

THE OIL BATTLEFIELD: EVOLUTION, RELATIONSHIPS, AND PRICES

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In “Street Fighting Man”, The Rolling Stones sing:
“Everywhere I hear the sound of marching, charging feet, boy
‘Cause summer’s here and the time is right for fighting in the street, boy”.

OVERVIEW AND CONCLUSION

The continued determination of leading OPEC members (such as Saudi Arabia) and some key non-OPEC oil producing nations (such as Russia) to subdue their crude oil output will underpin petroleum prices. The Saudis and their allies will not readily sacrifice their long-sought production restraint agreement achieved with several important non-OPEC exporters in late 2016. Assuming supply discipline by key producers and moderate global economic growth, supply/demand estimates indicate that OECD (advanced nations such as the United States) industry inventories by the end of calendar 2018 will have declined to around “normal” levels in days coverage terms.

Even gigantic producers such as Saudi Arabia and Russia (for political as well as economic reasons) need to generate at least moderate income. Given its planned sale of shares in Aramco via an initial public offering, does Saudi Arabia want a renewed collapse in petroleum prices to \$40 Brent/North Sea or less? Given its need for revenues, global political ambitions, and signs of domestic unrest, does Russia want petroleum prices to plummet sharply?

Other political worries help to bolster oil prices. Some (as usual) relate to the Middle East. North Korea’s nuclear program captures headlines. What if Venezuelan political turmoil results in a supply interruption?

However, current OECD petroleum industry inventories remain far above average. Even by end calendar 2017, they probably will be several days above normal. And end calendar 2018 obviously is a long time from now. Compliance with the OPEC/non-OPEC output guidelines by several individual countries has not been universal. And going forward, production discipline should not be taken for granted. Will Iraq and Iran moderate their production? What if Nigerian or Libyan production increases? Also, the net noncommercial position in the petroleum complex, which played a very important part in the explosive oil bull move in oil that began in first quarter 2016, is still quite high and vulnerable to liquidation.

History reveals that petroleum price levels and trends intertwine with currency, interest rate, stock and other commodity marketplaces (particularly base and precious metals) in a variety of ways. The current interrelationship between petroleum and these other arenas probably warns that it will be difficult for petroleum prices to sustain advances much above their first quarter 2017 highs.

Using NYMEX crude oil (nearest futures continuation) as a benchmark, petroleum prices for the next several months likely will stay in a broad range. Major support exists at around \$38.00/\$42.00. Significant resistance exists between \$52.00/\$55.25.

However, assuming ordinary international economic growth, what if OPEC/non-OPEC production discipline continues for the next year and a half (or marketplace faith increases that such restraint will persist)? In this scenario, if (and this “if” is a very important if) no sustained

significant weakness in global stock marketplaces (and intertwining/confirming patterns in the US dollar, interest rates, and metals) develops, then NYMEX crude oil prices probably will attack the \$60.75/\$65.00 range.

OPEC: POLICY EVOLUTION, PRICE MOVES, AND INVENTORY LEVELS

General Frank Savage: “The only thing which is never expendable is your obligation to this group.” (“12 O’ Clock High”, a 1949 film featuring US World War Two bombers)

The NYMEX crude oil (nearest futures continuation) weathervane collapsed following 6/20/14’s eminent drop-off point at \$107.73. Remember OPEC’s crucial oil meeting of 11/27/14, during which oil ministers decided to maintain high production levels (capture market share). The GSCI’s summit was 6/23/14 at 673. The S&P broad Goldman Sachs Commodity Index (“GSCI”) crashed loudly after 11/26/14’s close near 515.

With its November 2014 meeting, OPEC (particularly Saudi Arabia) embraced its role as the swing producer at much lower prices to maintain its key role in worldwide petroleum output. In late February 2016, the Saudi Arabian oil minister declared that inefficient producers will have to get out of the market. Saudi Arabia can produce profitably at \$20 per barrel. “We don’t want to, but if we have to, we will.” (Financial Times, 2/25/16, p20).

In a more ancient era, the Saudis had resolutely battled to regain market share. Recall the netback pricing era of almost thirty years ago. See the EIA’s “Petroleum Chronology of Events 1970-2000, the “Crude Oil Price Collapse of 1986” (May 2002). In late 1985, Saudi Arabia “increased production, and aggressively moved to increase market share.” “The collapse of crude oil prices in 1986 reversed the upward trend in U.S. production of the first half of the decade.”

http://www.eia.gov/pub/oil_gas/petroleum/analysis_publications/chronology/petroleumchronology2000.htm#T_10

Yet as petroleum prices cratered, by sometime in first quarter 2016, OPEC began to reconsider its late 2014 production/market share policy. Discussions with key non-OPEC producers ensued.

Saudi Arabia’s decision to increase austerity (cut government salaries and perquisites; NYTimes, 9/27/16, pA6) coincided with OPEC’s 9/28/16 commitment in its Algiers meeting to change its crude output policy. The ministers established a crude oil production target range of 32.5 to 33.0 million barrels per day. OPEC declared its determination to have serious dialogue and collaboration with non-OPEC producers.

The Saudis also probably wanted to arrest declining foreign exchange reserves. In addition, remember that the US Congress enacted legislation permitting lawsuits against foreign governments for terrorist attacks on American soil, and on 9/28/16 overrode a Presidential veto. Potential defendants include Saudi Arabia (relating to the 9/11 attacks; see NYTimes, 9/29/16, ppA1, 15). So that new law arguably helped to inspire Saudi Arabia to be less inclined to support very low oil prices.

OPEC’s September 2016 pronouncements and its decisions in the subsequent 11/30/16 gathering in Vienna represent a dramatic policy shift relating to the intertwined issues of oil production

output and acceptable price levels. On 11/30/16, OPEC agreed to reduce its production by around 1.2 million barrels per day, establishing a production target ceiling of 32.5 million barrels per day (effective 1/1/17). The duration of the agreement is for six months, extendable for another six months “to take into account prevailing market conditions and prospects”. That November 2016 OPEC production cut deal occurred in parallel with an understanding reached with key non-OPEC petroleum exporters (including Russia). On 12/10/16, ministers from OPEC and several non-OPEC oil producers met. The non-OPEC producers collectively agreed to decrease their production by 558,000 barrels per day (whether “voluntarily or through managed decline”), beginning 1/1/17 over the next six months (extendable for another six months).

This agreement with non-OPEC nations represents a substantial policy victory for OPEC. So long as non-OPEC nations show significant (even if incomplete) compliance with their promises, OPEC probably will not depart from this arrangement anytime soon.

The overall OPEC production level in calendar 2017 has displayed compliance with its current production target. The IEA states OPEC crude oil production in January 2017 was about 31.8 million barrels per day, with February 2017 at 32.0mmbd (International Energy Agency, “Oil Market Report”, p15 and Table 3, 3/15/17). Non-OPEC compliance with its 558mbd cut scheme has been less, at 40 percent in January and 34pc in February (page 19). However, as its pact took effect 1/1/17, non-OPEC has six months to reach its goal. The OPEC/non-OPEC Ministerial Monitoring Committee met 3/26/17, expressing satisfaction with the progress toward full conformity with the voluntary production cuts.

OPEC meets 5/25/17.

For 1996-2014, end year OECD oil inventory (relative to forward quarter average daily petroleum product demand) averaged about 54.2 days of consumption (see the International Energy Agency’s “Annual Statistical Supplement” and its monthly “Oil Market Report”).

Worldwide OECD industry petroleum inventories at end fourth quarter 2016 were 65.0 days of coverage (relative to forecast average daily forward demand (IEA, Oil Market Report, Table 5, 3/15/17; next release 4/13/17). These OECD industry petroleum inventories leap about ten days above average.

What is labeled as average, normal, typical, reasonable, or appropriate oil inventory varies not only according to personal opinions, but also due to the inventory practice and preferences generally embraced by the industry “as a whole”. All else equal, a “just-in-time” inventory orientation tends to keep as little inventory around as possible relative to actual and anticipated supply and consumption patterns. A “just-in-case” inventory holding outlook (picture fears of shortages due to supply interruptions from war or embargo) will favor maintaining some apparently extra petroleum supplies around.

Assuming the supply/demand estimates from the IEA for calendar 2017, and if OPEC continues to produce around 32.0 million barrels per day over calendar year 2017, then global inventories will slip .3mmbd in 1Q17, .7mmbd in 2Q17.

The 1Q17 worldwide stock draw of .3mmbd cuts days global coverage by a paltry one-third of a day (91 days times .3mm/day is about 27 million barrels; 27mm divided by about 98 million barrels of calendar year 2017 consumption). That for 2Q17 is not much larger.

However, assuming the IEA's estimates, the stock reduction thereafter accelerates significantly. The inventory slump is significantly greater in 3Q17, at 1.4mmbd, with 4Q17 an even larger 1.9mmbd.

For full year calendar 2017, with the call on OPEC crude oil estimated at 33.1 million barrels per day, inventories decline about 1.1 million barrels per day. That is almost 402 million barrels. Relative to calendar 2017 demand of 98.0 mmbd, that inventory draw represents about 4.1 days of average daily demand. What happens in the non-OECD territory (including strategic stocks) in the non-OECD constellation is challenging to ascertain. But suppose OECD industry inventories during calendar 2017 fall around four days. Then (using calendar 2017 demand as a rough guidepost looking forward), 4Q17 days coverage probably will be around 61 days (65 days at end 4Q16 less four days).

An OECD inventory level around 61 days probably remains a bit elevated from the industry perspective. Around the time in late 2014 when OPEC decided to capture market share, 4Q14 stocks were 58 days (4Q13 were 56 days).

There of course is modest potential for OPEC crude oil production to creep up to 32.5mmbd or more. After all, several countries desperately need revenues, and political strife may subside in some nations. Will Iran agree to cap its production at four million barrels per day (or less), if at all? Iraq needs money to satisfy its diverse political factions and help fund its ongoing civil war. Will Nigeria manage to subdue social unrest and thereby increase supplies? If Libya's civil war ever ends, production there likely will climb gradually. And maybe some non-OPEC nations will cheat on or abandon their commitments to the output cutting enterprise.

Yet suppose OPEC and its comrades manage to slash another four days of stock coverage during calendar 2018. Then the OECD industry inventories days coverage of around 57 days at end 2018 will border long-run average levels. OPEC and its confederates will have solved the inventory overhang problem.

Assuming normal global inventories, what is a reasonable (or appropriate or fair) price?

However, despite its late 2016 policy alteration, OPEC probably remains determined to eventually capture market share and induce further output cutbacks (or at least mitigate production boosts) by high-cost oil producers around the world (think of America's shale oil). The late year 2015 United States decision to lift the nearly complete ban on American oil exports surely displeased the Saudis and many other crude oil exporters.

The ability of worldwide petroleum prices to sustain rallies depends significantly on non-OPEC crude oil output from those outside the current OPEC/non-OPEC arrangement. The United States and its shale oil boom is an important factor. What has been the trend for United States lower 48 states crude oil production (without the Gulf of Mexico)?

According to the US Energy Information Administration (Short-Term Energy Outlook/"STEO", 3/7/17, Table 4a, next release 4/11/17), lower 48 states crude oil production peaked at about 7.7 million barrels per day in March 2015. It tumbled to 7.1mmbd in January 2016, reaching 6.5mmbd in December 2016. During calendar 2017 and 2018, America arguably will reverse much of the 1.2 million barrels per day fall from the peak. The EIA predicts calendar 2017 lower 48 production will average 7.1mmbd, with 2018's marching up to 7.4mmbd.

Global investment in petroleum projects fell after the price collapse. However, rig count trends in recent months suggest that some mild optimism has entered the oil arena. According to OPEC, the worldwide oil rig count in 2014 was 2,795 (excluding China and FSU; “Monthly Oil Report”, 3/14/17 (next release 4/12/17), Table 10.7; citing Baker Hughes and the OPEC Secretariat). At end 2Q14, it was 1,043, down 62.7 percent. By February 2017, the total grew to 1,489.

Pressure on America’s oil industry (which for some producers includes indebtedness) and elsewhere has diminished due to the price bounce of recent months. Some oil producers (particularly in the United States) supposedly have become more efficient. US oil rotary rig counts, after collapsing from 1,609 on 10/10/14 to 316 on 5/27/16, have ascended. They reached 672 on 4/7/17 (Baker Hughes).

CENTRAL BANKS: PART OF THE PETROLEUM PRICE GAME

“What’s it all about, anyone in doubt,
I don’t want to go until I’ve found it all out.” Cream’s song, “N.S.U.”

Leaders of the global central banking fraternity, such as the Federal Reserve Board, European Central Bank, Bank of England, and Bank of Japan focus on and sing similar anthems regarding core inflation. Yet the noisy crash in oil prices nevertheless influenced these financial sheriffs to finally admit that “too low” (collapsing) oil prices can endanger their ardent fight to achieve their beloved overall inflation objectives and can wound the so-called real economy. According to the Federal Reserve Board, European Central Bank, and other central bank hymns, two percent inflation is good, too low inflation is bad, and deflation generally is very bad (or evil).

These noble generals probably also confess that major commodity trends (especially in oil) often can closely intertwine not only with yield levels of debt securities, but also with foreign exchange patterns as well as emerging marketplace and advanced nation stock marketplace trends. Central bankers consequently tolerated, and arguably welcomed, the ferocious bull move in petroleum prices that began in first quarter 2016. The ongoing highly accommodative central bank policies of the Federal Reserve Board, European Central Bank, Bank of England, Bank of Japan, and China played a key role in creating a commodities floor around January/February 2016 lows.

At present, all else equal, central banks probably will accept a bit of “overshooting” of inflation benchmarks (such as the consumer price index and personal consumption expenditures) relative to their targets. A small further ascent in oil (and many other commodity) prices “by itself” probably will not inspire leading central banks to depart quickly from their ongoing highly accommodative monetary schemes.

The Federal Reserve and its central banking friends, all else equal, probably at present would not be troubled by petroleum prices staying around or even slightly over their first quarter 2017 highs. However, a sustained advance in NYMEX crude oil (nearest futures continuation) over \$60.00 to \$62.50 (5/6/15 peak \$62.58) likely would alarm them.

NYMEX CRUDE OIL: PRICE SUPPORT AND RESISTANCE

In “Life During Wartime”, the Talking Heads sing: “This ain’t no party, this ain’t no disco, this ain’t no fooling around.”

Let's flag support and resistance levels for NYMEX crude oil (nearest futures continuation basis).

Important resistance stands from around \$52.00 to \$55.25. The 1/3/17 top was \$55.24; 2/23/17 top \$54.84). A 100 percent move from \$26.05 gives \$52.10. In the rally up to the first quarter 2017 highs, recall interim tops on 6/9/16 at \$51.67 and 10/19/16's \$51.93.

Increasing optimism over the next several months about the consequences of OPEC production cuts could boost prices above the \$52-\$55 price band. It will remain difficult to sustain moves much above this range unless OPEC and non-OPEC production prospects display further likelihood of notable declines in current massive OECD industry inventories. The ability of petroleum prices to achieve and sustain these (or even higher) levels depends significantly on what occurs in financial marketplaces outside of the oil realm. A five percent move over 1/3/17's high equals about \$58.00.

Above that price range stands a barricade around \$60.75/\$65.00. Recall the spring 2015 highs: \$62.58 (5/6/15) and \$61.82 (6/10/15). A 133pc rally from \$26.05 is about \$60.77 (a 10 percent trip above the 1/3/17 top is \$60.76), a 150pc rally \$65.12. After its November 2016 meeting, OPEC (as a group) has shown significant compliance during calendar 2017 with its production cut goals. Several key non-OPEC producers have made only fair progress in trimming production cuts pursuant to their commitments. However, suppose OPEC and non-OPEC nations rollover their current agreement in May 2017, that they substantially comply with their commitments, and that this results in a significant drawdown in currently elevated global inventories (or instills widespread trust that such stocks will fall notably). Then this price range of around \$60 to \$65 will be an important target.

Above that, watch 10/4/11's low at \$74.95 (a fifty percent fall from the all-time high at \$147.27 on 7/11/08 equals \$73.64) as well as 6/28/12's \$77.28 depth (three times the \$26.05 bottom is \$78.15).

Important signposts for the broad GSCI can intertwine with key levels in the petroleum complex. Keep 2/13/17's 409 top in mind. A 50 percent rally from 1/20/16's 268 is 402 (381 is half the 4/2/11 and 5/2/11 major tops at 762). The 6/9/16 high was 392.

Beyond February 2017's summit, watch the GSCI's 2014 and 2015 tops. The 6/23/14 peak at 673 obviously is very distant. Recall 5/6/15's 459. Not only was 5/6/15's top 459. So was 5/25/10's low. The 6/10/15 interim top was 450. A 66pc bull move from the January 2016 low equals 446 (fairly close to 459; one-half of 7/3/08's major high around 894 is 447); a 100pc rally is 536 (556 was the 5/3/10 interim top; 573 on 10/4/11 and 556 on 6/22/12 were important interim lows).

If NYMEX crude oil prices retreat, monitor around \$38.00 to \$42.00. A fifty percent jump from 2/11/16's \$26.05 is \$39.08; 8/3/16's important interim trough was \$39.19. Remember the ancient major high at \$41.15 (the 10/10/90 Gulf War pinnacle). \$42.20 on 11/14/16 was the low right after the America's November election. \$37.80 was the key 9/20/00 peak. In regard to this NYMEX crude oil support band (or a bit lower), keep in mind the likely defense of Brent/North Sea crude oil around \$40 by Saudi Arabia and its friends.

Then watch \$32.40 (the 12/19/08 major low; \$33.75 on 2/12/09 was the take-off point for that earlier bull move) to \$35.25 (a 33 percent rally from \$26.05 is \$34.72; \$35.24 was 4/5/16's interim low).

Major support rests at the January and February 2016 bottoms around \$26.00.

Watch NYMEX crude oil front-to-back intramarket spreads (and other intramarket spreads) to confirm significant changes in the flat (nearby month) price trend. For example, examine the first less second month spread (using continuation contracts) or the actual December 2017 less December 2018 relationship. Reduced contango (near month price less than distant month one) or increased backwardation often (but not always) fit a bull pattern. Reduced contango (or increased backwardation) probably would suggest actual easing of the oil oversupply situation (or growing faith this stockpile burden eventually will disappear). The NYMEX first less second month crude oil spread contango on 2/11/16 was \$2.62 (settlement). The first less second month contango remains, but the spread has narrowed substantially (for example, twenty cents on 10/20/16, -.26 on 2/22/17, and about 40 cents contango on 4/7/17).

In contrast, growing contango (or reduced backwardation) can suggest actual or potential bearishness in outright (spot) prices.

NONCOMMERCIAL OIL PLAYERS: COMMITMENTS OF TRADERS AND PRICE TRENDS

Sometimes significant patterns and heights in net noncommercial petroleum positions are in rough harmony with important oil price trends. Let's review history since mid-2014 for the CFTC's Commitments of Traders (futures and options combined) for the NYMEX petroleum complex (benchmark crude oil, heating oil/diesel, and RBOB/gasoline) plus the ICE Brent/North Sea crude oil.

On 6/24/14, around the time of key highs in the petroleum complex (NYMEX crude oil futures drop-off point 6/20/14 at \$107.73, the net noncommercial long position peaked at about 729,000 contracts, a large arithmetical number and a very lofty 14.5 percent of total open interest. The net noncommercial long ("NCL") position for the NYMEX group plus Brent eroded as price fell; it bottomed at about 229m contracts (4.1pc if total open interest) on 12/22/15, only a few weeks before major price lows.

Given that OECD industry stocks in days coverage terms remained high from end fourth quarter 2015 (64 days) through end 4Q16 (65 days; 2Q16 high at 66 days), massive net noncommercial buying from late December 2015 through early 2017 likely played a crucial role in the large jump in petroleum prices.

As the overall net NCL position climbed from late December 2015, interim troughs in NCL position quantities which occurred thereafter did so in conjunction with interim price lows in NYMEX crude oil (nearest futures). Recall 8/2/16's 429m net NCL contracts (7.0pc of total OI; 8/3/16 low \$39.19) and 11/15/16's 502m net NCL (7.7pc of OI; \$42.20 low on 11/14/16).

On 2/21/17, not long after the 1/3/17's \$55.24 price peak and alongside 2/23/17's second's top at \$54.94, the net NCL position peaked at a gigantic 1.03 million contracts (15.9pc of total open interest). On 3/28/17, the net NCL was about 776m contracts (11.6pc of total OI). The recent NYMEX crude oil low occurred 3/22/17 at \$47.01. The 4/4/17 net NCL was about 812m contracts (12.1pc of total OI).

As net NCL levels and trends do not have pre-ordained destinies, the net NCL might expand from current levels. Yet since the current net noncommercial long position in petroleum remains extremely substantial, it (all else equal) probably is vulnerable to liquidation. In any event, a widespread run for the exits by such noncommercial longs likely would undermine petroleum prices.

A somewhat weaker dollar and stronger stocks (and very low interest rates, including negative yields on government debt in several key nations) can encourage some commodity marketplace bulls. To some weary yield-famished investors (alternative investors; speculators), apparently depressed commodity prices can offer satisfactory potential for a good (decent, reasonable) return (“yield”) or an appropriate “diversification” for their financial portfolio.

Alternative investment (buy-and-hold for the long run) in commodities reduces “free supply” of inventories, though expert warriors can debate regarding how much.

PETROLEUM: MARKETPLACE CONVERGENCE AND DIVERGENCE

“Danger always strikes when everything seems fine.” From the movie “Seven Samurai” (Akira Kurosawa, director; 1954)

Key petroleum complex members established major bottoms around the same time during first quarter 2016. Compare the interrelated timing of the highs attained a few months ago as well.

NYMEX crude oil (nearest futures continuation): Low \$26.19 on 1/20/16, \$26.05 on 2/11/16; high \$55.24 on 1/3/17.

ICE Brent/North Sea crude oil (nearest futures): Low \$27.10 on 1/20/16, \$29.92 on 2/11/16; high 1/3/17 at \$58.37.

OPEC crude oil daily basket: Bottom 1/20/16’s \$22.48; high 2/3/17 at \$54.24.

US Gulf Coast regular gasoline: Trough 82.1 on 2/9/16; high 171.5 on 1/3/17. The price neared 170.0 in early April.

USGC diesel: Bottom 79.8 on 1/20/16; 12/30/16 top 172.6.

USGC 3.0pc residual fuel: Low \$15.13 on 1/20/16; high \$48.88 on 1/5/17.

The extent to which important economic variables and realms (including financial marketplaces) overlap and their alleged trends converge or diverge (lead or lag each other) are matters of opinion, as are perspectives on and reasons for such relationships and movements. Over the next several months, as they have historically in various fashions, major price trends in the petroleum complex will entangle with other key financial marketplaces. Yet marketplace history need not repeat itself, either entirely or even partly. Therefore these relationships can change, sometimes dramatically.

Although petroleum of course displays its own supply/demand and inventory pictures, the somewhat bullish current supply/demand outlook for the global petroleum world probably will face significant countervailing resistance from other economic phenomena. In general, over the next several months, such factors interrelating with the petroleum playground will tend to subdue oil price rallies, and at times may encourage significant oil slumps. Thus petroleum price benchmarks probably will remain within a broad range.

For example, a weaker broad real trade-weighted United States dollar does not always or necessarily ignite or maintain commodity price rallies. Suppose significant dollar depreciation links with stock retreats by the S+P 500 (and other advanced country signposts) and by emerging marketplace signposts. Suppose yields of US interest rate benchmarks such as the 10 year government note continue their long run rising pattern (which began 7/6/16 at 1.32 percent). What if the UST's yield eventually marches over 2.65pc and assaults the important 3.05pc resistance? Monitor Fed tightening policy as well as long run federal budget deficit increase trends. In addition, suppose base metals, whose trends often track petroleum ones, begin to surrender ground acquired since their first quarter 2016 bottom.

In America, what if confidence in the quality of President and Congressional leadership remains low, and diverse and deep partisan divisions persist?

The following table includes the United States Treasury 10 year note, the broad real trade-weighted US dollar ("TWD"; Federal Reserve Board, H.10; monthly average, March 1973=100), the S+P 500, emerging marketplace stocks (MSCI Emerging Stock Markets Index, from Morgan Stanley; "MXEF"), and commodities in general (broad S&P Goldman Sachs Commodity Index; "GSCI"). The broad GSCI is heavily petroleum-weighted. "LMEX" is the London Metal Exchange base metal index.

Alongside the petroleum complex, various intertwined financial marketplaces reached important turning points in first quarter 2016. Take NYMEX crude oil (nearest futures continuation) as a proxy for petroleum "in general".

First Quarter 2016 Turning Points

<u>NYMEX Crude Oil</u>	<u>S+P 500</u>	<u>Emerging Market Stocks (MXEF)</u>	<u>Broad Real US Dollar ("TWD")</u>	<u>Broad GSCI</u>
\$26.19 (1/20/16)	1812 (1/20/16)	687 (1/21/16)	High 100.9 (Jan 2016)	268 (1/20/16)
\$26.05 (2/11/16)	1810 (2/11/16)	708 (2/12/16)		<u>LMEX</u> : 2049 (1/12/16)

January 2016's broad real TWD 100.9 top (monthly average) significantly surpassed the peak reached during the global economic crisis, March 2009's 96.7. The TWD appreciation from July 2011's major bottom at 80.3 to January 2016's summit was 25.7 percent, far surpassing the 15.1 percent appreciation (April 2008's 84.0 to March 2009's 96.7) during the dreadful global financial crisis. The nominal broad TWD has daily data; its high occurred 1/20/16 at 126.0.

The US 10 year government note yield nevertheless declined further after its 1Q16 low at 1.53pc on 2/11/16, attaining a major bottom on 7/6/16 (about identical in calendar time and level with 7/25/12's 1.38 percent major trough).

The nominal broad TWD rallied after early May 2016, including in the aftermath of America's election. It stood at 122.8 on Election Day. After Trump's victory, it accelerated up to 11/23/16's 127.9, thus piercing 1/20/16's 126.0 resistance.

Bob Dylan sings in “The Times They Are A-Changin’”:
“There’s a battle outside and it is ragin’
It’ll soon shake your windows and rattle your walls
For the times they are a-changin’”.

Calendar 2017: Turning Points in Place (Or Not Long from Now)?

<u>NYMEX Crude Oil</u>	<u>S+P 500</u>	<u>Emerging Market Stocks (MXEF)</u>	<u>Broad Real US Dollar (“TWD”)</u>	<u>Broad GSCI</u>
\$55.24 (1/3/17)	2401 (3/1/17)	980 (3/21/17)	102.8 (Dec 2016/Jan 2017)	409 (2/13/17)
\$54.94 (2/23/17)				<u>LMEX</u> :2926 (2/13/17)

NYMEX natural gas (nearest futures continuation) made a major low during first quarter 2016, on 3/4/16 at 1.611. Natural gas reached its 12/28/16 summit at 3.994 at almost the same day as crude oil’s January 2017 top.

Despite the timing convergence in recent times between the petroleum complex and various financial marketplaces, one should not view these relationships dogmatically. So, for example, even in the current international environment, NYMEX crude oil conceivably could have a top a few months after that in the S+P 500. Recall 2008; NYMEX crude oil’s 7/11/08’s major high at \$147.27 occurred several months after the S+P 500’s 10/11/07 pinnacle at 1576 (though not long after the S+P 500’s second and final top on 5/19/08 at 1440.

Relative to the array of marketplaces above, compare the timing of recent yield highs in the UST 10 year note: 12/15/16’s 2.64pc and 3/14/17’s 2.63pc. For US 10 year government note yields, a turning point occurring around first quarter 2017 involved a temporary pause in the longer run trend of rising yields that commenced in July 2016.

Key resistance for the 10 year note is around 2.65 percent. Half the 6/13/07 major yield peak at 5.32 percent is 2.66 percent. Twice the 7/6/16 major bottom is 2.64pc. Recall the 2014 drop-off points at 2.69pc (7/3/14)/2.65pc (9/19/14) following 1/2/14’s 3.05pc peak.

A fifty percent move from the GSCI’s 1/20/16 bottom equals 402. The broad GSCI made an important early top at 392 on 6/9/16. The Bloomberg Commodity Index’s high since its 1/20/16 bottom at 72.3 remains 6/9/16’s 90.3.

The broad real TWD dipped to 96.1 in April 2016, ascending rapidly from August 2016’s 97.2 level. It stood at 101.2 in March 2017, hovering slightly above January 2016’s important interim high.

The nominal TWD highs in its bull move to date are 129.1 on 12/28/16 and nearly 129.0 on 1/3/17. The low since then is 3/28/17's 123.8 (data available through 3/31/17). This is down about 4.1 percent from the December 2016 peak, and (importantly) is beneath 1/20/16's 126.0 top. Gold's hard-fought climb from \$1124 (12/15/16) to almost \$1270 (as of 4/7/17) probably coincides with a noteworthy top in the broad real TWD.

Rising rates at some point (thus "leading the way") eventually can link with US (and emerging marketplace) stock marketplace tops. In this context, players should monitor whether declines in the S+P 500 and MXEF connect with (confirm) slumps in the petroleum complex and the broad GSCI. Trends in emerging stock marketplaces in recent years have paralleled those in commodities "in general" (particularly petroleum and base metals). Suppose the broad real trade-weighted dollar became "too strong" in the global stock marketplace context. The TWD probably became so around the time of December 2016's 102.8 level and thereafter, for it sustained levels above January 2016's 100.9 interim top.

Admittedly, US consumer confidence is very high. But this sunny horizon has existed around times of other S+P 500 peaks. The Conference Board reports that US consumer confidence, in its determined climb from February 2009's 25.3 abyss during the terrifying global economic bloodbath, attained a new high in March 2017 at 125.6 (1985=100). Has the Goldilocks Era been resurrected? This lofty confidence height, though it is not an all-time record, surpasses the wonderful Goldilocks Era banner, July 2007's 111.9 (October 11, 2007 S+P 500 pinnacle at 1576). It is within shouting distance of the January/May 2000 summits at 144.7 (S+P 500 plateau was 3/24/00 at 1553).

Although stock valuations can appear very elevated relative for an extended period of time, some marketplace captains nowadays believe stock valuations by some measures are on the "high side". Yet will higher interest rates diminish corporate profitability? In the glorious Goldilocks Era, a sustained upward march in US government interest rate yields helped lead to (occurred before) the pinnacle in the S+P 500. The UST 10 year yield peaked at 5.32 percent on 6/13/07, the S+P 500 on 10/11/07 at 1576. Will the joyous "Trump stock market rally" end with a dismal slump in equities if America fails to enact significant tax "reform" or embark on large infrastructure projects?

The 2017 highs thus far in the S+P 500, MXEF, and GSCI are one year diagonal bull rallies from their first quarter 2016 lows. The S+P 500's March 2017 elevation is about an eight year diagonal time move from 3/6/09's major bottom at 667. Recall also that calendar 2000's major summit in the S+P 500 was 3/24/00 (at 1553).

For the relevance of "around" first quarter calendar timing for broad GSCI trend shifts in the current marketplace context, recall the 2007-09 global economic crisis. The GSCI attained its major low during winter, with 12/24/08's initial low at 308 and a final trough in 1Q09 at 306 on 2/19/09 (close in time to the S+P 500's March 2009 major bottom).

Several critical marketplace peaks in the broad real trade-weighted US dollar have occurred during the first quarter of a calendar year. In addition to the important January 2016 interim top, recall the TWD's March 2009 major summit in at 96.7. Other major TWD pinnacles include March 1985's exalted and record 128.4, February 2002's towering 112.8, and January 1973's monumental 107.6.

A bearish trend in the TWD probably has started to emerge in (“around”) first quarter 2017. Coincidentally, America’s Inauguration Day 1/20/17 was the one year anniversary of the high in the nominal broad trade-weighted US dollar. The December 2016/January 2017 TWD highs look like a double top in relation to the January 2016 TWD high.

For related marketplace analysis, see “Eurozone Under Siege: Currency Trends and Politics” (3/20/17); “Easing Comes, Easing Goes: US Government Interest Rates” (3/13/17), “Rhetoric and Global Currency Trends” (2/13/17), “Gold and Goldilocks: 2017 Marketplaces” (1/10/17), “Back to the Future: the Marketplace Time Machine” (12/13/16) and other essays.

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