Testimony of

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Good morning and thank you, Mr. Chairman and Members of the Committee, for the invitation to speak to you today. This is a topic that I care deeply about, and I appreciate the chance to share what I have discovered.

I have been successfully managing a long-short equity hedge fund for over 12 years and I have extensive contacts on Wall Street and within the hedge fund community. It's important that you know that I am not currently involved in trading the commodities futures markets. I am not representing any corporate, financial, or lobby organizations. I am speaking with you today as a concerned citizen whose professional background has given me insight into a situation that I believe is negatively affecting the U.S. economy. While some in my profession might be disappointed that I am presenting this testimony to Congress, I feel that it is the right thing to do.

You have asked the question "Are Institutional Investors contributing to food and energy price inflation?" And my unequivocal answer is "YES." In this testimony I will explain that Institutional Investors are one of, if not the primary, factors affecting commodities prices today. Clearly, there are many factors that contribute to price determination in the commodities markets; I am here to expose a fast-growing yet virtually unnoticed factor, and one that presents a problem that can be expediently corrected through legislative policy action.

Commodities prices have increased more in the aggregate over the last five years than at any other time in U.S. history.[1] We have seen commodity price spikes occur in the past as a result of supply crises, such as during the 1973 Arab Oil Embargo. But today, unlike previous episodes, supply is ample: there are no lines at the gas pump and there is plenty of food on the shelves.

If supply is adequate - as has been shown by others who have testified before this committee[2] - and prices are still rising, then demand must be increasing. But how do you explain a continuing increase in demand when commodity prices have doubled or tripled in the last 5 years?

What we are experiencing is a demand shock coming from a new category of participant in the commodities futures markets: Institutional Investors. Specifically, these are Corporate and Government Pension Funds, Sovereign Wealth Funds, University Endowments and other Institutional Investors. Collectively, these investors now account on average for a larger share of outstanding commodities futures contracts than any other market participant.[3]

These parties, who I call *Index Speculators,* allocate a portion of their portfolios to "investments" in the commodities futures market, and behave very differently from the traditional speculators that have always existed in this marketplace. I refer to them as "Index" Speculators because of their investing strategy: they distribute their allocation of dollars across the 25 key commodities futures according to the popular indices – the Standard & Poors - Goldman Sachs Commodity Index and the Dow Jones - AIG Commodity Index.[4]

I'd like to provide a little background on how this new category of "investors" came to exist.

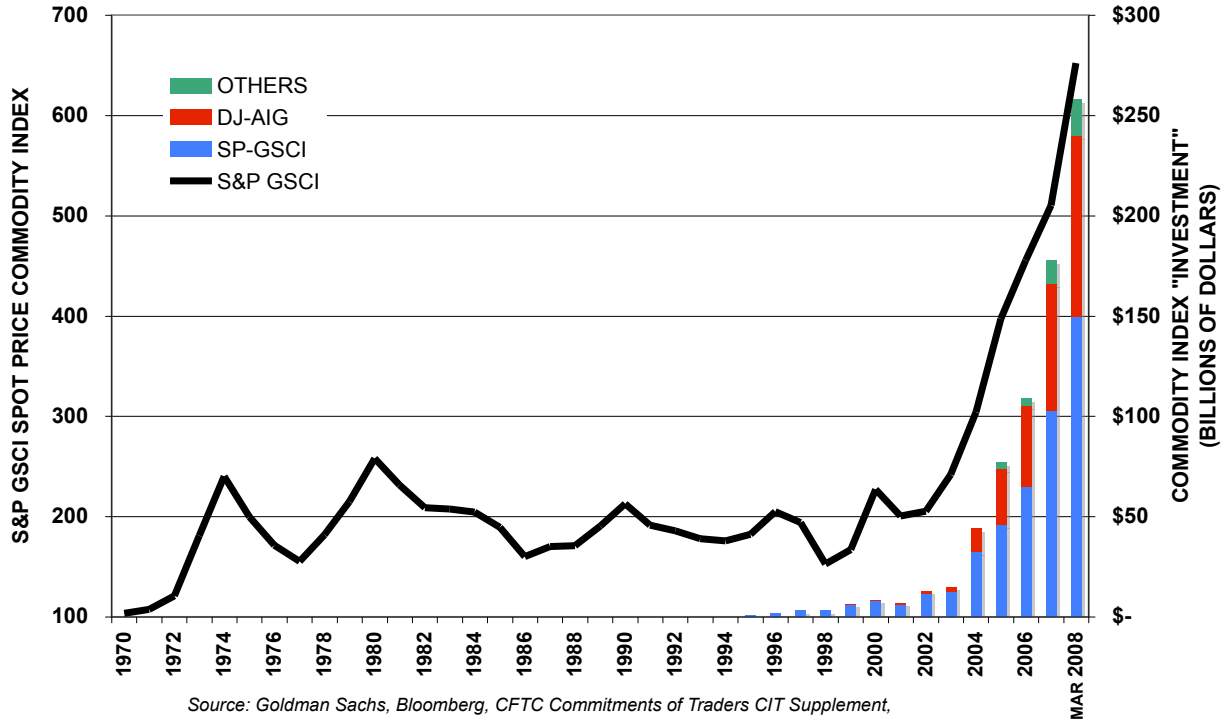
In the early part of this decade, some institutional investors who suffered as a result of the severe equity bear market of 2000-2002, began to look to the commodity futures market as a potential new "asset class" suitable for institutional investment. While the commodities markets have always had some speculators, never before had major investment institutions seriously considered the commodities futures markets as viable for larger scale investment programs. Commodities looked attractive because they have historically been "uncorrelated," meaning they trade inversely to fixed income and equity portfolios. Mainline financial industry consultants, who advised large institutions on portfolio allocations, suggested for the first time that investors could "buy and hold" commodities futures, just like investors previously had done with stocks and bonds.

Index Speculator Demand Is Driving Prices Higher

Today, Index Speculators are pouring billions of dollars into the commodities futures markets, speculating that commodity prices will increase. Chart One shows Assets allocated to commodity index trading strategies have risen from $13 billion at the end of 2003 to $260 billion as of March 2008,[5] and the prices of the 25 commodities that compose these indices have risen by an average of 183% in those five years![6]

CHART ONE

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



Source: Goldman Sachs, Bloomberg, CFTC Commitments of Traders CIT Supplement,

According to the CFTC and spot market participants, commodities futures prices are the benchmark for the prices of actual physical commodities, so when Index Speculators drive futures prices higher, the effects are felt immediately in spot prices and the real economy.[7] So there is a direct link between commodities futures prices and the prices your constituents are paying for essential goods.

The next table looks at the commodity purchases that Index Speculators have made via the futures markets. These are huge numbers and they need to be put in perspective to be fully grasped.

In the popular press the explanation given most often for rising oil prices is the increased demand for oil from China. According to the DOE, annual Chinese demand for petroleum has increased over the last five years from 1.88 billion barrels to 2.8 billion barrels, an increase of 920 million barrels.[8] Over the same five-year period, Index Speculators' demand for petroleum futures has increased by 848 million barrels.[9] The increase in demand from Index Speculators is almost equal to the increase in demand from China!

Commodity Purchases By Index Speculators The Last 5 Years

Sector	*Commodity*	*Units*	*Previous Futures Market Stockpile January 1, 2003*	*Net Purchases Last 5¼ Years*	*Current Futures Market Stockpile March 12, 2008*
Agricultural	Cocoa	Metric Tons	18,828	303,352	322,180
	Coffee	Pounds	195,716,944	2,238,858,056	2,434,575,000
	Corn	Bushels	242,561,708	2,138,383,292	2,380,945,000
	Cotton	Pounds	544,934,999	5,548,915,001	6,093,850,000
	Soybean Oil	Pounds	163,135,678	4,312,624,322	4,475,760,000
	Soybeans	Bushels	81,028,272	890,616,728	971,645,000
	Sugar	Pounds	2,291,358,746	46,094,097,254	48,385,456,000
	Wheat	Bushels	166,738,225	967,351,775	1,134,090,000
	Wheat KC	Bushels	54,746,014	102,618,986	157,365,000
Livestock	Feed Cattle	Pounds	104,446,612	365,453,388	469,900,000
	Lean Hogs	Pounds	517,414,747	3,827,425,253	4,344,840,000
	Live Cattle	Pounds	669,766,732	5,099,033,268	5,768,800,000
Energy	Brent Crude Oil	Barrels	47,075,357	144,524,265	191,599,621
	WTI Crude Oil	Barrels	99,880,741	538,499,579	638,380,320
	Gasoil	Metric Tons	1,682,662	6,027,680	7,710,342
	Heating Oil	Gallons	1,067,859,608	2,568,925,661	3,636,785,269
	Gasoline	Gallons	1,102,184,401	2,488,458,616	3,590,643,018
	Natural Gas	Million BTUs	330,652,415	1,932,356,225	2,263,008,640
Base Metals	Aluminum	Metric Tons	344,246	3,232,406	3,576,652
	Lead	Metric Tons	82,019	158,726	240,745
	Nickel	Metric Tons	20,147	101,988	122,135
	Zinc	Metric Tons	133,381	1,182,091	1,315,472
	Copper	Metric Tons	220,096	1,144,538	1,364,634
Precious Metals	Gold	Troy Ounces	979,863	8,742,401	9,722,264
	Silver	Troy Ounces	11,126,862	152,866,187	163,993,049

Sources: Goldman Sachs, Standard & Poors, Dow Jones, CFTC Commitments of Traders CIT Supplement, calculations

In fact, Index Speculators have now stockpiled, via the futures market, the equivalent of 1.1 billion barrels of petroleum, effectively adding eight times as much oil to their own stockpile as the United States has added to the Strategic Petroleum Reserve over the last five years.[10]

Let's turn our attention to food prices, which have skyrocketed in the last six months. When asked to explain this dramatic increase, economists' replies typically focus on the diversion of a significant portion of the U.S. corn crop to ethanol production.[11] What they overlook is the fact that Institutional Investors have purchased over 2 billion bushels of corn futures in the last five years. Right now, Index Speculators have stockpiled enough corn futures to potentially fuel the entire United States ethanol industry at full capacity for a year.[12] That's equivalent to producing 5.3 billion gallons of ethanol, which would make America the world's largest ethanol producer.[13]

Turning to Wheat, in 2007 Americans consumed 2.22 bushels of Wheat per capita.[14] At 1.3 billion bushels, the current Wheat futures stockpile of Index Speculators is enough to supply every American citizen with all the bread, pasta and baked goods they can eat for the next two years!

Index Speculator Demand Characteristics

Demand for futures contracts can only come from two sources: Physical Commodity Consumers and Speculators. Speculators include the Traditional Speculators who have always existed in the market, as well as Index Speculators. Five years ago, Index Speculators were a tiny fraction of the commodities futures markets. Today, in many commodities futures markets, they are the single largest force.[15] The huge growth in their demand has gone virtually undetected by classically-trained economists *who almost never analyze demand in futures markets.*

Index Speculator demand is distinctly different from Traditional Speculator demand; it arises purely from portfolio allocation decisions. When an Institutional Investor decides to allocate 2% to commodities futures, for example, they come to the market with a set amount of money. They are not concerned with the price per unit; they will buy as many futures contracts as they need, at whatever price is necessary, until all of their money has been "put to work." Their insensitivity to price multiplies their impact on commodity markets.

Furthermore, commodities futures markets are much smaller than the capital markets, so multi-billion-dollar allocations to commodities markets will have a far greater impact on prices. In 2004, the total value of futures contracts outstanding for all 25 index commodities amounted to only about $180 billion.[16] Compare that with worldwide equity markets which totaled $44 trillion[17], or over 240 times bigger. That year, Index Speculators poured $25 billion into these markets, an amount equivalent to 14% of the total market.[18]

CHART TWO

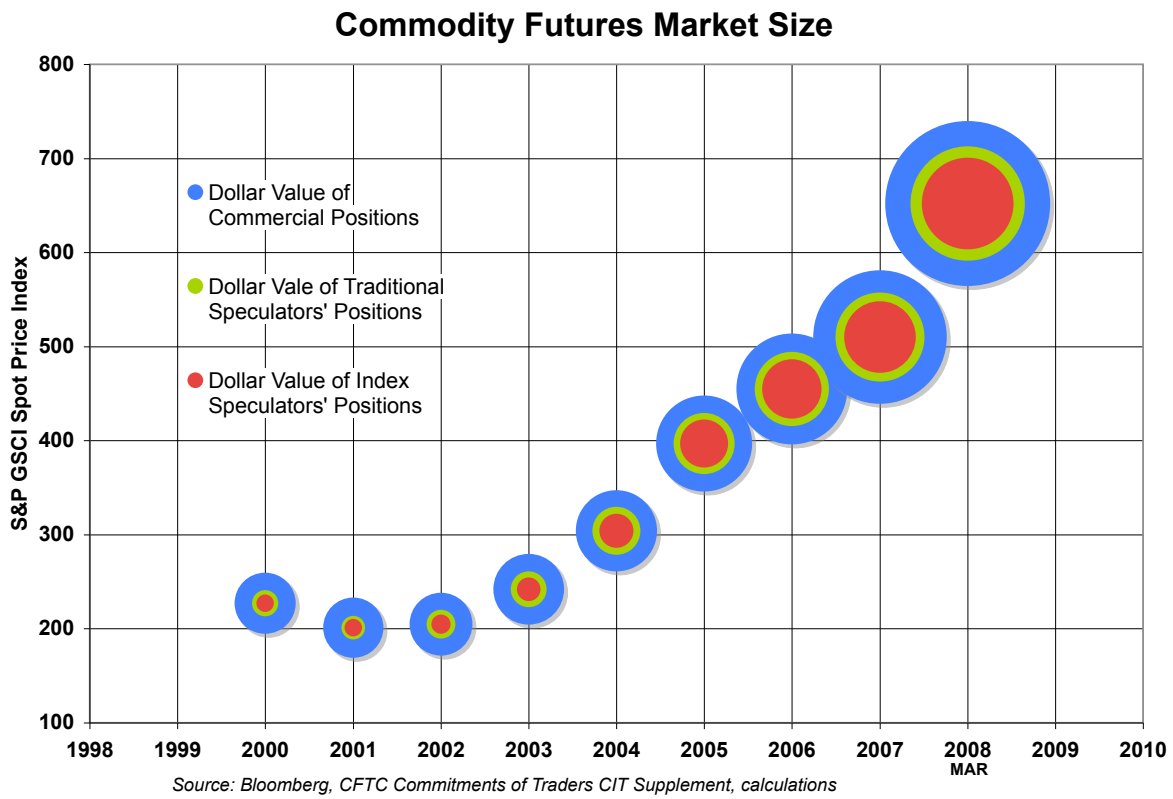


Chart Two shows this dynamic at work. As money pours into the markets, two things happen concurrently: the markets expand and prices rise.

One particularly troubling aspect of Index Speculator demand is that *it actually increases the more prices increase*. This explains the accelerating rate at which commodity futures prices (and actual commodity prices) are increasing. Rising prices attract more Index Speculators, whose tendency is to increase their allocation as prices rise. So their profit-motivated demand for futures is the inverse of what you would expect from price-sensitive consumer behavior.

You can see from Chart Two that prices have increased the most dramatically in the first quarter of 2008. We calculate that Index Speculators flooded the markets with $55 billion in just the first 52 trading days of this year.[19] That's an increase in the dollar value of outstanding futures contracts of more than $1 billion per trading day. Doesn't it seem likely that an increase in demand of this magnitude in the commodities futures markets could go a long way in explaining the extraordinary commodities price increases in the beginning of 2008?

There is a crucial distinction between Traditional Speculators and Index Speculators: Traditional Speculators provide liquidity by both buying and selling futures. Index Speculators buy futures and then roll their positions by buying calendar spreads. *They never sell.* Therefore, they consume liquidity and provide zero benefit to the futures markets.[20]

It is easy to see now that traditional policy measures will not work to correct the problem created by Index Speculators, whose allocation decisions are made with little regard for the supply and demand fundamentals in the physical commodity markets. If OPEC supplies the markets with more oil, it will have little affect on Index Speculator demand for oil futures. If Americans reduce their demand through conservation measures like carpooling and using public transportation, it will have little affect on Institutional Investor demand for commodities futures.

Index Speculators' trading strategies amount to virtual hoarding via the commodities futures markets. Institutional Investors are buying up essential items that exist in limited quantities for the sole purpose of reaping speculative profits.

Think about it this way: If Wall Street concocted a scheme whereby investors bought large amounts of pharmaceutical drugs and medical devices in order to profit from the resulting increase in prices, making these essential items unaffordable to sick and dying people, society would be justly outraged.

Why is there not outrage over the fact that Americans must pay drastically more to feed their families, fuel their cars, and heat their homes?

Index Speculators provide no benefit to the futures markets and they inflict a tremendous cost upon society. Individually, these participants are not acting with malicious intent; collectively, however, their impact reaches into the wallets of every American consumer.

Is it necessary for the U.S. economy to suffer through yet another financial crisis created by new investment techniques, the consequences of which have once again been unforeseen by their Wall Street proponents?

The CFTC Has Invited Increased Speculation

When Congress passed the Commodity Exchange Act in 1936, they did so with the understanding that speculators should not be allowed to dominate the commodities futures markets. Unfortunately, the CFTC has taken deliberate steps to allow certain speculators virtually unlimited access to the commodities futures markets.

The CFTC has granted Wall Street banks an exemption from speculative position limits when these banks hedge over-the-counter swaps transactions.[21] This has effectively opened a loophole for unlimited speculation. When Index Speculators enter into commodity index swaps, which 85-90% of them do, they face no speculative position limits.[22]

The really shocking thing about the Swaps Loophole is that Speculators of all stripes can use it to access the futures markets. So if a hedge fund wants a $500 million

position in Wheat, which is way beyond position limits, they can enter into swap with a Wall Street bank and then the bank buys $500 million worth of Wheat futures.[23]

In the CFTC's classification scheme all Speculators accessing the futures markets through the Swaps Loophole are categorized as "Commercial" rather than "Non-Commercial." The result is a gross distortion in data that effectively hides the full impact of Index Speculation.

Additionally, the CFTC has recently proposed that Index Speculators be exempt from all position limits, thereby throwing the door open for unlimited Index Speculator "investment."[24] The CFTC has even gone so far as to issue press releases on their website touting studies they commissioned showing that commodities futures make good additions to Institutional Investors' portfolios.[25]

Is this what Congress expected when it created the CFTC?

Congress Should Eliminate The Practice Of Index Speculation

I would like to conclude my testimony today by outlining three steps that can be taken to immediately reduce Index Speculation.

Number One:
Congress has closely regulated pension funds, recognizing that they serve a public purpose. Congress should modify ERISA regulations to prohibit commodity index replication strategies as unsuitable pension investments because of the damage that they do to the commodities futures markets and to Americans as a whole.

Number Two:
Congress should act immediately to close the Swaps Loophole. Speculative position limits must "look-through" the swaps transaction to the ultimate counterparty and hold that counterparty to the speculative position limits. This would curtail Index Speculation and it would force **ALL** Speculators to face position limits.

Number Three:
Congress should further compel the CFTC to reclassify all the positions in the Commercial category of the Commitments of Traders Reports to distinguish those positions that are controlled by "Bona Fide" Physical Hedgers from those controlled by Wall Street banks. The positions of Wall Street banks should be further broken down based on their OTC swaps counter-party into "Bona Fide" Physical Hedgers and Speculators.

There are hundreds of billions of investment dollars poised to enter the commodities futures markets at this very moment.[26] If immediate action is not taken, food and energy prices will rise higher still. This could have catastrophic economic effects on millions of already stressed U.S. consumers. It literally could mean starvation for millions of the world's poor.[27]

If Congress takes these steps, the structural integrity of the futures markets will be restored. Index Speculator demand will be virtually eliminated and it is likely that food and energy prices will come down sharply.

APPENDIX: HOW TO CALCULATE INDEX SPECULATORS' POSITIONS

If someone knows how much money is invested in the total index then it is easy to calculate how much must be in each commodity in dollars and in futures contracts.

Total Dollars Invested In Index	x	Weight Of Individual Commodity	=	Dollars In Individual Commodity		
Total Dollars Invested In Index	x	Weight Of Individual Commodity	/	Dollar Value Of A Commodity Contract	=	# Of Contracts In An Individual Commodity

And therefore if someone knows how many contracts are in an individual commodity along with the dollar value of a contract and the weight of that commodity in the index then you can calculate the total dollars invested in the index as follows:

# Of Contracts In An Individual Commodity	x	Dollar Value Of A Commodity Contract	/	Weight Of Individual Commodity	=	Total Dollars Invested In Index

The CFTC starting in January 2006 has been publishing the Commodity Index Trader Supplement to the Commitments Of Traders report. This supplemental report shows the reported positions of Index Speculators in 12 different agricultural commodities. Of the 12, two commodities:, KC Wheat and Feeder Cattle, are part of the S&P GSCI (and not the DJ-AIG) and one commodity: Soybean Oil, is part of the DJ-AIG (and not the S&P-GSCI). Note that 95% of dollars indexed to commodities are replicating either the S&P-GSCI or DJ-AIG.

Both the S&P-GSCI and DJ-AIG publish on a daily basis the individual weights of their constituent commodities. Also futures market data providers like Bloomberg publish daily closing prices for the commodities. Since the futures contract terms do not change that enables someone to calculate the daily dollar values of the individual commodity contracts.

So with these three data points it is simple to calculate the total dollars invested in the S&P-GSCI and the DJ-AIG on a weekly basis. And once the total dollars invested in these two indices is known then that results in the ability to calculate the number of contracts held by Index Speculators in the other 13 non-agricultural commodities.

A detailed example of this 3 step process follows.

Step One - Estimate Total Amount Invested In S&P-GSCI and DJ-AIG

According to the CFTC's January 17, 2006 CIT report, Index Specualtors had positiions in KC Wheat, Feeder Cattle and Soybean Oil of 21366 , 5613 and 59264 contracts

respectively. Plugging in the weights and contract values from the appropriate sources yields the following calculations:

21,366	**X**	$18,762.50	**/**	0.82%	**=**	$48,887,753,049
5,613	**X**	$56,137.50	**/**	0.68%	**=**	$46,338,204,044
59,264	**X**	$12,732.00	**/**	2.77%	**=**	$27,240,045,054

So the S&P-GSCI had somewhere between $46 and $49 billion invested in it and the DJ-AIG had around $27 billion invested in it. This corresponds well to the figures published by Goldman Sachs and Dow Jones.

CALCULATIONS OF INDEX SPECULATORS' POSITIONS *(JANUARY 17, 2006)*

	PERCENTAGE WEIGHTS		POSITIONS (in millions)		Contract Dollar Value	POSITIONS (in contracts)		Combined Position Estimate	CFTC Actual Positions
	S&P-GSCI	DI-AIG	S&P-GSCI	DI-AIG		S&P-GSCI	DI-AIG		
Cocoa	0.2%	0.0%	$95.5	$0.0	$15,710	6,081	0	6,081	9,390
Coffee	0.8%	2.9%	$373.2	$799.0	$46,425	8,039	17,201	25,240	28,777
Corn	2.0%	5.9%	$954.0	$1,600.0	$10,438	91,398	153,292	244,689	305,264
Cotton	0.9%	3.2%	$444.9	$862.0	$27,995	15,891	30,777	46,668	53,741
Soybean Oil	0.0%	2.8%	$0.0	$753.0	$12,732	0	59,173	59,173	59,264
Soybeans	1.4%	7.8%	$672.5	$2,116.0	$28,563	23,543	74,073	97,617	103,304
Sugar	1.9%	3.0%	$884.9	$808.0	$17,438	50,742	46,352	97,094	124,487
Wheat	2.1%	4.8%	$1,009.1	$1,300.0	$16,438	61,393	79,082	140,475	181,986
Wheat KC	0.8%	0.0%	$396.0	$0.0	$18,763	21,106	0	21,106	21,366
Feed Cattle	0.7%	0.0%	$329.5	$0.0	$56,138	5,869	0	5,869	5,613
Lean Hogs	1.4%	4.4%	$663.8	$1,185.0	$23,790	27,902	49,824	77,726	69,591
Live Cattle	2.7%	6.1%	$1,293.2	$1,660.0	$38,620	33,486	42,982	76,468	71,834
Brent Crude Oil	14.5%	0.0%	$6,901.3	$0.0	$64,900	106,337	0	106,337	
WTI Crude Oil	31.3%	12.8%	$14,888.0	$3,482.0	$66,310	224,521	52,516	277,036	
Gasoil	3.1%	0.0%	$1,472.7	$0.0	$54,725	26,911	0	26,911	
Heating Oil	8.0%	3.8%	$3,823.7	$1,048.0	$75,243	50,818	13,924	64,742	
Gasoline	7.9%	4.1%	$3,780.5	$1,105.0	$76,579	49,368	14,424	63,792	
Natural Gas	10.6%	12.3%	$5,030.8	$3,355.0	$91,680	54,873	36,591	91,464	
Aluminum	3.1%	6.9%	$1,464.4	$1,866.0	$59,475	24,621	31,383	56,004	
Lead	0.3%	0.0%	$156.4	$0.0	$31,800	4,918	0	4,918	
Nickel	0.7%	2.7%	$312.8	$724.0	$88,182	3,547	8,214	11,762	
Zinc	0.7%	2.7%	$355.6	$736.0	$51,900	6,852	14,184	21,036	
Copper (LME)	2.8%	0.0%	$1,335.1	$0.0	$116,575	11,453	0	11,453	
Copper (CMX)	0.0%	5.9%	$0.0	$1,602.0	$54,225	0	29,542	29,542	
Gold	1.8%	6.2%	$875.9	$1,694.0	$55,430	15,802	30,568	46,370	
Silver	0.2%	2.0%	$99.2	$545.0	$45,100	2,201	12,080	14,280	
TOTAL	100%	100%	$47,613	$27,240					

Source: Standard & Poor's, Dow Jones, Bloomberg Data

Step Two - Calculate Position Size For Other Commodities

If $47.6 billion is used as an estimate for the S&P-GSCI and then $27.2 billion is used for the DJ-AIG it is possible to calculate (using the formulas above) Index Speculators positions in all the other commodities. The table above shows the results.

Step Three - Compare With Actual CFTC Figures For Accuracy

The final column in the table shows the actual figures released by the CFTC. As you can see in almost all cases the estimates generated using this method yield results that are less than the actual reported results. That increases one's confidence that this method is in fact conservative.

Final Note

This method of calculating Index Speculators is almost identical to the methods used by Philip Verleger (www.pkverlegerllc.com), Steve Briese (www.commitmentsoftraders.org) and others. It is not clear who deserves the credit for developing it but it clearly is not us.

ENDNOTES

[1] "Reserve Management, The Commodity Bubble, The Metals Manipulation, The Contagion Risk To Gold And The Threat Of The Great Hedge Fund Unwind To Spread Product." Frank Veneroso, July 19, 2007, pp. 5-6. http://www.venerosoassociates.net/Reserve%20Management%20Parts%20I%20andII%20WBP%20Public%2071907.pdf

[2] http://hsgac.senate.gov/public/index.cfm?fuseaction=Hearings.Detail&HearingID=dc7368c2-0ea1-4151-9fc5-06317a5bba79

[3]

Commodities Futures Markets Open Interest

2008	LONG / DEMAND SIDE		
	Physical Hedger	Traditional Speculator	Index Speculator
COCOA	33%	48%	19%
COFFEE	26%	35%	39%
CORN	41%	24%	35%
COTTON	32%	27%	41%
SOYBEAN OIL	46%	22%	32%
SOYBEANS	30%	28%	42%
SUGAR	38%	19%	43%
WHEAT	17%	20%	64%
WHEAT KC	37%	32%	31%
FEED CATTLE	17%	53%	30%
LEAN HOGS	18%	20%	63%
LIVE CATTLE	13%	24%	63%
WTI CRUDE OIL	59%	10%	31%
HEATING OIL	37%	16%	47%
GASOLINE	41%	20%	39%
NATURAL GAS	62%	10%	28%
GOLD	22%	55%	23%
SILVER	27%	46%	28%
AVERAGE	**33%**	**27%**	**39%**

Source: CFTC Commitments of Traders CIT supplement plus calculations

[4] For more information visit:
http://www.djindexes.com/mdsidx/?event=showAigHome for the DJ-AIG or for the S&P-GSCI
http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_gsci/2,3,4,0,0,0,0,0,0,1,1,0,0,0,0,0.html

Index Component Weights

as of March 12, 2008		S&P-GSCI	DI-AIG	Weighted Average
Agricultural	**Cocoa**	0.2%	0.0%	0.1%
	Coffee	0.6%	2.9%	1.5%
	Corn	3.3%	5.7%	4.2%
	Cotton	0.9%	2.5%	1.5%
	Soybean Oil	0.0%	2.9%	1.1%
	Soybeans	2.2%	7.2%	4.1%
	Sugar	1.0%	3.1%	1.8%
	Wheat	5.3%	5.6%	5.4%
	Wheat KC	1.2%	0.0%	0.8%
Livestock	**Feed Cattle**	0.3%	0.0%	0.2%
	Lean Hogs	0.8%	2.2%	1.4%
	Live Cattle	1.7%	3.9%	2.6%
Energy	**Brent Crude Oil**	13.4%	0.0%	8.3%
	WTI Crude Oil	38.3%	12.9%	28.6%
	Gasoil	5.0%	0.0%	3.1%
	Heating Oil	4.9%	3.8%	4.5%
	Gasoline	4.2%	3.6%	4.0%
	Natural Gas	6.8%	13.1%	9.2%
Base Metals	**Aluminum**	2.5%	7.7%	4.5%
	Lead	0.5%	0.0%	0.3%
	Nickel	0.9%	2.7%	1.6%
	Zinc	0.6%	2.7%	1.4%
	Copper	3.1%	7.3%	4.7%
Precious Metals	**Gold**	1.9%	7.1%	3.9%
	Silver	0.3%	3.0%	1.3%

Source: Standard & Poor's, Dow Jones

[5] "Investing and Trading in the GSCI," Goldman, Sachs & Co., June 1, 2005 and calculations based upon the CFTC Commitments of Traders Report, CIT Supplement, see the Appendix for more information on how to calculate Index Speculators' positions.

6

Commodity Futures Price Inreases

March 2003 - March 2008

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

Source: Bloomberg Financial Data

[7] The CFTC states on its website that “In many physical commodities (especially agricultural commodities), cash market participants base spot and forward prices on the futures prices that are ‘discovered’ in the competitive, open auction market of a futures exchange.” - “The Economic Purpose of Futures Markets and How They Work,” U.S. Commodities Futures Trading Commission, http://www.cftc.gov/educationcenter/economicpurpose.html

As an additional example, when Platts, an energy markets pricing service, surveys crude oil pricing in physical markets around the globe they are receiving bid and offer quotations from market participants expressed as WTI Light Sweet Crude minus a spread. - “Platts Oil Pricing and Market-on-Close Methodology Explained,” Platts - a McGraw Hill Company, July 2007. http://www.platts.com/Resources/whitepapers/moc.pdf?a=i Note that if and when Platts receive price quotes as Brent Crude or Dubai Crude plus or minus a spread there is still a direct and stable relationship between WTI, Brent and Dubai.

[8] Please remember if demand for oil stays the same then prices will stay the same. If supply is constant then demand has to increase for prices to increase. That is why we examine increases in demand.

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

[9] This table takes the numbers from the main table in the body of the statement and converts them to their barrel equivalents. The Petroleum consumption numbers that the DOE provides for Chinese consumption include all forms of petroleum both crude and refined.

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

[10] Energy Information Association - U.S. Department Of Energy. http://tonto.eia.doe.gov/dnav/pet/pet_stoc_wstk_dcu_nus_a.htm

[11] "The End Of Cheap Food," The Economist, December 6, 2007 http://www.economist.com/research/articlesBySubject/displaystory.cfm?subjectid=7216688&story_id=10252015

[12] "Ethanol Reshapes the Corn Market," Economic Research Service - U.S. Department Of Agriculture, Allen Baker and Steven Zahniser April 2006. http://www.ers.usda.gov/AmberWaves/April06/Features/Ethanol.htm

[13] "Ethanol Production Could Be Eco-Disaster, Brazil's Critics Say," Kelly Hearn, National Geographic News, February 8, 2007, http://news.nationalgeographic.com/news/2007/02/070208-ethanol.html

[14] Economic Research Service, U.S. Department of Agriculture, http://www.ers.usda.gov/Briefing/Wheat/consumption.htm

[15] see endnote #2

[16] Because the base metals are traded on the London Metals Exchange, Bloomberg did not have open interest data prior to 2005. Since prices and open interest expressed in contracts have been rising steadily the last five years we took 2005's base metal data and added it to 2004 actual numbers to come up with a conservative estimate for 2004 open interest. These are daily numbers averaged across the entire year.

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**

Source: CFTC Commitment of Traders and Bloomberg. Delta-equivalent options positions are included but spread positions are omitted. For Base Metals, Brent Crude and Gasoil open interest represents futures only. No data for Base Metals in 2002-2004.

[17] CIA World Factbook. https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html#Econ

[18] There is no publicly available data that shows inflow data for commodity indexation trading strategies but some approximations can be made. The end of year "investment" figures are published by the respective index companies (or they can be calculated) and the annual performance is known. Therefore the amount that the prior year's investment has grown or shrunk can be calculated. Then the difference in the yearly change has to come from net inflows. When during the year the inflows occurred is not known, so the assumption is made that all net inflows occurred evenly throughout the year. Changing assumptions on net inflow timing only affects the rate of growth for that year's inflow which never amounts to more than a few billion dollars difference.

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

[19] ibid.

[20] This table is a good reference in comparing the differences between market participants.

Types Of Futures Market Participants

HEDGER	INDEX SPECULATOR	TRADITIONAL SPECULATOR
Sheds Price Risk	**Takes On Price Risk**	**Takes On Price Risk**
Hedges Underlying Position	**Profits From Price Moves**	**Profits From Price Moves**
Consumes Liquidity	**Consumes Liquidity**	**Provides Liquidity**
Price Sensitive	**Insensitive To Price**	**Price Sensitive**
Take Long And Short Positions	**Long Only**	**Take Long And Short Positions**

[21] "And that actually happened in 1991 with a particular swap dealer that was hedging an OTC transaction with a pension fund, and the swap dealer came to us, and we said, "yeah, that qualifies for a hedge exemption," so we granted a hedge exemption to the swap dealer. And in the years since then, we've done the same for other swap dealers, as well."
(Remarks of Don Heitman, Division of Market Oversight, CFTC Agricultural Advisory Committee Meeting, Washington, D.C., December 6, 2007)
(www.cftc.gov/stellent/groups/public/@aboutcftc/documents/file/aac_12062007.pdf)

[22] "Commodities: Who's Behind the Boom?," Gene Epstein, Barron's, March 31, 2008

[23] "Similar hedge exemptions were subsequently granted in other cases where the futures positions clearly offset risks related to swaps or similar OTC positions involving both individual commodities and commodity indexes. These nontraditional hedges were all subject to specific limitations to protect the marketplace from potential ill effects. The limitations included: (1) The futures positions must offset specific price risk; (2) the dollar value of the futures positions would be no greater than the dollar value of the underlying risk; and (3) the futures positions would not be carried into the spot month."
(72 FR 66097, Notice of Proposed Rulemaking, Risk Management Exemption From Federal Speculative Position Limits, , November 27, 2007.)
(http://www.cftc.gov/stellent/groups/public/@lrfederalregister/documents/file/e7-22992a.pdf)
(The language in 72 FR 66097 above also appears in 71 FR 35627, CFTC Request for Comments, Comprehensive Review of the Commitments of Traders Reporting Program, June 21, 2006.)
(http://www.cftc.gov/foia/fedreg06/foi060621a.htm)

[24] (72 FR 66097, Notice of Proposed Rulemaking, Risk Management Exemption From Federal Speculative Position Limits, , November 27, 2007.)
(http://www.cftc.gov/stellent/groups/public/@lrfederalregister/documents/file/e7-22992a.pdf)

[25] "CFTC Study Finds Independent-Moving Commodity and Equity Markets," December 19, 2007, http://www.cftc.gov/newsroom/generalpressreleases/2007/pr5425-07.html
http://www.cftc.gov/stellent/groups/public/@aboutcftc/documents/file/amarketofone.pdf

[26] Pension fund consultants have been advocating portfolio allocations of between 5% and 12% to commodities indices. Considering that worldwide institutional assets are about $29 trillion, if Institutional Investors heed the advice of their consultants, index replication could easily reach $1 trillion. $1 trillion on $29 trillion would represent an average allocation of just 3.5%.
"Investing In Collateralised Commodities Futures," Russell's Research For Excellence, Yvonne Ooi and David Rae, 2005
Strategic Asset Allocation and Commodities, Ibbotson Associates, Thomas M. Idzorek, March 27, 2006
Pension Funds $26 trillion : "UK pension fund returns at five-year low," IFAonline, Jennifer Bollen, January 28, 2008. http://www.ifaonline.co.uk/public/showPage.html?page=698204
Sovereign Wealth Funds $3 trillion : "Sovereign Wealth Funds," Council On Foreign Relations, Lee Hudson Teslik, January 18, 2008. http://www.cfr.org/publication/15251/

27 "WFP says high food prices a silent tsunami, affecting every continent," World Food Program - United Nations, April 22, 2008. http://www.wfp.org/english/?ModuleID=137&Key=2820