

It's a bubble, for sure...

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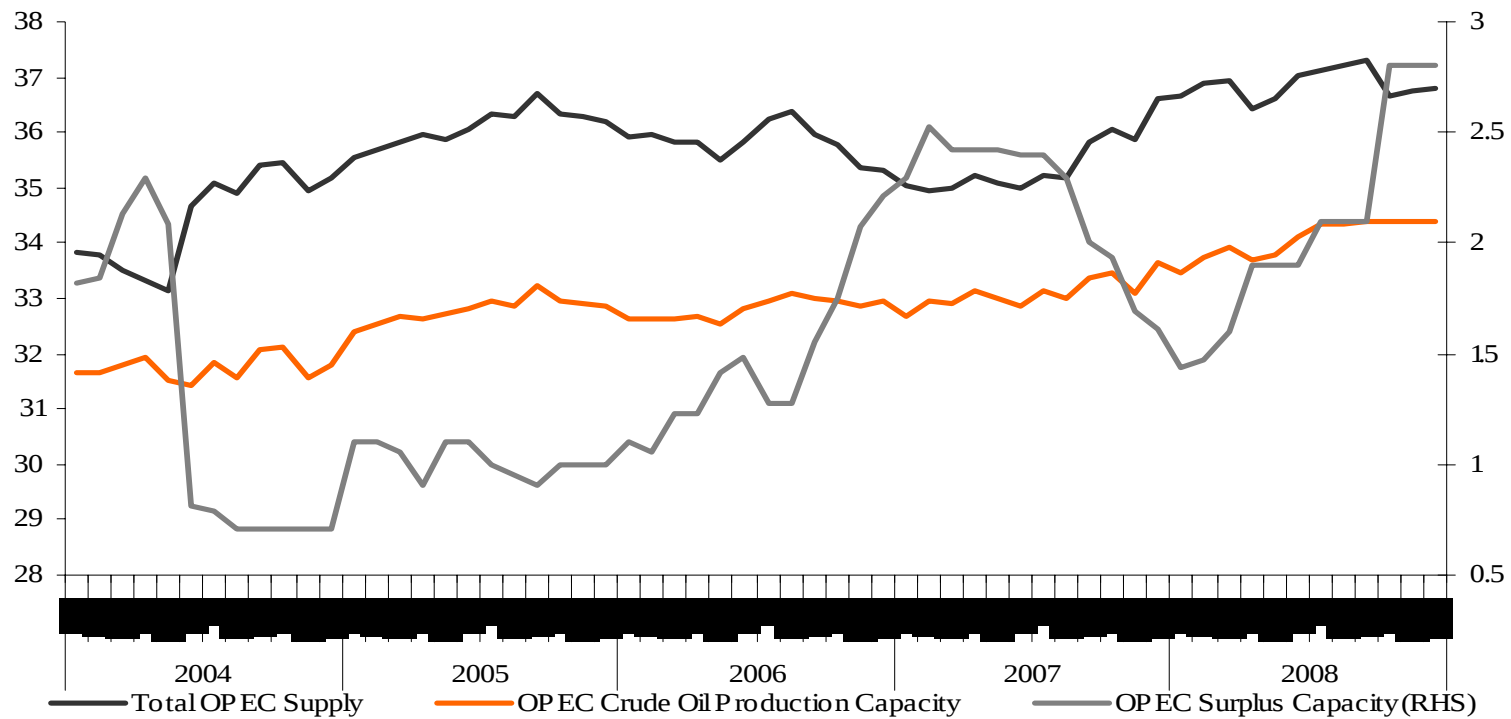
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Consumption is almost stagnant

		Total World Production	Consumption					
			OECD	U.S.	Europe	China	Other Asia	Total World
2007	Jan	84.23	48.8	20.56	0.85	7.33	8.74	85.1
	Feb	84.31	50.42	21.27	0.85	7.33	8.74	86.53
	Mar	84.08	49.32	20.53	0.85	7.33	8.74	84.56
	Apr	84.55	47.87	20.58	0.78	7.52	8.83	84.3
	May	84.23	47.8	20.63	0.78	7.52	8.83	84.26
	Jun	84.33	48.47	20.74	0.78	7.52	8.83	84.9
	Jul	84.63	48.53	20.64	0.73	7.59	8.64	85.18
	Aug	83.77	48.81	21.05	0.73	7.59	8.64	85.41
	Sep	84.61	48.44	20.38	0.73	7.59	8.64	84.62
	Oct	85.45	49.43	20.46	0.79	7.87	8.93	86.44
	Nov	85.24	50.11	20.71	0.79	7.87	8.93	87.08
	Dec	85.76	49.67	20.87	0.79	7.87	8.93	86.47
2008	Jan	85.72	48.84	20.11	0.86	7.72	8.81	86.25
	Feb	85.97	49.82	19.78	0.86	7.72	8.81	87.02
	Mar	85.89	49.51	20.31	0.86	7.72	8.81	85.8
	Apr	85.67	48.32	20.35	0.8	7.93	8.88	86.04
	May	86.13	47.37	20.43	0.8	7.93	8.88	85.12
	Jun	86.71	48.35	20.67	0.8	7.93	8.88	86.06
	Jul	87.16	48.43	20.68	0.75	8.05	8.66	86.31
	Aug	87.06	48.66	20.99	0.75	8.05	8.66	86.49
	Sep	87.34	48.94	20.45	0.75	8.05	8.66	86.57
	Oct	87.04	48.71	20.62	0.81	8.32	8.97	86.99
	Nov	87.24	49.51	20.68	0.81	8.32	8.97	87.69
	Dec	87.24	50.93	20.95	0.81	8.32	8.97	88.99

OPEC supply has infact increased this year KRCChoksey



Is it a bubble then?

- The present oil boom has symptoms of a financial bubble, such as Japan in the 1980s, technology stocks in the 1990s and, most recently, housing and mortgages in the US.
- There has been no major 'fundamental changes' during the past nine months.
- The oil markets didn't suddenly discover China's oil demand nine months ago so this cannot explain the doubling of prices since last August.
- In fact, China's "insatiable" demand growth has decelerated. In 2004 it was consuming an extra 0.9 million barrels a day; in 2007 it was consuming just an extra 0.3 mbd.
- In the same period global demand growth has slowed from 3.6 mbd to 0.7 mbd.
- The increase in global demand growth is now well below last year's increase of 0.8 mbd in non-Opec production.

**Increase In Chinese Demand For Petroleum
Last 5 Years**

	CONSUMPTION (Barrels Per Year)	YEAR OVER YEAR CHANGE
2002	1,883,660,777	
2003	2,036,010,338	152,349,561
2004	2,349,681,577	313,671,240
2005	2,452,800,000	103,118,423
2006	2,654,750,989	201,950,989
2007	2,803,010,200	148,259,211
TOTAL CHANGE		919,349,423

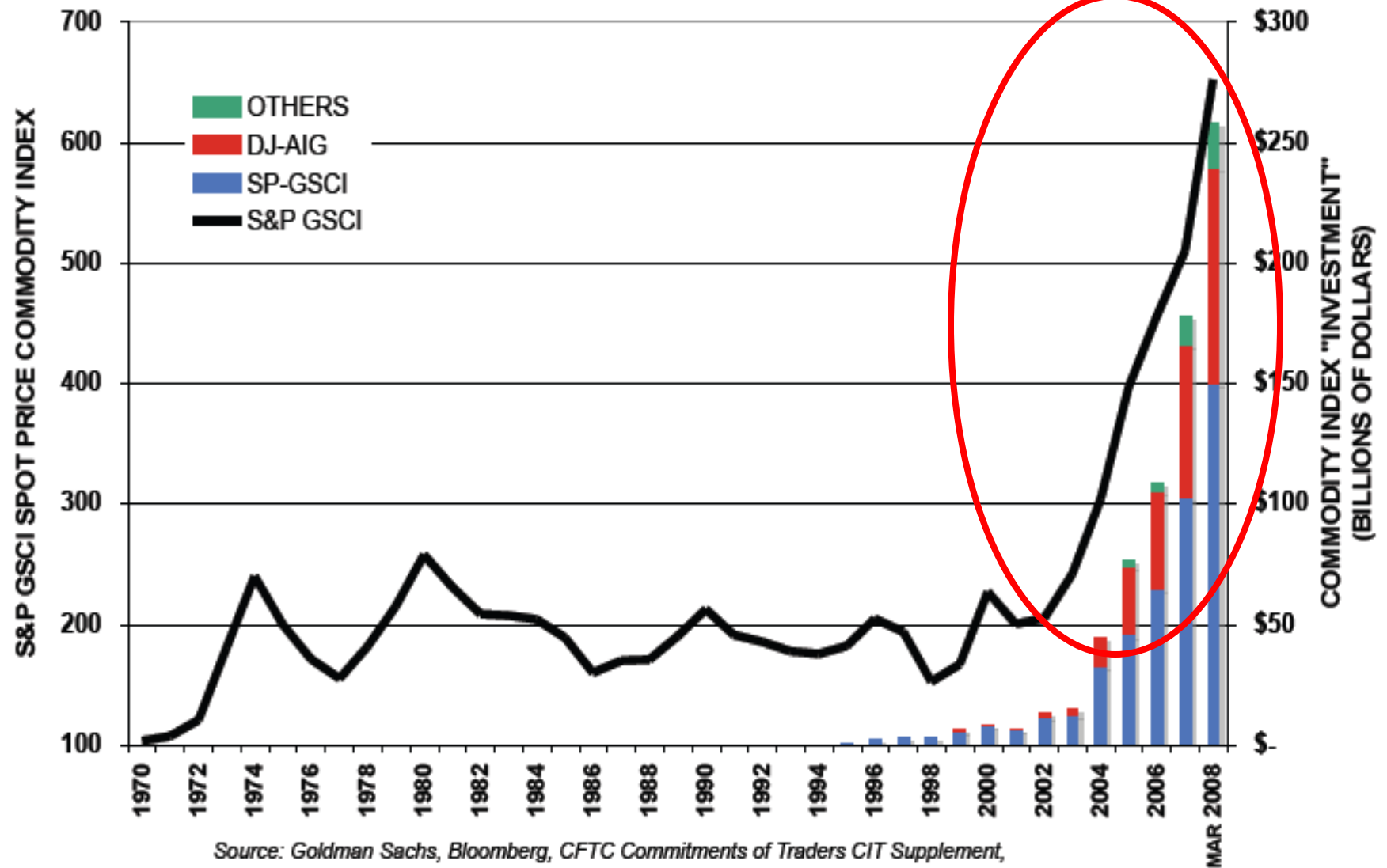
*Source: Energy Information Association, US
Department of Energy*

**Increase In Index Speculator
Demand For Petroleum
Last 5 Years**

Petroleum Product	Barrels
WTI Crude Oil	538,499,579
Brent Crude Oil	144,524,265
Gasoil	44,122,619
Heating Oil	61,164,897
Gasoline	59,249,015
TOTAL CHANGE	847,560,374

The increase in demand from Index Speculators is almost equal to the increase in demand from China!

COMMODITY INDEX INVESTMENT COMPARED TO S&P GSCI SPOT PRICE COMMODITY INDEX



Is it a bubble then?

- The Gulf is overcrowded with supertankers chartered by oil-producing governments to hold the inventories of oil they are pumping but cannot sell.
- It means that there are few buyers for physical oil cargoes at today's prices, but interestingly there are plenty of buyers for pieces of paper linked to the price of oil next month and next year.
- This situation is exactly similar to the bubble in credit markets a year ago, where nobody wanted to buy sub-prime mortgage bonds, but there was plenty of demand for “financial derivatives” that allowed investors to bet on the future value of these bonds.

Financial Funds in Energy markets

- Demand shocks are coming from institutional investors like corporate and government pension funds, university endowments, and sovereign wealth funds. Index speculators are the primary cause of the recent price spikes in commodities.
- The explosion in the number of financial players in the energy markets has occurred especially in the past two years, which also happened to be a period of soaring energy prices.
- There are now 634 energy hedge funds, up from just 180 in October, 2004.
- Of the total funds now, 210 are strictly energy commodity funds trading oil or oil futures and options, as opposed to the stocks of energy companies such as ExxonMobil and Chevron.
- Large financial institutions such as Goldman Sachs and Morgan Stanley have also stepped up their participation in the energy markets.
- More money has flowed into commodities as a hedge against the falling value of the dollar and as an investment alternative to a volatile stock market. These fund flows have influenced oil prices heavily.

Commodity Futures Price Increases March 2003 - March 2008

<i>Agricultural</i>	Cocoa	+34%
	Coffee	+167%
	Corn	+134%
	Cotton	+40%
	Soybean Oil	+199%
	Soybeans	+143%
	Sugar	+69%
	Wheat	+314%
	Wheat KC	+276%
<i>Livestock</i>	Feed Cattle	+34%
	Lean Hogs	+10%
	Live Cattle	+23%
<i>Energy</i>	Brent Crude Oil	+213%
	WTI Crude Oil	+191%
	Gasoil	+192%
	Heating Oil	+192%
	Gasoline	+145%
	Natural Gas	+71%
<i>Base Metals</i>	Aluminum	+120%
	Lead	+564%
	Nickel	+282%
	Zinc	+225%
	Copper	+413%
<i>Precious Metals</i>	Gold	+183%
	Silver	+331%

Estimated Annual Inflows

	S&P-GSCI	DJ-AIG	TOTAL
2004	\$16.2	\$8.9	\$25.1
2005	\$4.8	\$12.4	\$17.2
2006	\$28.3	\$11.3	\$39.6
2007	\$14.7	\$15.4	\$30.1
2008	\$35.1	\$20.0	\$55.1
TOTAL	\$99.1	\$68.0	\$167.1

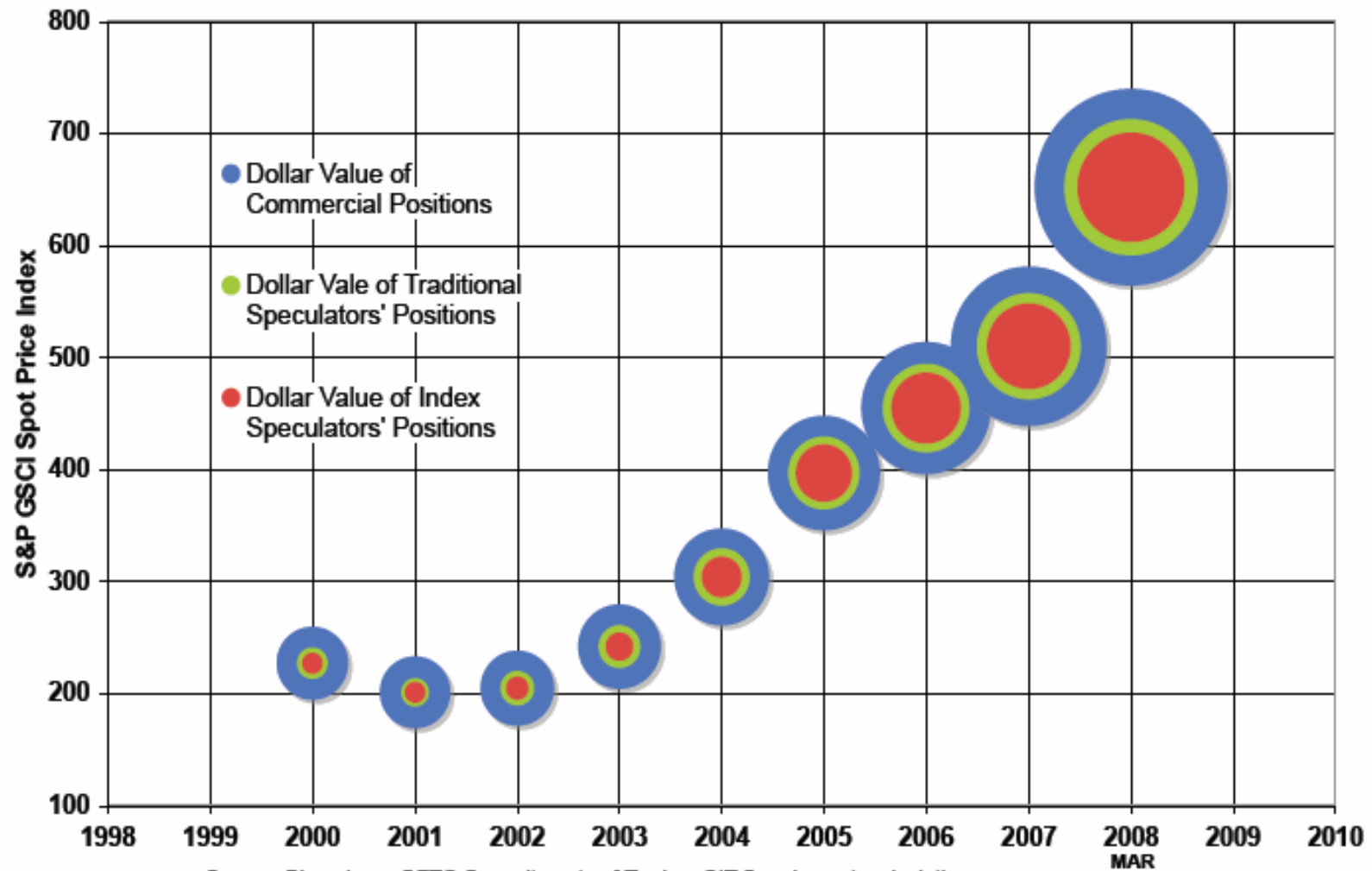
Apart from crude, the Index Speculators have raided other major commodities too. Huge jump in future prices tell the real reason behind this "Super Spike" theory.

Financial Funds in Energy markets

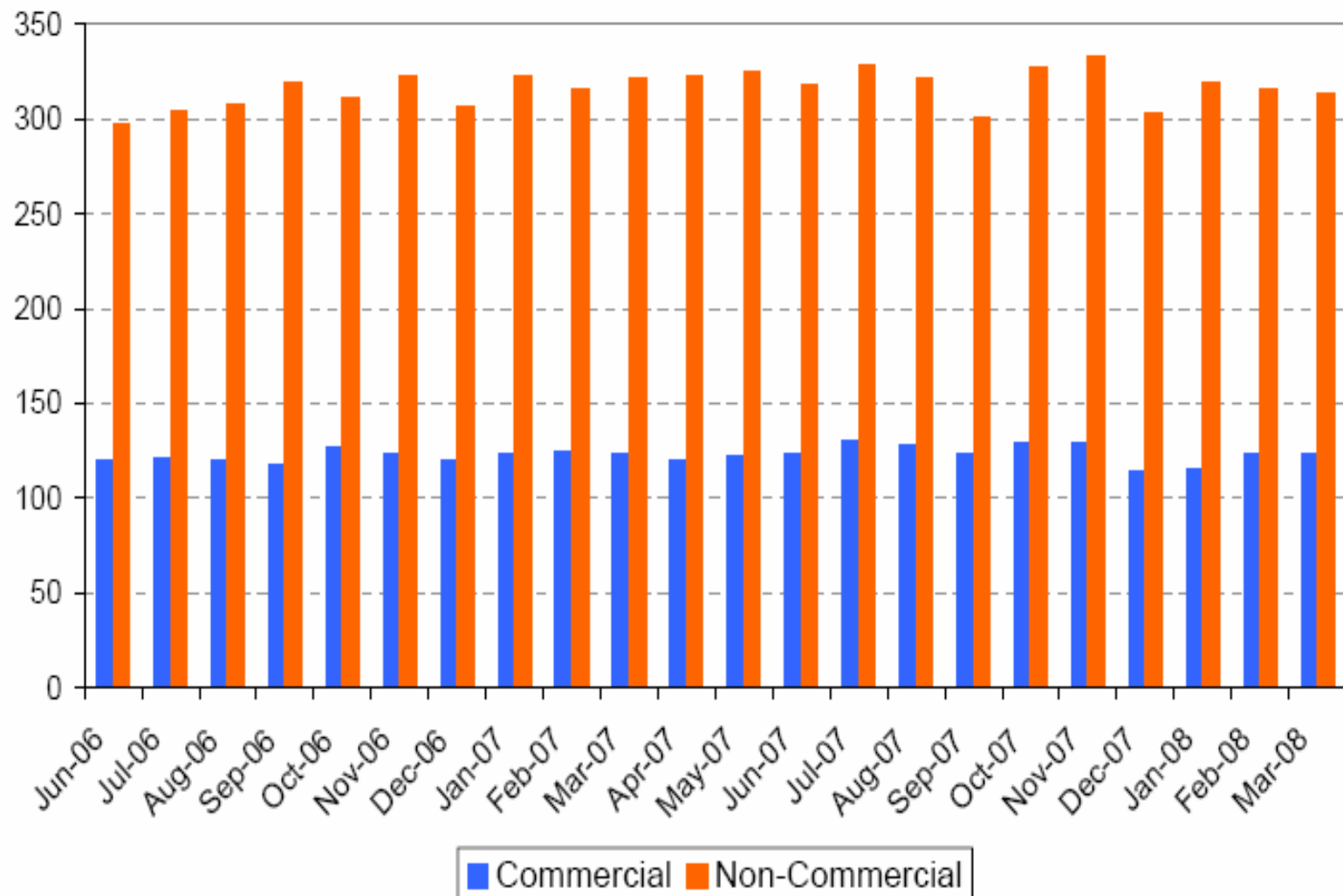


- These funds are not traditional speculators but index speculators, or passive investors who enter the commodities markets as a long-term hedge against inflation.
- Though, Commodities exchanges limit the number of positions an investor can take in the market, the Commodity Futures Trading Commission has allowed unlimited speculation in these markets through a loophole.
- This 'swaps loophole' exempts investment banks like Goldman Sachs and Merrill Lynch from reporting requirements and limits on trading positions that are required of other investors.
- The loophole allows pension funds, etc. to enter into a swap agreement with an investment bank, which can then trade unlimited numbers of the contracts in futures markets.

Commodity Futures Market Size



Number of Market Participants in NYMEX WTI Crude Sweet Oil Futures Markets



Financial Funds in Energy markets



- Speculative activity in commodity markets has grown dramatically over the last several years.
- In the past decade, the share of long interests—positions that benefit when prices rise—held by financial speculators has grown from one-quarter to two-thirds of the commodity market.
- In only five years, from 2003 to 2008, investment in index funds tied to commodities has grown twentyfold, from \$13 billion to \$260 billion.
- Hence, oil's recent rise has been fueled by non-supply-demand factors and potential inventory misperceptions.
- In fact, new price determinants, dollar's value and interest rates in the oil markets, are replacing supply and demand.

Average Daily Dollar Value Of Open Interest

(in millions)	2002	2003	2004	2005	2006	2007	2008
COCOA	\$ 1,815	\$ 1,510	\$ 1,569	\$ 1,883	\$ 2,040	\$ 2,690	\$ 4,062
COFFEE	\$ 1,408	\$ 1,693	\$ 2,748	\$ 3,769	\$ 4,203	\$ 6,308	\$ 9,521
CORN	\$ 5,435	\$ 5,118	\$ 8,182	\$ 7,657	\$ 15,059	\$ 23,763	\$ 37,427
COTTON	\$ 1,646	\$ 2,990	\$ 2,645	\$ 2,841	\$ 4,259	\$ 6,822	\$ 11,689
SOYBEAN OIL	\$ 1,441	\$ 1,952	\$ 2,456	\$ 1,944	\$ 3,186	\$ 5,756	\$ 8,868
SOYBEANS	\$ 4,883	\$ 7,306	\$ 9,480	\$ 8,846	\$ 10,129	\$ 20,882	\$ 37,399
SUGAR	\$ 1,521	\$ 1,712	\$ 2,772	\$ 5,120	\$ 8,634	\$ 8,174	\$ 15,509
WHEAT	\$ 1,836	\$ 1,862	\$ 2,647	\$ 3,827	\$ 7,414	\$ 11,608	\$ 19,742
WHEAT KC	\$ 1,304	\$ 1,081	\$ 1,240	\$ 1,525	\$ 3,099	\$ 4,094	\$ 6,253
FEED CATTLE	\$ 540	\$ 757	\$ 804	\$ 1,298	\$ 1,518	\$ 1,409	\$ 1,818
LEAN HOGS	\$ 602	\$ 858	\$ 1,873	\$ 2,309	\$ 3,285	\$ 3,875	\$ 4,465
LIVE CATTLE	\$ 2,670	\$ 3,595	\$ 3,556	\$ 4,859	\$ 6,701	\$ 7,909	\$ 8,764
BRENT CRUDE	\$ 6,556	\$ 8,486	\$ 12,620	\$ 19,388	\$ 31,094	\$ 45,653	\$ 52,832
WTI CRUDE	\$ 16,052	\$ 20,400	\$ 33,620	\$ 55,297	\$ 80,996	\$ 130,699	\$ 199,970
GASOIL	\$ 3,990	\$ 3,695	\$ 5,461	\$ 10,196	\$ 14,749	\$ 21,006	\$ 22,917
HEATING OIL	\$ 4,412	\$ 5,105	\$ 8,242	\$ 11,838	\$ 13,575	\$ 17,903	\$ 23,854
GASOLINE	\$ 3,714	\$ 3,947	\$ 7,304	\$ 10,276	\$ 11,366	\$ 16,085	\$ 24,213
NATURAL GAS	\$ 23,551	\$ 27,812	\$ 25,897	\$ 42,427	\$ 45,067	\$ 54,075	\$ 72,834
ALUMINUM	\$ 0	\$ 0	\$ 0	\$ 12,286	\$ 23,676	\$ 27,589	\$ 32,741
LEAD	\$ 0	\$ 0	\$ 0	\$ 677	\$ 981	\$ 2,226	\$ 2,134
NICKEL	\$ 0	\$ 0	\$ 0	\$ 1,986	\$ 4,415	\$ 6,690	\$ 6,608
ZINC	\$ 0	\$ 0	\$ 0	\$ 2,696	\$ 6,759	\$ 6,917	\$ 6,428
COPPER	\$ 0	\$ 0	\$ 0	\$ 11,864	\$ 26,516	\$ 28,921	\$ 32,717
GOLD	\$ 5,639	\$ 9,851	\$ 13,221	\$ 13,860	\$ 18,929	\$ 24,891	\$ 43,700
SILVER	\$ 1,976	\$ 2,438	\$ 3,745	\$ 4,286	\$ 6,447	\$ 7,437	\$ 12,935
TOTAL	\$ 90,991	\$ 112,168	\$ 150,082	\$ 242,955	\$ 354,097	\$ 493,382	\$ 699,400

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