MEMORANDUM

TO: File
FROM: Aaron Foxman
RE: Meeting with Goldman Sachs
DATE: September 28, 2010

On September 28, 2010, Jeffrey Mooney, Aaron Foxman, Scott Bauguess, Emre Carr, Adam Yonce, James Thibodeau, Marta Chaffee, Robert Riepe, Andrew Bernstein, Jill Henderson, Juanita Hamlett, John Guidroz, Katelynn Bradley, Jimmy Michaels, Catherine McGuire, Andrew Blake, Peter Curley, Lisa Watson, Haimera Workie, Thomas Eady, Heather Seidel, Brian Bussey, Darren Vieira, Susan Ervin, and Burt Porter of the Securities and Exchange Commission met with Michael Thompson (Vice President, Goldman Sachs), Amar Kuchinad (Managing Director, Goldman Sachs), Colin Corgan (Managing Director, Goldman Sachs), Paul Russo (Managing Director, Goldman Sachs), Michael Dawley (Managing Director, Goldman Sachs), Oliver Frankel (Managing Director, Goldman Sachs), Steven Bunkin (Managing Director, Goldman Sachs), Bradford Levy (Managing Director, Goldman Sachs), Paul Christensen (Managing Director, Goldman Sachs), and Annette Nazareth (Partner, Davis Polk) (collectively, "Goldman Sachs").[1]

Goldman Sachs discussed a series issues including: mandatory clearing; swap execution facilities; trade reporting; and position limits.

---

[1] Leah Mesfin, James Eastman, Andrew Glickman, Michou Nguyen, Martin Murphy, and Kenneth Riitho of the Securities and Exchange Commission participated in the meeting via telephone.

Agenda for Goldman Sachs & Co. (GS) Meeting with the SEC Regarding Proposed Regulation Of Title VII of the Dodd-Frank Act of 2010 (DFA) On September 28, 2010, Washington, DC

Attendees for Goldman Sachs: Brad Levy, Steve Bunkin, Paul Christensen, Paul Russo, Colin Corgan, Amar Kuchinad, Michael Thompson, Annette Nazareth (Davis Polk)

1) Clearing:
- Overview of Central Clearing in OTC Markets
- Clearing house risk standards
- Documentation
- Governance and ownership

2) SEFs:
- Key objectives and guiding principles
- Definition
- Characteristics
- Product eligibility requirements
- Block exemptions
- Other considerations

3) Trade Reporting:
- Considerations in rulemaking
- Global regulatory consistency
- Market precedent
- Non-cleared product(s)

4) Position Limits:
- Aggregate limit calculations
- Other limits
- Hedging/risk management considerations and relationship to limits
- Aggregation
    - Standards for aggregating positions against limits

Discussions with the SEC

The Goldman Sachs Group, Inc.
28th September 2010

Table of Contents

I. Clearing

Clearing
Agenda

- Overview of Central Clearing in OTC Markets
- Clearing House Risk Standards
- Documentation
- Governance and Ownership

Goldman Sachs

Clearing

Overview of Central Clearing in OTC Markets

- Key Benefits of OTC Clearing:
  - Reduction of systemic risk
  - Multilateral netting
  - Increased transparency
  - Uniform collateral management
  - Consistent risk management for all clearing participants
  - Centralized management of member default and related consequences

- Key Considerations:
  - Risk management and valuation model implications of more complex products
  - Impact on appropriate margin requirements of:
    - Broad range of liquidity for different OTC products
    - Likelihood of lower liquidity during periods of financial or market stress
    - Decentralized and infrequent trading resulting in less reliable price observations
  - Connectivity between members, CCPs, clients and middleware providers

- Management of clearing house position in a member default is complicated by diversity of products (across Futures, Rates and Credit Derivatives) and requires risk-taking participation of clearing members

Clearing

Clearing House Risk Standards

- Product level considerations
  - Liquidity of different products
  - Correlation with events of default
  - Concentration of large position with individual clearing members and/or their clients
  - Directional bias of clearing member books
  - Complexity of overall portfolio
  - Inter-market correlation assumptions

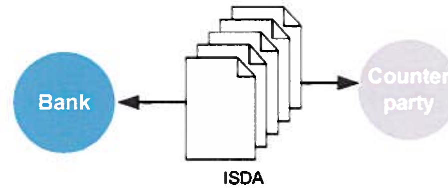
- Margin and Guarantee Fund Requirements
  - Margin requirements should meet a minimum standard and adjust to changing market conditions
  - Guarantee fund requirements should meet IOSCO standards
  - Funded vs. unfunded waterfall obligations

- Membership criteria and prerequisites
  - Adequate resources and operational capabilities
  - Willingness and ability to make markets in diverse set of products, including providing daily pricing
  - Sufficient capital, trading expertise and formal commitment to participate in large scale liquidation

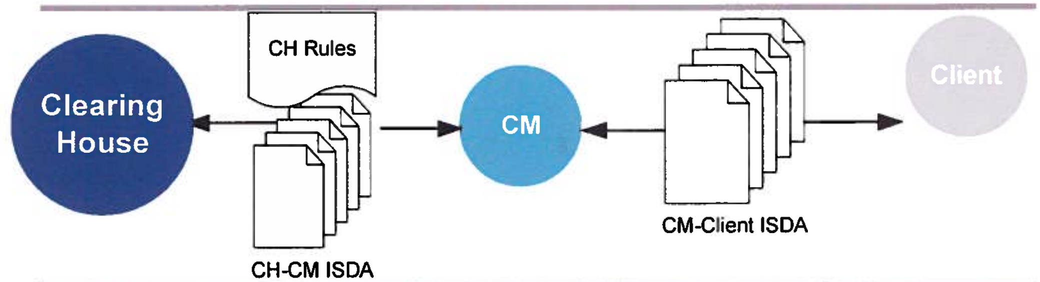
Clearing

Documentation Issues

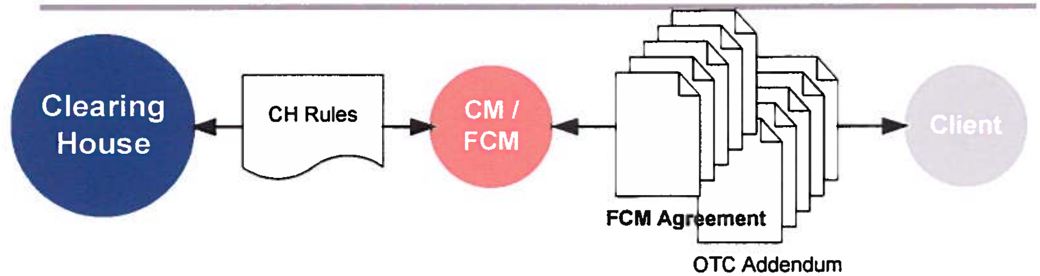
- Client Clearing Documentation
  - Bi-lateral OTC derivatives transactions



  - "ISDA-based" client clearing model [Planned, never implemented, pre-Dodd-Frank]



  - "FCM model" Post Dodd-Frank, collateral held for US clients who carry cleared derivatives contracts will be required to be held by an FCM



- Execution Documentation
  - ISDA documentation or a compensation agreement may be required

- Give-Up Documentation
  - Allocation of risk and responsibilities among the parties, with focus on status of trades that fail to clear

Goldman Sachs

Clearing

Governance and Ownership

- Governance
  - Clearing members have material participation in governance
    - Default management
    - Risk models
    - Rule making
  - Non-clearing member representation in product offering, portability, etc.
  - Independent directors

- CCP Structure and Business Model
  - Utility-like model focusing on systemic risk reduction over market returns
  - Open architecture

II. SEFs

Goldman Sachs

SEFs
Agenda

- Key Objectives and Guiding Principles
- Definition
- Characteristics
- Product Eligibility Requirements
- Block Exemptions
- Other Considerations
- Case Study: U.S. Treasuries Cash Market

Goldman Sachs

SEFs

Key Objective and Guiding Principles

- In drafting Dodd-Frank, Congress recognized the importance of promoting transparency and maintaining liquid markets

- Under Dodd-Frank, the CFTC and SEC were provided broad discretion to determine:
  - Which transactions must be executed on a SEF
  - Minimum requirements for the manner of execution

- These determinations should take into account:
  - The relevant market
  - Its liquidity characteristics
  - The needs of market participants

Goldman Sachs

SEFs
Definition

- SEF definition as set forth in Dodd-Frank
  - *"trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or system"*

- Requires that multiple participants, acting independently, have the ability to execute swaps by accepting bids/offers made by multiple participants
  - The Core Principles applicable to SEFs track most of the Core Principles applicable to exchanges (designated contract markets or DCMs) but importantly do not include DCM Core Principle 9
  - The omission of Core Principle 9 supports conclusion that SEFs need not provide the same type of open market required of DCMs

- Based on the foregoing, Dodd-Frank contemplates the following construct:
  - A regulated trading system or platform that provides pre-trade transparency by allowing a participant to simultaneously receive multiple executable prices for a particular transaction and with access to automated post-trade flows, such as confirmation and access to clearing houses

SEFs
Characteristics

- A SEF can define the execution method

- SEFs do not have to offer all products or segments

- SEF can set its own objective access rules, including:
  - Different roles for different participants (e.g. price maker vs. price taker)

Goldman Sachs

SEFs

Product Eligibility Requirements

- Ability to clear a swap is not a sufficient condition for mandating SEF execution
  - Swaps must be available to be traded
  - Necessary for the regulators to determine that sufficient liquidity in the swap exists

- The liquid "benchmarks" in each asset class should be subject to mandatory SEF execution
  - "Benchmark" determined according to agreed measures of liquidity, e.g.: for IRS the 2, 5, 10, 30 year outright swaps; for CDS on-the-run 5 year points (for both indices and constituent single names)
  - Where index licenses are needed, providers should grant them to SEFs broadly and on commercial terms
  - Intra-group trades, where the entities have the same beneficial owner, should be excluded

- Would result in a major shift in how products are traded today
  - Significant percentage of IRS and CDS trades will be moved to electronic SEFs

Goldman Sachs

SEFs
Block Exemptions

- Large trades that meet a certain size threshold should be permitted to be traded “off SEF”
  - Trades subject to different post trade reporting requirements
- Block trading thresholds must be set at levels that accommodate:
  - Overall size of market, level of liquidity and average ticket size
  - Number of participants
  - Velocity of trading activity
  - Needs of market participants in the relevant asset class
- Block thresholds should be re-evaluated as commonly observed market liquidity changes

SEFs

Other Considerations

- SEFs should be required to offer routing to multiple clearing houses
- Clearing houses should be open to accepting matched or executed trades from multiple SEFs
- Competition among SEFs (and DCMs that offer swap execution services) should be a goal
- Encourage standardization and centralization of the processes supporting the products
- Retain ability to customize instruments tailored to hedging/taking risk

Goldman Sachs

SEFs

Case Study: U.S. Treasuries Cash Market

- Treasury market overview
  - Participants have several trading options when looking to execute / hedge risk associated with U.S. treasuries
  - They can decide on the proper venue depending on multiple factors including specificity of risk, size, timing, participants, operational efficiency and anonymity
- Multi-dealer RFQs
  - Venues: Bloomberg and Tradeweb
  - Buy-side clients can query one or more market makers simultaneously for executable prices
  - Clients would potentially use this method of execution if they had a larger trade size than could be executed with a single party on either Brokertec or eSpeed
- Central limit order book trading
  - Venues: Brokertec and eSpeed
  - Transparent and liquid markets where counterparties can view, post or aggress anonymously against live executable prices. Access is open to both traditional buy-side and sell-side participants
  - Trading on these venues is typically higher velocity and smaller size - akin to typical equity exchanges
- Single Dealer Platforms or Voice
  - Venues: phone or proprietary dealer platforms
  - Clients can view where the market is trading via the venues above, however, if they want to do large size, they will enter into a bi-lateral negotiation with a market maker in order to get the best quote

III. Trade Reporting

Trade Reporting
Agenda

- Considerations in rulemaking
- Global regulatory consistency
- Market precedent
- Non-cleared product(s)

Goldman Sachs

Trade Reporting
Considerations in Rulemaking

- Currently in the OTC markets, clients can choose whether to hedge exposures in a single risk transfer (paying a one-time transaction cost in order to transfer all market risk to a single liquidity provider) or in multiple tickets over time (paying many, potentially lower, transaction costs, but bearing the risk of adverse market moves during an ongoing execution process)

- In certain reporting regimes, the reporting event may impact the market in ways for which the liquidity provider will adjust

- In the worst case, the cost of providing liquidity will increase to the point that a single risk transfer transaction becomes uneconomic for the client, thereby removing an important form of hedging option

- A post trade reporting regime should try to achieve transparency while maintaining client choice

- Alternative reporting arrangement for block transactions (based on market liquidity and the size of the trade) will protect liquidity and achieve transparency

Goldman Sachs

Trade Reporting
Global Regulatory Consistency

- CESR recommendation to EC on post trade transparency
  - Based on discussion with policymakers & regulators across 27 EU Member States and a 1-month stakeholder consultation
  - "CESR is of the view that the calibration of thresholds and time delays for the proposed regime should ideally be based on liquidity of the asset in question"[1]
  - Proposed construct:

Transaction Size (Net)	Info Published	Timing of Publication
Below Level 1	Price and volume of transaction	As close to real time as possible
Level 1	Price and volume of transaction	EOD
Level 2	Price and indication that trade is above Level 2 threshold (no volume)	EOD

[1] Committee of European Securities Regulators. *CESR Technical Advice to the European Commission in the Context of MiFID Review: Non-equity Markets Transparency.* 29 July 2010. 3.

Goldman Sachs

Trade Reporting

- Market precedent
  - TRACE Reporting
    - NASD introduced TRACE in July 2002 in an effort to increase price transparency in the US corporate debt market
    - The system captures & disseminates consolidated information on secondary market transactions in publicly traded TRACE-eligible securities
    - As of TRACE system open, NASD began disseminating price and other transaction information on certain debt securities transactions immediately upon receipt
      - Initially, transaction information was disseminated on 500 corporate debt securities, including 50 representative high yield bonds, with additional groups of bonds being added over time
      - This incremental phase-in approach allowed NASD to study the impact of increased price disclosure upon market liquidity

- Non-Cleared Products
  - Real time reporting of non-standard transactions poses additional issues
  - Completeness including secure transmissions to the eligible recipients

IV. Position Limits

Position Limits
Agenda

- Dealers' role in commodities markets
- Existing position limit framework
- Dodd/Frank position limit mandate
- Approach under Dodd/Frank

Goldman Sachs

Position Limits

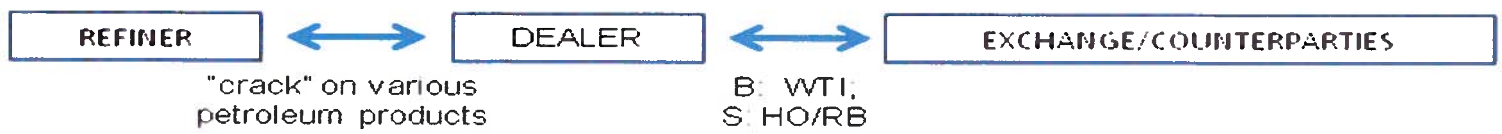
Managing Risk in the Commodity Markets

- General motivations:
  - Commodity clients seek to obtain or transfer exposure in relation to different commodities
  - Clients look to dealers to provide customized products and liquidity for various products
    - E.g., Jet fuel in the US Gulf Coast , Diesel in NY Harbor, Iso-butane in Montbelvieu, TX
  - Dealers generally hedge using liquid, standardized contracts (often listed futures on particular commodities)
  - The difference between client- specific underliers and standardized contracts is referred to as basis risk
  - Ultimately, dealers seek to mitigate risk internally by managing diverse client base
- Basis risk includes:
  - Commodity type
  - Tenor and pricing methodology
  - Settlement terms (e.g., single day vs. average of many days settlement)
  - Customized volumes by day, week or month
  - Pricing location
  - Underlying Currency
- Other risks borne by dealers include:
  - Credit
  - Funding
  - Contract terms

Goldman Sachs

Position Limits
Examples of Transactions

- Example 1: Refiner seeks to expand production and takes loan to fund capex. Lenders, seeking to secure borrower's ability to repay, require refiner to hedge feedstock costs and product sales



- Example 2: Airline seeks to hedge exposure to jet fuel prices, for which it pays average of month price

- Dealer's book is a composite of variety positions that are distilled into very focused risks

Goldman Sachs

Position Limits

Example of an End-User Transaction

- Step 1: An airline seeks to hedge its Jet Fuel consumption for 2011. The airline requests a price on an average price swap for 2011 on US Gulf Coast Jet Fuel in the OTC market and receives bids/offers in response

- Step 2: The airline analyzes the prices and decides to buy a swap on US Gulf Coast Jet Fuel from a swap dealer

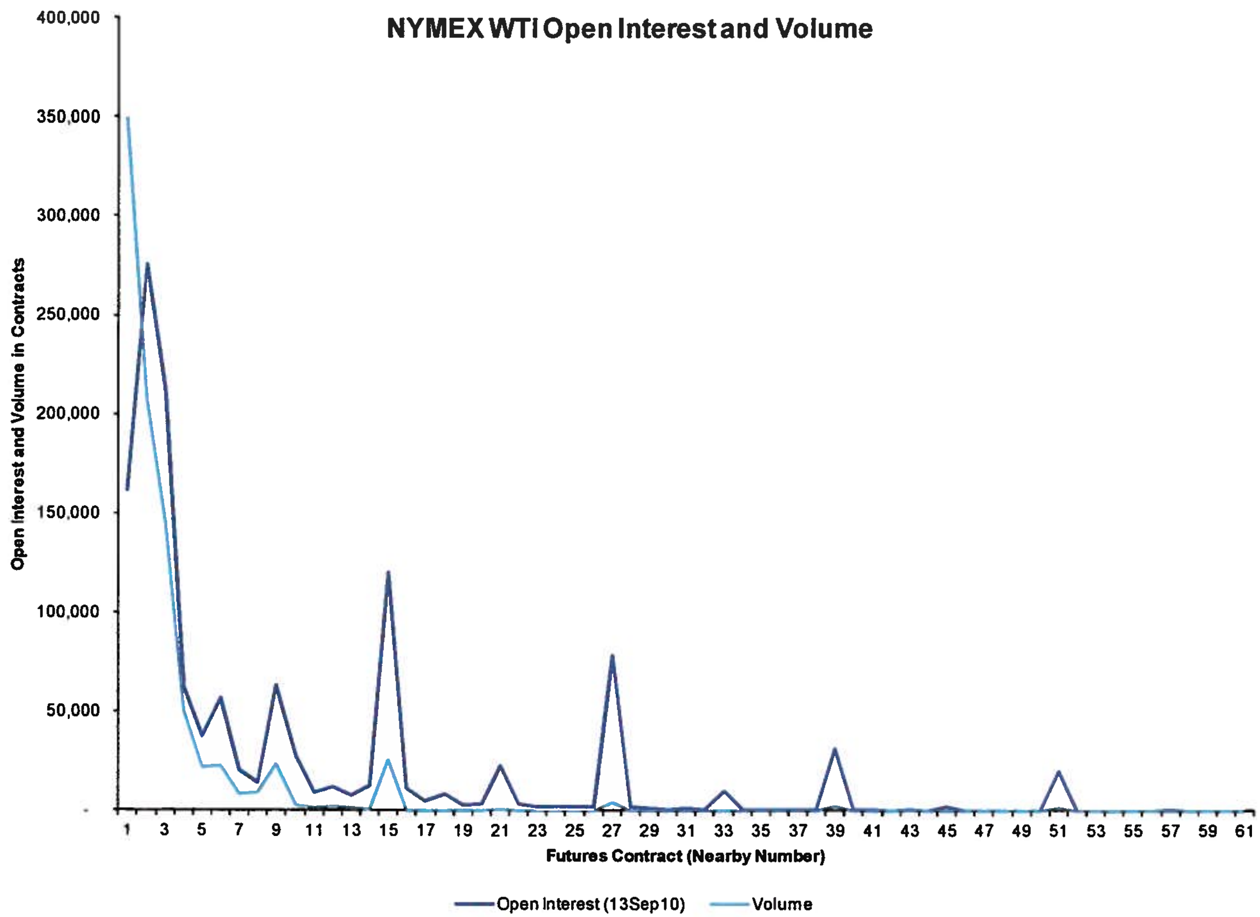
- Step 3: The swap dealer is short USGC Jet Fuel and needs to hedge
  - Swap dealer buys NOV10 WTI futures (current front month and most actively traded)
  - Swap dealer buys NOV10 HO crack to move length from WTI to HO as a closer proxy to Jet Fuel
  - Swap dealer buys NOV10-DEC10 HO spreads
  - Swap dealer buys DEC10-JUN11 HO spreads on part of position
  - Swap dealer buys DEC10-DEC11 HO spreads on part of position

- Step 4: Swap dealer is left short USGC Jet Fuel pricing over the average of 2011 vs long DEC10 HO, MAY11 HO and DEC11HO

Position Limits

Managing Risks of Longer Tenor Trades

- As shown in the chart below the futures market has liquidity only at specific points mostly concentrated in the front month



Position Limits
Dealer Operations Pre-Dodd/Frank

- Dealer trades swaps with clients, using futures and other products as hedge, relying on hedge exemptions
- Dealer purposefully retains capacity under hedge exemptions to allow for contingencies (e.g., early termination by client)
- Dealer prices efficiently by internalizing risk mitigation through client base (offsetting producers with consumers, also with investors and speculators)

Goldman Sachs

Position Limits

Dodd/Frank Mandate

- CEA Section 4a as amended
  - Ability to set limits to prevent/eliminate excessive speculation when burden to commerce
  - Establishment of Position Limits
    - DCM futures on exempt and agricultural commodities
  - Requirements of limits: Each, all and spot months; aggregate, with goal of:
    - Diminishing/preventing excessive speculation
    - Deterring manipulation, squeezes, corners
    - Ensuring sufficient liquidity for hedgers
    - Ensuring price discovery function
  - Definition of Significant Price Discovery Function
  - Commission to treat economically equivalent contracts on equivalent basis, notwithstanding other provisions of section
  - Aggregate limits
  - Exemptive authority for traders; contract types
- 4a(c)(2)(B): Swap dealer exemptions only for swaps with commercials

Goldman Sachs

Position Limits

Rules Under Dodd/Frank

- Aggregate limits
  - Excessive speculation mandate
  - Netting of contracts having comparable underlying risk in order to ensure liquidity and price discovery
- Exchange/Contract-Specific
  - Focus should be on spot month where squeezes, corners are risk
- Swap Dealer Hedge Exemptions:
  - Reduced reliance on swap hedge exemption in light of reduced scope and manner in which dealers manage operations
- Risks in Rulemaking
  - More expensive execution for customers
  - Volatility
  - Aberrations; movement of open interest
- Other considerations
  - "Crowding out"
  - Account controller aggregation

Goldman Sachs

Position Limits

Economically Similar Swaps and Futures

- The same exposures frequently may be expressed in different, but economically equivalent forms
  - Example 1: WTI Average Price Swaps vs. string of listed futures
    - Average price swaps settle against the average settlement price of WTI over the business days in specified period. (ie. Calendar 2011)
    - A string of listed futures over the same time period will have the same economic exposure
  - Example 2: Multiple commodity contract vs the underlying futures
    - Multiple commodity contracts financial settle against the settlement price of the underlying futures
    - Multiple commodity contracts represent the same economic exposure as a corresponding position in the underlying futures

Goldman Sachs

Position Limits
Glossary of Terms

- "Crack": Swap based on difference between price of crude oil and refined products
- WTI: listed futures contract on West Texas Intermediate light sweet crude oil
- HO: listed futures contract on heating oil
- RB: listed futures contract on Reformulated Blendstock for Oxygenate Blending gasoline