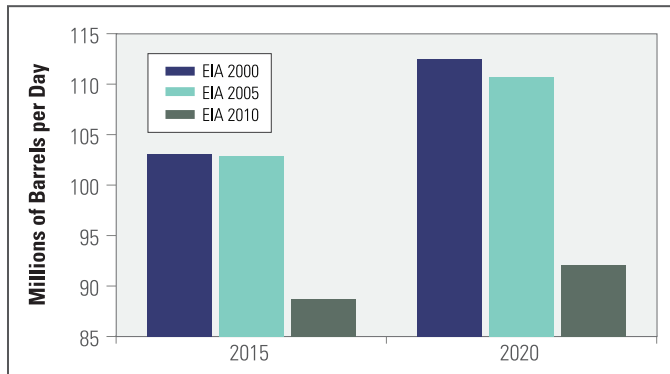
FIGURE 1: WORLD OIL SUPPLY VS. BRENT CRUDE OIL PRICE



Source: US Energy Information Administration, ICE Futures Exchange

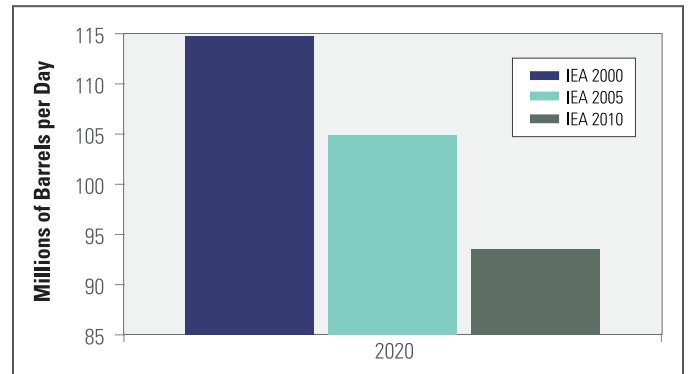
Despite this extremely large and sustained increase in price, oil production has failed to grow meaningfully. Over the past ten years, most experts have consistently overestimated future production growth and have continually revised their forecasts lower as a result. Figure 2 from the U.S. Energy Information Administration (“EIA”) below charts production forecasts made in 2000, 2005 and 2010. Over the last decade the EIA has revised its global oil production estimates lower for 2015 and 2020 by 14% and 18%, respectively. In light of these downward revisions, it still seems extremely optimistic that supply will increase significantly in the coming years.

FIGURE 2: EIA OIL PRODUCTION FORECASTS



Source: U.S. Energy Information Administration, International Energy Outlooks (2000, 2005 and 2010).

FIGURE 3: IEA OIL PRODUCTION FORECASTS

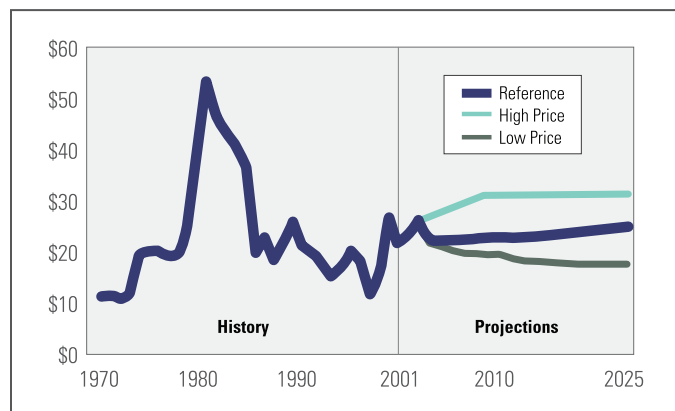


Source: International Energy Agency, World Energy Outlooks (2000, 2005 and 2010).

Figure 3 above illustrates that the International Energy Agency (“IEA”) estimates have been just as inaccurate, forcing it to reduce its global oil production estimates year after year. It is also important to reflect on the pricing environments that were predicted years ago when these optimistic forecasts were made.

FIGURE 4:
EIA 2002 PRICE FORECAST

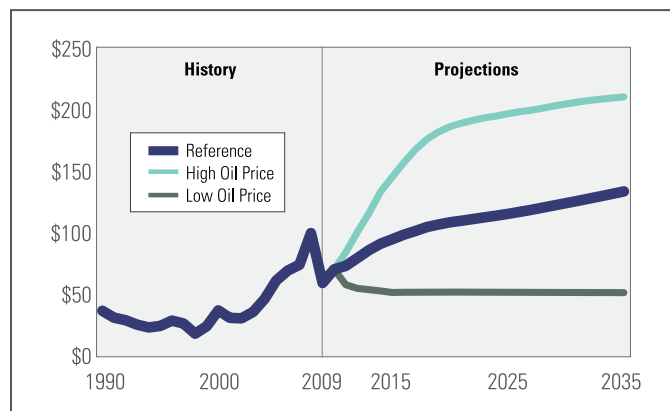
Lower 48 crude oil wellhead prices in three cases, 1970 – 2025 (2001 dollars per barrel)



Source: U.S. Energy Information Administration

FIGURE 5:
EIA 2010 PRICE FORECAST

Average annual world oil prices in three cases, 1980 – 2035 (2008 dollars per barrel)



Above are charts of the EIA's 2002 and 2010 oil price predictions. Over the last eight years its high case future price prediction has increased by over 600% from the low \$30s to north of \$200, while the median reference price has gone from below \$30 to almost \$150 by 2035. Reflecting on these historical price forecasts really puts into perspective the amount that production growth has disappointed. Had the oil price stayed in the EIA's 2002 predicted price range, global production would have significantly declined. In fact, all of the production growth we have experienced since then can essentially be attributed to high cost oil operations which are economically dependent on very high oil prices.

We highlight the magnitude of these forecast errors not to criticize their sources but to emphasize how terribly unprepared we are to deal with an oil production-constrained world. Economic growth is well correlated with oil consumption as increasing global GDP requires increased energy use that is heavily oil dependent. Conversely, if oil supply is limited or declines, real economic growth tends to stagnate, if not decline, in lockstep. If a country begins to lose its access to affordable energy its economy will likely shrink.

Why are Prices High? – No More Giants

There are a number of reasons why there has been so little growth in supply. First, and most importantly, global supply is struggling to grow because we are not finding and bringing into production any new "super giant" oilfields. This reality was well documented by the EIA in a study it published in 2008.³

The EIA study revealed that the largest 1% of oilfields (798 total fields) in the world account for over 50% of global production. Remarkably, in this group, there are 20 super giant fields which account for roughly 25% of global production. All of these super giant fields were discovered decades ago.

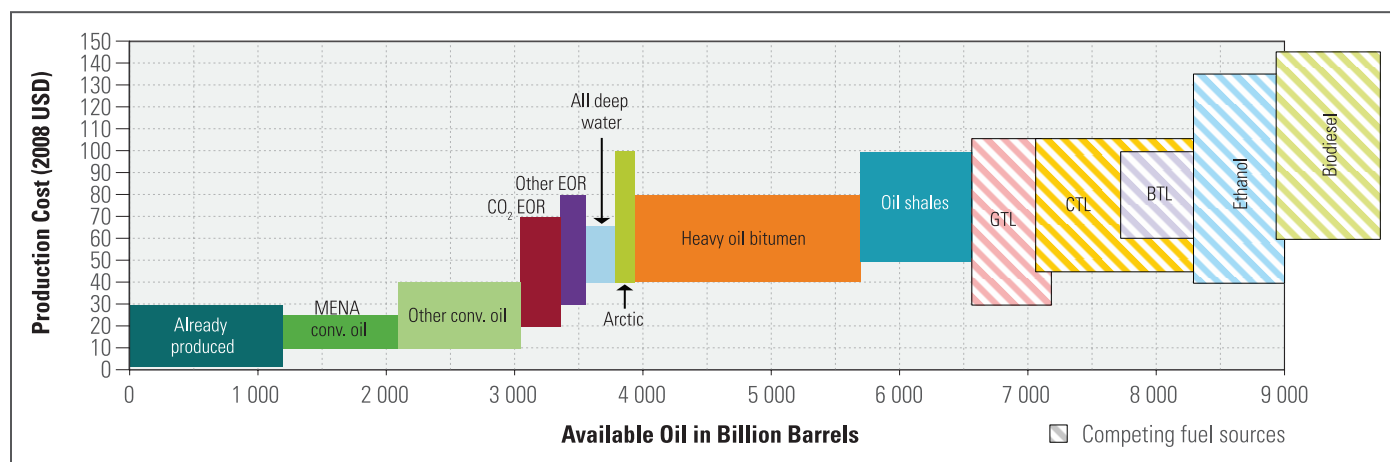
What has been discovered and brought into production in the past few decades are smaller fields, which normally have higher decline rates. As these new smaller fields replace production from larger fields, and older larger fields age, we can expect the global observed decline rate to increase from the current estimated rate of 6.7% (or 4.7 million barrels per day annually).

³ International Energy Agency, World Energy Outlook 2008 (Paris: OECD/IEA, 2008).

Rising Production Costs Necessitate High Prices

Oil prices are also high due to rising production costs, and it's worth noting that new production sources, such as offshore, tar sands and other unconventional sources are amongst the highest cost producers today. These oil sources now make up a significant and growing percentage of global production. As a result, it is becoming clear to many industry analysts that current oil production cannot be sustained under \$75 a barrel and the price required to sustain production seems destined to continually rise.

FIGURE 6: PRODUCTION COST CURVE (NOT INCLUDING CARBON PRICING)



Source: International Energy Agency (http://www.iea.org/papers/2010/Flyer_RtoR2010.pdf)

Middle East Exports are Increasing in Cost and Risk

There have also been significant political developments of late which have permanently altered the dynamics of the oil markets. The so-called "Arab Spring" uprisings in countries such as Egypt and Libya are forcing these and other major oil producing nations to spend more of their oil revenue on social assistance programs. For example, as a result of newly announced social spending in Saudi Arabia, it is forecasted by The Institute of International Finance, Inc. that the budget balancing price of Saudi oil will jump from \$68 per barrel in 2010 to \$85 per barrel in 2011 and then continue to rise, but at a slower pace, to \$110 per barrel by 2015.⁴

In general, it can also be said that political instability and social unrest are very detrimental for oil investment and production. Recently, as Libya collapsed into civil war, production went to near zero causing extreme volatility in the Brent Crude price. As the Middle East region continues to experience riots and protests, we can only assume that there will continue to be heightened risk of disorderly political change which could dramatically increase prices in the future.

Regardless, it now appears that even if, politically speaking, the status quo is maintained, the majority of the Middle East exporting nations are now producing at or near capacity while domestic consumption is increasing. Their economies and populations are continuing to grow and mature and, as a result, their exporting capacity will in turn be limited and possibly begin to terminally decline.

⁴ George T. Abed et al., "The Arab World in Transition: Assessing the Economic Impact" (May 2, 2011) Institute of International Finance, Inc.

Major Oil Companies' Production in Decline

The struggle to grow oil production, especially non-OPEC production, was highlighted in a recent report by Deutsche Bank's Paul Sankey that measured the dramatic oil declines for major oil companies in Q2 2011.⁵ Despite \$120 per barrel Brent pricing during Q2 2011, the results of more than 20 major oil companies showed a 1 million barrels per day year-over-year decline. The sample group in the report accounted for over 1/3 of global production, so it would be difficult to expect smaller companies to make up their shortfall.

Supply Constrained and Prices to Remain High

In summary, even though the oil price has been averaging 4-5 times higher than the most knowledgeable industry watchers would have expected just eight years ago, global production has remained relatively stagnant. Government agency production estimates have been overly optimistic and a review of the oil market environment suggests production will continue to disappoint. High prices are now required just to maintain current global production. Even with robust pricing, it is beginning to appear that a tremendous amount of our existing production is at risk due to rising rates of decline and political instability. These factors may soon push global production into an irreversible decline.

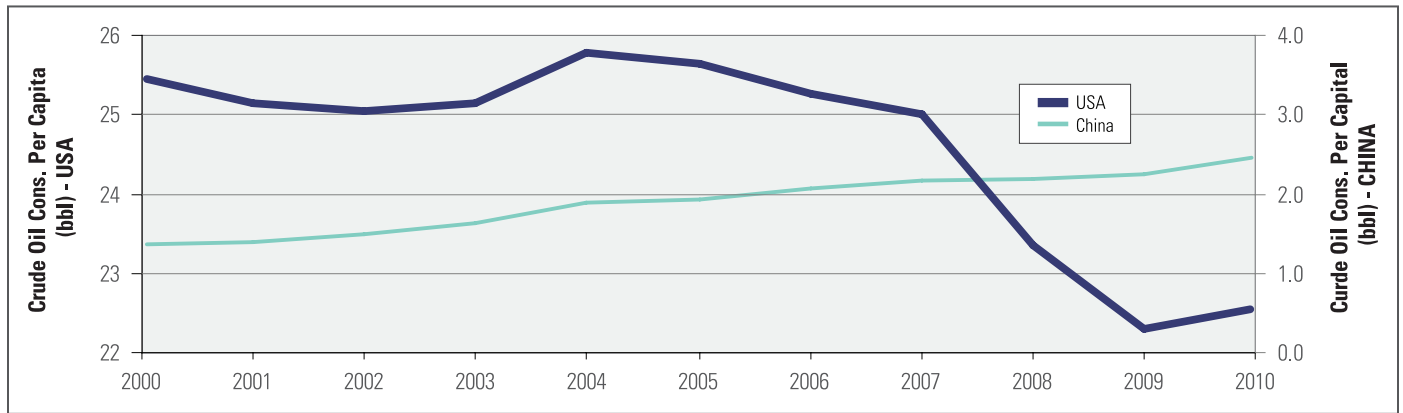
Demand – Who Will Win the Battle for the Limited Oil Supply?

Given that increasing global supply will continue to be a challenge, individual nations will soon be forced to compete outright for oil. Emerging market economies are currently out-growing Western economies not just because of urban population growth but also because employment is naturally shifting to jurisdictions with lower labour costs. As this globalization path continues, we can expect job growth to be higher in countries where the citizenry are willing to work harder for less. This roughly characterizes the emerging market countries which for the most part are also large exporters of goods and services, run significant trade surpluses and have strengthening currencies. These factors are combining to put the emerging markets "in the driver's seat" and enable them to continue to increase their per capita and total oil consumption. Conversely, higher wage Western nations are fighting rising unemployment, trade deficits, weakening currencies and, consequently, are being forced to reduce their oil consumption. Simply put, the emerging markets are outworking developed economies for a greater slice of global commodity production and the tight oil market is a key battleground.

These developments are best illustrated in Figure 7 which contrasts the United States' oil consumption decline of more than 2 million barrels per day with China's 1.4 million barrels per day increase. We would argue that we are in the very early stages of this trend as the per capital consumption of the United States is still nearly 10 times that of China, hence the requirement for two axes on the chart.

⁵ Paul Sankey & Winnie Nip, "The Death of Non-OPEC: Oil Production declines Q2 for 40 Major Oils" (August 12, 2011) Deutsche Bank.

FIGURE 7: CHINA VS. USA, OIL CONSUMPTION PER CAPITA



Source: US Energy Information Administration and US Department of Energy

We should also reflect on the fact the global population is currently passing the 7 billion mark, which equates to a global production per capita of 4.5 barrels per annum. In order for China to move from its current per capita consumption of 2.4 barrels per annum without material domestic production growth, it will need to increase its imports from 5.5 million barrels per day to 13.5 million barrels per day. This would represent an approximate increase of 146% for the Chinese, who currently rank as the world's second largest importer of oil. The United States, which is the largest importer of oil in the world with just under 9 million barrels per day of imports, would have to reduce consumption by 80% in order to consume in line with the global per capita oil production of 4.5 barrels per annum.

Looking further into this China/United States relationship, we see that significant relative wage growth is underpinning the Chinese oil consumption increase as they are able to afford a greater portion of the global oil supply. As shown in Figure 8 below, the Chinese have achieved a 231% increase in disposable income over the last decade compared to very low growth in the United States.

FIGURE 8: CHINA VS. USA DISPOSABLE INCOME

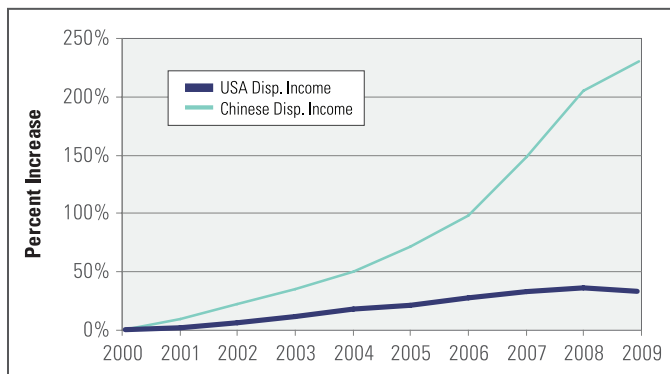
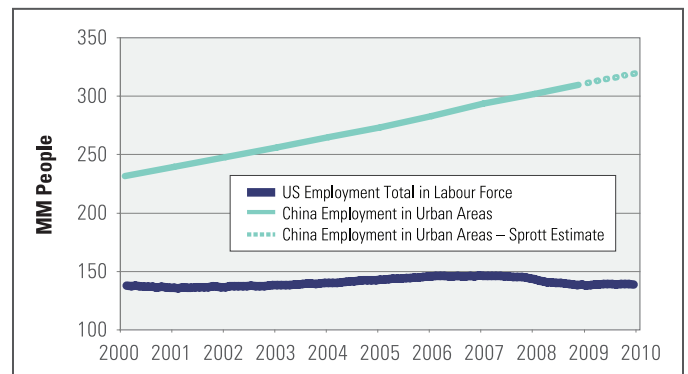


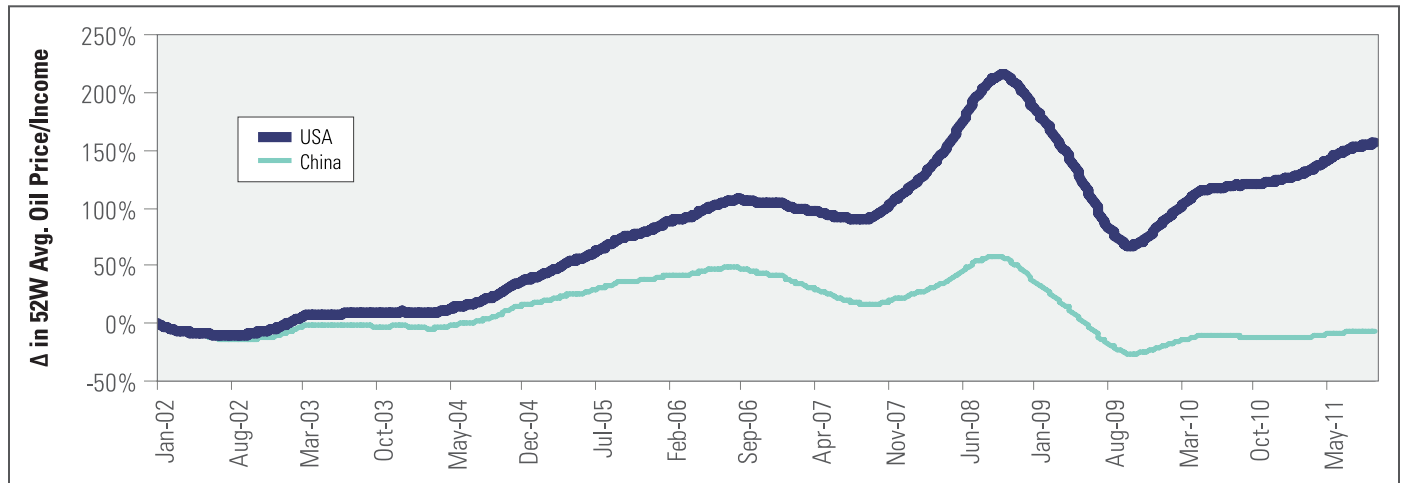
FIGURE 9: CHINA VS. USA TOTAL EMPLOYMENT



Source: National Bureau of Statistics of China, US Bureau of Labor Statistics, China Economic Information Network and US Bureau of Economic Analysis

The growth in Chinese disposable income has actually completely offset the rising crude price as shown in Figure 10. Relative to disposable income growth, the price of oil has gone down for workers in China while rising by over 150% for American workers. In addition, Americans have faced rising unemployment while China has created over 80 million jobs during the past decade.⁶ Furthermore, those fortunate enough to stay employed in the USA also had to deal with the negative wealth effects emanating from multiple stock market declines and a housing market collapse.

FIGURE 10: CHANGE IN CRUDE OIL PRICE DIVIDED BY CHANGE IN DISPOSABLE INCOME – CHINA VS UNITED STATES



Source: National Bureau of Statistics of China, US Bureau of Labor Statistics and Sprott Inc.

We believe that this trend is destined to continue throughout emerging economies like China, which continue to demonstrate a willingness to work harder for a fraction of the wages (or a fraction of the oil) of workers in the developed economies.

FIGURE 11: NET MONTHLY SALARY (2009 US\$)

	CHINA	USA
Car Mechanic	\$445	\$3,341
Carpenter	\$305	\$3,883
Computer Programmer	\$733	\$6,062
Engineer	\$632	\$7,267
Miner	\$480	\$4,164

Source: National Bureau of Statistics of China, China Statistical Yearbook; US Bureau of Labour Statistics, National Compensation Survey

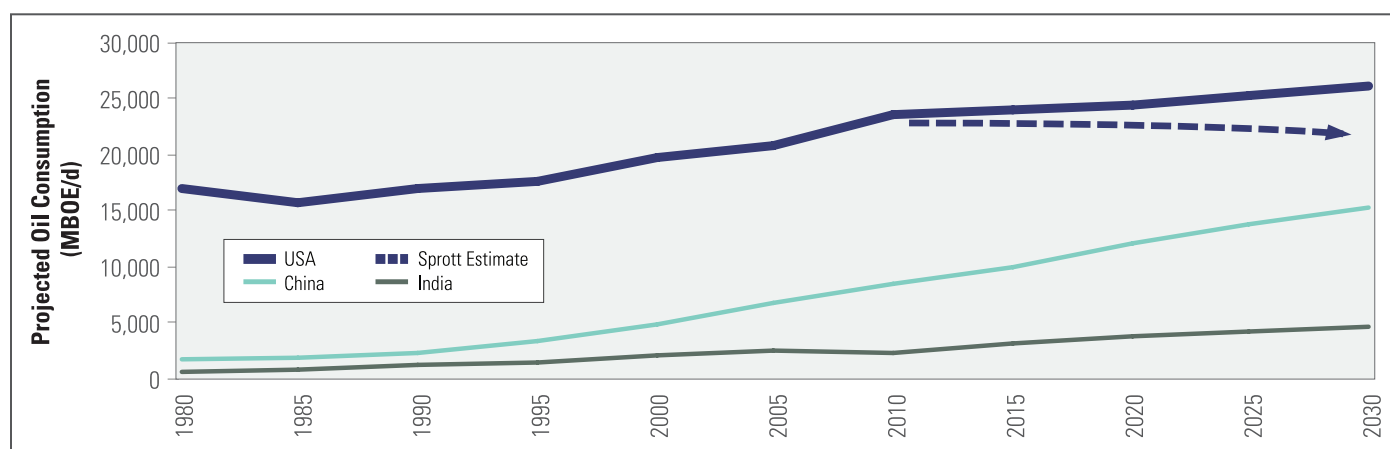
The wage comparison table above highlights the differential between US and Chinese workers for select occupations. We have a long way to go before the wage differential between emerging markets and Western economies shrinks enough to stop the flow of jobs and the redirecting of oil exports around the world. As frightening as this may be for the inhabitants of high wage countries like ourselves, it is best to acknowledge the change and to prepare for a reduction in relative purchasing power as these inevitable adjustments flow through the employment, trade and currency markets.

⁶ National Bureau of Statistics of China (www.stats.gov.cn).

In Figure 12 below, we have added a dashed line representing our revised US consumption estimate to the EIA's forecasted consumption of barrels of oil equivalent per day (boe/d) for the USA, China and India. This revision is meant to reflect the poor history of EIA projections regarding production and account for the potential decrease in US dollar purchasing power of available future oil supplies. This dashed line is strictly illustrative but it neatly presents our view that the oil supply will remain constrained and concerted consumption growth for both developed and developing nations will not be possible.

The forecasted consumption growth in India and China may well turn out to be accurate but we believe it will unfortunately have to come at the expense of US consumption – as there simply won't be enough oil to go around. The price will eventually be driven high enough in US dollar terms to force a rebalancing in global consumption.

FIGURE 12: USA/CHINA/INDIA CONSUMPTION FORECASTS



Source: US Energy Information Administration, World Petroleum Consumption, Annual Estimates, 1980-2008; 2009 International Energy Outlook report, Table A5: "World Liquids Consumption by Region, Reference Case"

Conclusion – Hedge Yourself

For North American workers and investors, one way to hedge against a decline in living standards is to use your current relative advantage in oil purchasing power to accumulate oil reserves that will be developed in the future. This purchasing power advantage, currently evident in the time a worker in the West must work to earn a barrel of oil, will eventually dissipate, as world labour markets recalibrate and shift wealth from West to East. This will mean that workers in the West will be working for less and the balance of trade will be increasingly settled in commodities, in particular oil, and not in inflated Western labour costs. This strategy of oil accumulation will help to preserve your standard of living, as it ensures each hour of your labour earns you many hours of someone else's labour at current rates.

The recent market decline and ongoing volatility is affording investors with an opportunity to invest in oil producers and service companies, in particular junior and mid-cap companies, at attractive valuations. Equities are pricing in much lower oil prices over the long-term. Our view is that while there may be additional volatility in the crude oil price in the short-term, long-term pricing will remain high and equity prices will rise to correct this disconnect. Although the newspapers might not be writing about oil as much today, we believe this is a great time to focus on it. 📌

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Kevin Bambrough

Market Strategist
Sprott Asset Management LP

Between 2002 and 2009, Mr. Bambrough held a number of positions with Sprott Asset Management, including Market Strategist, a role in which he devoted a significant portion of his time to examining global economic activity, geopolitics, and commodity markets in order to identify new trends and investment opportunities for Sprott's team of portfolio managers. He is a recognized leader in the natural resource sectors and in 2007 founded Sprott Resource Corp. Since 2009, Mr. Bambrough has also served as President of Sprott Inc., one of Canada's leading asset managers with \$10 billion in assets under management. In 2010, Kevin was ranked as #1 in Casey's NexTen list of next generation leaders in the natural resource industry. He also received an Honourary Chieftainship from the Blood Tribe in recognition for the valued partnership between the Tribe and One Earth Farms, a company founded by Mr. Bambrough.

Paul Dimitriadis

Chief Operating Officer
Sprott Resource Corp.

Mr. Dimitriadis is Chief Operating Officer for Sprott Resource Corp. Mr. Dimitriadis originates, evaluates and structures transactions, coordinates and conducts due diligence and is involved in the oversight of the company's operating subsidiaries. He serves on the board of directors of Waseca Energy Inc. and Stonegate Agricom Ltd. He has been with Sprott since 2007. Prior to joining Sprott, Mr. Dimitriadis practiced law at a national Canadian law firm. Mr. Dimitriadis holds an L.L.B. from the University of British Columbia and a B.A. from Concordia University.

Sprott at a Glance

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Our history of outperformance speaks for itself.

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Sprott Asset Management LP is the investment manager of the Sprott family of mutual funds, hedge funds and discretionary managed accounts. Sprott Asset Management offers a Best-in-Class Investment Team led by Eric Sprott, world renowned money manager. The firm manages diverse mandates united by the same goal: delivering superior returns to investors. Our team of investment professionals employs an opportunistic, high conviction and team-based approach, focusing on undervalued securities with the greatest return potential.

For more information, please visit www.sprott.com

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Global Resource Investments Ltd., our full-service U.S. brokerage firm, specializes in natural resource investments in the U.S., Canada and Australia. Founded in 1993, the firm is led by Rick Rule, a leading authority in investing in global natural resource companies. More than just brokers, the team is comprised of geologists, mining engineers and investment professionals.

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