

“Intelligent Commodity Investing and Risk Management”

Presentation to the Calgary Chapter of PRMIA

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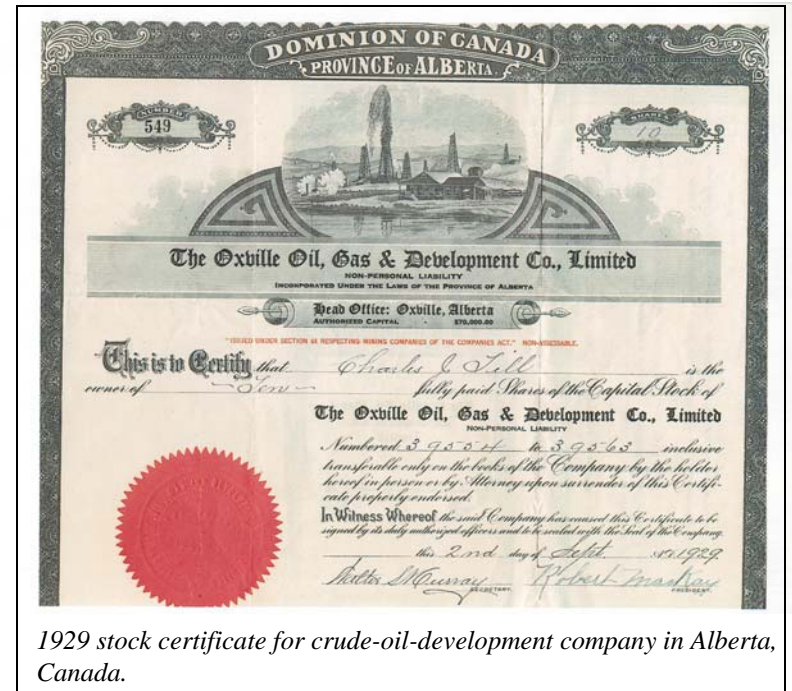
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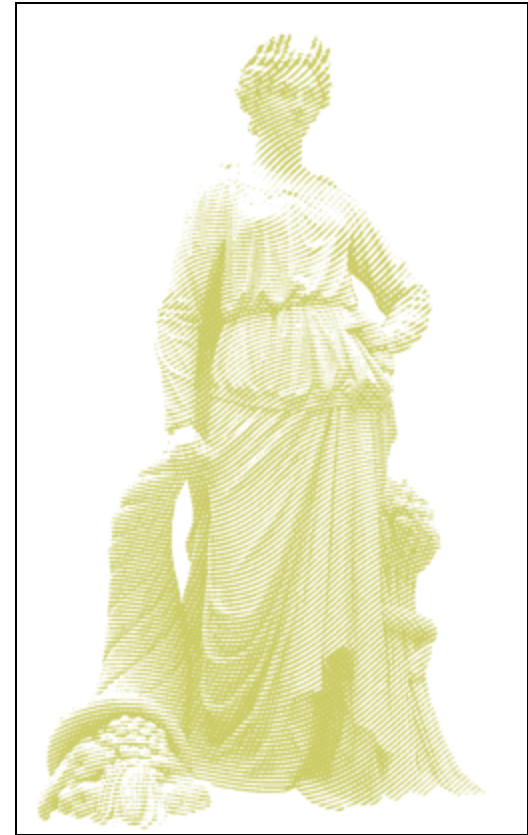
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Commodity Futures Investing

- I. Commodity Speculation
- II. Risk Management
- III. Commodity Product Innovations



Icon above is based on the statue in the Chicago Board of Trade plaza.



I. Commodity Speculation

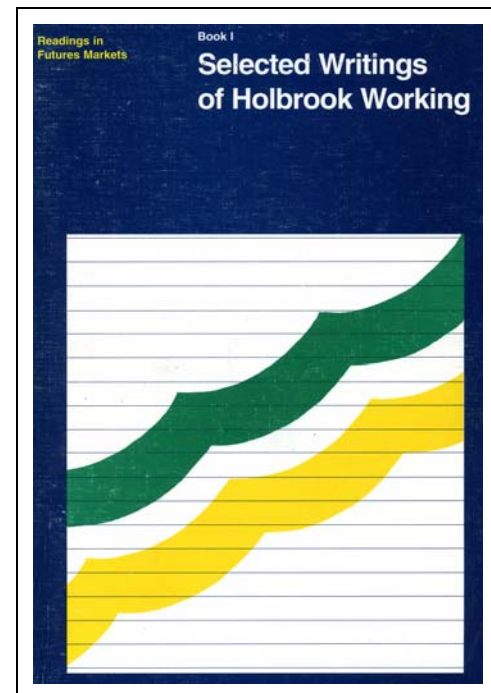
- A. Historical View
- B. CFTC Data
- C. Prices and Futures Positions



A. Historical View

Holbrook Working's Four Conditions for a Futures Market to Survive and Prosper

1. The contract terms and commission charges must be such as to attract appreciable use of the futures contract for merchandising purposes.
2. There must exist a possibility of attracting enough speculation to provide at least a reasonably fluid market.



A. Historical View

Holbrook Working

3. Handlers of the commodity must have reason to make substantial use of the futures contracts as temporary substitutes for merchandising contracts that they will make later.
4. There must exist adequate public recognition of the economic usefulness of the futures market.



A. Historical View

University of Illinois Research: Is There Excessive Speculation in the Agricultural Futures Markets?

- While the increase in long-only speculation has received the most publicity, the increase in the size of short hedging positions is equally interesting.
- Agricultural futures contracts have not had a historically high level of speculative (vs. hedging) activity, based on Working's Speculative T index.



B. CFTC Data

Disaggregated Commitments of Traders Report

- The T index is a traditional metric for evaluating the balance of speculation-versus-hedging in a futures market.
- With last year's release of new CFTC data, one can now calculate the T index for the U.S. oil exchange-traded futures-and-options markets.
- One can examine the historical agricultural futures markets as a guide to the typical balance of hedging-versus-speculation over many decades.



B. CFTC Data

US Oil Futures Markets

- Based on this traditional speculative metric, the balance of outright speculators in the NYMEX oil futures markets does not *appear* excessive relative to commercial hedging needs over the past three-and-a-half years, as of the Fall of 2009.
- See next slides for other related research.

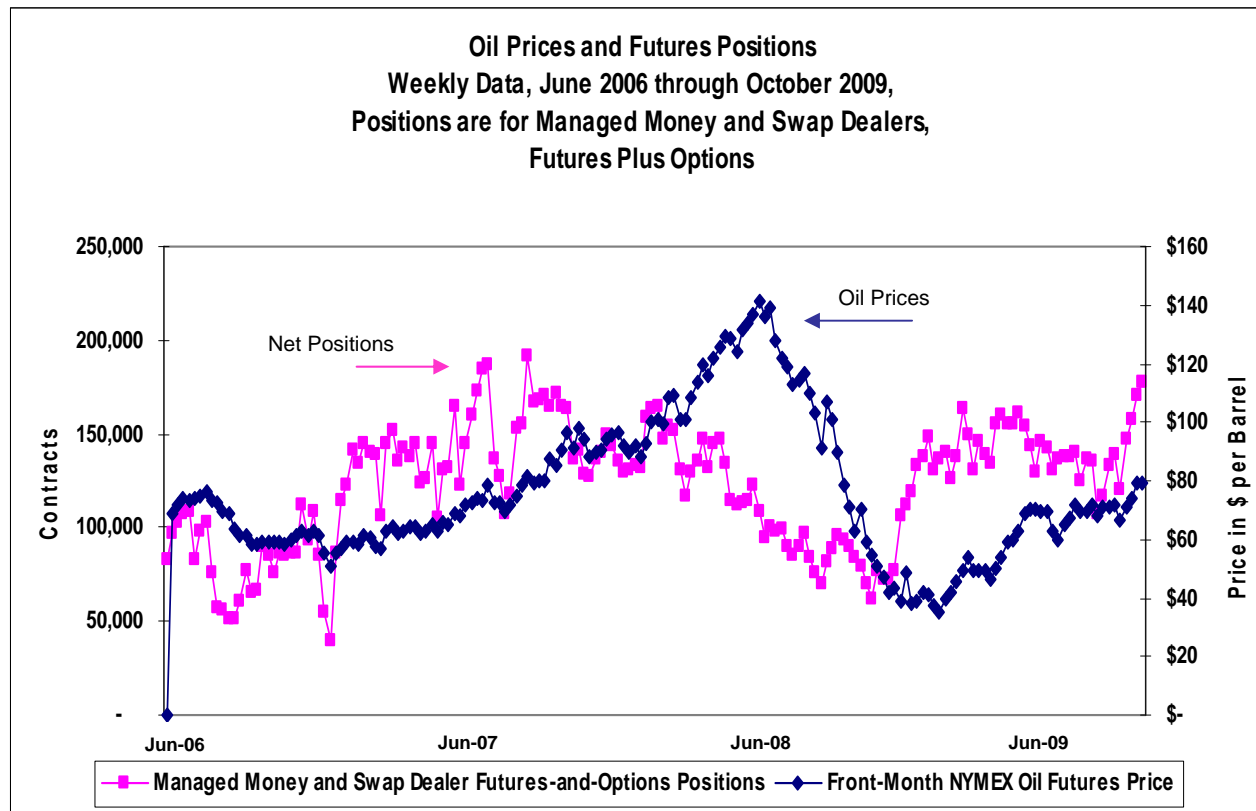


Source: Till (2009b).



C. Prices and Futures Positions

Managed Money and Swap Dealer Positions



Graph Based on Ribeiro et al. (2009), Chart 1.

Source: Ribeiro et al. (2009).



C. Prices and Futures Positions

Oil Prices: The True Role of Speculation

- “... we would say that alert futures traders, who noted that both the heating-oil crack spread and the Baltic indices were successively peaking in the late-May-to-late-July period, had a number of warning signs that a fundamental source of demand for oil appeared to be diminishing in short order.”



Source: Amenc et al. (2008).



C. Prices and Futures Positions

Oil Prices: The Actual Impact of Speculation

- “these tests are consistent with the view that current oil prices are being driven by fundamental supply and demand factors.”

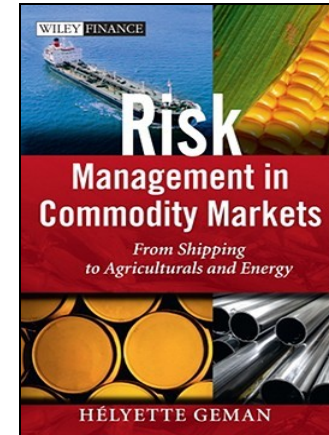
Trader Classification	Hypothesized Direction of Causality					
	Price Changes lead Position Changes			Position Changes lead Price Changes		
	Direction	Significant?	P Value	Direction	Significant?	P Value
All Commercials (includes Manufacturers, Commercial Dealers, Producers, Other Commercial Traders, and Swap Dealers)	+	Yes	.000	.	No	.418
Manufacturers	+	Yes	.000	.	No	.225
Commercial Dealers	+	Yes	.000	.	No	.130
Producers	+	Yes	.036	.	No	.160
Other Commercial Traders	.	No	.623	.	No	.918
Swap Dealer	-	Yes	.001	.	No	.582
All Non-Commercials (includes Hedge Funds, Floor Brokers & Traders)	-	Yes	.000	.	No	.451
Hedge Funds	-	Yes	.000	.	No	.510
Floor Brokers & Traders	.	No	.683	.	No	.351
Non-Registered Participants	.	No	.873	.	No	.575
All Non-Commercials combined with Swap Dealers	-	Yes	.000	.	No	.251

Source: Buyuksahin and Harris, "Do speculators move crude oil prices?". CFTC-Office of the Chief Economist, Working Paper, Forthcoming, Fall 2008.



II. Risk Management

- A. Institutional Risk Management
- B. Proprietary Trading Risk Management
- C. Hedge Fund Risk Management
- D. Fund-of-Hedge-Funds Diversification
- E. Market Risk Management
- F. Due Diligence
- G. FCM Monitoring



A. Institutional Risk Management

Case Study Lessons

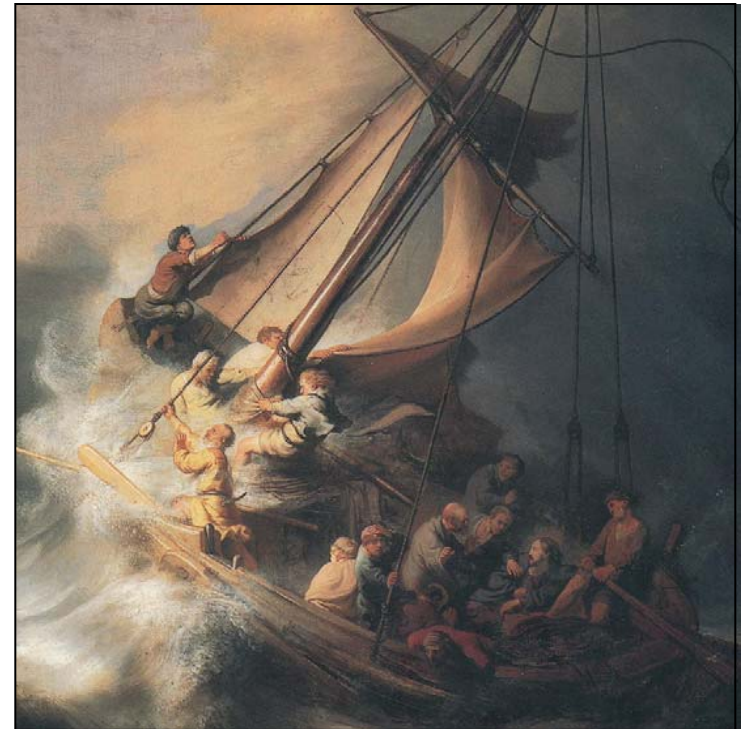
- Establish clear-cut compliance and ethics programs, not just for the trading staff but also for senior management.
- Always get your marks from large, legitimate, established brokers, publishers, or exchanges.
- Ensure that one's trading activity is diversified across more than one broker.
- Impose strict position limits in all electronic trading systems.



B. Proprietary Trading Risk Management

Types of Risks

- The risk of personal bankruptcy is sufficiently large that a complex system of controls and incentives becomes a moot point.
- The main risks are structural breaks in empirical regularities.



Rembrandt's *Storm on the Sea of Galilee*, Isabella Stewart Gardner Museum, Boston, and Cover of *Against the Gods: The Remarkable Story of Risk* by P. Bernstein, (New York: John Wiley & Sons), 1996.



C. Hedge Fund Risk Management

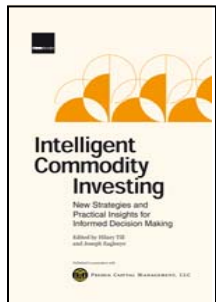
Types of Risks

- Hedge funds are a hybrid of an institutional asset-management firm and a proprietary trading firm, depending on how much of the principals' wealth is at risk.
- For large-scale hedge funds, operational risk issues are what is paramount.



D. Fund-of-Hedge-Funds Diversification

Diversification of Idiosyncratic Risks



A fund-of-funds can potentially dampen the sharp peaks-and-troughs in profitability of individual managers, as demonstrated in Akey (2007).

- Even with this in mind, each individual manager should take steps to keep their market risk within well-understood bounds.



E. Market Risk Management

Elements of Commodity Risk Management

- Trade construction
- Sizing
- Exit strategy
- Scenario analyses
- Choice of leverage level



F. Due Diligence

Business Risk

- Business Inexperience
- Loss of Information Edge
- Unverifiable Track Record
- Fraud



G. FCM Monitoring

FCM Financial Monitoring

- The CFTC monitors financial data for FCMs and provides this information on their website.

Financial Data for Futures Commissions Merchants

Futures commission merchants (FCMs) must file monthly financial reports with the CFTC's Division of Clearing and Intermediary Oversight within 17 business days after the end of the month. Selected financial information from these reports is published below. The most recent month-end information generally is added within 12 business days after FCMs file their reports, but occasionally may be added later. For example: The 17th business day filing "due date" for February 28, 2009 financial reports was March 24, 2009. The 12 business day target for posting these data was April 9, 2009.

Once posted, the CFTC does not revise this information to reflect any amended financial information subsequently received.

[Description of Report Data Fields](#)

2009		
November 30, 2009	PDF	Excel
October 31, 2010	PDF	Excel
September 30, 2009	PDF	Excel
August 30, 2009	PDF	Excel

[Historical FCM Reports](#)



III. Product Innovations

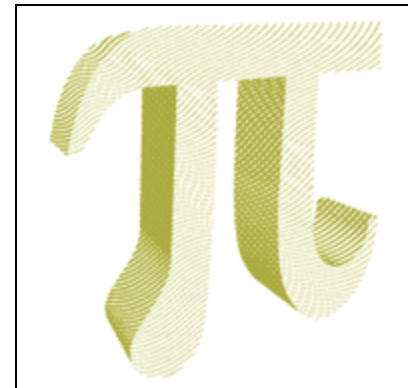
- A. Commodity Indices
- B. Commodity Structures
- C. Commodity Investor Concerns



A. Commodity Indices

Enhancement of Traditional Indices

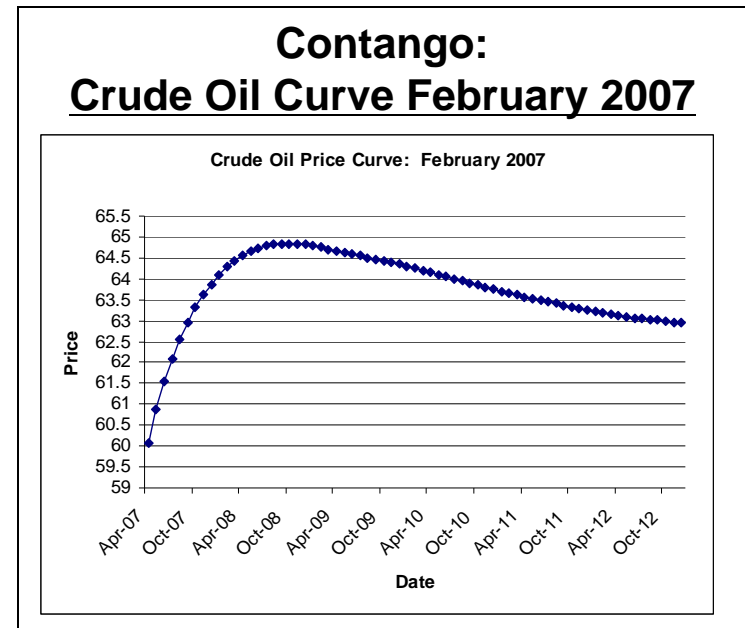
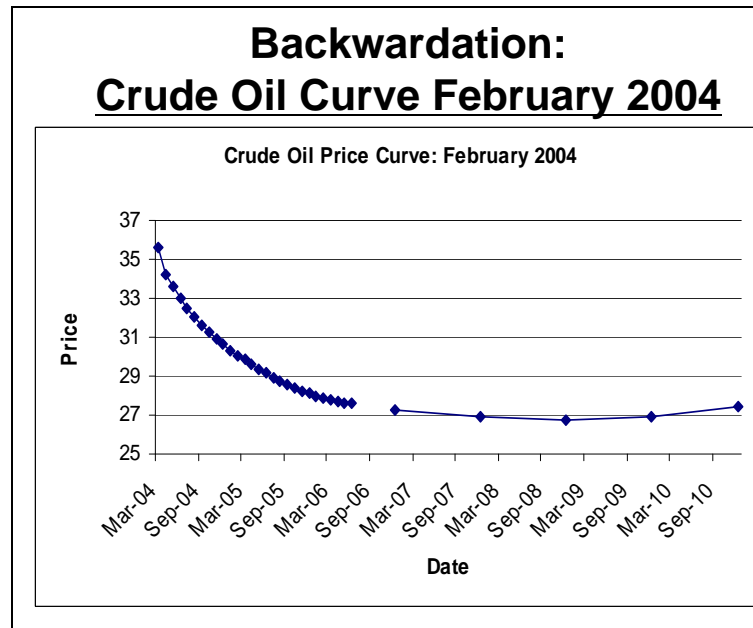
- Commodity-index providers have created next-generation indexes, which attempt to methodically provide exposure to spot commodity prices while minimizing the carrying costs of such investments, particularly in the energy sector.



A. Commodity Indices

Beta


- Choice of index: given that the driver of returns could be spot returns (and not roll returns), going forward.



B. Commodity Structures

Commodity-Linked Notes

- The SEC website, EDGAR, shows the latest commodity-linked notes issued by the money-center banks.

Term Sheet No. 210R <i>To prospectus dated October 10, 2006, prospectus supplement dated November 13, 2006 and product supplement R dated April 4, 2007</i>	Registration Statement No. 333-137902 Dated October 18, 2007; Rule 433
Deutsche Bank  Deutsche Bank AG, London Branch \$	
Double Opportunity Securities Linked to the Deutsche Bank Liquid Commodity Index – Mean Reversion™ Excess Return (Non-Principal Protected) due November 28, 2008	
General	
<ul style="list-style-type: none">• The securities are designed for investors who seek a return of two times the appreciation of the Deutsche Bank Liquid Commodity Index – Mean Reversion™ Excess Return up to a maximum return at maturity of between 27.00% and 29.00% to be determined on the Trade Date. Investors should be willing to forgo any coupon payments and, if the Index declines, be willing to lose some or all of their initial investment.• Senior unsecured obligations of Deutsche Bank AG due November 28*, 2008.• Minimum denominations of \$10,000, and increments of \$1,000 in excess thereof.• The securities are expected to price on or about October 24*, 2007 and are expected to settle on or about October 29*, 2007.	
Key Terms	
Issuer:	Deutsche Bank AG, London Branch

[EDGAR stands for the "Electronic Data Gathering, Analysis and Retrieval" system.]



B. Commodity Structures

Exchange-Traded Funds (ETFs)

- Last year, for example, the first U.S. platinum and palladium ETFs were launched, giving US investors easier access to these metals for large-scale direct investment. (*Reuters, 1/7/10*)



C. Commodity Investor Concerns

*Proxies for Oil Investment
(12/31/08 to 12/31/09):*

- Canadian dollar vs. US dollar: +15.72%
- Norwegian Krone vs. US dollar: +20.03%
- S&P GSCI All Crude Index Total Return: +13.15%
- Rolling Front-Month Crude Oil Futures Contract: +77.94%
- Exxon Mobile Corporation Total Return (Dividends Reinvested): -12.60%



C. Commodity Investor Concerns

*Proxies for Oil Investment
(12/31/09 to 12/31/10):*

- Canadian dollar vs. US dollar: +5.53%
- Norwegian Krone vs. US dollar: +0.49%
- S&P GSCI All Crude Index Total Return: +3.21%
- Rolling Front-Month Crude Oil Futures Contract: +15.15%
- Exxon Mobile Corporation Total Return (Dividends Reinvested): +10.14% ... BP Total Return: -22.63%



Conclusion

Outlook

- In November 2010, Barclays Capital noted that the reasons to still be constructive on commodities were as follows:
 - The historically positive impact of negative real interest rates on commodity prices;
 - The long-run diversification benefits of commodities, and
 - The potential of geopolitical risks to skew commodity prices to the upside.



Conclusion

Outlook

- In their January 2011 outlook, Deutsche Bank states that they believe that this year will be characterized by fresh investment inflows into the commodity complex.
- They note that the sector's appeal reflects investor appetite...
 - to gain exposure to emerging markets,
 - to hedge against tail events, and
 - to hedge against possible higher inflation ahead.



Conclusion

Outlook

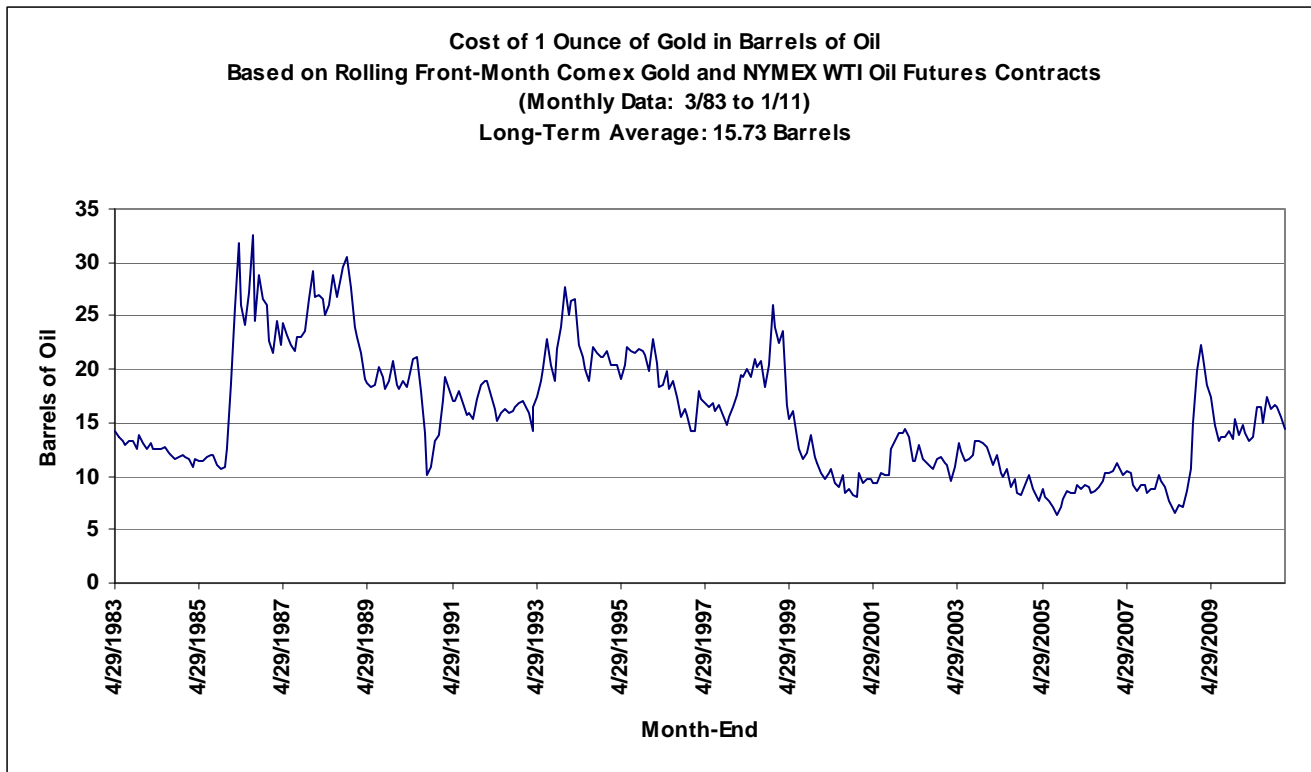
- In times of currency revaluations, it is difficult to separate out commodity price effects from pure currency effects.
- As of 2/4/11, the front-month WTI futures contract price was at \$89.03 per barrel.
- In gold terms, the price of crude oil is cheap to its long-term average level. See next slide.



Conclusion

Outlook

Oil in Gold Terms



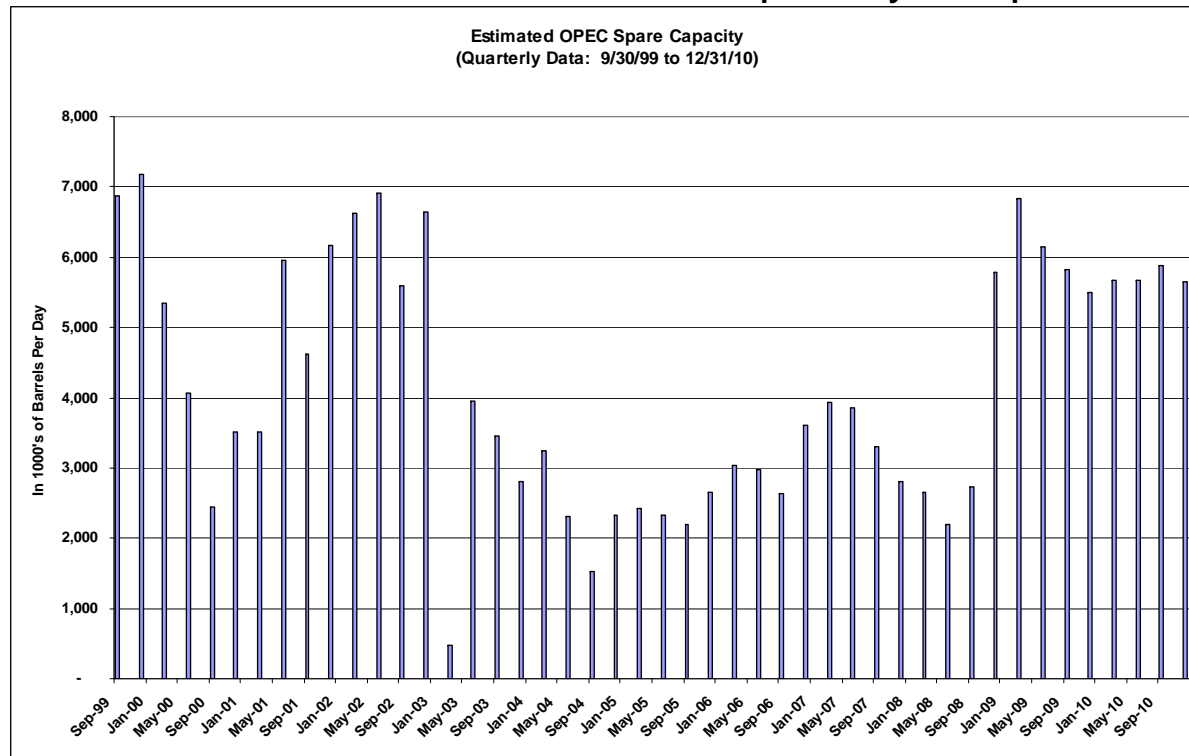
Source of Data: Bloomberg.



Conclusion

Outlook

Sufficient Spare Capacity (Thus Far) Such That One Wouldn't Expect Crude Oil Prices to Have a Propensity to Spike



Source of Data: Bloomberg
[Constructed from Bloomberg Tickers:
OPRECTO <index> - OPCRTOTL <index>.]



References

Akey, R., H. Till, and A. Kins, 2006, "Natural Resources Fund-of-Funds: Active Management, Risk Management, and Due Diligence," a chapter in Fund of Hedge Funds: Performance, Assessment, Diversification and Statistical Properties (Edited by G. Gregoriou), Oxford: Elsevier Finance, pp. 383-399.

Akey, R., 2007, "Alpha, Beta, and Commodities: Can a Commodities Investment be Both a High-Risk-Adjusted Return Source and a Portfolio Hedge?," a chapter in Intelligent Commodity Investing (Edited by H. Till and J. Eagleeye), London: Risk Books, pp. 377-417; and in *Journal of Wealth Management*, Fall 2006, pp. 63-82.



Amenc, N., B. Maffei, and H. Till, "Oil Prices: The True Role of Speculation," *EDHEC-Risk Publication*, November 2008.

Barclays Wealth Americas, 2010, "Commodities Macroeconomic Backdrop," Barclays Wealth Americas in partnership with Barclays Capital presentation, November.

[ITF] Interagency Task Force on Commodity Markets, 2009, "Special Report on Commodity Markets," Draft, January 5th. This report was never formally released, but was accessed by the *Wall Street Journal* through a Freedom of Information Act request, as reported in Lynch (2010). The task force was chaired by Commodity Futures Trading Commission (CFTC) staff.



Degas, Edgar, "The Cotton Exchange at New Orleans," 1873, Musée Municipal, Pau, France.



References

- Lewis, M., 2011, "Commodities Outlook," Deutsche Bank Global Markets Research, January 11.
- Lynch, S., 2010, "CFTC Documents Reveal Internal Debate on Position Limits," *Wall Street Journal*, May 14.
- Ribeiro, R., L. Eagles, and N. von Solodkoff, 2009, "Commodity Prices and Futures Positions," J.P. Morgan Global Asset Allocation & Alternative Investments, December 16.
- Sanders, D.R., S.H. Irwin, and R.P. Merrin, 2008, "The Adequacy of Speculation in Agricultural Futures Markets: Too Much of a Good Thing?" Marketing and Outlook Research Report 2008-02, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June.
- Tang, F., 2010, "U.S. Platinum, Palladium ETFs Set to Trade on Friday," *Reuters*, January 7.
- Till, H., 2007, "Value Investing in Commodity Futures," *The Price Report*, August 21.
- Till, H. (2008a), "Case Studies and Risk Management Lessons in Commodity Derivatives Trading," a chapter in Risk Management in Commodity Markets: From Shipping to Agriculturals and Energy (Edited by H. Geman), Chichester (UK): John Wiley & Sons Ltd., pp. 255-291.
- Till, H., (2008b), "The Oil Markets: Let the Data Speak for Itself," *EDHEC-Risk Publication*, October.
- Till, H., 2009a, "Has There Been Excessive Speculation in the US Oil Futures Markets? What Can We (Carefully) Conclude from New CFTC Data?", *EDHEC-Risk Publication*, November.
- Till, H., 2009b, "Speculation in Oil Futures," *Financial Times*, December 7.
- Working, H., 1970, "Economic Functions of Futures Markets," a chapter in Futures Trading in Livestock – Origins and Concepts (Edited by H. Bakken), Chicago Mercantile Exchange.

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