

Compliance and Legal continue to be responsible for creating and maintaining the related corporate level policies and procedures and working with lines of business to develop the tailored and more detailed policies and procedures, surveillance, monitoring and review activities, and training. Legal and/or Compliance may also act in an advisory capacity, although all legal work is now under the supervision of Legal. Compliance testing programs have been in place in certain businesses for some time (e.g., the former ITS LOB within what is now called Worldwide Security Services within T&SS). More recently, control and self assessments (“CSAs”) related to compliance and formalized compliance testing procedures were mandated for all lines of business. Corporate Compliance worked closely with Internal Audit in creating a mapping of regulatory requirements to businesses and associated test plans.

#### Written Agreement Compliance – Legal and Reputational Risk Framework

The Legal and Reputational Risk Management Framework (“LRRM Framework”) was originally created in late 2002 and has developed over time as a result of the Enron matter and the July 28, 2003 Written Agreement. The cornerstone to the LRRM Framework is the executive oversight process for reviewing and opining on heightened risk transactions (“HRTs”) through the Policy Review Office (“PRO”) and the newly re-named Regional Reputational Risk Committees, formally entitled the Policy Review Committees. The LRRM Framework also includes updated policies and procedures to guide IB businesses and control functions in better identifying and escalating transactions with clients that may pose heightened risk from a reputation perspective. Formal training, another key component of the LRRM Framework, has been developed and rolled out in early 2005.

Examiners have assessed the LRRM Framework as satisfactory, although additional examination testing is required to fully assess effectiveness across the globe, as well as to determine the adequacy of the control environment in other LOBs as it relates to heightened risk transactions. The LRRM Framework reinforces the firm’s procedures for reviewing transactions in terms of appropriateness, ethical issues and reputational risk more broadly and enhances the firm’s scrutiny of a client’s purpose and motivation, which are the key drivers to determining potential heightened reputational risk, as well as the effect of transactions on the client. The overall goal is that these transactions are not used by the client to mislead or deceive others, including auditors and investors.

The structure operates at three levels: (i) as part of the business transaction approval process, (ii) through regional committees in the Americas, EMEA and Asia, and (iii) through the PRO, which ultimately reports up through the Legal Department to Mr. McDavid. The status of the implementation of the program and actions taken to address the Written Agreement have been reported to the board and senior management, however, MIS initially was somewhat limited. However, more recently, MIS is more has improved and is more formalized and uniform across regions.

RAP Matrix

Legal and Compliance Risk Management	Board and Senior Management Oversight	Policies, Procedures and Limits	Risk Monitoring and MIS	Internal Controls	Overall Risk Management and Controls Assessment
<b>Banking Businesses</b> (Wholesale and Retail: IB, CB, RFS and CS LOBs)	Satisfactory	Strong	Satisfactory	Satisfactory	Satisfactory
<b>Fiduciary Businesses</b> (Trust, Custody and Processing: AWM and T&SS LOBs)	Satisfactory	Strong	Satisfactory	Satisfactory	Satisfactory
<b>Other Businesses</b> (Securities, Insurance and Merchant Banking: IB LOB and Insurance and PE)	Satisfactory	Strong	Satisfactory	Satisfactory	Satisfactory
<b>Overall Risk Management and Controls Assessment</b>	Satisfactory	Strong	Satisfactory	Satisfactory	Satisfactory

***RISK MANAGEMENT AND CONTROLS***

a. Board and Senior Management Oversight (factors considered: composition, culture and effectiveness)

At the board level, in addition to the audit-related matters, the Directors' Audit Committee is responsible for reviewing with management the firm's program for compliance with laws and regulations, significant legal cases outstanding and other legal or regulatory matters that may have a material impact. This committee also is responsible for receiving periodic presentations from management and the external auditor on the identification and resolution status of material weaknesses and reportable conditions in the internal control environment and any fraud, whether or not material, that involves management or other employees who have a significant role in the firm's internal controls.

Other related areas of responsibility include reviewing Code of Conduct compliance, regulatory authorities' significant examination reports and communications and presentations regarding suspicious activity reports that are filed. Finally, this committee is also charged with discussing with management the firm's exposure to risks, including reputational risk, and the major financial risk exposures and steps management has taken to monitor and control such exposures; credit, market and fiduciary risks are officially covered by the Directors' Risk Policy Committee. An official assessment is conducted against all of the Audit Committee's responsibilities to ensure compliance with the committee charter. The Audit Chair, and the Committee more broadly, are actively engaged in the legal and compliance matters noted above and receive very detailed and robust MIS at each meeting.

b. Policies, Procedures and Limits (factors considered: policies and procedures and training)

The policy portal, housed on the firm's intranet, contains a plethora of individual policies and procedures related to the legal and compliance risk management program. The portal contains corporate-wide policies and procedures, as well as those related to specific laws, rules and regulations, lines of business

as well as regions and legal entities. The documents are updated regularly and the portal allows for the identification of date, contact persons and policy/procedure ownership. This is in addition to line of business and support functions' operational policies and procedures that govern various activities, including the internal controls at the business level.

Compliance training is also centrally coordinated, developed and managed through a unit within Corporate Compliance and includes multiple forms of training techniques (e.g., in person sessions, on-line training courses, etc.). A recent example of the partnership between the Compliance Training Unit and the business is the on-line reputational risk/heightedened risk transaction training, which was rolled out in early 2005.

c. Risk Monitoring and MIS (factors considered: control self assessments and key risk indicators, board and senior management level reporting and monitoring practices)

(As risk monitoring, including control risk assessments related to compliance and formal compliance testing as well as related MIS, are currently under significant evolution internally, this section will be developed upon completion of the Corporate Compliance Horizontal Examination, due to conclude at year-end 2005.)

See Section ii. a above for information related to board level reporting.

d. Internal Controls (factors considered: reporting lines, internal and external audit, systems and automation and review and testing practices)

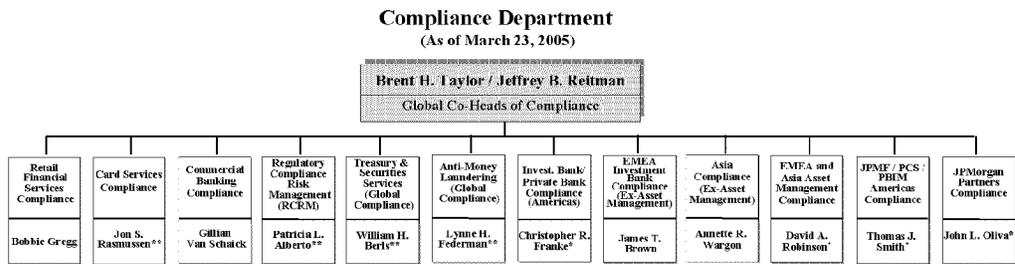
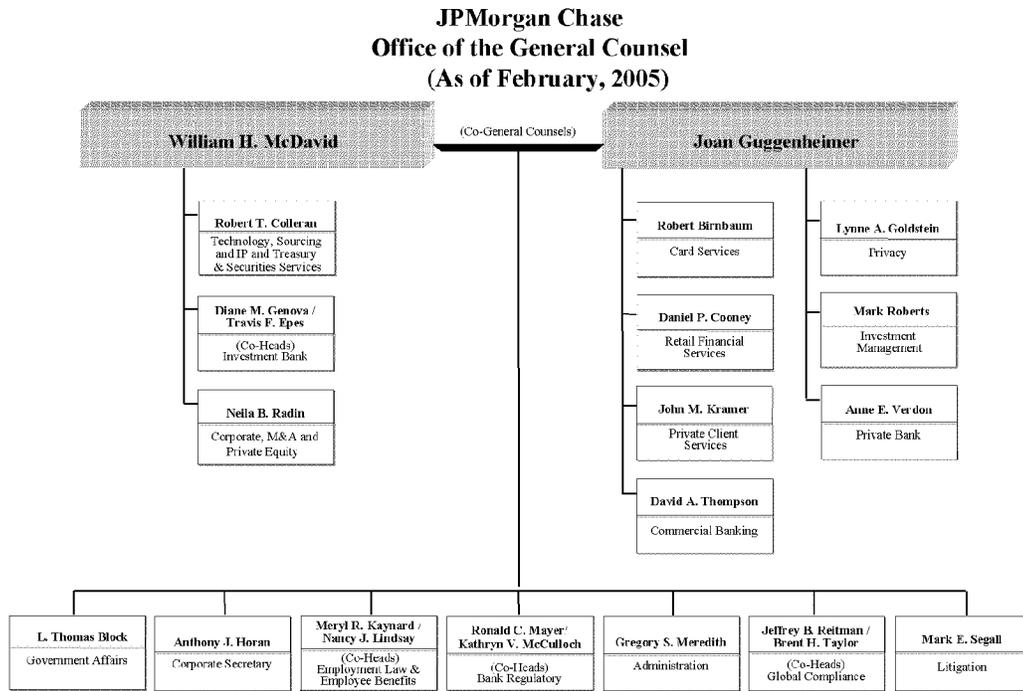
Corporate Compliance is responsible for developing and maintaining corporate-level compliance policies and procedures, maintaining the conflicts database, monitoring employee registrations and personal trading, conducting compliance surveillance, developing and implementing monitoring and review programs and providing guidance on BSA/AML, personal privacy and OFAC compliance related matters, as well as conducting internal compliance training. Also, Corporate Compliance is represented on individual business control and risk management committees.

The corporate Anti-Money Laundering Oversight Committee (AMLOC), chaired by Lynne Federman, the Global Director of AML Compliance, was formed in 2002 to provide a formal means of communication and coordination, and to institute a global framework for BSA/AML risk analysis across all business units to comply with applicable laws and regulations. AMLOC, which meets formally approximately every two weeks, is comprised of compliance officers covering the various business lines and has sub-committees (e.g., KYC, Training and Monitoring), that are responsible for more detailed work in certain critical areas. In addition to the regular meetings, AMLOC convenes two-day long in-person off-site meetings at least three times per year, where AMLOC members from around the globe present results of their work and determine future projects and initiatives to be undertaken. The BSA/AML Compliance Group produces a detailed quarterly newsletter for firm-wide distribution and the Global AML Director also reports periodically to the Directors' Audit Committee as well as the Operating Committee and its Working Group on BSA/AML related matters.

Generally, Legal continues to work closely with Compliance, and is responsible for providing transaction, legal, regulatory and advisory services to individual business lines and other corporate functions, both directly and through outside counsel. Individual attorneys are assigned either to business lines reporting directly to the LOB General Counsel, or a particular control processes and/or corporate functions, and provide traditional transaction, legal, regulatory and advisory services, manage litigation claims and cases made against the firm and are involved in various legal and regulatory matters as well as internal reviews and investigations. In addition, Legal is responsible for creating and maintaining certain legal, regulatory and compliance related policies and procedures. Also housed within the Legal Department is the Office

of the Corporate Secretary, managed by Anthony Horan, Corporate Secretary, which is responsible for dealing with a variety of regulatory, code of conduct and board of director matters. Also, the Global Head of Litigation formally reports, on a semiannual basis, detailed information on the status of litigation claims, reserves (by LOB) and developments in certain key cases to the Directors' Audit Committee.

The former reporting lines for Legal and Compliance were as follows (the internal organizational charts have not yet been updated to reflect the recent changes):



\* Primary Report to Brent Taylor  
 \*\* Primary Report to Jeff Reitman

7/20/05 11:38 AM

*LINES OF BUSINESS* (currently under development)

- a. Banking (Wholesale and Retail: IB, CB RFS and CS LOBs)
- b. Fiduciary (Trust, Custody and Processing: AWM and T&SS LOBs)
- c. Other Businesses (Securities, Insurance and Merchant Banking: IB LOB and Insurance and PE)



**Fw: fed facilities doc for AIG work**  
Dani Lima to: Michael Patrick

06/11/2010 02:25 PM

Dani Lima  
Tel: 212-720-2566  
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----- Forwarded by Dani Lima/NY/FRS on 06/11/2010 02:25 PM -----

From: Christopher Calabia/NY/FRS  
To: Elise Liebers/NY/FRS@FRS  
Cc: Lance Auer/NY/FRS@FRS, Danielle Vicento/NY/FRS@FRS  
Date: 08/22/2008 04:26 PM  
Subject: Fw: fed facilities doc for AIG work

Restricted FR

Hi, Elise,

I hear Buffalo is pretty nice this time of year!

Lance has asked us to help him with a project thinking about alternative criteria for primary dealers that might capture a firm like AIG. Dani is looking at the balance sheet to understand especially the funding structure of the firm (to help determine whether access to the Fed's facility might be useful to such a firm).

In addition, Lance asked us to look at how others view liquidity risk management in insurance companies, so we're looking at analyst reports right now. Do you have any thoughts on how insurance supervisors look at liquidity risk management in a major insurance company? If so, what points should we consider? Are there resources that might give more insight?

warm regards,

Chris

----- Forwarded by Christopher Calabia/NY/FRS on 08/22/2008 04:19 PM -----

Lance Auer/NY/FRS  
08/22/2008 10:36 AM

To Danielle Vicento/NY/FRS@FRS  
cc christopher.calabia@ny.frb.org  
Subject fed facilities doc for AIG work



Project outline -- Fed facilities access v2.doc

**AIG Liquidity and Access to the PDCF**  
Danielle Vicente September 2, 2008

AIG's current liquidity position is precarious and asset liability management appears inadequate given the firm's substantial off balance sheet liquidity needs. Although the insurance company has a large securities portfolio, which totals \$835 billion, liquidating sufficient assets to fund their liabilities would result in substantial realized losses and potentially impact market prices. Borrowing through the Primary Dealer Credit Facility could potentially allow AIG to unwind its positions in an orderly manner while satisfying its immediate liquidity demands, although it is questionable whether such a facility is necessary for the survival of the firm.

**Volatile funding**

AIG is vulnerable to "runs" on a portion of its liabilities. This funding is generally susceptible to run-off risk; risk that these liabilities would not be rolled over. Although they total nearly \$100 billion, these liabilities represent less than 10% of assets. As of second quarter 2008, volatile funding consists of:

- repurchase transactions- \$9.7 billion
- securities lending- \$75 billion
- commercial paper and extendable notes- \$15 billion

**Off-balance sheet commitments**

The primary concern for the insurance company's liquidity position is not volatile funding but rather its off-balance sheet commitments. Unlike liabilities on-balance sheet, the effect of these commitments on the firm's liquidity can be difficult to forecast. In the near term, possible commitments that could strain liquidity are:

- Collateral calls in the event of a downgrade – minimum of \$10.5 billion
- Contract terminations in the event of a downgrade- minimum of \$4.6 billion
- Put options exercised but not yet funded- \$1.5 billion
- Other commitments (such as private equity, ect.)- \$17 billion

These commitments that could require funding at any moment, and if events trigger margin calls and contract terminations, it is less likely that the volatile funding will be rolled over.

**Other noteworthy aspects of their liquidity**

Additionally, the following short term liabilities come due within the next year:

- Guaranteed investment contracts- \$9.4 billion
- Current portion of long term debt- \$28 billion

AIG has available \$4 billion in revolving credit facilities. However, it is unclear whether \$3 billion has already been designated to support put options.

## **What are the main concerns of AIG's current liquidity position?**

### Liability runs: not just a banking problem

AIG is an active securities lender; the firm takes a large portion of its securities and lends them to institutions and investors who pledge collateral against these securities. AIG then takes the collateral and invests it in assets with longer durations in order to earn a spread. This is possible because the liabilities due to the investors are normally rolled over. Currently, AIG's assets associated with securities lending are experiencing losses, and are valued at \$59.5, less than the \$75.1 billion in liabilities.

Potential liquidity need: Securities lending contracts range in maturity from one day to six months. Given the current operating environment, roll over risk is substantial, and could mirror a run on deposits. Therefore, AIG's potential overnight liquidity needs for securities lending varies, but is limited to \$75 billion.

### Collateral calls: in the long run, we're all dead

AIG sold \$80 billion of multi-sector CDO protection (notional). The ultimate economic losses on the book are difficult to determine at this time. Both independent analysts and AIG's management have continually increased their estimates, however, management doubts the current estimated losses will materialize. Nevertheless, as unrealized losses grow, margin calls will require the firm to post additional collateral. This CDS book has recorded losses of \$26.1 billion to date and AIG has posted \$16.5 billion of collateral.

If the firm is downgraded by one notch by a single rating agency, collateral postings of \$10.5 billion would be required for Guaranteed Investment Agreements and other financial derivatives. The collateral call would increase to \$13.3 billion both S&P and Moody's downgrade AIG.<sup>1</sup>

Potential liquidity need: Margin calls on this CDS book can create an immediate funding need that requires AIG to sell assets under duress.

### Contract terminations: downgrades hinder liquidity

If the firm is downgraded by one notch by a single rating agency, \$4.6 billion of the CDS written on multi-sector CDOs would be terminated. Terminations would increase to \$ 5.4 billion if both agencies downgrade AIG.

The settlement of these CDSs contracts would imply a full cash outflow. Goldman's equity report points out that protection written on CDOs are often settled physically; meaning that AIG would actually purchase these debt securities at par. So a contract with

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<sup>1</sup>These estimates were calculated before Fitch announced its review of AIG's ratings. If all three agencies downgrade the firm, the collateral calls and contract terminations will increase.

a \$100 loss may imply a cash outflow of \$1000 to purchase the security, now valued at \$900 on the market.

Additionally, AIG is has \$8.2 billion of CDS contracts that require the firm to maintain a certain level of over-collateralization. Should the firm not comply with these provisions, the contracts would also be terminated.

Potential liquidity need: Contract settlements on this CDS book imply a large cash outflow when combined with the margin calls.

#### Commitments that could come back to bite them

AIG sold \$11.3 billion of put options that may require the firm to buy CDOs backed by CMBS and hold them from three to six years. The firm has committed liquidity lines of \$3 billion to support some of these options, but of the \$1.6 billion that have experienced default triggers, only \$100 million has been funded and the remaining \$1.5 billion . The unrealized loss in the second quarter in this portfolio is \$800 million.

Potential liquidity need: In addition to the \$1.5 billion in unfunded options that have been exercised, cash will be needed to support the remaining unexercized options.

#### **What are the perspectives of the ratings agencies?**

All three major rating agencies have placed AIG on watch for downgrades. S&P is not focused on liquidity concerns as of yet, but rather earnings volatility. They seem to delay any action until the third quarter, in hopes that management will find some way to deal with the potential losses and poor operating performance of the subsidiaries. Moody's expects that management will "actively address potential liquidity and capital needs." Fitch was the last of the agencies to put the firm under review.

In general, rating methodologies for insurance firms have not incorporated analysis of liquidity in the way we analyze bank liquidity. Insurance company liquidity considerations have been focused on cash flow ratios, total investments, committed bank lines, leverage and interest coverage.

Market sentiment believes the rating agencies will require more capital of AIG to maintain its current ratings, especially as the firm is expected to make additional contributions to some subsidiaries. At year end 2006, S&P believed financial leverage would remain around 20% or less. Today, financial leverage stands at 32.4%. The firm's capital structure was 81% equity in 2007 and is now less than 70% equity due to hybrid instruments.

### **How do analysts see AIG?**

Market sentiment is against buying credit or equity related to AIG. Review reports by Goldman, Lehman, Citigroup, and, analysts seem concerned with the extent of losses in the CDS and investment portfolios, rating agency actions on the firm, and the subsequent impacts on capital. Additionally, they worry about downgrades on AAA MBS assets that are currently benefiting from subordination, and the consequences it will have on AIG subsidiaries.

Goldman was especially concerned over liquidity. Their analyst believes AIG management and rating agencies are denial about the extent of economic losses that is expected and hint that management is not prepared to deal with the magnitude of challenges facing the firm.

## Possible Liquidity Metrics for AIG and other Insurance Firms

### Balance Sheet:

- *Composition of balance sheet:*
  - Asset Composition
    - Repo Assets as % of Total Assets
    - Illiquid Assets as % of Total Assets
    - Securities Lending Assets as % of Total Assets
    -
  - Liability Composition
    - Short Term Liabilities as % of Total Assets
    - Repo Liabilities as % of Total Assets
    - Securities Lending Liabilities as % of Total Assets
  
- *Structure of investment assets*
  - Short-term investments
    - Treasuries
    - Agencies
    - Corporates
  - Fixed Income
    - Treasuries
    - Agencies
    - Corporates
  - Equity
    - Treasuries
    - Agencies
    - Corporates
  - Mortgage and other receivables
  - Security lending assets
  
- *Off-balance sheet measures:*
  - Contingent liability structure
    - CDS terminations
    - Collateral Calls
    - Put options
    - Other commitments

**Project Outline: Criteria for access to Fed liquidity facilities**

Draft 8/21/08

Goal: develop criteria and associated list of metrics to help define which large financial institutions (1) are systemically important to the US financial markets, and (2) would benefit from being given access to Fed liquidity facilities during a crisis, and thus increase the stability of financial system.

Please note:

1. access to Fed facilities would likely come with additional Fed oversight, the form of which is TBD.
2. Criteria to determine financial firms with systemically important payment and settlements systems are being evaluated in a separate workstream and so will not be part of this project.
3. It is possible that there are other financial institutions that could be subject to additional Fed oversight, but do not fit this criteria.

Immediate deliverable: Set of metrics (see below) comparable across institutions.

Deadline: September 9

Final deliverable: writeup of metrics and comparison to primary dealer criteria. Comparison of universe of "systemically important" firms to primary dealer list.

Deadline: September 19

Criteria and possible metrics:

*Please note: this is a list of possible metrics we can consider. An important first step will be to determine which metrics we can measure (fairly) consistently across different types of financial firms, and which seem to be most meaningful.*

- Susceptibility of liabilities to runs and contagion; liquidity mismatch -- funding long maturity assets with short-term liabilities (even if market risk is hedged); similarities of liability structure to other institutions, ie could a liability run be contagious to other financial firms.
  - Maturity structure of assets: duration, maturity buckets, rolling estimate of cash available.
  - Maturity structure of liabilities: duration, maturity buckets, rolling estimate of funding needs, 1 week, 1 month, 3 months, etc. in the future.
  - Contingent liability structure (if any)
- Size: "large enough" to be important at parent company level. Focus on US/dollar financial markets
  - Assets
  - Revenues -- measured how?
- Criticality to (wholesale) credit formation, financial market functioning; interconnectedness
  - market shares of securitization (RMBS, ABS, CMBS), underwriting corporate debt and equity, loan syndication, CP
  - market share of fixed income liquid products trading (Treasuries and agencies, agency MBS)
  - market share of repo/secured lending activity, prime brokerage

## Restricted FR

- market share of derivatives activity
- substitutability -- the ease with which another competitor could step in and provide services in the place of a stressed market participant. (See Research's concentration study for metrics)
- Liquidity provision  
*What we'd like to know is which firms are considered the "backup lenders or liquidity providers" when markets face shocks. We think we know that banks do this for corporate borrowing, they definitely do it for CP and other backup lines of credit, and we think the GSEs do this for secondary mortgage markets --- and on a small scale we know trading desks do this for bonds, derivatives, and even structure products. But such "contingent liquidity" arrangements are not very well measured, and often not even formal contracts*
  - Asset growth during first phase of this crisis as a rough measure?

### Tentative list of firms to gather data for metrics:

Nonbank: GS, MS, ML Leh  
Fannie, Freddie, FHLB System  
AIG, GE Capital, Citadel

Domestic LFI: Citi, JPMC, BofA, Wachovia, Wells

Foreign LFI: DB, UBS, CB, HSBC, Barclays

Other possibles: WaMu, other very large hedge funds, any other large finance companies?

### Personnel:

Lead: Trish Mosser

Lance Auer will be overseeing the project from Aug 25-Sept 5 while Trish is on vacation

Rick Weaver --- LFI data and analysis: coordination with Liquidity Risk and foreign LCBOs

Kevin Messina --- IB data and analysis

Stavros Peristiani --- market share metrics, information on underwriting, etc. , GSEs

Elise Liebers -- AIG data and analysis (any other insurance companies?)

James Clark --- Hedge fund data and analysis, particularly Citadel

Tanya Rakpraja --- Fannie and Freddie data and analysis

Morton Bech -- FHLBs

GE Capital?