MUSINGS FROM THE OIL PATCH

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Allen Brooks
Managing Director

Note*: Musings from the Oil Patch reflects an eclectic collection of stories and analyses dealing with issues and developments within the energy industry that I feel have potentially significant implications for executives operating oilfield service companies. The newsletter currently anticipates a semi-monthly publishing schedule, but periodically the event and news flow may dictate a more frequent schedule. As always, I welcome your comments and observations.* Allen Brooks

Revisiting the Exxon Valdez Oil Spill

We were surprised by the relative balance of the presentation

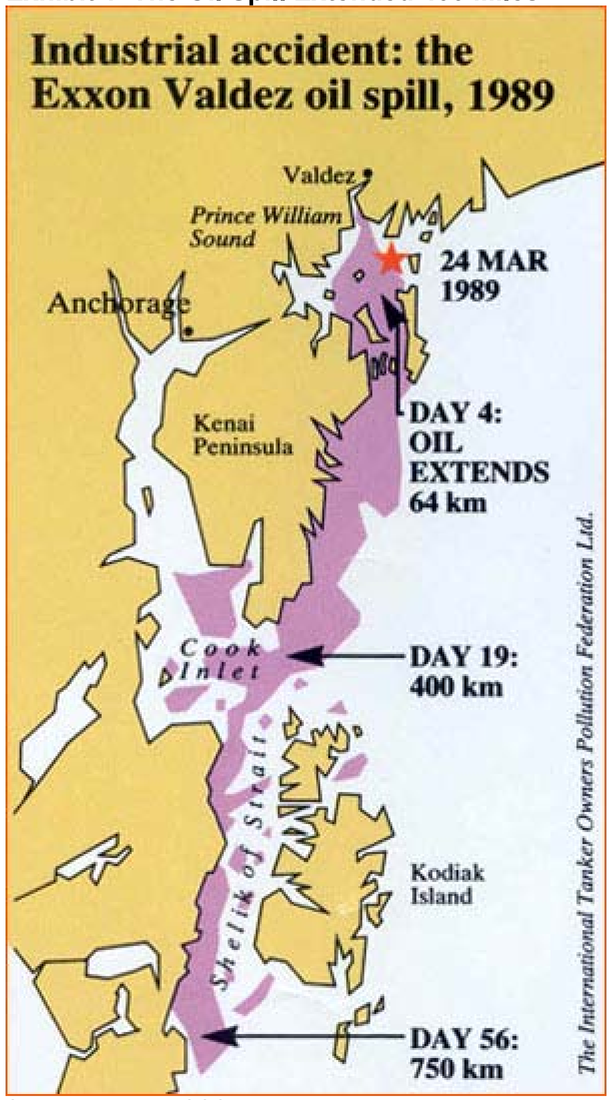
We have just returned from a two-week cruise and land tour in Alaska. As part of the trip, we spent time at the Mt. McKinley Lodge inside the Denali Alaska State Park. During our time there, I attended an hour-long talk by a young female Alaska Ranger about the Exxon Valdez oil spill of 1989. There were about a dozen other tourists in attendance, including, as I found out at the end, two couples from Scotland with one husband who had spent 30 years in the oil patch. I was surprised by the relative balance of the presentation, as I went fully expecting it to be dominated by oil industry, and especially Exxon (XOM-NYSE), bashing.

Her only major shortcoming was constantly confusing 11 million gallons and 11 million barrels

The young ranger's presentation was based entirely on secondary sources. The layout and topics in the presentation were well ordered and comprehensive. Her only major shortcoming (one that I finally pointed out to her) was constantly confusing 11 million gallons and 11 million barrels, in describing the size of the Exxon Valdez spill. There is a huge difference in the numbers, although she didn't seem to recognize the difference until I did the math for her – 11 million barrels equals 462 million gallons – which makes the 11 million gallon Exxon Valdez spill pale in comparison.

One place where this verbal confusion distorted a point the ranger was making was during the discussion of the five primary conclusions from the National Transportation Safety Administration's (NTS) report on the spill. One point dealt with the adequacy of the environmental impact study (EIS) on the potential for an oil spill in Prince William Sound. According to the EIS study, there was 1 chance in 241 years of an oil spill equal to 200,000 barrels or more. When those barrels are converted, the spill size would equate to 8.4

Exhibit 1. The Oil Spill Extended 400 Miles



Source: www.UNESCO.org

million gallons or more. That spill size represents over 76% of the Alaskan spill volume, but when 200,000 barrels are compared to 11 million barrels, the study's result looks ridiculous. The other point she focused on was the odds of that magnitude of a spill. However, most of us are aware of the hundred-year storm or hundred-year flood, or even the 500-hundred year flood as in the new Houston flood maps. Just because it happens one year does not mean a storm of the same magnitude cannot happen the very next year and still fall within the statistical hundred-year periods.

All the quotes used were not identified as to their source

Another issue I had with the presentation was that all the quotes used were not identified as to their source. On some of the issues, such as the ongoing dispute about the condition of Prince William Sound's environmental health since the spill and the issues involving the scope of the damage at the time of the spill, many of the quotes were obviously taken from environmental groups. It is always nice to know which environmental group authored the statement as there is clearly a range of professionalism among those groups.

Exhibit 2. Valdez Oil Spill Clean Up Effort

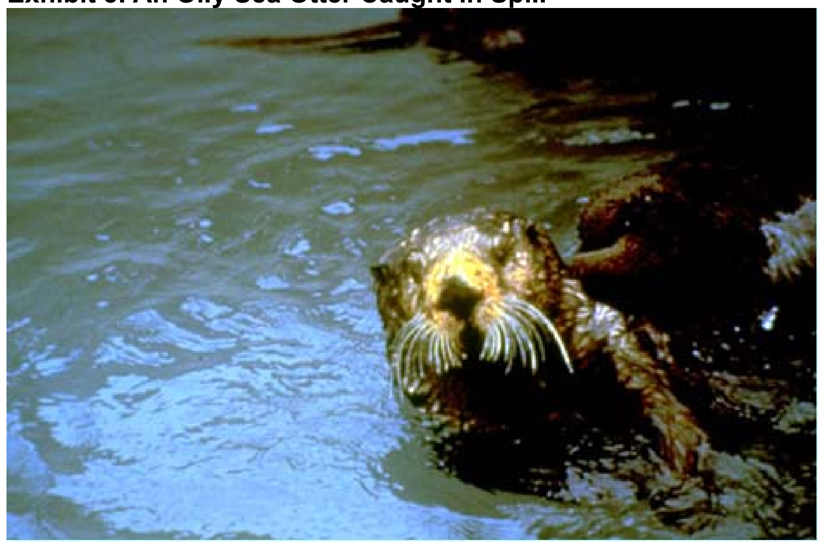
Source: www.scienceclarified.com

Although the Exxon Valdez spill was a serious accident, it no longer ranks among the top 50 oil spills in the world

The last point I found interesting was the ranger's shock that although the Exxon Valdez spill was a serious accident, it no longer ranks among the top 50 oil spills in the world. She admitted she didn't know about any of these other spills. I would have thought she should have done some research about them. It would have added some important material to her presentation. For example, one of the conclusions of the NTS report was incorporated into the 1990 oil spill legislation and mandated that tankers operating in U.S. waters must have double-hulls. As a result of the much larger oil spills involving tankers off the coast of Europe, the entire shipping world is being required to adopt the U.S.-led standard on double-hulled tankers.

In the presentation, Exxon still took a beating for its current profits contrasted against the company's continued appeal of the $5 billion in punitive damages levied after the oil spill trial. Exxon was also attacked for its effort to shift all the blame for the accident onto the tanker's captain, Joseph Hazelwood. Given the testimony about both the company's and his subordinates' knowledge of Mr. Hazelwood's drinking problems, the ranger and the audience, were appalled that he was allowed to skipper the ship. This was where the Scottish oil worker commented that in his experience he didn't know of any company he worked for that would employ someone with a DUI (driving while under the influence) conviction and allow him to drive a company vehicle. I am not sure that was the industry standard 30 years ago, but I may stand corrected. All-in-all, I must admit I was pleased by the ranger's presentation – both its scope and completeness and its balance in presenting the emotionally sensitive issues of the spill.

Exhibit 3. An Oily Sea Otter Caught in Spill



Source: www.temple.edu

IEA Answers The Peak Oil Question

Mr. Birol's comments seemed to have presaged the agency's official concerns about an approaching peak in global oil production

In our last issue of Musings (Is The IEA Beginning to Acknowledge Peak Oil?, July 10, 2007), we wrote about an interview given to the French newspaper, *Le Monde*, by the International Energy Agency's (IEA) Chief Economist Fatih Birol, in which he appeared to raise questions about the ability of the global oil industry to produce the additional oil supplies implied by his agency's forecasts. Moreover, Mr. Birol also seemed to be questioning the validity of the oil reserve estimate of the world's most important oil producer, Saudi Arabia. Now that the IEA's Medium-Term Oil Market Report has been issued, Mr. Birol's comments seemed to have presaged the agency's official concerns about an approaching peak in global oil production and the serious implications of this development.

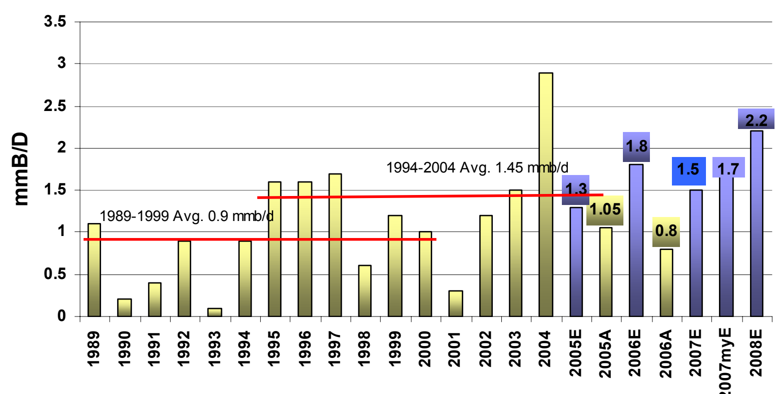
The IEA has once again raised its estimate of 2007 oil demand as continued and unrelenting demand growth emanating from China and India, along with other developing country economies, pushes consumption higher. In fact, the Chinese government just announced that its economy grew at an 11.5% annual rate for the first half of 2007. The IEA now foresees oil demand climbing at a 2.2% per annum rate, pushing global oil consumption to 95.8 million barrels per day (b/d) by 2012. If that target is reached, the world's daily oil consumption will have grown by nine million b/d from the IEA's estimate of 86.1 million b/d of consumption this year. The revised IEA forecast is based on the expectation that global economic activity will grow at an annual 4.5% rate, and given the latest Chinese economic figures and the UK's economy's reportedly faster than expected growth plus a recovering U.S. economy, that estimate appears reasonable.

The IEA stated, "Despite four years of high oil prices, this report sees increasing market tightness beyond 2010…"

The opening line of the IEA's report frames its new found concern about an impending peak in oil supply. "Despite four years of high oil prices, this report sees increasing market tightness beyond 2010, with OPEC spare capacity declining to minimal levels by 2012." This statement echoes the view that Mr. Birol expressed in his interview when he said, "If Iraqi production does not rise exponentially by 2015, we have a very big problem, even if Saudi Arabia fulfills all its promises. The numbers are very simple, there's no need to be an expert." He is saying that even as long as Saudi Arabia can meet its stated oil production growth commitments, the world will still be dependent upon some other source of incremental oil supply - in this case Iraq.

While we share many of the IEA's concerns about a peaking in global oil supply sometime in the future, we believe there are market dynamics at work that may help the world deal with the potential shock of a significant oil supply shortage in the future. The primary issue is demand growth. We recently read one analysis of the IEA's report that concluded that the report was even scarier than it seems because, in the analyst's view, the IEA always underestimates energy demand. Therefore, it is likely that actual oil demand growth will exceed the IEA's 2.2% annual growth forecast for the next five years, which allows even less room for avoiding a global oil crisis than previously thought.

Exhibit 4. IEA's Forecasts In Recent Years Have Been High



Source: IEA, PPHB

Based on our analysis of past IEA forecasts, we believe the agency consistently understated global energy demand growth, and in particular the annual increases in oil demand for most of the last half of the 1990's and the first few years of this century, up until 2004. It was in 2004 when it became clear that the IEA was well behind the forecasting curve as its model for estimating oil demand in China proved woefully weak. Of course, virtually every oil forecaster missed the gigantic jump in China's oil consumption in 2004. But since then, the IEA (with a better forecasting model) began to get China's oil demand growth right, but more importantly, it started overestimating annual demand growth due to its inability to accurately judge the impact on demand growth due to the jump in global oil prices.

Continued strong economic growth in developing economies has been underestimated, leading the IEA to have to raise its oil demand forecasts

This misjudging of demand growth continued until part way through this year's forecasting period. Much of the overstatement in recent months was due to the impact of the warmer winter weather in the United States and Europe and the more moderate summer. On the other hand, economic demand-related oil demand growth has been stronger than the IEA assumed as the U.S. economy has done slightly better than anticipated, but European economies have been much stronger and Japan's economy has shown more life than it has in many years. But clearly the continued strong economic growth in developing economies has been underestimated, leading the IEA to have to raise its oil demand forecasts.

We would caution readers, however, that the experience of the early 1980s, after global oil prices jumped almost 12-fold following the Arab oil embargo in 1973-74 and the Iranian revolution in 1979, global economies did experience a severe recession resulting in a fall in global oil demand over several years in the early 1980s. Many economic forecasters are looking at the U.S. economy's statistics and conclude that it is recovering from an economic slowdown and that the country's growth rate will be accelerating in future periods which, when coupled with a continued strong Europe and Asia/Pacific economies, will lead to stronger global economic activity and oil demand. We remain more cautious about future economic activity as we expect some of the economic problems that have been highlighted recently, but seem not to have caused any significant negative impact yet, may still come back to bite the economy and undercut energy demand growth estimates.

Shifting consumer energy use trends in response to higher oil and energy prices may soon emerge to challenge the conventional wisdom about energy consumption

We suspect that oil and energy consumption relationships may be about to change as climate change legislation mandates new energy use patterns. Shifting consumer energy use trends, in response to higher oil and energy prices, may soon emerge to challenge the conventional wisdom about energy consumption. These would be similar to the stealth energy and oil consumption pattern changes that happened in the late 1970s, just after everyone accepted the view that world economies had successfully absorbed the twin oil shocks of the seventies.

Where the IEA may be on safer ground in its statement is the issue of new oil supplies. The relentless erosion of our existing supply base due to depletion, whether that depletion rate is accelerating or not, forces the world to find a growing volume of new oil merely to sustain its existing supply before considering the requirement to find new supplies to meet incremental demand growth. The fall in oil production in Mexico, the North Sea and Kuwait - the locations of large oil fields - is adding a new dimension to the global oil supply picture. Given this challenge, the IEA's pleas for OPEC to become more transparent about their oil reserves and production need to be heeded, although we doubt that will ever happen. The recent internal political battle over Kuwait's official reserve estimate demonstrates just how sacred these figures are.

Readers may want to prepare for a possible inflection point in energy consumption trends

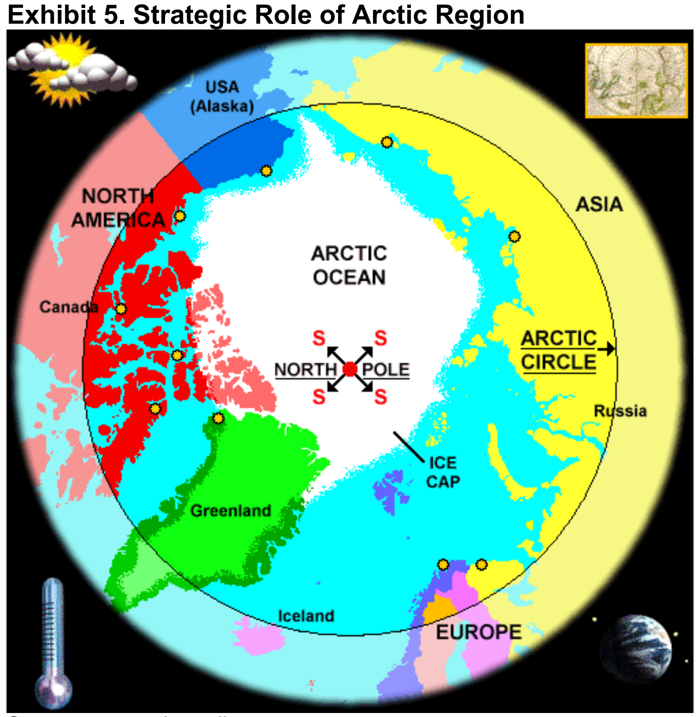
When we wrote about Mr. Birol's comments in the last issue, we did not expect to have his concerns confirmed so quickly. While it is too early to say that the IEA has its new forecast wrong, we suggest that readers may want to prepare for a possible inflection point in energy consumption trends that could undo most economic and energy demand assumptions that underlie existing conventional thinking about the future of energy markets.

Canada: The New 800-Pound Energy Gorilla?

Russia announced that it was claiming 400,000 square miles in the Arctic based on the natural extension of the country's outer continental shelf

Several weeks ago, Russia's President Vladimir Putin announced that his country was claiming 400,000 square miles in the Arctic based on the natural extension of his country's outer continental shelf. Underlying this claim is the prospect the area may contain significant reserves of natural gas and crude oil, further enhancing Russia's energy stature in the world. Mr. Putin's move has stimulated a quick response from Canada that could, if the prospective oil and gas reserves prove present, make that country the new 800-pound energy gorilla by the end of this century, or sooner.

Exhibit 5. Strategic Role of Arctic Region



Source: www.arthropolis.com

Canada announced it would move forward with plans to construct up to eight new Polar Class Arctic Offshore Patrol Ships – armed icebreakers

On July 9, Canada's Prime Minister Stephen Harper announced that his government would move forward with plans to construct up to eight new Polar Class Arctic Offshore Patrol Ships – armed icebreakers. In his speech, Mr. Harper invoked the terms "sovereignty" and "national identity" several times as he emphasized Canada's territorial claims on the Arctic acreage. How Canada's claims on this territory evolve may have significant implications for the global energy business and even the global shipping industry. The potential battle over Canada's claim is just beginning, but with Russia weighing in with its claim, the battle over this frozen region is just beginning.

Countries have full rights to all the minerals within an exclusive economic zone that extends 200 nautical miles from the country's coastline

Just how could the issue of who controls these vast areas of the frozen Arctic evolve and what are the possible implications? The United Nations Convention on the Law of the Sea (UNCLOS) dictates that countries have full rights to all the minerals within an exclusive economic zone that extends 200 nautical miles from the country's coastline. There are special considerations for long continental shelves that can extend those rights even further than the 200-mile limit. In the Arctic, the continental shelves extend for hundreds of miles (witness the Russian claims), thus offering the possibility that the bulk of whatever natural resources are located in the region will belong to Canada, and possibly Russia. There are some countries that are objecting to that scenario, however.

At the moment, there are two disputes between Canada and other countries. One involves the United States and is over a sliver of land in the Beaufort Sea and whatever oil and gas deposits may be under it. The other dispute is between Denmark and Canada over Hans Island, a small pile of rocks some 1.3 kilometers in area. This latter dispute, which commenced in 2004, has been waged between the two countries by the planting of flags and the banning of the importation of pastries. The significance of the Arctic region in light of the potential impact of global warming could make these territorial disputes potentially more meaningful in the future.

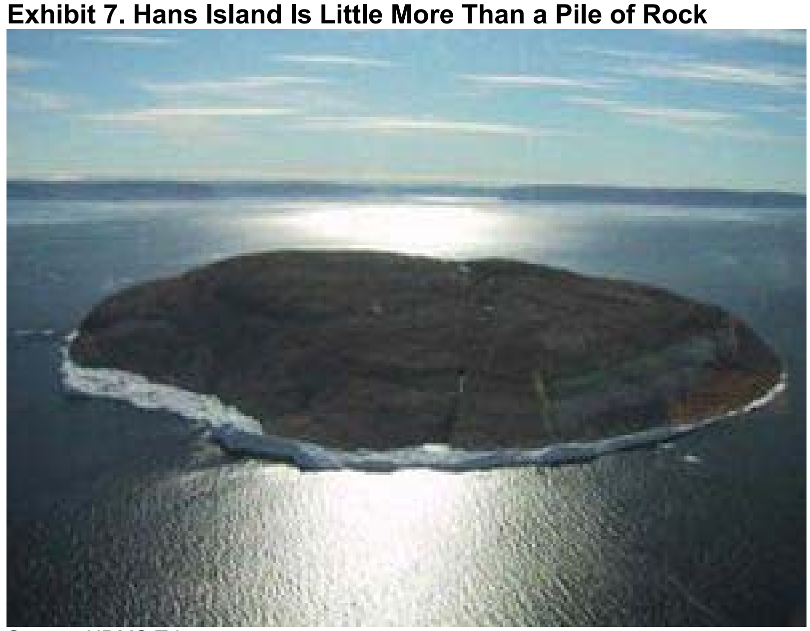
Exhibit 6. Strategic Location of Hans Island

Source: www.canadiangeographic.ca

If Canada's northern territories become accessible year-round that may significantly alter the development and delivery of future energy resources

As the ice-pack that covers the Arctic recedes due to global warming, more of Canada's northern territories will become accessible year-round and may significantly alter the development and delivery of future energy resources that are located there. For example, if the natural gas reserves that have been discovered in Canada's Mackenzie Valley in the Northwest Territory are able to be developed and transported as liquefied natural gas (LNG), there may be no need to build the $7 billion, 750-mile Mackenzie Valley natural gas pipeline that has been delayed now for four years as construction costs have doubled. The change in the development scheme could cost the provincial governments and First Nations the royalties the pipeline would have generated, thus altering their future financial outlook.

Exhibit 7. Hans Island Is Little More Than a Pile of Rock



Source: HDMS Triton

Another example of the dramatic change opening up the Arctic to year-round access by water is that potential oil and gas resources could be drilled each year without having to construct expensive ice islands or build ice-proof drilling rigs such as those used at Sakhalin Island off the coast of Russia. Lastly, there is the potential impact from creating the long sought-after Northwest Passage.

Resource rights on the seafloor and territorial waters on the surface of the sea are governed differently under UNCLOS

Resource rights on the seafloor and territorial waters on the surface of the sea are governed differently under UNCLOS. If the Northwest Passage is determined to constitute shipping lanes within Canada's territorial waters, which is the most favorable outcome for Canada, the country will control all access and use of the route enabling it to charge tolls and determine who can use the lanes. On the other hand, the United States' and other countries' position is that the Arctic is a straight connecting two international bodies of water – the Pacific and Atlantic Oceans – so the Northwest Passage should be considered international waters with full and complete access by any nation's ships. But with Canada moving forward with construction of the eight armed icebreakers, the largest such fleet in the world, the Canadian Navy will be patrolling these Arctic waters as they open up over the next 20 years. Would patrolling with armed vessels be tantamount to determining the outcome of the issue?

Exhibit 8. Danish Flag On Hans Island

Source: HDMS Væddern

This change would free the marine industry from the minor tyranny of beam and draft restrictions of Panamax and Suezmax ships

Since the Northwest Passage would cut about 5,000 miles off the Europe to U.S. West Coast trading route, its development would have a significant impact on the marine transportation industry and the economics of various trading routes. It would pull trade away from the Panama and Suez Canals as ships find more direct routes over the top of the globe. This change would free the marine industry from the minor tyranny of beam and draft restrictions of Panamax and Suezmax ships, and would create a new standard – Canadamax hull requirements. Ice strengthening of the hulls would certainly be one characteristic of this new standard.

The possible development of a Northwest Passage, along with the increased development of Arctic ports in Russia, is what is behind the tanker industry's efforts to build icebreaker class chips and tankers with ice-strengthened hulls. Those tanker owners with these vessels already in their fleets, or under construction, will gain the early-mover advantage of the changing industry outlook as a result of the opening of the Arctic region.

Governmental moves to claim their sovereign rights to the Arctic region is setting the stage for future potential geo-political struggles

While it is very early to be speculating on the impact of the year-round access to the Arctic region by Canada and Russia, the respective governmental moves to claim their sovereign rights to the Arctic region is setting the stage for future potential geo-political struggles. To our way of thinking, the long-term winner in this struggle is likely to be Canada. Russia may also gain economic and political power if it is able to move forward with its land grab, which appears to have less legitimacy than Canada's, and is expected to be more harshly challenged as it appears to be part of the political strategy of Mr. Putin to re-establish an all-powerful Russia. Regardless, the world's energy and shipping industries may be on the cusp of significant new opportunities that will present strategic challenges for company managements.

Private Equity Alters the Canadian Income Tax Outlook

The expressed rationale for the change in the tax scheme was to level the playing field between corporations and income trusts

On then evening of October 31, 2006, Canadian Finance Minister James Flaherty announced a change in the taxation of income trusts that resulted in a huge loss of equity value among these securities as investors bailed out of their ownership due to the projected loss of the tax-deferred or tax-free income from the trusts. Earlier, in the spring of 2005, there had been a scare among investors in income trusts as reports circulated that the Canadian government was going to alter the tax rules to prevent the possibility of Canadian commercial banks from transitioning into income trusts. The expressed rationale for the change in the tax scheme was to level the playing field between corporations and income trusts. But the real reason for the Halloween Evening tax move was the government's fear that the Canadian telecommunications companies were considering converting into income trusts, also.

Income trusts have become highly popular investments in Canada because of their tax structure that allows companies to form a trust to hold the company's assets for the benefit of the unitholders. The unitholders receive a substantial portion of the company's cash flow monthly with the requirement that the holders pay income taxes on these distributions at their normal tax rate. For retired individuals who pay substantially reduced tax rates, these high-yielding cash distributions from the trusts became highly valued investments – both for their current yields and the monthly distribution pattern. Many income trust investments were held in individual retirement funds, which significantly boosted their investment flows and delayed the subsequent tax obligations until the income was paid out to the holder upon his retirement. A meaningful portion of income trust units were also held by traditional pension funds that are exempt from paying tax until the income is paid out to the beneficiaries.

Globally, Canadian income trusts became attractive investment alternatives in a world dominated by low interest rate investments

The challenge the Canadian government faced in both spring 2005 and fall 2006 was the potential loss of current income tax payments from the Canadian commercial banks and telecommunications companies. As far as the tax obligations from these investments for Canadian investors, the primary impact was postponement of the tax revenues. However, globally, Canadian income trusts became attractive investment alternatives in a world dominated by low interest rate investments. Even after the usual 15% withholding tax on the distribution, these investments still provided current yields that exceeded alternatives available. Therefore a growing portion of Canadian income trust units were being acquired and held by foreign investors, especially Americans.

For the Canadian government, however, the banks and telecommunications companies are **REAL** tax payers and the thought of losing that income stream is what drove the government to alter the income trust tax rules, even though a substantial amount of the taxes would be realized at a later time. As a concession to

The government has capped the time period for its loss of tax revenues

the existing trusts, the government granted a period of four years before the trusts must convert back to corporate status. That change means that the government has capped the time period for its loss of tax revenues. That may become important as the possibility of lower energy and mineral prices that could cost the government in the future increases. By changing the tax rules, however, the Canadian government eliminated the attractiveness of companies converting into income trusts.

Eight months after cutting off the income trust option, the Canadian government is staring at the potential loss of its income stream from Bell Canada Inc. (BCE-NYSE), formerly known as BCE Inc., and one of the country's leading telecommunications companies. When the takeover battle for Bell Canada was over and private equity firms were the winner, we know their playbook for the new telecommunications company. The strategy will likely involve adding substantial debt to the company's capital structure, increasing investment to improve the company's competitive position in the new telecommunications industry of Canada, and reducing employment. The net result is that Bell Canada's taxable income will shrink dramatically, along with its tax payments to the government. When employees are laid off, even though the Canadian job market is healthy, their incomes will decline for some time period, again resulting in a shrinking of tax revenues, and possibly boosting government outflows as unemployment benefits may need to be paid.

The bottom line is that the Canadian government has not solved its potential tax revenue losses by prohibiting the transformation of companies into income trusts

The bottom line is that the Canadian government has not solved its potential tax revenue losses by prohibiting the transformation of companies into income trusts. Rather, they may lose their tax revenues as financial engineering, conducted by private equity firms, erases various company income tax obligations. Short of constructing barriers to the free movement of capital, Canadian regulators have little control over the purchase of domestic companies by private equity groups who will bleed the government's tax revenues away. More importantly, what the government has done by its tax maneuvers is to leave investors uncertain about Canada as an attractive investment location. The government's willingness to alter the tax code at a whim, while making its decisions in secret, is the culprit.

Russia Grants Energy Companies Paramilitary Status

The law enables the companies to employ and arm their own security forces

Recently, 341 of the 450 delegates of Russia's lower house (the Duma) backed a law giving natural gas-oriented Gazprom (OGZPY.PK) and the Russian monopoly oil pipeline company, Transneft (TRNFF.PK), the right to form armed units to patrol their respective oil and gas pipelines. The law enables the companies to employ and arm their own security forces, but only with rifles and other small arms, to protect their oil and gas producing and transporting infrastructures from military attacks.

Is Russia's oil and gas infrastructure truly at risk? Alexander Gurov, a deputy in the Duma and one of the authors of the legislation, said, "A couple of terrorist acts and an ensuing ecological catastrophe would be enough to immediately declare Russia an undependable partner and supplier of energy resources." Of course, the country already is well along in earning that title given its unabashed use of energy supplies to influence the political leanings and behavior of its neighbors and former states.

Russia owns 27% of the world's gas reserves, which account for 44% of the European Union's natural gas imports

At the present time, Russia owns 27% of the world's gas reserves, which account for 44% of the European Union's natural gas imports. Those imports represent one-quarter of all of Europe's natural gas consumption. Europe currently depends on foreign supplies for about a half of its total energy needs and that ratio is expected to climb to 70% by 2030. The influence that Russia has, and will increasingly build, over European countries and its neighbors, is becoming clearer every day. This power will enable Russia to exert greater influence in the outcome of geopolitical trends, even though the country no longer has the military power it exerted during the Cold War years.

One does have to wonder whether, and if, Russia's oil and gas infrastructure might become the target of rebel groups fighting the government. We have seen these rebels make bold terrorist attacks in the past, including the seizure of hostages in a Moscow theater in October 2003 in which 39 terrorists and 129 hostages died. Rebels also seized a school in Beslan in 2004. After a three day siege, 323 hostages, including 156 children, 26 hostage-takers and 10 Russian Special Forces troops lost their lives in the final resolution. Other attacks have involved bombings of Moscow subway trains, two Russian airplanes and people outside of a Moscow subway entrance. These attacks took 130 lives and injured at least 425 people. Destroying pipelines and pumping stations would seem easier targets. However, they would not be as spectacular from a PR point of view, but they would certainly be a very powerful economic act.

An intriguing scenario where these corporate units take on quasi-military/sovereign tasks

The arming of Gazprom and Transneft security forces creates an intriguing scenario where these corporate units take on quasi-military/sovereign tasks that are politically touchy issues for the Russian government. This new development could put a different slant on the concept of corporate espionage.

Windmills Don't Sink Land Values

One of the claims against approving construction of the Cape Wind windmill project off Cape Cod in Nantucket Sound has been its negative impact on real estate values in the area. An October 2003 study, produced by David Tuerck's Beacon Hill Institute and financed by the family foundation of a major Cape Wind opponent – EMC Corp. (EMC-NYSE) co-founder Richard Egan – seemed to confirm this belief. The study concluded: "It is estimated that property values in the six affected towns would fall by 4 percent. This represents a loss of $1.35 billion in property values, or almost twice the cost of the windmill project."

Using the conclusion of the study, one opponent, Robert F. Kennedy Jr. once justified his opposition to Cape Wind on the grounds of economic and social justice: Middle- and low-income homeowners would pay higher property taxes because wealthy shoreline homeowners would pay less after the projected depreciation.

The team asked homeowners if they thought their properties might drop in value if Cape Wind were built

Given the imprecise measurement of home values, how did the Beacon Hill Institute develop its estimate? It seems that a team of surveyors showed 501 homeowners in the six towns around Nantucket Sound photo simulations of what the offshore wind project would allegedly look like from their homes. Then the team asked homeowners if they thought their properties might drop in value if Cape Wind were built. Interestingly, 79% of the interviewees said they did not expect a drop in home value – a point not mentioned in the institute's summary and study analysis. Instead, the conclusion stated: "Homeowners said that the wind mill project would depress property values…."

Only 20% of the sample suggested that their home values might decline in the future

According to reporters who have read the Beacon Hill Institute's questionnaire and its responses, only 100 of those surveyed said they expected a drop in property values. So with only 20% of the sample suggesting that their home values might decline in the future, how does the $1.35 billion figure evolve? Since the report was not peer reviewed, that question was not addressed or answered in the report, and it has never been addressed since the report.

Several years ago, a graduate student in Environmental Policy at the Bard Center at Bard College in New York City actually looked at home sales near a 20-turbine, 30-megawatt wind project in central New York State. He examined 679 home sales occurring within five miles of the project over a decade during and after the project was constructed. He found no evidence of a drop in property values.

The study is designed to be the first scientifically rigorous, peer reviewed and published study on the actual, documented effects of wind turbines on property values

The student recently teamed up with a scientist with the Electricity Markets and Policy Group at Lawrence Berkeley National Laboratory in California. They embarked on a study to examine this property value issue in greater depth. The study is designed to be the first scientifically rigorous, peer reviewed and published study on the actual, documented effects of wind turbines on property values. This study is being financed with public money and not by a private family foundation with an ax to grind. Their study will have a huge sample size – 3,500 to 5,000 home sales near eight to 10 operating wind-turbines projects.

Earlier this month, the team presented preliminary results of the study, which is not quite half done. After looking at four sites with a total sample size of 2,195 home sales, the team found "no statistical evidence that homes within four to seven miles of a facility are affected adversely." The study is expected to be completed by the end of the year with the full results available in early 2008.

We know that the head of the Beacon Hill Institute has written scathing attacks on the two investigative reporters for the Cape Cod newspaper that has been investigating these issues. Distortions of the facts surrounding the challenging issues for approval and construction of the Cape Wind project have been the order of the day from its opponents. These tactics seem to confirm the view that the environmental movement with respect to alternative energy technologies and climate change issues has moved well beyond factual and intellectual debates. The tactics reflect the growing demonization of the battle, or as some observers have commented, the opponents have elected to employ the tactics used by the Nazis during their pre-World War II reign of terror. It all suggests that with respect to climate change issues and solutions, we have entered a period characterized by a lack of civility.

The opponents have elected to employ the tactics used by the Nazis during their pre-World War II reign of terror

Has the Mexican Revolution Begun?

In the last Musings issue we wrote about what we considered to be the incongruent views of credit raters and the head of the Mexican government over the outlook for Mexico's oil and gas industries and the implications for the future of the country's economy and government. That story (Mexico's Outlook: Calderón versus Standard & Poor's, July 10, 2007) focused on Standard & Poor's upgrading of Pemex's, the state-owned oil company, and the Mexican government's sovereign bond ratings at the exact same time that President Felipe Calderón was warning about the impact on the country from falling oil production.

Within days of this story and our questioning whether we were about to see the start of a revolution in the country, guerilla groups attacked natural gas pipelines near Guadalajara in western Mexico. A statement about the attacks came from the People's Revolutionary Army. The statement said, "We have started a national campaign of harassment against the economic interests of the oligarchy and the anti-people government. We declare those interests as legitimate military targets." Until the pipelines are repaired, a number of operations of international corporations, including Hershey's (HSY-NYSE), Honda (HMC-NYSE) and Kellogg's (K-NYSE), were being impacted. Mexican authorities estimate that the economic impact for the companies was running at about $7 million per day of lost output.

"We have started a national campaign of harassment against the economic interests of the oligarchy and the anti-people government. We declare those interests as legitimate military targets."

The pipelines were quickly repaired including re-routing around one of the destroyed pipelines to enable the companies to re-start their operations. Around the same time, Pemex announced it was raising workers' pay by about 4.5%.

On July 18, President Calderón introduced a new infrastructure investment program (National Infrastructure Program) that would

Mr. Calderón has made passage of this spending contingent on the legislature also approving his controversial recently proposed tax reform agenda

entail the government spending $225 billion over the remaining term of the current government (until 2012) on expanding and improving airports, railroads, highways and ports. However, Mr. Calderón has made passage of this spending contingent on the legislature also approving his controversial recently proposed tax reform agenda. If approved, one-half of the new tax revenues from the fiscal plan would be used for infrastructure projects. If the new fiscal plan is not approved, then the government expects that infrastructure spending would be flat to maybe down slightly from current levels. In this move, President Calderón is trying to sway legislatures who favor the infrastructure spending into voting for the controversial changes in the country's tax scheme.

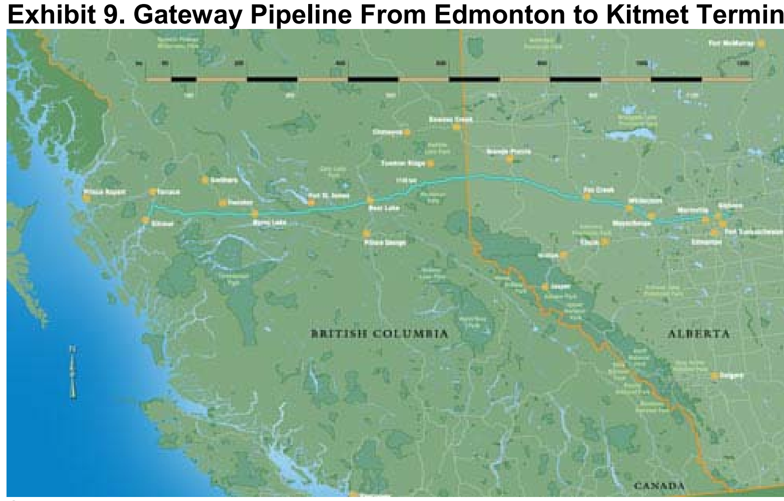
Given the recent developments and the potential for rebel activities aimed specifically against the country's oil and gas infrastructure, we are even more curious about Standard & Poor's decision to upgrade the credit rating of Mexican government and Pemex bonds. While it may be too early to declare that Mexico will experience a destructive social revolution, the powder keg that is present in the country could be one of those geo-political surprises we always marvel at after the fact.

China Increasing Competitive Landscape for IOCs

PetroChina is pulling out of the Gateway $4 billion, 700-mile pipeline project in western Canada due to a lack of support from the Canadian government

Chinese state-controlled energy company, China National Petroleum Company (PetroChina) (PTR-NYSE), is pulling out of the Gateway $4 billion, 700-mile pipeline project in western Canada due to a lack of support from the Canadian government and an uncomfortable environment according to a July 12 statement by PetroChina's Vice President Yiwu Song. Gateway, a new pipeline project, is anticipated to supply Canadian oil sands output to a marine terminal located in Kitmet, British Columbia for export to China and other Asian markets. Enbridge (ENB-NYSE), PetroChina's 50%-partner in the project reportedly was not informed in advance of the announcement of the decision.

Exhibit 9. Gateway Pipeline From Edmonton to Kitmet Terminal



Source: Enbridge

There is also speculation that the Chinese only became involved in the Gateway pipeline project to learn more about the technical issues of extracting, pumping and transporting heavy oils

Much like the political environment at the time of China National Offshore Oil Company's (CEO-NYSE) bid for the U.S.'s Unocal in 2005, the negative feedback over potential Chinese involvement in an important Canadian oil export infrastructure project has made the Chinese leery of wanting to bear that political heat. Although shortly after reports of the decision to exit the Gateway project surfaced, the Chinese were talking about their long-term commitment to their investment in new oil sands projects. There is also speculation that the Chinese only became involved in the Gateway pipeline project to learn more about the technical issues of extracting, pumping and transporting heavy oils since they have made an even greater investment commitment in Venezuela's Orinoco Basin and are rumored to be targeting heavy oil deposits elsewhere around the world.

If the Chinese find they cannot invest their funds in North American energy infrastructure projects and/or domestic oil and gas companies because of adverse political pressure, they will seek energy investment opportunities in less developed regions that are more politically challenging for western independent oil companies (IOCs). This would not be a particularly attractive outcome for domestic IOCs who would like to have less competition around the world as they seek new energy resources.

Contact PPHB:
1900 St. James Place, Suite 125
Houston, Texas 77056
Main Tel: (713) 621-8100
Main Fax: (713) 621-8166
www.pphb.com

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