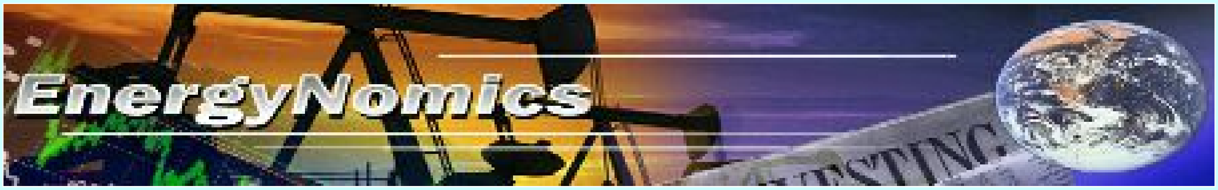
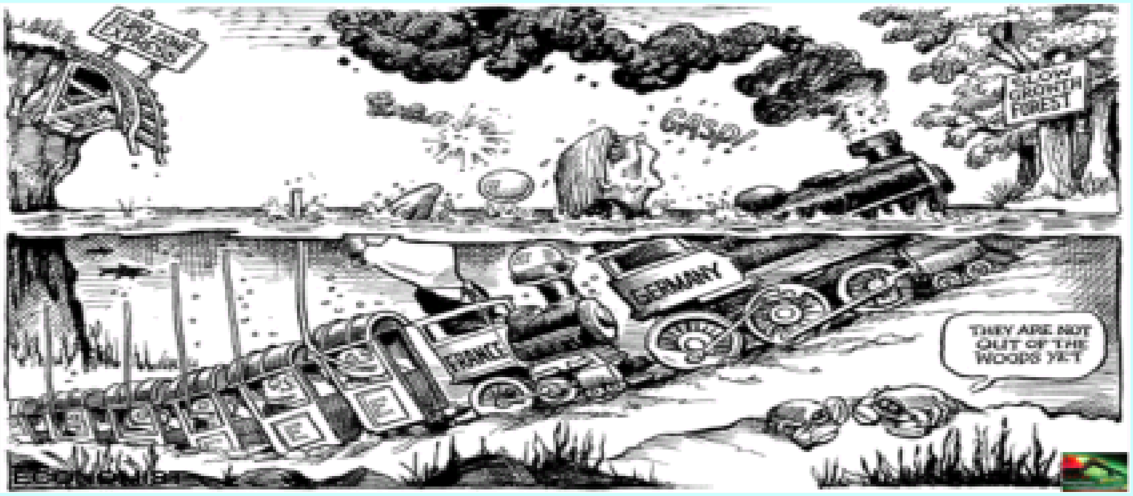
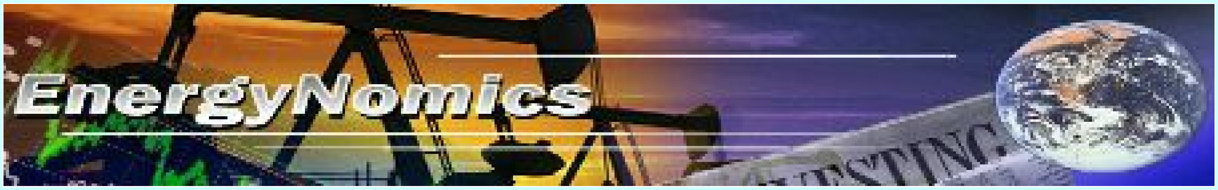


SAUDI ARABIA OIL PRICE DECISION

An awful lot has been written about the recent fall in the price of oil. Now, with Saudi Arabias surprise price cut on Monday 03 to USA shipments while raising them slightly in Asia and rolling the drums of a price war in the middle of a sellers market. It seems appropriate to analyse these developments with care. What has been written so far can be divided into 4 categories. 1) Demand 2) Supply 3) A sinister plot by beltway insiders to punish Russia (and Venezuela, and Iran) "as Ronald Reagan did in 1985", and 4) a clever scheme by Saudi Arabia to price out US Oil shale out of the market and recover their "market share".

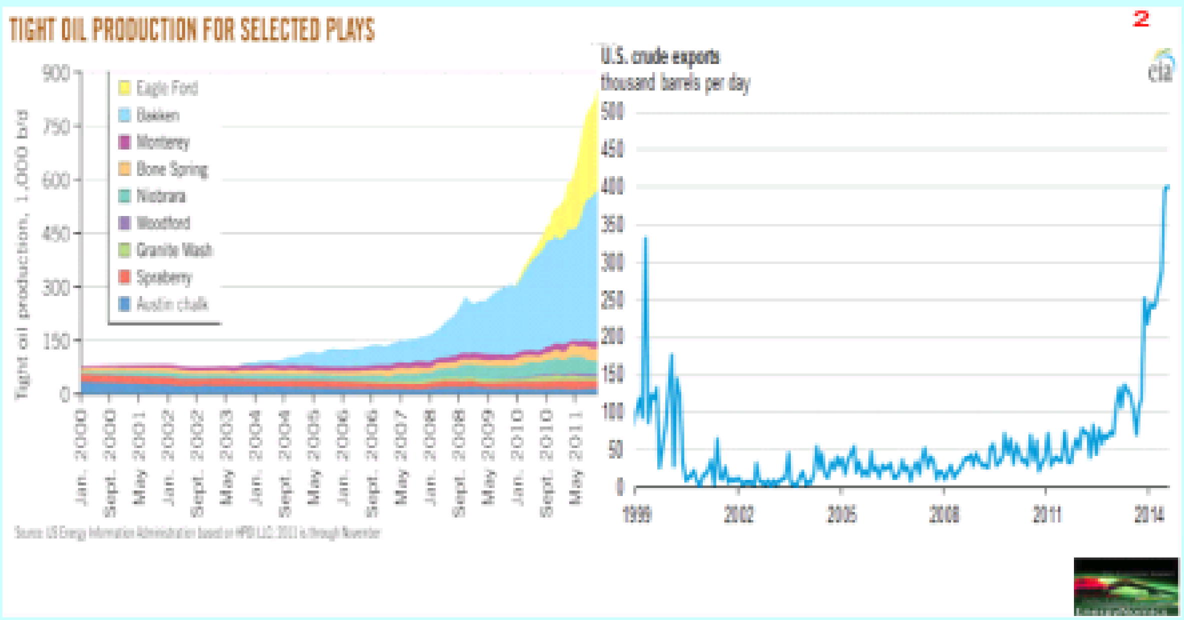




The answer from our seat at EnergyNomics de Venezuela is yes, yes, no and no. The ultimate objective of Saudi Arabia in lowering oil prices is directly related to this picture from The Economist above.

Lets discard the No´s first. Saudi Arabia is not driving out US shales out of the market for two reasons. First, Saudi Arabia and the Americans are close friends and allies and whenever either of them does something that affects the other it is to help, never to hurt[1]. "*The defence of Saudi Arabia is vital to the defence of the United States"* proclaimed Franklin Delano Roosevelt on February 16, 1943, to explain his approval of widening the Lend Lease Act of 1941 to Saudi Arabia to sell, exchange, lend, lease or otherwise transfer military equipment to "*any country whose defence the president deems vital to the defence of the United States*". The USA has a military camp in Saudi Arabia to protect the Royal family from any hostile forces and the Saudis have, especially after Kissinger's visit to Riyadh in 1974, been the voice of reason in the oil rich MENA and inside OPEC. Second, even if the Saudis wanted to quell the entire US/shale oil industry they could never do it; the USA is simply too strong and organized to let anything bad happen that would weaken the energy security of its citizens. Consider the following 5 facts **in combination**:

A) The Shale reserves are all inside the USA borders, as is most of their final consumption.



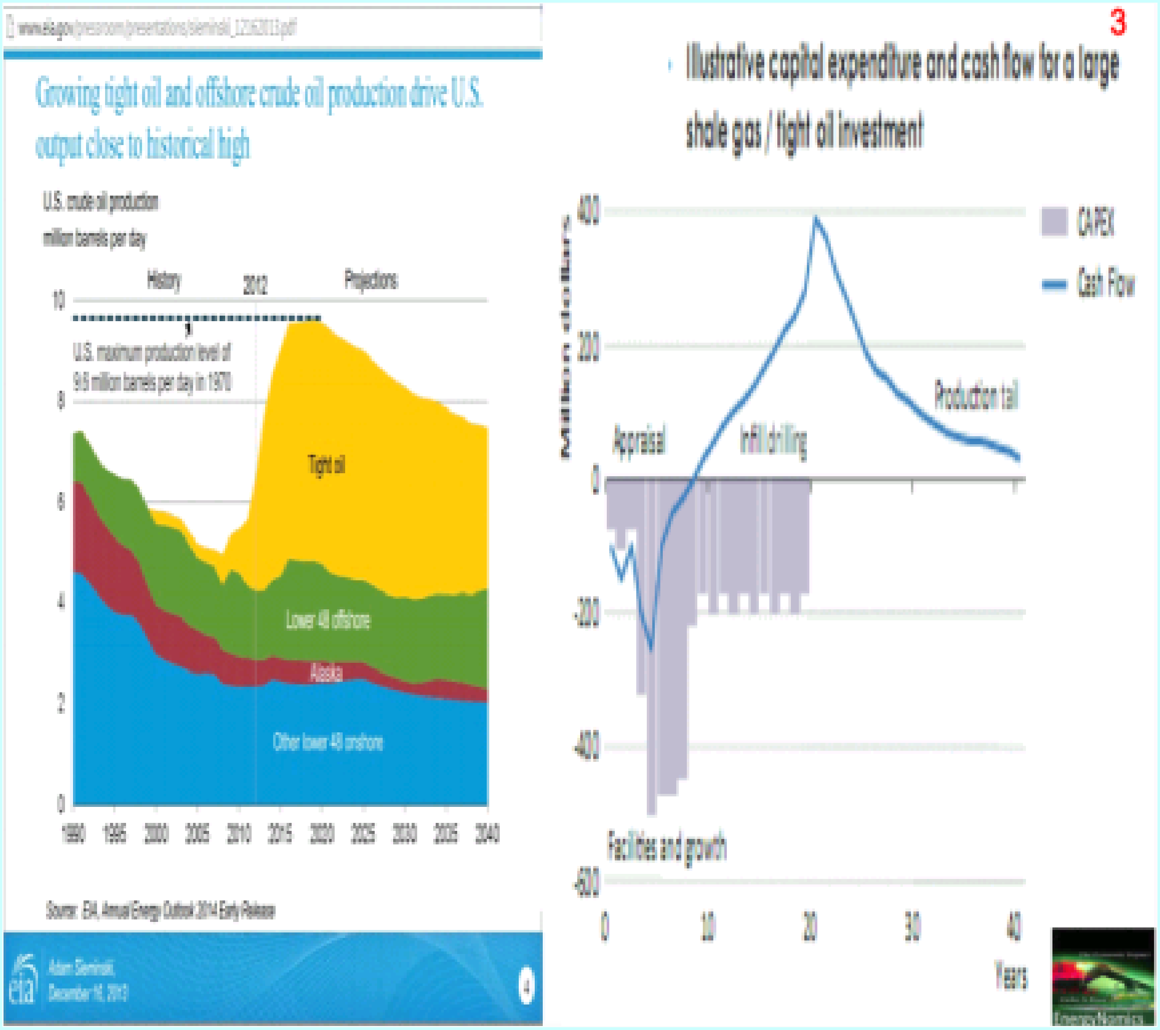
B) Oil shales do have a large declining rate but the technological breakthroughs in hydraulic fracking and horizontal drilling, among others, have driven down most of the supply price breaking point of most shales below the US$80pb threshold. Shale oil, like all oil, is subject

[1] "*It is impossible to overstate the importance of the US-Saudi relationship. Not only is Saudi Arabia the leading foreign supplier of crude petroleum to the United States··it is the only major supplier we can be sure will significantly increase its deliveries of oil to us in times of crisis. Because it has so much of the worlds untapped oil-some 262 billion barrels-and because it has so much spare capacity for extra production, Saudi Arabia can single handily boost its deliveries enough to compensate for any cut-offs from other major suppliers*". Michael T. Klare

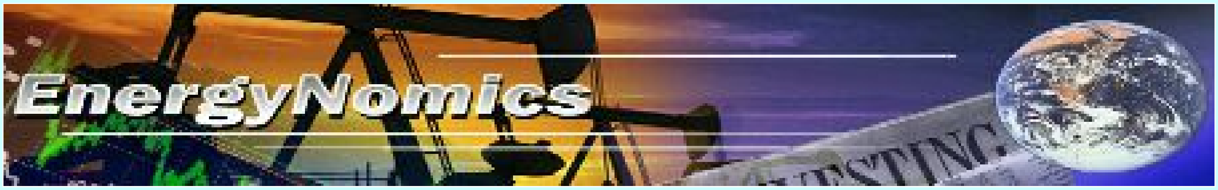
to exhaustion, but the good news is that there are many thousands of untapped shale resources in the USA and the ones tapped have even allowed a small export capacity.

C) The USA harbours most of the machines and inputs needed to develop said reserves, as well as the companies and personnel to do it.

D) The US Dollar is by far and away the strongest currency in the planet. In this context this means is that if push comes to shove the US Energy Department can just declare the US Shales reserves and investment as "too big to fail". They will simply subsidize them to the level that clears costs and shows enough profitability for re-investment. Important to know: Most of the entire energy industry can be subsidized with electronic money transfers without any of it filtering into inflation; i.e., <u>in the energy industry alone, as in the war industry in WW2, fiscal deficits don't matter</u>.



Last but not least is the nature of oil investment themselves. Oil investments imply large scale capital outlays and huge sunk costs-deep into the $billions- They also imply a long time before



pay dirt (positive cash flow) often in very inhospitable places some of which may have governments with fragile institutions that view foreign investment as a hostile force (see right hand graph above).

What this means is that short term movements in the oil price will not deter investments that are already inside the pipeline or programmed to be because what oil companies are on the lookout is the long term; how oil prices will look like in the foreseeable future given World economic, population and energy demand projections. Nowadays with China and India in the mix for industrial modernization and with the demonstrative effect of material prosperity that globalization has afforded the entire planet, the future demand for energy has never looked more promising. Unfortunately the supply side has never looked bleaker (left hand side graph)..but that is another discussion.

For now, taking all of this together and adding it all up EnergyNomics concludes that the understandable desire of the US Government to provide its citizens with as much in-house energy security as possible will go unchallenged by anything that the Saudis, OPEC, or anybody else can do. So what are the Saudis after? Before we get there lets discard another hypothesis popular with James Bond enthusiasts.

<u>Lessons from the 1980's</u> Is this is another version of a Ronald Reagan "bake sale" that ultimately succeeded in coaxing Mijail Gorbachev to install Glasnosts-Perestroika that later pulverized the Berlin Wall in 1989 and disintegrated the USSR in 1990? Is it possible to project that experience a quarter of a century later when everything is different (globalization, peak oil, sellers oil market)? Well, hmmm‥‥It is an interesting theory ‥but NO; that's not it either.

First of all Ronald Reagan never "engineered" the oil price collapse of 1986; OPEC did. And they did this by misreading the oil market and misusing the market power that it had because of short sight-ness and of underestimation of the true grit of oil importing industrial countries; much like Venezuela has been doing since 2006. Glasnost and Perestroika were all Gorbachev's decisions and what happened after that was all the Russian people's own doing.

Context: In the 1973 Yom Kippur War oil prices quadrupled to about US$13pb igniting the first oil shock that "*altered irrevocably the world as it had grown up in the postwar period*" (Henry Kissinger). Oil prices increased again during the 1979 Iranian Revolution over 150% to US$34pb, lighting up a second oil shock in the same decade (even though the shortage in oil output was only 4%-5%) causing all kinds of panic in the world economy and global politics. These shocks created the largest recession the United States had in the Post WW2 era until the Great Recession of 2008, both of which were principally rooted on the same thing, very high and increasing oil prices. In the 1980's the importing oil countries responded by uniting under a rallying cry: "*lets get OPEC of our backs*".; meaning, lets drill for oil in Venus if we have to. And they came close. The Russians hit jackpot in Siberia and constructed the Trans-Siberian oil pipeline, the largest in the World; the Americans did the same in Alaska and constructed an equally impressive pipeline across the Canadian North Pacific Rim; they also struck jackpot in the Gulf of Mexico; the Russians drilled the Caspian, the Canadians in Calgary, the British and Norwegians in the North Sea ect. Most of these findings were already suspected to have existed in plays but impossible to drill and monetize with pre-1973 prices. Now thanks to OPEC's shocks these were not only very profitable economically but ten times that politically. In record time, by the mid 1980's not only was Iranian oil flowing freely again but these newfound developments were also flowing.

The predictable result: a glut in oil supply that drove the oil prices to pre-1973 levels in real terms. Equally staggering was the reduction in OPEC oil; by 1986 OPEC was producing 38% less than in 1973 and its total clout declined from controlling over 51% of total World oil production in 1973 to just over 30% in 1986. In all of that time Non-OPEC oil increased a full 47% while total world oil consumption increased 9.5%. You can accurately state that it was OPEC itself that "engineered" the oil price collapse of the 1980's, not Reagan; and that the end result was to the Worlds benefit because all of that new oil would have been impossible-or much less likely-without the oil shocks of the ´70s. Ronald Reagan just took advantage of a situation presented to him and turned it into the best of all possible outcomes for everyone, especially the Russian people. A while back an important oil executive told me: "*People seem to think we are decision makers…but we are so strongly conditioned that at the end of the day I don't recognize any decision in our decision. We just know how to optimize*".

This development, summed to other correct measures in fiscal and monetary policy were the harbinger of the roaring 1980's for the USA and most oil importing countries. This is because a low oil price means more disposable income for everyone. For the oil exporting countries this meant a long period known as the "lost decade" which in Venezuela would last about 17 years, from 1986 to 2003 when a change of circumstances unrelated to wars or revolutions but related to entropy and China + India drove an inflection point in oil prices that pushed them on an upward path that surpassed the 1970's. Until now.

Today's "oil shale revolution", much like North Sea oil, was a product of prices rising too high too soon and of hard working oil importing nations wanting to reduce their dependence on foreign OPEC oil and maximize their energy security. The difference in this crisis from the one that besieged the last century is that back then we knew that all would eventually be resolved; that wars would end, that revolutions would settle allowing oil to freely flow again and that the oil importing nations just needed to bite the bullet a bit and change their life-styles for a while (like trading inn their Lincoln Continental for a Volkswagen beetle until the SUV came around). The difference this time is the plain physical truth that we live in a finite world but have infinite appetite for industrialization and population growth. Above ground problems are always easier to solve than those below.

But mankind also has limitless bounds when it comes to creative technological ingenuity and designs. The oil shale revolution has increased production in the USA by some 3MB per day in the last 3 years, and by 2015 it is set to produce 9.5mbd, the most since 1970; the year Shell Geologist Marion King Hubbert calculated its oil peak back in 1956[2].

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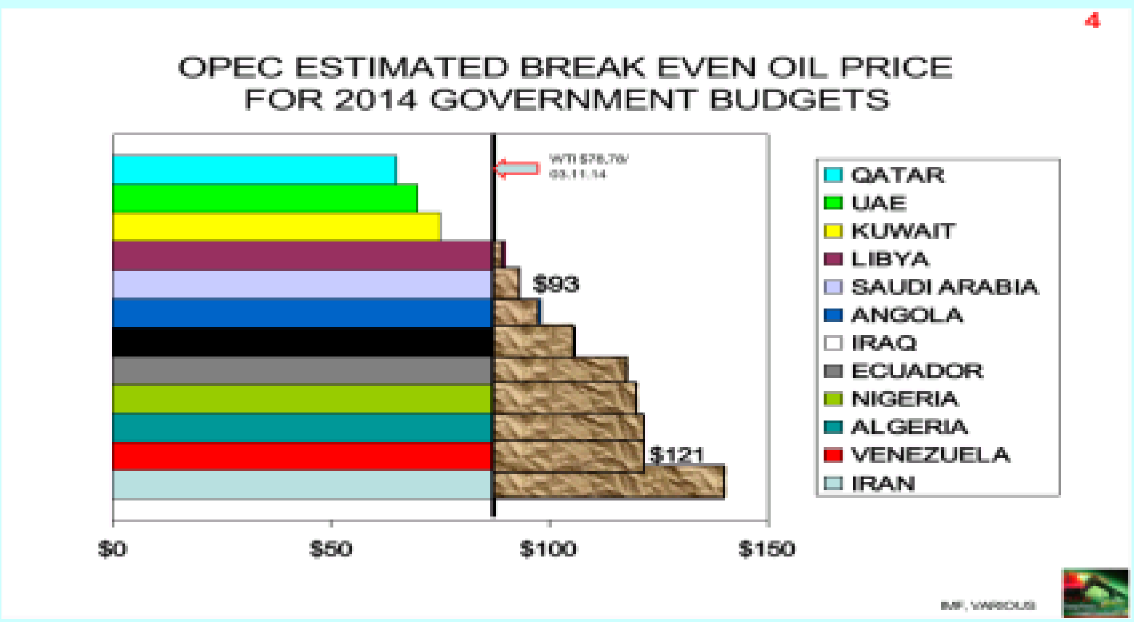
[2] Energy Information Administration: The United States exported 401,000 barrels per day (bbl/d) of crude oil in July 2014, the highest level of exports in 57 years and the second highest monthly export volume since

Another argument that has popped up by oil some pundits is that the Saudis are worried about loosing "market share". This is an old argument; entirely appropriate to the buyers market environment of the Post WW2 era until the 1970's, and again from the mid 1980`s until 2003. Then and there you did need to discount prices and be close to the customers and rich clients, and that was the chief reason PDVSA bought CITGO in 1985 and 1990[3)].

But the World is not in a buyers market any more and will likely never be again. We are in a Sellers Market now and have been since oil prices started to escalate in 2003. The main difference between a buyers and a sellers market is who is on the receiving end of the phone call; in a seller's market it is the producer. So the argument that Saudi Arabia is on the lookout to widen its market share today is invalid. The argument that the Saudis are out to recover what is physically impossible for them to loose is plain wrong.

An even further argument that has been stated is that Saudi Arabia is in a financial bind and needs lots of export revenue now. The OPEC graph below does show that the Saudis need prices to clear the $93 threshold for their budget to break even. But if that is true, it would make much more sense to them to cut production and raise oil prices and urge other OPEC members to do the same. Also, the argument does not properly account for the $800Billion that they have in reserves. Venezuela, which liquid reserves have fallen to about $3billon by some estimates has already called for an OPEC meeting for the purpose of reigning inn oil production and was denied. The No Theories have been discarded; now lets focus on the Yes.



The question is why? Why is Saudi production increasing and cutting delivery prices in the west when its neighbours Iraq, Kuwait and Libya are also increasing production? Why did they increased prices in Asia?. The reason, in EnergyNomics perspective, is both altruistic and

1920, when EIA's published data starts. As a result of existing U.S. crude oil export restrictions, most U.S. crude exports are sourced domestically and are sent only to Canada.

[3)] See **EnergyNomics** report on CITGO delivered to you on September 2-2014 business. Put in a nutshell, Saudi Arabia just wants to help out the struggling countries of Europe motivated by two altruistic reasons (A-B) and two business reasons (C-D):

A) Europe-nations have been hit hard by the quadrupling of oil prices in the last decade. The average GDP growth of the Euro-Zone in the last 6 years is a negative -0.3% with the last 2 years also negative. Technically speaking this is defined as depression.

EURO-AREA GDP % GROWTH AT CONSTANT PRICES (Ave: -0.3%)

2008	2009	2010	2011	2012	2013
0,34%	-4,5%	1,9%	1,6%	-0,7%	-0,4%

B) Their 335million people have felt the whip of high oil prices for far too long and the results are plain to see. Even though they all have made valiant sacrifices to their living standards by lowering oil consumption and increasing energy efficiency throughout the years, a limit has been reached when they cannot grow any more and have started a painful reversal trend.

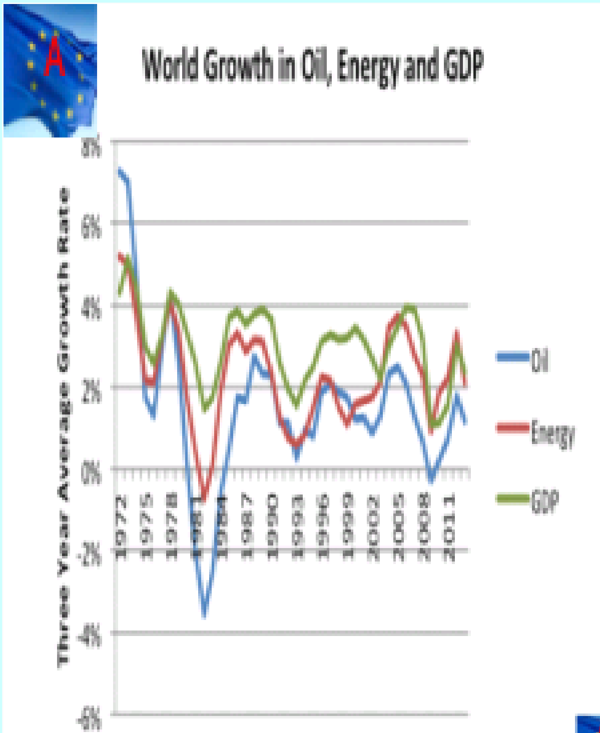
C) A standing and guiding principle of capitalism is that no one likes to see their clients go broke. It behoves you when they are rich because they buy more from you and you from them, thus increasing the living standards and the prosperity of both.

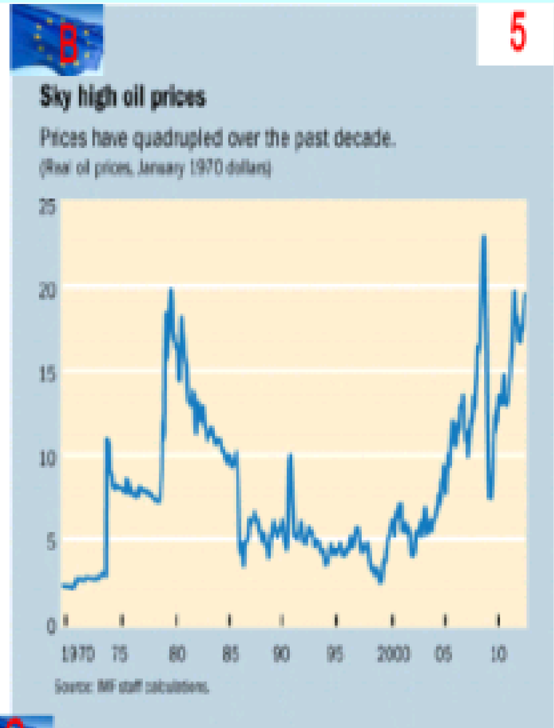
D) The oil price-demand is inelastic for a very long time but not forever; because the possibility of a technological breakthrough in primary energy alternatives (nuclear) and/or end use efficiency (hydrogen cars) cannot always be ruled out. The 8 Graphs below answers the question of why Saudi Arabia is doing this.

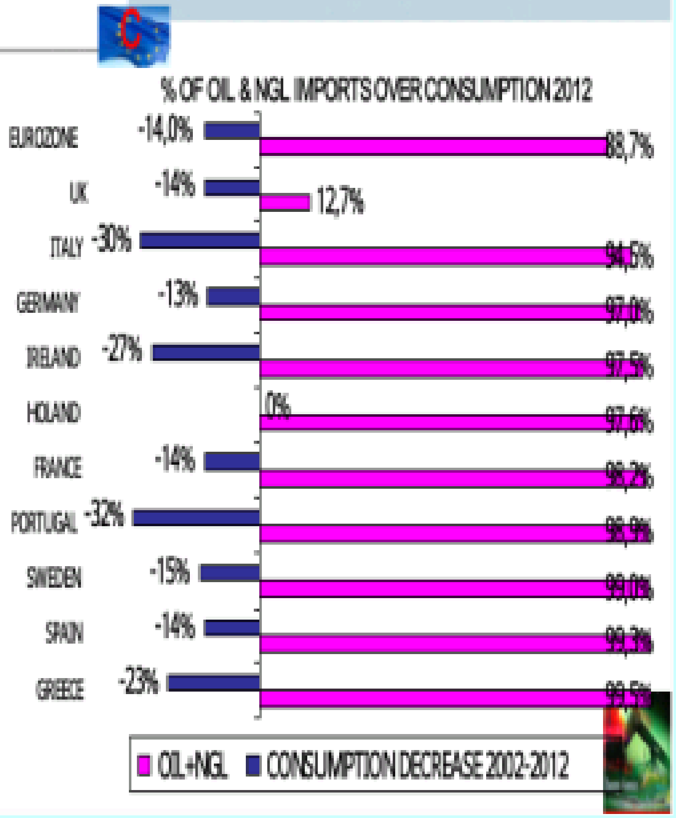
As the first graph of this paper shows, Europe's two biggest engines, Germany and France are struggling badly to keep their nose above water and the most recent stats has them hitting the skids into the red zone with the "peripheral" countries (IMF wordings) Italy and Spain trailing them. Others fare worse.

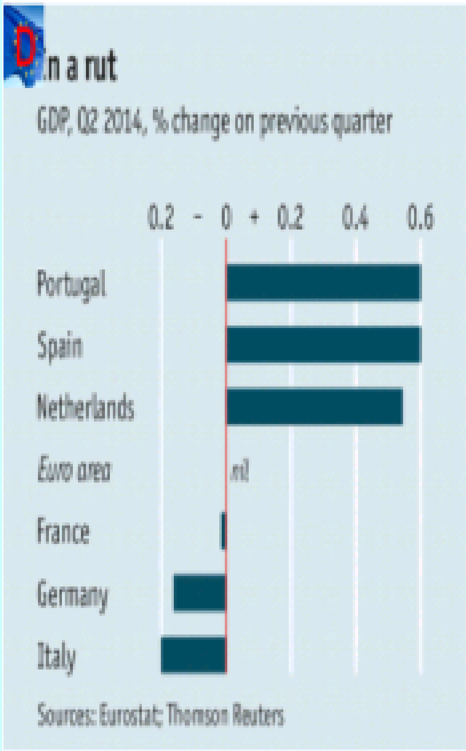
PLEASE REFER TO GRAPH 5-6 BELOW. These graphs and the two most important of this paper:

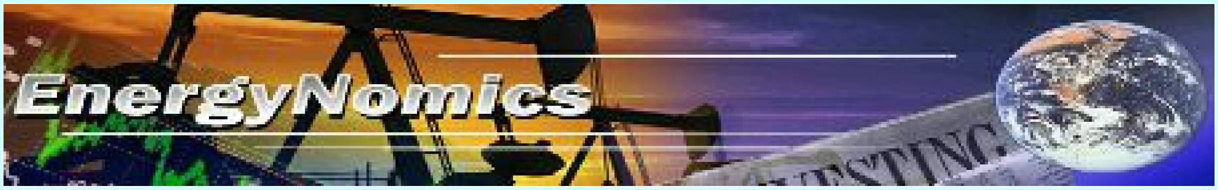
Lets connect the dots from what we know starting on the upper left side and working clock-wise; we see A) that there is indeed a tight positive correlationship between the consumption of oil & energy with the Gross Domestic Product of any country in the World (in my second book I calculated a 63.2% oil-GDP correlation for the World in 1980-2007). B) Oil prices have quadrupled in the last decade. C) The oil import dependency of the Euro nations is extreme; as a whole it is almost to 90% with some countries like Greece, Spain and Portugal reaching 99%. As a result they have had to curtail their oil consumption in the last decade by 14%, with some nations cutting well above that, like Portugal, Italy, Ireland, Greece and Spain, known to all of us today as the PIIGS, by >25% on average. They all have to pay premium prices every day of every one of the 6 years that they have been in recession. D) The Predictive result: a RUT in economic growth and living standards.


A
World Growth in Oil, Energy and GDP
Three Year Average Growth Rate
8%
6%
4%
2%
0%
-2%
-4%
-6%
1972
1975
1978
1981
1984
1987
1990
1993
1996
1999
2002
2005
2008
2011
Oil
Energy
GDP

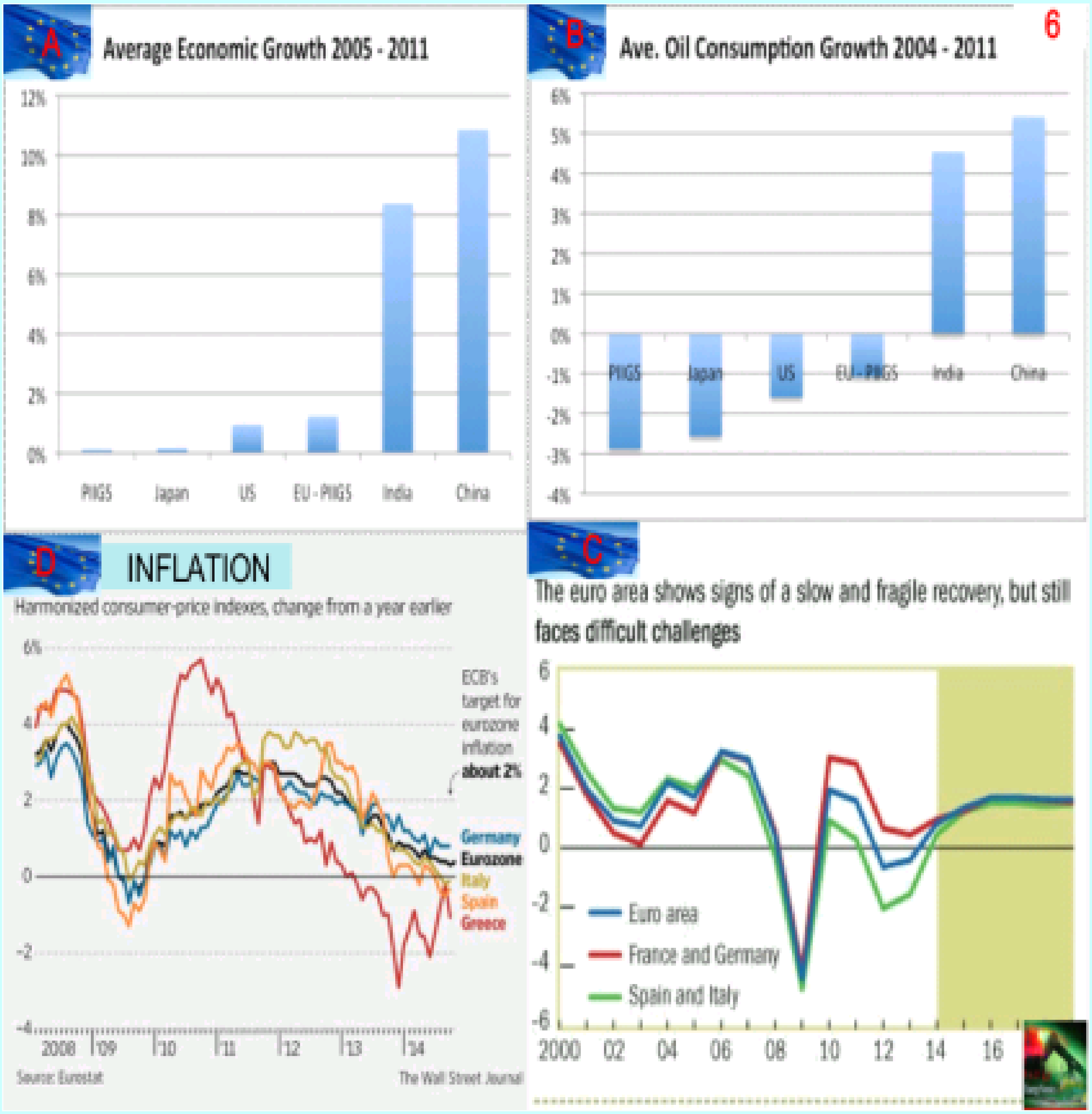

B
5
Sky high oil prices
Prices have quadrupled over the past decade.
(Real oil prices, January 1970 dollars)
25
20
15
10
5
0
1970
75
80
85
90
95
2000
05
10
Source: IMF staff calculations.


C
% OF OIL & NGL IMPORTS OVER CONSUMPTION 2012
EUROZONE -14,0% 88,7%
UK -14% 12,7%
ITALY -30% 94,5%
GERMANY -13% 97,0%
IRELAND -27% 97,5%
HOLAND 0% 97,6%
FRANCE -14% 98,2%
PORTUGAL -32% 98,9%
SWEDEN -15% 99,0%
SPAIN -14% 99,3%
GREECE -23% 99,5%
OIL+NGL
CONSUMPTION DECREASE 2002-2012

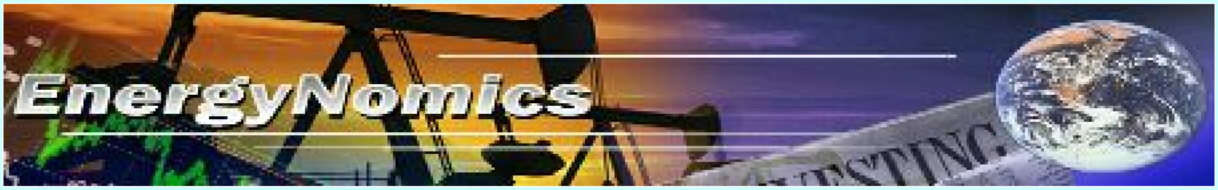

D
In a rut
GDP, Q2 2014, % change on previous quarter
0.2 - 0 + 0.2 0.4 0.6
Portugal
Spain
Netherlands
Euro area
nil
France
Germany
Italy
Sources: Eurostat; Thomson Reuters



Going back to forward we see that things don't get much better. Again clockwise from the upper left corner; the extremely low economic growth in the PIIGS, the USA, rest of Europe and Japan are all explained by negative growth in oil consumption, which fits in the correlations. This leads to near zero growth forecast for the region. According to the IMF in 2014 Europe is projected to increase its GDP by a meagre 0.8%, but other sources put that number even lower.



The bottom graph at the left corner portrays the ultra low inflation rates of the Euro nations, some of which (Italy, Spain and Greece) are already inside the very dangerous deflation zone, while the entire Euro-zone is too close to zero. Deflations are omen symptoms of economic depression because they lead to plant shutdowns, corporate and country bankruptcy, loss of credit, bank failure and unemployment.



If oil was cheaper and more abundant it would mean more energy surplus released into the World and that translates into more disposable income in peoples hands and more room to grow, which opens up the possibility of more investment, production and prosperity (see the presentation I gave in Belgium-sent to you in April 14)[4].

CONCLUSIONS

This is why Saudi Arabia has decided to increase production of oil, lower price levels and offer discounts. Europe needs help from expensive energy restrictions. But it is not all altruistic; it is also business. Like I wrote no seller likes to see its biggest customers go under because if they do they don't buy your product any more it impoverishes the people of the oil exporting country and it also devalues the value of the property wealth of OPEC investments in European capitals and stock markets. Two questions before we finish.

A) Will this action by Saudi Arabia affect radical oil exporting countries like Venezuela, Russia and Iran?

B) How long can Saudi Arabia keep oil prices down?

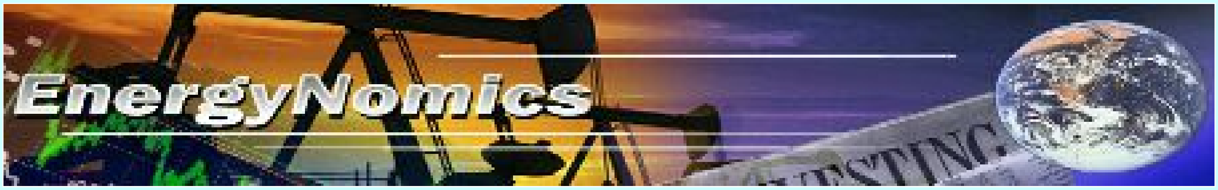
Answer A: It all depends in how long this "low oil price" scenario lasts and how over-exposed and vulnerable these radical or rogue countries are to high and ever increasing oil revenues. Venezuela is the most vulnerable by far, as it depends on 96% of oil revenues for foreign exchange, it imports by some measures over half of what it eats, and it is utterly dependent on dollars for its entire agricultural and manufacturing industrial structure and on the purchase of everything from inputs and spare parts and for final necessary consumer goods. Venezuela is already in technical default, meaning that it has had to prioritized its debt payments putting foreign paper(bond and bank) debt first in the list; necessary food and medicine imports second; military hardware third and everything else fourth; like airlines, spare parts, inputs, oil suppliers, contractors, partners and capital repatriation. There is no dollar money for the fourth element on the list.

Venezuela, as you will recall from other papers I have written and delivered to you, made the crucial mistake of thinking (Chavez-Ramirez) that the tight peak oil environment in the World plus its bountiful oil reserves in the Orinoco were enough for all oil companies and importing countries to come to Venezuela and accept any of its terms and conditions, no matter how outrageous they were[5].

Because some of these terms bordered on the preposterous payment to PDVSA's partners stopped altogether and were forced to exchange the little they were paid at the

[4] This presentation was a summary of the main conclusions of my book The Energy Within Economics & the Bubble Envelope Theory for Human Prosperity (Nova Science Publishers, New York, USA, 2012).

[5] At one point the Government take was 94%, all financial and operating decisions were made by PDVSA while some companies were being expropriated and nationalized without a moments notice and the significant others were actually asked to "loan" PDVSA their 60% of the investment required **without PDVSA's signature appearing anywhere.**



overvalued official exchange rate for Bolívares; meaning that none could keep up local payments and they all had to ring their headquarters every month for "cash-calls". Oil investment stopped and production declined, some 27% since 1997, while the rest of the non-oil economic sector imploded. The result is not only debt, scarcity and stagflation on one end, but less oil produced that would go along way in alleviating the European crisis.

This means that Venezuela put itself in the very dangerous situation of being in the other side of isle of the prosperity equation. Venezuela's prosperity is dependent on low production levels and high oil prices; while everybody else's prosperity is dependent on just the opposite. This is a situation that is not only highly unstable but historically punishable especially if account is taken that this policy is also impoverishing the people of Venezuela as the latest government statistics clearly demonstrate. If the latest Saudi action is inadvertently conducing of a reversal of the jaded petroleum policy in Venezuela so be it.

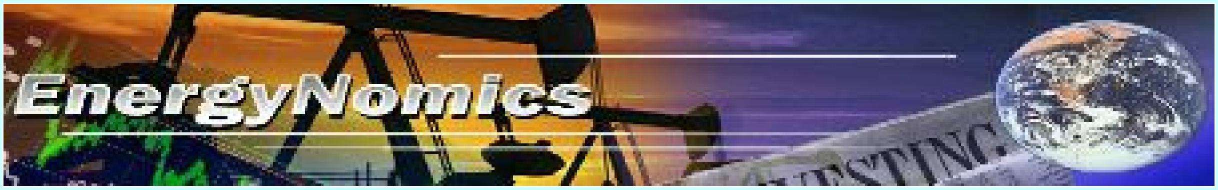
As for Russia's aggressiveness in the Ukraine, the old bread basket of the USSR, after they already reclaimed the Crimea, and Iran's ongoing efforts to become a regional nuclear powerhouse, both these actions are also reprehensible and any effort by anyone to stop and right this should also be applauded. Neither of these countries, Russia and Iran are as ultra-dependent on oil revenues as Venezuela is; although both of them are to a great degree.

Answer B: Oil prices can't stay low in the mid-upper US$70s for a long time for several reasons. First, as said above OPEC reported that Saudi Arabia needed oil prices passing $100pb for its budget to break-even; but if you take into account its huge international reserves one can only conclude that in that regard Saudi Arabia is in a very bountiful spot and can withstand low oil prices for a very long time.

That's is not the case with the other oil producers. Saudi Arabia only accounts for less than 14% of total World oil production. All of the rest are certainly in a more precarious position for reasons of lower monetary reserves and because they all deal with more complex oil formations that require higher CAPEX-OPEX plus more geological-political risk.

We also know that most investments are already made or are programmed to be made, not of which are to be deterred by short term price movements. This only accounts for the supply side of the equation from the Major Oil Exporting Countries (MOEC). We need to establish some sort of dynamic equilibrium between the supply and the demand side. We know that oil prices can't go up too much over a certain threshold without causing real devastation to the economic structure of the Major Oil Importing Countries (MOIC).

EnergyNomics has calculated the maximum resistance upper band price to be in the US$113pb range (Brent) with a tendency to fall and a lower band supply price floor on US$83pb with a tendency to rise. This price-band is dynamic and can change. Putting it all together our projection is that oil prices will remain low in the low 80's for a max of



6months to a year until the MOIN countries can scale back to the high 80's threshold. Triple digit oil price levels will happen again; but not soon.

Second, even if it is true that some oil shale investments plus other non-conventional oil sources need high prices to clear CAPEX and OPEX, as I mentioned above oil companies invest for the future, meaning that short term movements in oil prices for whatever the reason will not impact their business planning structures. Right now close to 3% of all world oil production is unprofitable at prices below $80pb, and that translates to about 2.6mbd in the QIII of 2014. Important to know: the recent fall in oil prices from as high as $115 this year to today's level does not mean that this 3% will immediately go off the market, or that investments will immediately stop in the costly complex areas. The oil delivered to the World will continue to flow until this trend is deemed to be long lasting, and there are no signs of that occurring right now.

According to an IEA report the most vulnerable projects to prices below the $80 dollar threshold are the Canadian synthetics, Norway and Russia Artic, China-onshore, and the deep waters of the US-Gulf, Brazil and Angola. But most of these are projects were investment has already been programmed and have started. Much more worrisome are the ultra expensive projects that are still in the planning stages. According to Luisa Cippollitti of Statoil-Venezuela there are 163 oil mega-projects in the World half of which need the oil barrel to be over the $120 mark. An oil barrel priced that high would all but devastate the World Economy, starting with Europe and Asia .

Right now Europe needs help and the radical oil exporting countries need to adapt a friendly business investor strategy. Saudi Arabia is doing its part.

This report was written by enlisting help from the following sources and institutions.

British Petroleum; Energy Information Administration, EnergyNomics, International Energy Agency, International Monetary Fund, Klare-Michael, OPEC, The Economist, Tverberg-Gail, The Wall Street Journal and Yergin-Daniel

"Energy is the Lien of Money. The production of wealth of all nations depends much on the affordable supply of energy, thereby all elements that constitute prosperity including money ride on the back of energy"··Charles Hall & Carlos A. Rossi