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U.S. SECTOR STRATEGY

COMMODITY CORNER FOCUS

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Warren Pies, ERP Senior Commodity Analyst
John LaForge Commodity Strategist

E-mail Us

Commodities Beyond 2014 - Part I

As commodities act out their death roll, I am reminded of one of my all-time favorite novels, *Shantaram* (quote below). It is the true life story, and fate, of Gregory David Roberts; an educated man who loses his daughter, turns to heroin, is convicted of armed robbery to feed his habit, breaks out of prison, becomes Australia's Most Wanted man, escapes to India, eventually finding redemption living and working in the slums of Bombay. It is the easiest 900 pages you'll ever read (no joke).

Today's publication is also about fate; the predetermined path of the commodity bull super-cycle, and its future beyond 2014. Yes, we do believe that the commodity bull super-cycle had a fate; has fate. It was sure to die. History tells us so. All cycles eventually end. In the case of commodity bulls, 16 years has been the average, using data back to the year 1800 (chart, grey shaded areas). Commodity bears have averaged just shy of 20 years (average of white areas in chart).

Fate needs accomplices. In the summer of 2012, believing it was better to be too early than too late, we started looking for the accomplices (signs of the end). We published **The End – Part I**, and **The End – Part II**. Of the signs we found, most were flashing mixed signals. Although some did warn that the end was near, those early signs, in hindsight, looked to be right.

Over the course of two publications, also using a Part I and Part II format, we're going to review the accomplices, and where they stand. Not every sign is confirming the end; there are some stubborn holdouts. On Page 2 we begin with the prime assassins of commodity super-cycles: time and success. They sometimes go by the phrase, "high commodity prices cure high commodity prices".

Part I will set the stage for how commodity super-cycles die, using oil today as the example. The timing could not be better. OPEC and Russia are showing us in real time how the major actors behave at the end. Between them they control half of daily oil production. Yet, with oil down -47% since June, both have made speeches claiming that production will not be cut. Does this make economic sense? It does if you are Russia or OPEC, which are over-reliant on the revenue. For the price of oil it is bad, of course. Everyone needs to cut, but no one wants to. These actions are natural consequences of aging super-cycles.

BOTTOM LINE

- Commodity super-cycle dying.
- What it means for oil.

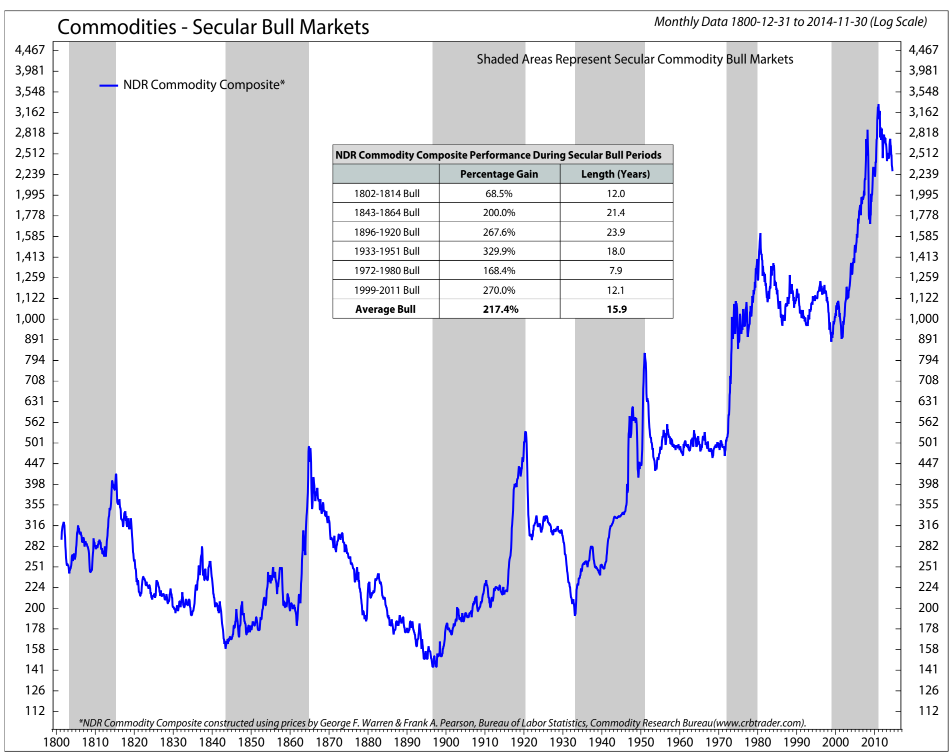
KEY COMMODITY PRICES

- **Gold** . . . .$1198.70/oz.
- **Copper** . . . .$287.90/lb.
- **Oil** $61.87/barrel
- **Natural Gas** $3.71/MMbtu

REFERENCED CHART LINKS

In Part II, early next week, we will target the other signs, and what to do in 2015.

> **"Fate needs accomplices."**
>
> ***- Shantaram***
> by Gregory David Roberts

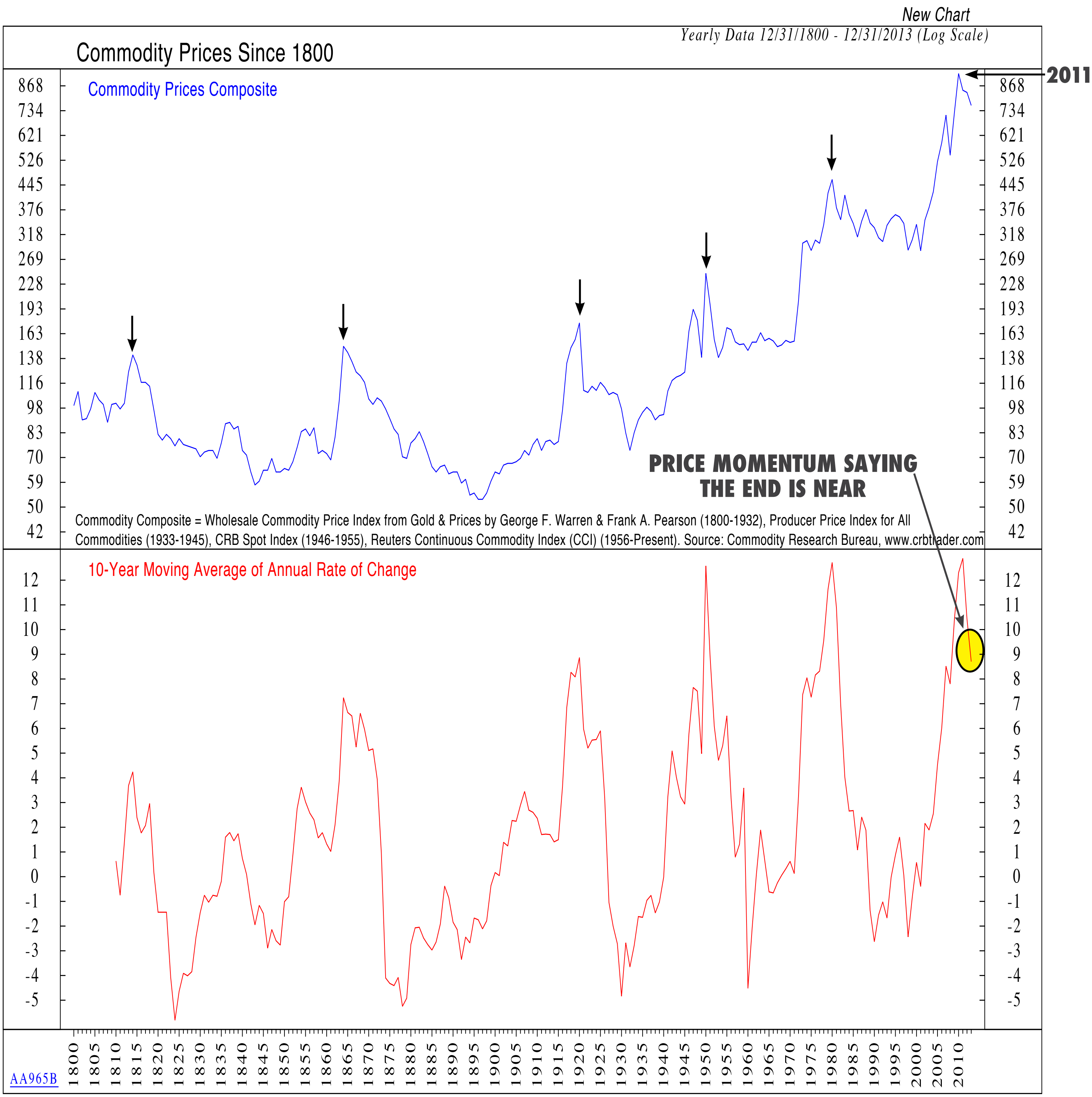


NDR Commodity Composite Performance During Secular Bull Periods		
	Percentage Gain	Length (Years)
1802-1814 Bull	68.5%	12.0
1843-1864 Bull	200.0%	21.4
1896-1920 Bull	267.6%	23.9
1933-1951 Bull	329.9%	18.0
1972-1980 Bull	168.4%	7.9
1999-2011 Bull	270.0%	12.1
Average Bull	**217.4%**	**15.9**

COM10

THE PRIME ACCOMPLICES - TIME & SUCCESS (MOMENTUM)

The stealth assassins of commodity bulls are time and success. We'll use the chart below to help explain. The blue line is our commodity composite back to the year 1800. The arrows highlight the ultimate price peaks at the end of each bull super-cycle. The red line in the bottom clip is the 10-year momentum of the commodity complex. Notice that the momentum peaks in the bottom clip match up well with the ultimate price peaks in the top clip. This is our way of showing the common phrase, "high commodity prices cure high commodity prices." Momentum was one of those early signs claiming that the end was near. **The momentum of commodity prices has a history of killing its own super-cycles.**



Oil is the most recent victim of time and success. We understand the desire to pin the oil drop on someone. But arguing over whether it was the Saudis or Putin, shale or tar sands is wasted breath, we believe. They are but role players in a centuries-old game called How Commodity Super-Cycles Begin, Evolve, & Die. If you really want to ascribe blame – blame oil. Oil killed itself.

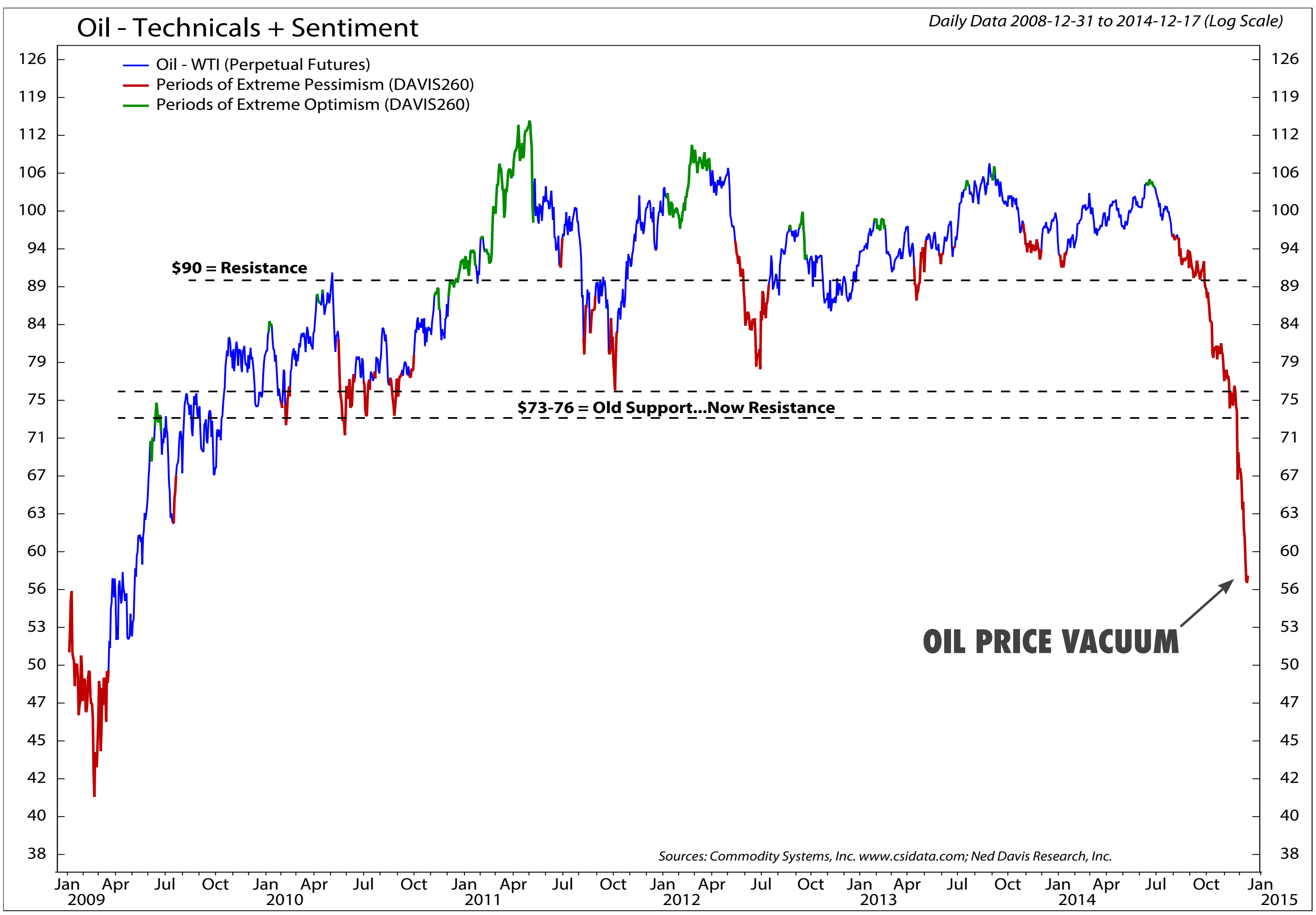
Prices run too far, too consistently over a string of years (time and momentum). This invites ever increasing amounts of capital (more wells, debt) - invites ever increasing amounts of competition (fracking, shale, LNG, etc.). The bulls drink the "this is going to go on forever" KoolAid. More money is raised, more holes are dug; then the cycle stops. The market realizes that too much capital is involved; too much is being produced. Capital starts to be removed, speculators get spooked, prices drop, and eventually tank. Most do not get out, though, because they believed in the "this is going to go on forever" mirage. **This is where we sit at the end of 2014.**

We are now at a point where capital is stuck in the system: land, drilling equipment, mines, debt, people, etc. Much of this is now going to work against the system and will prolong the bear. Capital will exit, but it will exit slowly.

Producers need to cut production, but no one wants to. They have either drank too much of the bull KoolAid, or they can't afford to stop producing (Russia, Saudi Arabia etc.) Producers will eventually close mines and shut-in production, but they will do it reluctantly. Inevitable price spikes will lead to hope that the bull is back, and production will start coming back; only to send prices lower again. Rinse and repeat. **Stuck capital and disbelief will act like a wet blanket over price for many, many years. The average bear market lasts 20 years; the average bull 16 years. Coming back down the slope is painful and frustratingly long.**

Recent comments by OPEC and Russia feed this historical pattern. Between the two, they control over 50% of the world's daily production. The price of oil is down -47% in six months. Yet, both said that they would not cut production. Russia said that they had not even considered it. **It is the collective, selfish actions over the course of a bull super-cycle that eventually dooms it.**

What this means for oil in 2015 and beyond is that prices will enter a long, wide trading range; far below where oil has been the last few years (chart). Once the price of oil finally washed-out from the $30s to $10/barrel in 1986 (thanks to the Saudis), it spent 1986 to 1998 in a persistent $15-25/barrel trading range (spikes due to crisis excluded). Think of today as early 1986 (Page 5); washing-out with a little more downside possible, but probably entering the prolonged trading range.



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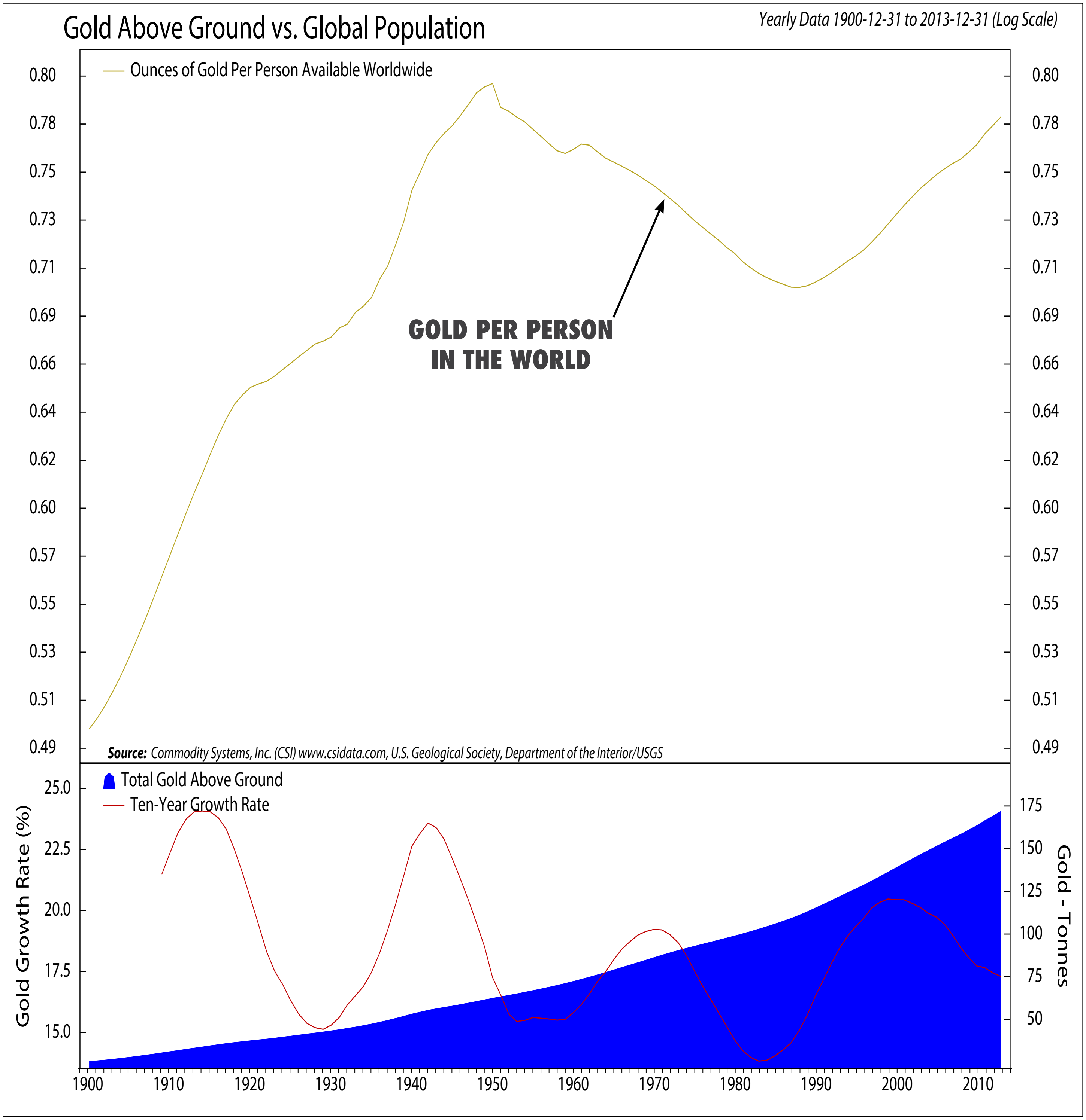
Don't think the cycle description is only about oil. Oil is our example today, but we could be using others. Gold saw prices crater $-600/oz. last year. Yet, world gold production gained 5%; one of its largest y/y gains in decades, and a record yearly production number. It was by far its largest year/year production gain too, since 2001. And 2014 is tracking on-par with 2013.

The amount of gold above ground on a per-person basis in the world now stands at one of the highest levels since 1900 (bottom chart, top clip). **Much to the disbelief of gold bugs, the gold market is saturated; another common trait of aging super-cycles.**

Yet, gold producers cut reluctantly, or not at all. **As commodity super-cycles die, producers often do what they need to do to survive**, which may or may not be at marginal cost.



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HOW OIL DIED IN THE 1980s

The oil story today is showing some interesting parallels to the 1980s.

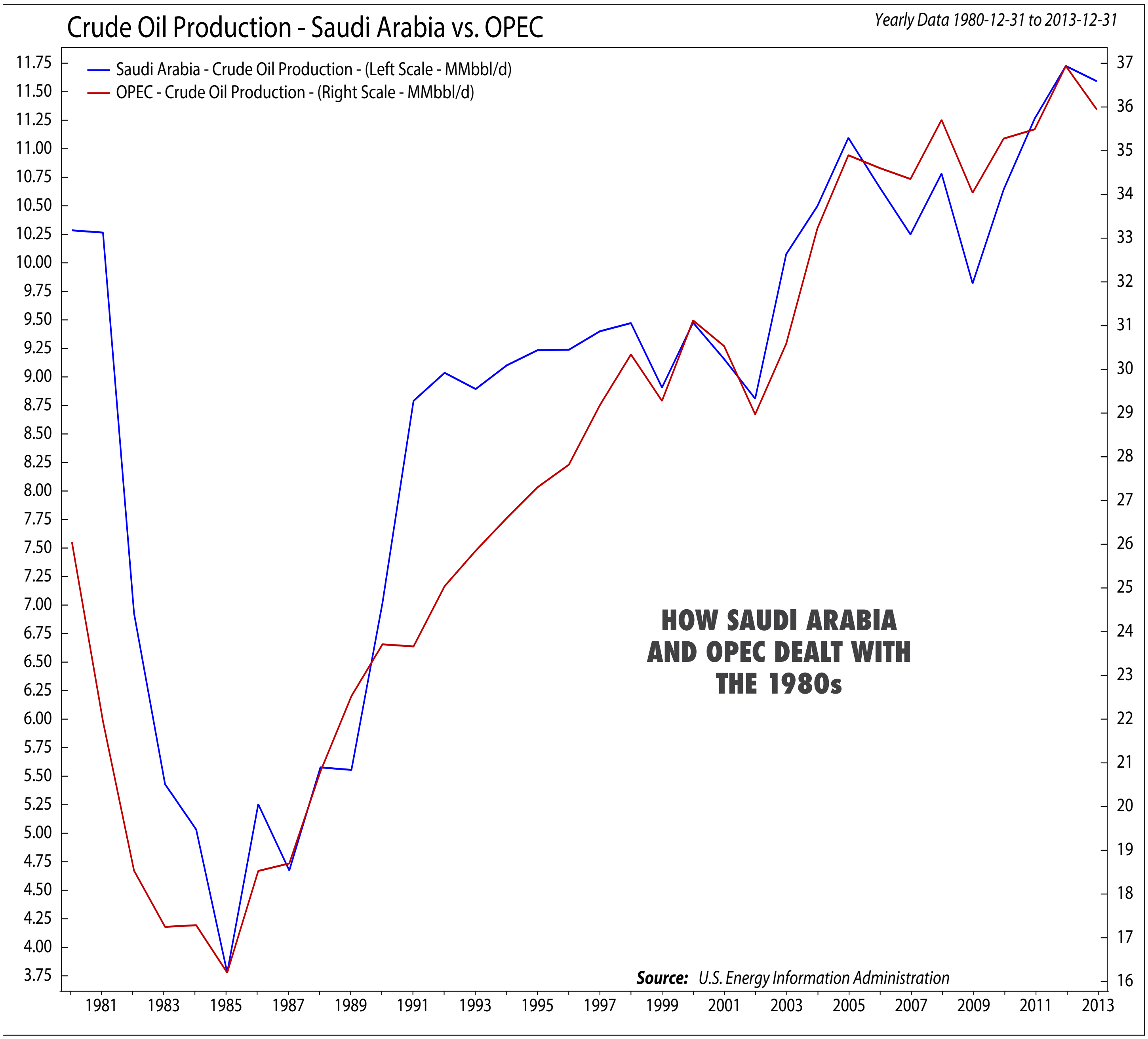
The Russians are not the only ones who don't want to cut in 2014. OPEC stated last week that next year's demand would be the weakest in eleven years. Yet, they did not cut production, nor did they signal that a cut was coming.

Q: What makes OPEC think they can have their cake (high oil prices) and eat it too (not cut production)?

A: The 1980s.

As the cycle died in the early 1980s, OPEC producers fought hard not to cut oil production. OPEC eventually caved, but its burden was not shared evenly. OPEC members leaned heavily on Saudi Arabia to cut more, and they won, allowing their smaller quotas to remain relatively steady. The red line in the chart shows OPEC production (including Saudi Arabia) since 1980. The blue line is production from Saudi Arabia alone. From 1980 to 1985, OPEC cut production 9.8mm b/day; 6.5mm b/day of that was Saudi Arabia. The Saudis went from producing 10.3mm b/day in 1980 to 3.8mm b/day in 1985.

Note the production spike around 1985 as you flip to Page 6.



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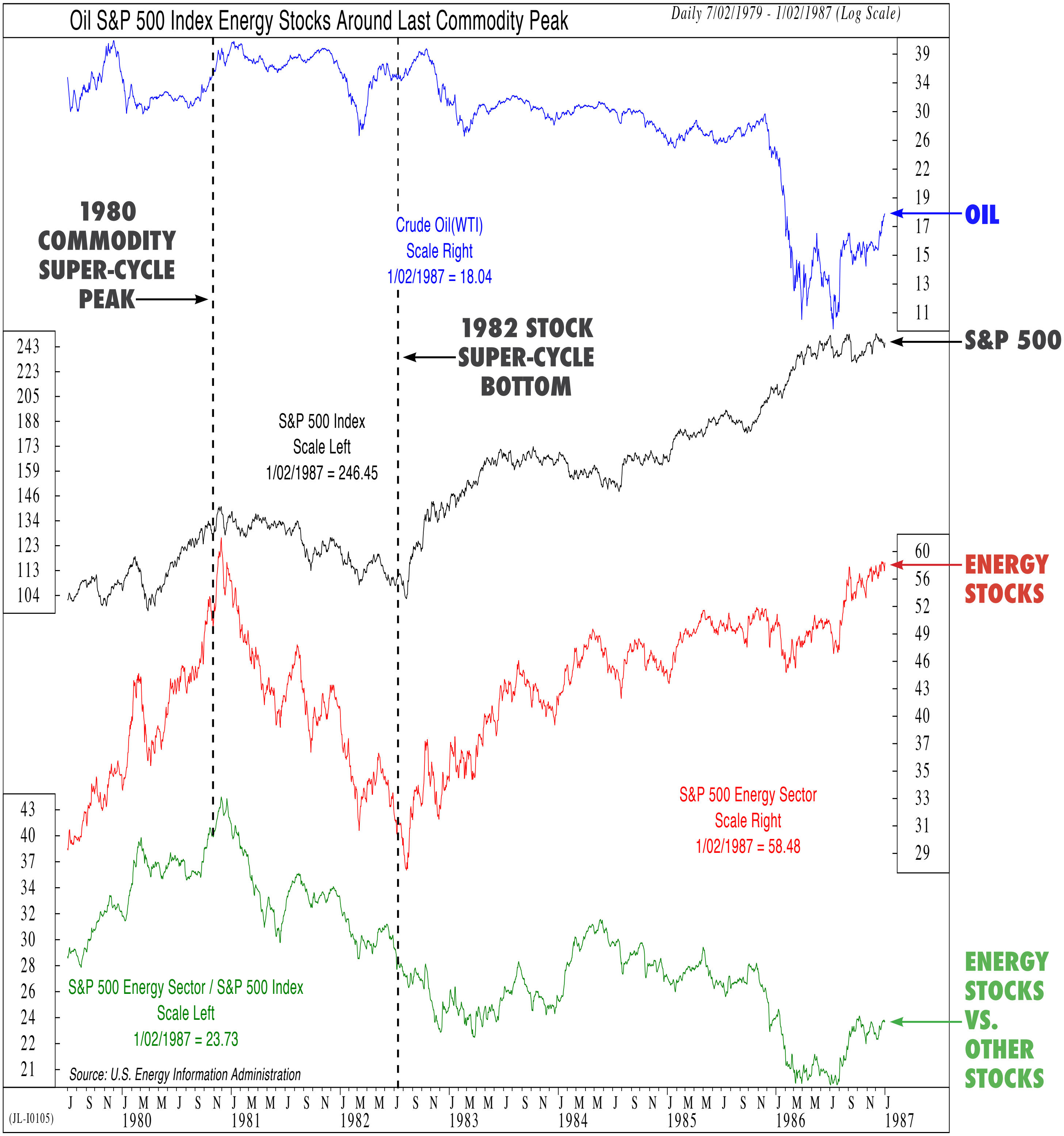
By 1985, the Saudis had had enough of the OPEC freeloaders, and needed prices to clear. They invoked a strategy of shock and awe by reversing course and jacking-up production. Prices plummeted, which can be seen in the top clip of the chart, near the end of 1985.

After the fact, the strategy was praised a success by many oil producers (countries and companies), as it set an ultimate price floor. WTI hit a record low of $10.42 on April 7th, 1986, and has not hit a lower price since, not even during the 1998 Russian ruble/Thai bhat crisis. The last time WTI printed less than $10.50/barrel was September 1974. So, the Saudi strategy was successful in hindsight, but it clearly came with maximum pain.



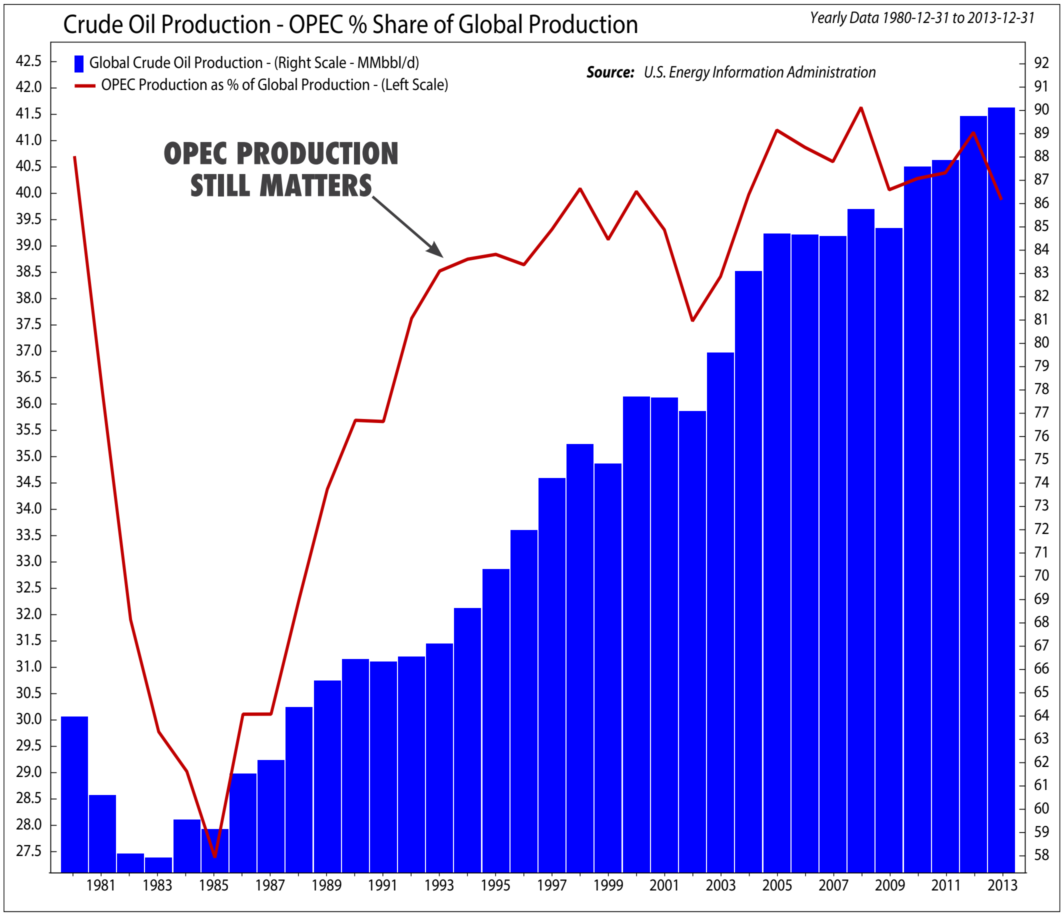
DOES OPEC MATTER LIKE IT USED TO, THOUGH?

The answer is, yes it does. The blue area in the top chart shows world oil production. Today, world oil production sits near 90mm barrels/day. The red line is OPEC's share of that oil production. While it is down some since the start of the shale boom, it is close to all-time highs at 39.5%. **What OPEC does with future oil production will impact global oil prices.**

It is true, though, that the U.S. is importing less oil from OPEC countries. This is shown in the second clip of the bottom chart. Canada and U.S. shale basins are making up the difference in OPEC imports. But that may change if oil prices stay in the $50s. We are already seeing shale permits being shelved.

The answer makes us confront another probable "accomplice" as to why commodity bears take so long to clear: producers don't always have the same motivations.

Companies that produce commodities have stakeholders that force them to respond fairly quickly to new economic realities. Countries, on the other hand, are not known for their quick responses. And countries are some of the biggest commodity producers. They have revenue needs, arguably much greater at the end of super-cycles than at the start. Being good stewards of capital often comes second to the final revenue number for countries.



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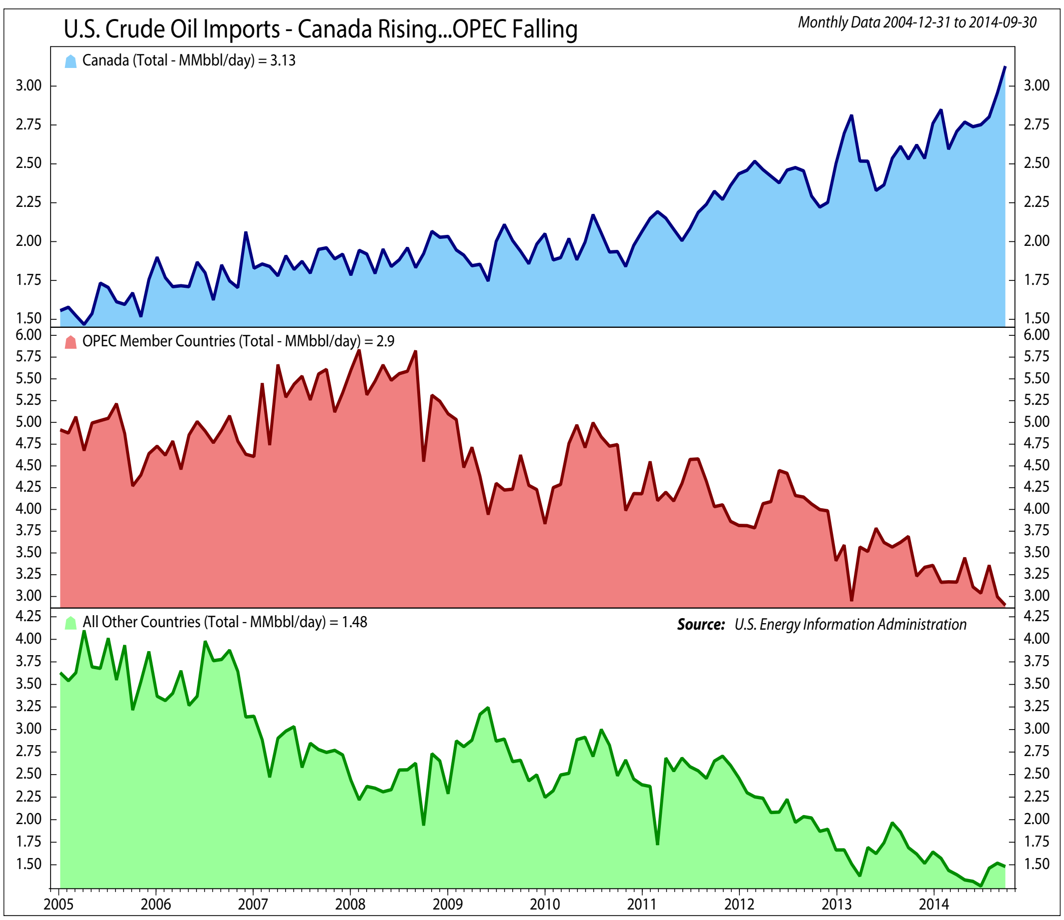

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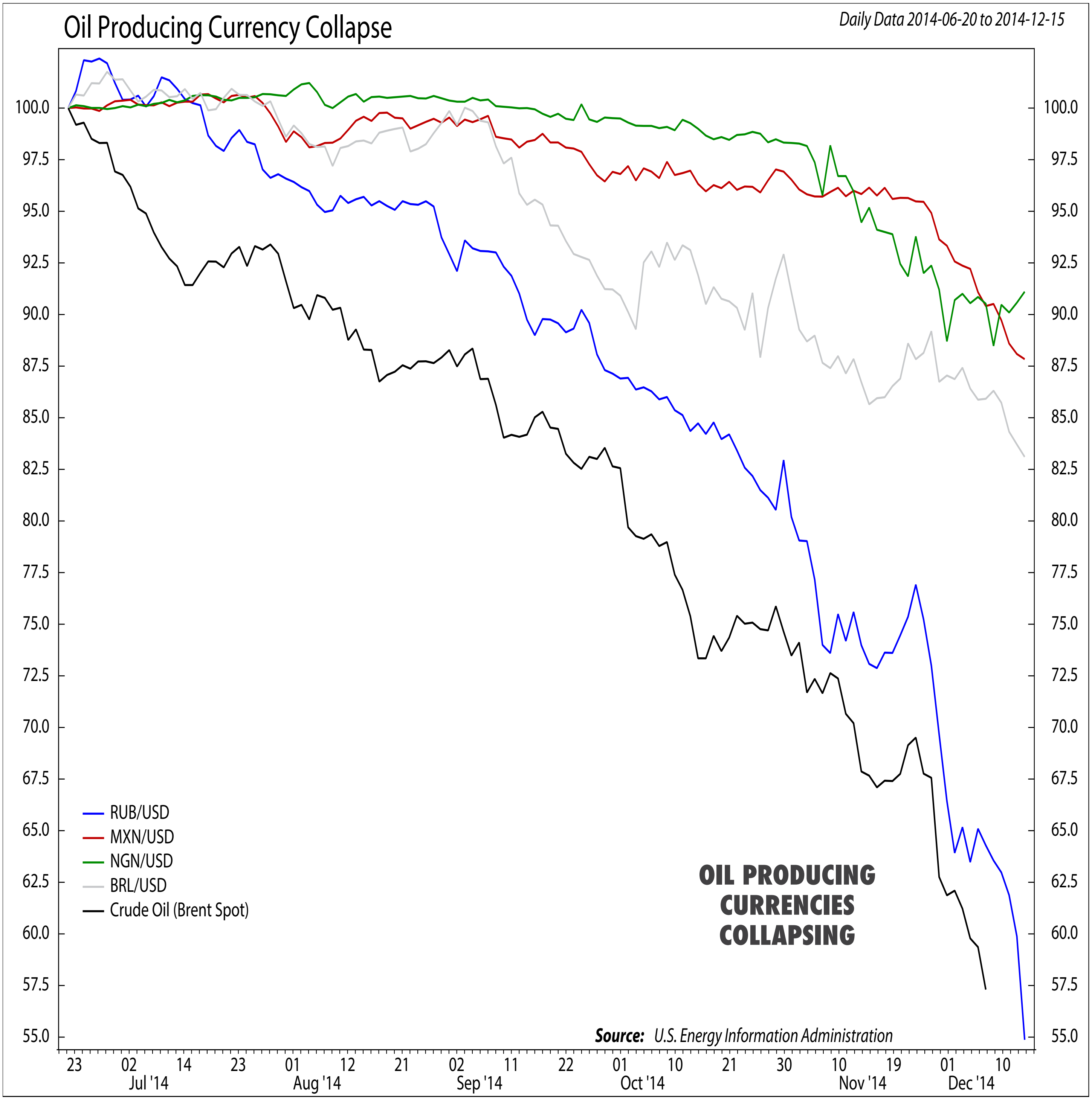
That does not mean that global investors do not hold countries accountable. They do (they at least try). The chart looks at the currencies of four different oil-producing countries versus the U.S. dollar: Russia, Nigeria, Mexico, and Brazil. The chart starts at the $107/barrel June peak to present. Russia (blue line) has taken it hard, falling in lock-step with the price of oil (black line). Option-adjusted spreads (OAS) of oil-producing countries, as expected, are blowing out too.

Holding countries accountable, however, does not always square with oil's economic realities. While oil is looking for a clearing price, countries that produce oil are trying to protect their finances. The ruble is collapsing, but cutting oil production will not necessarily help Russian finances. In fact, it could make matters worse, unless the production cut is coordinated with other key players. **What's best for oil prices is not always best for individual oil producers, and vice versa.**



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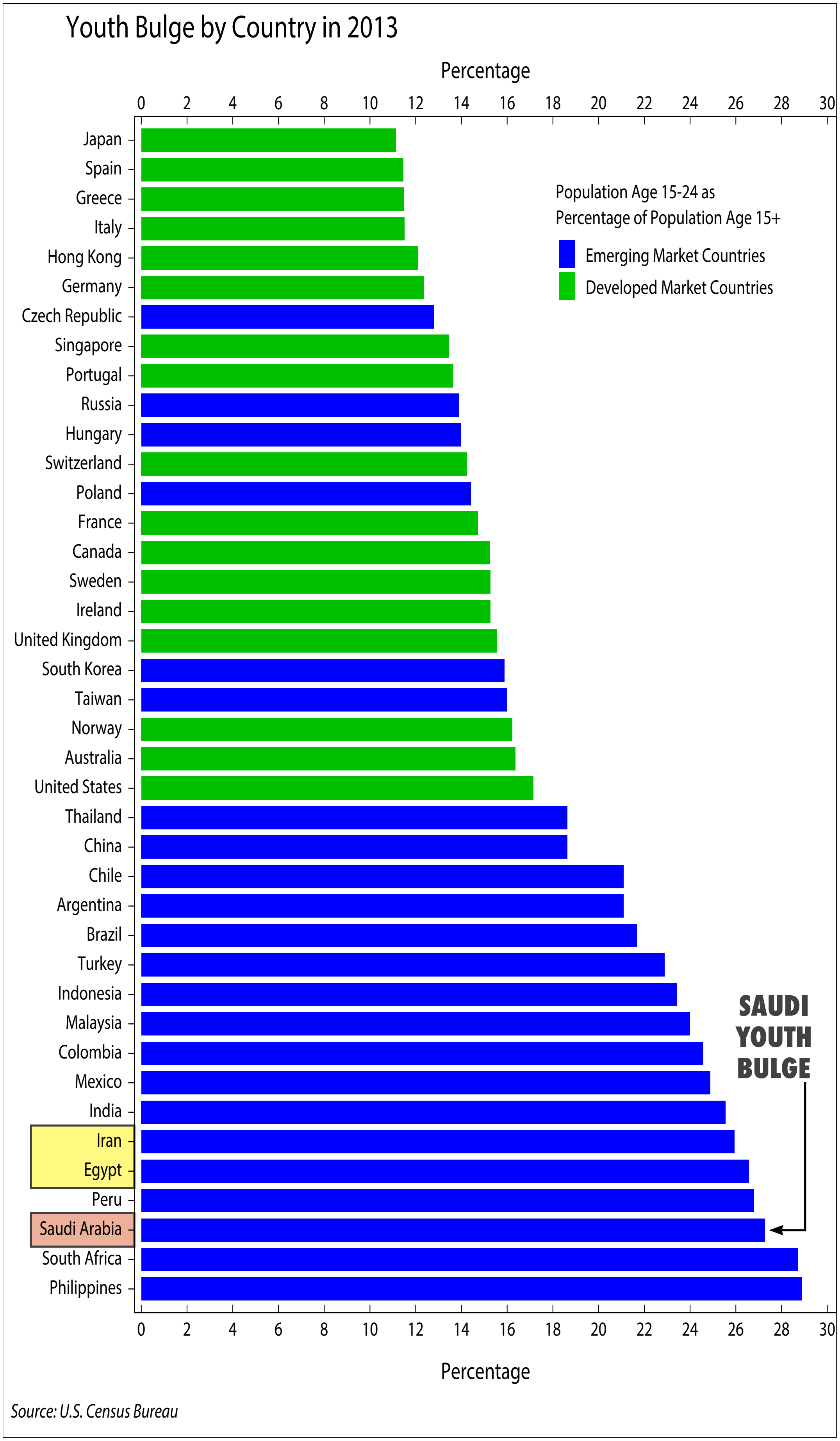
SAUDIS BEHIND THE PRICE SWOON?

The 1980s OPEC storyline is the likely genesis of today's talk that the Saudis are behind the recent price swoon. The plan being something like: don't cut production, maybe even raise production, watch prices fall, and with it high cost oil production from places like North Dakota. In other words, undercut your competition and watch them fade away.

Some shale oil is coming offline, but we are skeptical that this was the grand plan of the Saudis. The Saudis need high prices as much as everyone else, probably more than you think. The Saudis are not in the same position that they were in the 1980s. Saudi Arabia has an outsized youth problem on its hands. Nearly 50% of all Saudis are under the age of 25. The chart at right shows Saudi Arabia near Egypt and Iran as those countries facing imminent youth bulges.

Youth bulges, combined with high unemployment (plus increasing educational rates, and low and rising incomes), **have a history of stirring up trouble.** Past revolutions were bred from similar circumstances. Some notables include Iran in the late 1970s, South Korea in the mid-1980s, Indonesia in the late 1990s, and Tunisia and Egypt in 2010. To be clear – we are not saying that revolution is at-hand in the Kingdom, just that demographic trends are putting the government in a difficult spot.



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Q: What is the "breakeven" oil price that balances revenues with spending for Saudi Arabia?

A: North of $80/barrel.

Paul Gamble from Jadwa Investment presented his estimates while we were on an oil panel together in Riyadh in 2012. He showed the chart below, which had breakeven prices ranging between $70 and $90/barrel in the coming years. Back in 2012, Paul's breakeven guesstimate for 2014 was $67/barrel. At the start of 2013, he revised it to $71/barrel. **At the start of this year the estimate was again revised higher to $81/barrel** (not reflected in the chart yet by Jadwa Investment). Increased social spending to combat the youth bulge keeps the breakeven rising.

Paul also threw out, to an astonished audience, that the breakeven price could be as high as $325/barrel by 2030. The $325/ barrel number was even more startling when we realized that slower Saudi oil consumption growth was factored into the future estimates.

Now, we don't know for sure what the breakeven price is in Saudi Arabia. Paul doesn't either. But we think his firm is on to something. Should $81/barrel be even remotely close to the right breakeven price, it is a risky proposition for the Saudis to be conspiring against U.S. shale producers or Russia. **A better guess at what is going on with oil is the collective actions at the end of super-cycles; high prices cure high prices (no one wants to cut, yet everyone needs to).**

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Q: So how did it end for energy stocks after the Saudis made their shock and awe move in 1985?

A: Not well (relatively).

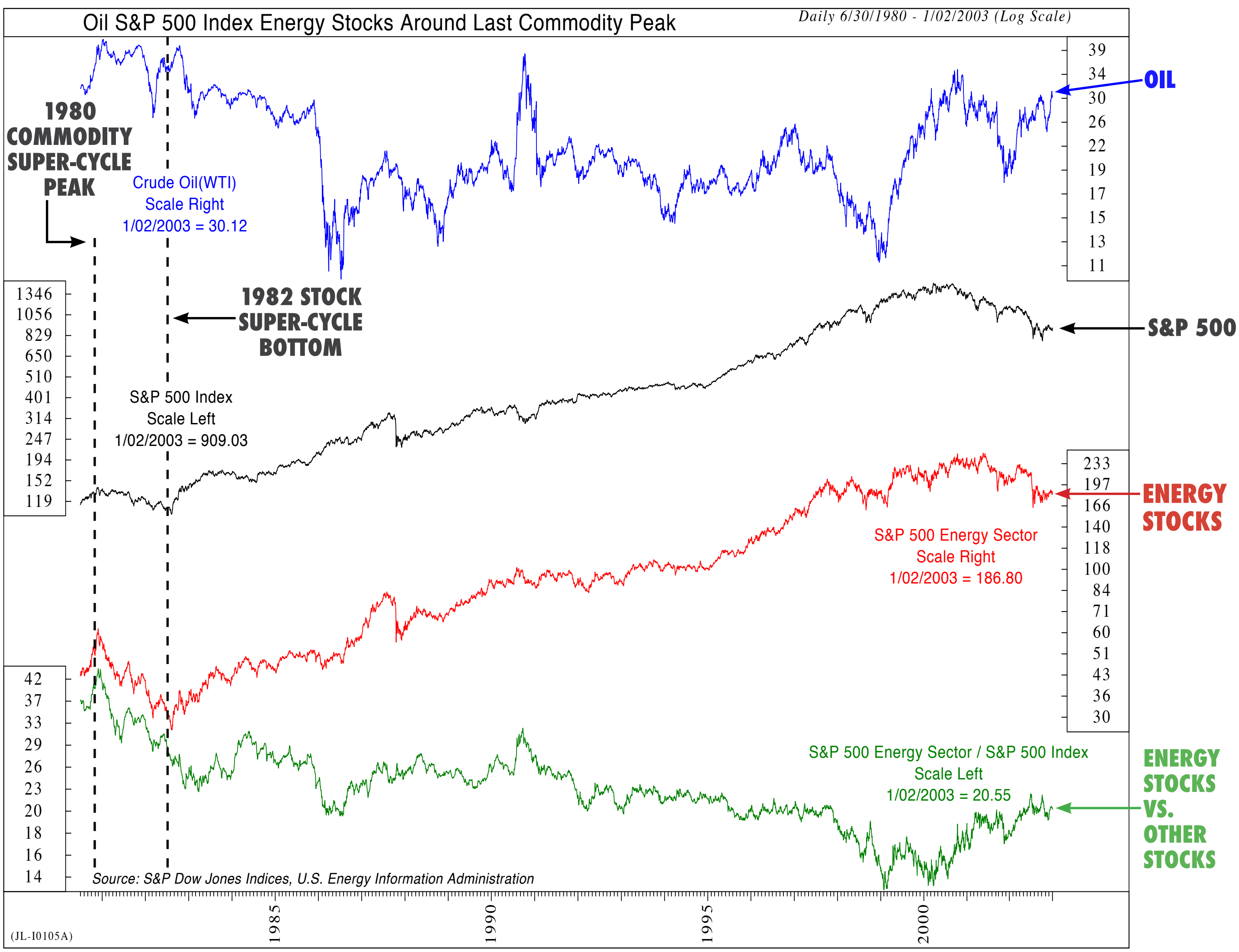
The chart below is the same chart from Page 6, but it extends from 1979 to 2005. This way, we can see the connection between the price of oil (top clip, blue line) and the relative strength of energy stocks (bottom clip, green line) during the 1980s and 1990s. Even though the ultimate price floor was set in 1986, prices spent most of their time from 1986 to 1998 inside a $15-$25 range. **Energy stocks were not good relative investments until the commodity bear super-cycle ended.**

Oil is searching for a clearing price today. However, we are fearful that producers, still selfishly motivated, will remain undisciplined, another sign of aging super-cycles. With each price rise, the market may find more supply in the market than demand, keeping a persistent lid or range on prices. If this is truly the end, don't expect to see oil north of $100/barrel anytime soon.

SUMMARY

A new commodity bear market has likely started, as of February 2011. The average bear lasts just under 20 years. The implications are grave for commodity prices. For commodity stocks, it does not have to be as dire as long as the stock market is in a secular bull, which it is. On an absolute basis, commodity stocks can still be up during a commodity bear, but they'll likely struggle on a relative basis.

Next week, in Part II, we'll list the other signs, where they stand, and what to do.



NED DAVIS RESEARCH GROUP

sales @ndr.com
www.ndr.com
(800) 241-0621

VENICE
600 Bird Bay Drive West
Venice, FL 34285
(941) 412-2300

BOSTON
50 Federal Street
2nd Floor
Boston, MA 02110
(617) 279-4860

ATLANTA
2100 RiverEdge Parkway
Suite 750
Atlanta, GA 30328
(770) 308-1128

SAN FRANCISCO
50 California Street
Suite 1500
San Francisco, CA 94111
(415) 277-5477

LONDON
Nestor House
Playhouse Yard
London EC4V 5EX
+44 (0)20 7779 8579

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