

Quote of the week : “Here we have witnessed a real climate change; for rains are now coming out of season.” - Munene Kamau, a Kenyan journalist resident in the Kenyan town of Kerugoya on the lower slopes of Mount Kenya, a longtime friend & recipient of Gleanings - *While this is unlikely to convert climate change skeptics/deniers, for those who treasure facts such grass roots’ anecdotal evidence adds to the empirical evidence that climate change is not a figment of the imagination of scientists ‘talking their own book’; for as long as people can remember, rainfall in Kenya followed a predictable, monsoon-like seasonal pattern with the “long rains” coming like clockwork from, say, mid-March to mid-May & the “short rains” from mid-October to mid-November.*

On the subject of climate change, yesterday, Monday September 8th, it snowed in Alberta. While in Edmonton it melted as soon as it hit the ground, in many other places, incl. some not far from Edmonton, it laid down two inch-thick white coatings¹. And the weather forecast at the time of writing (1000 hrs local time Tuesday September 9th) for the next few days called for high & low temps for Edmonton of +7/-1 (45/30 Fahrenheit) tomorrow (Wednesday), +14/+3 (57/38) on Friday & +23/+11 (73/52) on Sunday (these numbers have since been pushed back, with the thermometer now not hitting the 20's until Monday but then supposedly staying well in the 20+/68 degree Fahrenheit range for the next ten days). And on Tuesday it was what the Dutch call “water koud” (wet cold), the most uncomfortable kind of cold weather since one cannot dress for it. While it is by no means unprecedented to have snow in September², it nevertheless is not pleasant & puts an unreasonable early end to plant growth in the gardens.

There was a report that the four biggest “too-big-to-fail” US banks hold 90% of the total US\$240TR of derivatives held by the entire US banking system. Since at last report these four had < US\$1TR in shareholders’ equity, it wouldn’t take much of a ‘black swan’ event in the derivatives market to create a US banking crisis of unprecedented proportions (& likely a bank bailout that would make the last one look petty). This is a good news, bad news story. The good news is that derivatives’ face value vastly overstates the risk exposure of the banks involved since in any meltdown there would be a massive ‘netting’ of assets & liabilities that would reduce the banks’ **net** risk exposure to just a fraction of the derivatives’ face value. On the other hand, the bad news is that it would take only a loss of 0.4% on the face value of this US\$220TR of derivatives to **entirely** wipe out these banks’ shareholders’ equity.

In the years 2000-2005 the US banking system’s loans as a percentage of its deposits fluctuated in the 100-105% range & by late 2008 had drifted up further, to 110%. But in 2009 they started an as yet not ended slide to 75% (although since early 2012 the rate of decline has become less precipitous) - *this must have been a factor in the economy’s low rate of growth.*

Last year the hi-tech computer models of the National Oceanic and Atmospheric Administration’s Climate Prediction Centre (CPC) predicted above normal November through

¹ As of Tuesday evening, September 9th, snowfall in Calgary had been as much as 10 cms (4 inches), an amount that was expected to double before it was all over (in the event it turned out to be as much as 35 cms/14 inches, with considerable damage to power lines & trees). This will complicate life for farmers during their harvest and, in addition, cause a deterioration in the quality of any late seeded crops, due to localized overnight frosts stopping plant growth.

² Over the years Edmonton has seen snow in **every** month of the year & I recall people telling me that in 1951, the year before I came to Canada, it had snowed there, in Eastern Saskatchewan, on September 15th, with the snow staying until the following April, causing farmers to have to delay much of the harvesting of their crop until the following April.

January temperatures for much of the Continental US while the almost 200 year-old Farmers' Almanac (that uses a "secret" but presumably low-tech methodology) forecast a nasty winter. In the event the CPC was proven wrong & the Almanac right. Both have now posted their predictions for the coming winter, with the Almanac again predicting another 'brutal' one & the CPC above-average, El Niño-driven precipitation in the Southwestern & Southeastern US, and above normal temperatures for the Northwestern-, North-Central-, & Northeastern regions. One can only hope that this year the CPC will be proven right, & the Almanac wrong; for natural gas-in-storage levels still haven't recovered from last winter's massive drawdowns & at last report, two months before the official start of the winter heating season on November 1st, were down 14.8% YoY &, more significantly, 15.4 % below their last five years' average levels for this date. And while currently the price of natural gas is in the US\$4 range, about on a par with that a year ago, last February the severe winter weather caused it to spike almost 100% YoY to US\$6+ &, given the current level of natural gas in storage, the spike could be even greater this year if the Almanac's prediction were once again 'on the mark'.

In California only 40% of all water consumption comes from renewable surface resources & 60% from underground sources being drawn down at unsustainable rates, as witnessed by the fact that in the past decade groundwater levels there have dropped an average 15 feet, 75% thereof in the last five years.

All the hype about the Alibaba IPO glosses over the fact its biggest shareholder is not Jack Ma or Yahoo but, to Beijing's chagrin, Japanese telecom giant Softbank (that after the IPO will still own 32% of the stock outstanding) & that 60+% of the stock on offer will come from, & reduce, the personal holdings of Chairman Jack Ma & Executive Vice Chairman Joe Tsai (Ma's first employee, way back when).

According to BankAmerica 45% of all US government debt outstanding now yields less than 1%, making the US budget deficit extremely vulnerable to rising interest rates.

The City of Edmonton is in the throes of an unprecedented home building boom driven by the fact that in the past two years its population has grown 7.4% to 878,000 (the population of Metropolitan Edmonton is about 30% greater & has been growing at a not dissimilar pace). Much, if not all, of this, however, is oilsands expectations-driven & could be reversed as quickly as it emerged if these expectations were to falter. Alberta has seen boom & bust cycles far too often. Thus three decades ago cars in Calgary featured bumper stickers saying "Let the Eastern bastards freeze in the dark", which a few short years later became "God please give us another oil boom and we promise not to piss it away next time" (only to be forgotten as soon as times got better again); that has been the pattern ever since : Albertans & their governments counting their chickens before they're hatched. And now storm clouds may be gathering over the Province's recent primary economic driver. For as noted later (*see below under **GATEWAY DELAY CLOUDS (OIL) INDUSTRY'S EXPORT PUSH***) there appears to be a growing risk that the anticipated expansion of the oil sands may be less axiomatic than the local CW holds, as well as a smaller, more worrisome, risk that the oilsands to some extent could become a "stranded asset" for a lack of pipeline capacity to get the oil Alberta expects to be producing a few years hence to market (& anyone who thinks that oil-by-rail can be ramped up sufficiently to pick up the slack economically & efficiently hasn't thought this through). Apart from the material in the above-noted article, other signals are flashing orange. Not long ago the CAPP (Canadian Association of Petroleum Producers), not an entity driven to pessimism about the outlook for the oil industry, marked down (*albeit ever so marginally*) its expectation of Alberta oil production by 2030. A recent report by the London-based Carbon Tracker Initiative (that is, however, not an unbiased source), concluded that, in the absence of higher oil prices some of the world's more

costly energy projects, incl. some in the oilsands, could be cancelled & that 20 of the biggest oil projects around the world (that would involve an upfront investment of over US\$90BN) need oil prices of over US\$110 bbl to be viable (& a few in the oilsands even US\$150). Any increase in interest rates could change the economics of all planned projects. In a piece of anecdotal evidence my truck driver son, who hauls into Fort McMurray, told me recently about how scarce work had become in the previous three months. And while the long-term outlook for oil remains bullish, because both total global demand, & the marginal cost of bringing in new sources of supply, keep rising, over the short term output is growing in the US, the market, rather counter-intuitively, seems to have reduced the political risk premium built into oil prices, Libyan & Iraqi oil output will increase as & when the political situation in their countries stabilizes a bit, & a number of oil producing countries incl. Russia & Mexico for budgetary reasons may seek to maximize output to offset the recent decline in spot oil prices (Brent is down 14% in the past three months to US\$98, a level not seen since mid-2012 & before that at the end of 2010).

Three years ago Irish two-year bonds traded on a 23.25%-, while earlier this week they did so on a - 0.004%-, yield basis. This warrants two observations. One, the contrarians who bought Irish bonds back then must have made out like bandits. And two, while Ireland is doing much better than the other PIIGS countries & its fiscal situation is improving, its Debt-to-GDP ratio is still 116%, its budget deficit still 6.7% of GDP & its youth unemployment rate still 25%, and people are still emigrating. Elsewhere, German government bonds trade on a negative yield basis all the way out to three years & Japanese investors have been piling into French government bonds with abandon for a yield pickup over Bunds, spurning Spanish, Italian & Greek bonds as 'too risky' while blissfully ignoring the growing risk that France is 'a (fiscal) accident looking for a place to happen'.

President Obama's National Security Adviser, Susan Rice³, was in Beijing for three days this week as advance guard for his presence there next November 10th -11th at the APEC Summit⁴. While there, President Xi first informed her that "It has become more important than ever for China and the United States to work with each other as the international situation continues to undergo profound and complex changes" &, on her last day there, Gen. Fan Changlong, Vice-Chairman of the Central Military Commission, that the US should take the "correct" view of the development of the Chinese military and "decrease, and even end, close-in ship and aircraft surveillance of China." - *Beijing has obviously taken note of Obama's 'limp wrist' responses to the crises in Eastern Europe & the Middle East.*

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WATER RESOURCES A PROBLEM FOR ENERGY EXTRACTION WORLDWIDE
(FuelFix, Jennifer A. Dlouhy)

³ Contrary to popular perception she is not related to Condoleezza Rice who occupied the same post during George Bush's first term in office.

⁴ I.e. one week after the November 4th midterm election. This may not be good timing for him.

- Fracking holds the promise of providing the world with oil & gas for decades to come. But an analysis by the Washington-based World Resources Institute suggests this could prove a poison chalice since 38% of the *world's known* shale oil & gas reserves are in areas that are either arid or under high levels of water stress already (the same is true in the US where over one-third of its shale reserves are in places like Texas, Colorado & California that have high baselines of water stress, and/or, as in the case of the Eagle Ford in Texas, where aquifers are being drawn down at unsustainable rates.

Fracking a well typically takes millions of gallons of water that either stays underground to create a risk of polluting ground water or comes back up with the oil, several times 'saltier' than sea water. And while, in North America at least, companies are making progress in cleaning up, & reusing, the latter water, this a) adds to the cost of production, b) only reduces, but does not eliminate, the need to draw down virgin surface water stocks, and c) creates problems disposing of the byproducts of the waste water treatment process..

WHY THEY STILL HATE US, 13 YEARS LATER (WP, Fared Zakaria)

•Islamist terrorism is not a function of a few nihilists but of a broad culture complicit in-, or at least unwilling to fight-, it. It's less an Islam-, than an Arab-, problem. For it has, so far at least⁵, not taken root in the world's largest Muslim country, Indonesia, nor among India's 175MM Muslims (*although al-Qaeda leader Ayman al-Zawari has just announced he wants to change that*). Political stagnation in the Arab world spawned *frustration*, fanaticism & jihad; for while people in most of the world now know more political freedom than half a century ago, the reverse was true in the then dictator-dominated Arab world. But no dictator could ban religion; so, as the Western-affiliated, secular ones failed politically, economically & socially, Islam morphed into the political opposition, with fundamentalists preaching the West's ways were decadent & "Islam ... the solution". As a result, Arab society became polarized between dictatorship *cliques* & deeply illiberal opposition groups and, as the former failed, the structure of the state collapsed with it; for they had failed to create a *functioning* civil society or *sense of nationhood*. And in Egypt, after a non-violent Islamist movement had taken power but overreached, the military took the opportunity to set the clock back & institute an even more brutal police state than Mubarak's, *thereby reinstating Egypt as the US' closest ally in the region*. .

An interesting insight that helps explain why things have gone so badly awry after the high hopes that the Arab Spring engendered.

AMERICA'S HORROR STORY (NYT, Frank Bruni)

- The US government is *distressingly* dysfunctional. The latest Gallup poll showed that only 14% of Americans approve of Congress' performance. And an ABC/Washington Post poll last month revealed that a majority of Americans are not just generally dissatisfied with the Congress but equally & specifically, if not more so, with the individual(s) they had sent there *to represent them*. And yet in all but one of the last five elections 90% of the incumbent members of the House, & 80% of those in the Senate, were re-elected. And Stuart Rothenberg, publisher of the Rothenberg Political Report,

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There are concerns, however, that the 500 or more young Indonesians who are known to be with ISIS in the Middle East (many of whom had been working in the region) will pose problems if they were to survive & return home.

expects the re-election rate in the November 4th election to be as high as 96% in the House & 90% in the Senate.

American elections nowadays are all about two things, money (that incumbents are now raising on a 24/7/365 basis in ways that their challengers have difficulty matching) &, in America's celebrity-, & brand name-, obsessed society, name recognition (ditto).

HOW 'SLACKERS' PUT A DRAG ON THE ECONOMY (Market Watch, David Widner)

- Generation X (those born between 1965 & 1980) is likely the first generation in history to be less 'better-off' than the preceding one (*history is not Americans' long suit*). Adjusted for when Boomers (*born between 1946 & 1964*) were the same age, GenXers' average household income lags theirs by 12%, despite studies that show they are better educated and more nimble, entrepreneurial & comfortable switching jobs, and have more women in the work force & more two-income families *than* the Boomers.

Calling them as "slackers" ill becomes a Boomer generation that in their working years through government borrowing 'downloaded' part of the cost of their 'entitlement lifestyle' onto future generations, thus becoming like the grasshopper in Aesop's fable of the grasshopper & the ant.

DESPITE AGGRESSIVE DELEVERAGING GENERATION X REMAINS "GENERATION DEBT" - (St. Louis Fed, William R. Emmons & Brain J. Noeth)

• Their recently published study underscores how deeply the Great Recession hit the 41MM Generation X. *Sandwiched between the 76MM Boomer-, & 77MM Millennial (1980-2000)-, generations* they carry the biggest debt burden (incl. credit card-, mortgage-, & student loan-, balances), it being on average 60% greater in real terms than that of the Boomers at the same stage of their age cycle (\$142,077 vs. US\$88, 553). And while they are making progress paying it down (it was over US\$160,000 in 2008), their still massive debt burden is slowing down the generation that traditionally has driven the economy, or as the authors put it "Families that are reducing their debt are, by definition, not spending all of their income ... Given the evidence of widespread debt declines among younger families, overall economic growth will be dampened for some time" (and a Pew Charitable Trust study in May 2013 found that Generation X lost 45% of its wealth in the recession vs. the Boomers' 28%, & that, as a result, GenXers won't have adequate resources for retirement). Moreover, their lingering mortgage debt has affected their mobility; for it is hard to leave a home that is not worth what's owed on it (according to Zillow, a real estate website, as of last May there were still 9.7MM 'underwater' mortgages). Bottom line : at a time their generation should be leading the economy *to greater heights*, their debt burden & historically low *real* earnings help explain why the economy isn't surging ahead to match the market's gain (*with another factor being that corporations have used their excess cash & creditworthiness to buy back their own shares rather than investing it in GDP-, & productivity-, boosting ways?*).

The latest Transamerica Retirement Survey found that GenXers say that they will have a harder time achieving financial security than their parents, and believe that Social Security won't be there for them when their turn comes, so that personal savings will have to be their primary source of income in retirement. And while the Boomers suffered more layoffs & wage cuts, and took a hit to their assets, many still have traditional (i.e. defined benefit and/or indexed pensions) & Social Security will still be there for them, while the Millennials had fewer assets at risk during the recession & will have more years than the GenXers to save for retirement - on

the other hand, the plight of the GenX generation (that the wealth management industry is, & has been, aggressively marketing) may be overstated; for at least part of the Boomer generation's assets base will outlive them & be available to ease the GenXers' predicament.

GATEWAY DELAY CLOUDS (OIL) INDUSTRY'S EXPORT PUSH (G&M, Jeff Lewis)

- The oil industry's (& hence the Alberta government's) plans call for more than doubling oilsands output to 4.1MM bbl/d by 2025. And to reduce the extent to which it would be captive to a US market increasingly flush with locally-produced oil (*in which Alberta crude sells at, sometimes very large, discounts*) it has counted on boosting exports to Asia by the end of the decade. But hopes for this are fading as various pipeline proposals are getting bogged down in local opposition & regulatory wrangling.
- On September 4th John Carruthers, Enbridge's Project President of its contentious Northern Gateway Pipeline Project (*to Kitimat, B.C.*) told an audience in Calgary the 2018 timeline for its start-up was "quickly evaporating" in the face of opposition by BC aboriginal groups, & offered no alternative timeline target. Furthermore that, while so far he had reached deals with 26 aboriginal groups (*i.e. about two-thirds of the total*) that gave them collectively a 10% (\$300MM) ownership interest in the project, it would be difficult to have still greater aboriginal ownership & "still have an economic project", and that the best his company could offer the others was \$600MM in procurement deals & 15% of the construction jobs. That same day Kinder Morgan said that, while oil could start flowing by 2018 through the expansion of its TransMountain system between Edmonton & Vancouver, it too faces delays, due to escalating municipal route-, & increased tanker traffic in Burrard Inlet-, concerns. And TransCanada's proposed Energy East pipeline is also facing hurdles.
- According to Judith Dworkin, Director of Energy Research at Calgary-based ITG Inc.⁷ "The headwinds are increasing ... It's getting harder, not easier, to get things done", citing mounting challenges to National Energy Board decisions & the recent Supreme Court ruling that appears to have solidified aboriginal control over non-treaty lands.

The Kinder Morgan expansion will likely go ahead, despite the fact that concerns about increased tanker traffic in Burrard Inlet are far better founded than most people appreciate; for the expansion envisages almost tripling the capacity of its existing system and, since historically only about one-third of its throughput was exported overseas, the tripling of the line's capacity would increase the amount to be exported by a factor of 7. But that can be overcome by having the expansion routed to Blaine, Wash., where there is ample excess oil handling-, & storage-, capacity; this will also overcome Burnaby's opposition to the expansion pipe using a right of way in that city that fifty year ago was farmland but now is suburbia, & to the necessary tripling of the size of Kinder Morgan's tank farm on its waterfront (& since Kinder Morgan already has an approved cross-border right-of-way, it ought not run into the same border crossing obstacles that have bedogged TransCanada's Keystone pipeline proposal. It's indicative that Carruthers didn't give an alternative timeline &, if he thinks that the other dozen or so aboriginal groups not yet on board will settle for anything less than a piece of the action, he doesn't understand their thinking; so, if we take his comment that a further sharing of the line's ownership would make the project no longer "economic at face value, the obvious conclusion is that the Northern Gateway is dead, at least in its present format & under its present sponsorship. TransCanada's Energy East pipeline always was a non-starter, if only because it would have to cross lands

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control over which is claimed by no fewer than 180 aboriginal groups; ever since the Supreme Court decision such groups are 'feeling their oats', as witnessed for instance by the hereditary chiefs of the Gitsxsan bands in BC having CN notice to quit using their land for their rail line to Prince Rupert BC (which is the economic lifeline for that city, which has been growing in importance as an alternate, less union-dominated port for container traffic from Asia) & have informed TransCanada it can forget about having its proposed Prince Rupert Gas Transmission Pipeline cross their land.

REPORTS OF MISSING LIBYAN PLANES RAISE 9/11 FEARS **(USA Today, Katherine Lackey)**

- Last month Libyan rebel forces overran the Tripoli International Airport. Since then eleven commercial airliners that were there when they did so have gone 'missing'. The Washington Free Beacon, a conservative news website, claims the intelligence community fears they might be used in 9/11-style attacks in North America or elsewhere on the anniversary of the attack on New York's World Trade Centre (& of the terrorist attack on the US diplomatic compound in Benghazi in which four Americans, incl. the US Ambassador, were killed). And the Huffington Post quoted the Moroccan military expert Abderrahmane Mekkaoui as saying there was "credible evidence (one Libyan militia) is plotting to use the planes in attacks in the region on the 9/11 anniversary."

By the time you will get this, September 11th will have come & gone. While it may have done so, & hopefully did, without an incident, this won't eliminate the risk of these planes being used for terrorist purposes at a later date. Be that as it may, the chances of them being used against targets in North America are likely between slim & nil. For one thing because it is far away while there is a plethora of potential targets closer at hand. Secondly, because air defense systems in nearby countries, with the possible exception of Israel, cannot hold a candle to those in the US. And finally because terrorism is has greatest effect when & where it strikes most unexpectedly.

BoJ BEAT : DEPUTY GOV. IWATA CHANGES STANCE? (WSJ, Tatsuo Ito)

- During his confirmation hearings in March 2013 he said he would resign if the BoJ didn't achieve its 2% 'price growth' (*i.e. inflation*) target. And in a recent speech to a group of business leaders he reconfirmed his belief this target could be reached by monetary policy alone. But then he went on to say that monetary policy alone would "not be sufficient" to achieve the 2% long-term GDP trend growth rate⁸ target & that it would be necessary "to raise Japan's growth potential by pushing ahead with drastic structural *fiscal* reforms ... If I touch on growth strategy, some people may say my thinking has changed ... But the task is not as easy" as just printing more money to achieve sustained long-term high growth.

Unfortunately Japanese voters appear to have no more stomach than, say, their French counterparts for "drastic structural reforms" of the type he talks about. And Japan has even more potential for destabilizing the global economy than France. For not only does it have a GDP twice the size of that of France, it also has a nosebleed-high Debt/GDP ratio (which will

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Its First Quarter annualized 5.9%-, & Second Quarter annualized -7.1%-, rate of GDP growth averaged out to a less than 0.5% First Half average (both numbers were, however, warped by the hike in the national sales tax effective April 1st that prompted a great deal of pre-emptive buying).

*become more of an issue in the future than in the past because its government deficits⁹ have in the past been funded by domestic borrowing something which is becoming increasingly difficult since its rapidly aging population in retirement is cashing in, rather than buying more-, bonds), its recovery depends on its ability to grow its exports (which it is having difficulty doing due to a lack of global competitiveness), creating pressure to weaken the Yen (which today, Thursday September 11th, hit a six year low of 106.83, thereby going through a 106.59 'resistance level' that chartists say clears the way for a further decline to the 125 range), which, while boosting its international competitiveness, would risk intensifying the currency war already underway behind the scenes, in a for central banks' first ever move the BoJ has been **buying** JGBs at a negative yield, while its manoeuvring room will at some point be constrained by the fact that its balance sheet is half the size of its GDP, twice that of the Fed, BoE & ECB.*

RENEWED FIGHTING CASTS DOUBT ON CEASEFIRE (AP, Mstyslav Chernov)

- On Sunday September 7th, two days after a ceasefire agreement was signed between Ukraine, Russia & the Kremlin-backed rebels, at least two houses were hit & set on fire in the rural village of Spartak, North, & near the airport, of Donetsk, apparently after rebels had fired from a spot nearby & provoked retaliatory fire from Ukrainian government troops. Earlier that day in that village the rebels had celebrated their successful assault on the government-held terminal at the airport (now little more than a burnt-out shell) where they claimed to have captured eight government soldiers. A statement by the rebels said Ukrainian forces had fired on six of their positions on Saturday & killed several of their fighters, and according to one rebel fighter "There's no ceasefire for anyone".

*For a ceasefire to be more than just a piece of paper, everyone involved must **want** it to work, a sentiment which in this case seems to be MIA.*

A WORRYING FACTOR IN UKRAINE'S CHAOS ; 15 NUCLEAR REACTORS (WP, Rick Noack)

- NATO already last April sent a small team of civilian experts to Ukraine to advise the government on the safety of its *nuclear* infrastructure. Jeffrey Mankoff, Deputy Director of the Washington-based Center for Strategic & Intentional Studies' Russia & Eurasia Program opined "there haven't been many conflicts in states with nuclear power facilities in the past, so we're really entering unknown territory here." Germany's public broadcaster ARD warned that "a second Chernobyl will be inevitable if the fighting in Ukraine cannot be stopped" after being told by Sergej Boschko told it that "no nuclear power plant is protected against military attacks. They are not made for war, they are made for peace." And shutting down the plants is unrealistic; for they meet 18% of Ukraine's energy needs (& Russian gas, the stability of supply of which is always questionable, for over half).

While it is better to be safe than sorry, the greatest threat to these facilities would be a terrorist-, not a military-, attack; for the installation closest to the fighting, at Zaporizhzhya (which houses five of Ukraine's nuclear reactors), is 250 kms from it - looking at the map, it is staggering to see how small the area really is that the rebels control, less than 1% of Ukraine's territory.

⁹ In recent years as little as 60% of the government budget has been funded from taxes.

ROSNEFT STRUGGLES ... AS SANCTIONS HIT ... (Reuters, Dmitry Zhjannikov)

- The output of Rosneft, the world's biggest listed oil company, in the past decade has grown ten-fold, to 4MM bbl/d (4+% of global-, & 40% of Russia's-, oil output), largely through acquisition, incl. the questionable one of Yukos' assets¹⁰. And it had plans to ramp it up to 6.4MM bbl/d in 2020 by developing ten new oil fields in Eastern Siberia, requiring the investment of US\$21BN **annually** for the next several years, on top of the US\$55BN debt load it already had on its books from past acquisitions (US\$12BN of it due this year & another US\$27BN in 2015). But the sanctions have hit it hard, financially & technologically. For, cut off from all Western funding of > 90 days), it has laid off staff & turned to a Russian sovereign wealth fund for a US\$40BN loan (which Prime Minister Dmitry Medvedev has assured it will be approved since the Company "is a big source of funds for the Russian Budget") & to offer Beijing a stake in its Vankor field in Eastern Siberia (*estimated to hold 1.5BN bbls of oil & 3.2TCF of natural gas*), in contravention of the Kremlin's long-standing policy of not allowing China a foot in the door in its *Siberian* oil & gas sector. But what will be longer term even more damaging to Rosneft's plans is that the sanctions also prohibit the export to Russia of oil & gas technology that it doesn't have at home & cannot get from the Chinese, and is only available in the West.

And while Beijing is waiting in the wings with billions of unwanted dollars it would only be too happy to make available to the Company, this would no doubt come at a price & could turn out to be a modern day Trojan Horse & a reiteration of the adage 'Beware of Greeks (or in this case Chinese) bearing gifts'. Earlier this year his Economy Minister warned Putin he should not count on more than a longer term GDP trend growth rate of 2%¹¹ which may prove optimistic (while Putin's empire-building plans supposedly are based on a 5% GDP growth rate assumption). It is beginning to look more & more as if Putin may have fallen in a trap not dissimilar to that which Messrs. Brezhnev, Andropov & Chernenko fell into in the early 1980's which ultimately led to the collapse of the Soviet Union, getting involved in a race that required a stronger domestic economic base than he/they presided over. And in a worst case scenario, this may not just lead to Putin's dream of restoring Russia to the status it had during the Cold War days turning to dross but to Russia becoming, for all intents & purposes, a China vassal.

¹⁰ The 2006 bankruptcy of which was orchestrated by Putin, because its owner, oligarch Mikhail Khodorkovsky, at one time the richest man in Russia, had developed the objectionable habit of advocating democratization.

¹¹ Which in light of recent developments may well be prove to be an optimistic prognostication.