Presentation to: Tokyo Town Hall

CSE Overview

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LEHMAN BROTHERS

Agenda

- High Level Overview of CSE and Basel II
- CSE Impact on Lehman Brothers
- CSE Methodology
- Capital Calculation Details
- Pillar 2
- Pillar 3

High Level Overview of CSE vs Basel II

The Short History of CSE

- 1999 - Bank of International Settlements (BIS) begins work on what is to become Basel II – a risk based regulatory capital regime – to replace Basel I.

- In February 2003 the EU Financial Conglomerates Directive (FCD) was published which required that financial groups with a European presence be prudentially supervised by a consolidated regulator. Where a European regulator does not act as the consolidated supervisor for a financial group, the FCD required an overseas equivalent consolidated regulator or will require ring fencing of the European operations.

- The existing SEC supervisory regime with oversight only at the broker-dealer level was deemed not to be equivalent.

The Short History of CSE (Continued)

- In response, in November 2003, the SEC issued draft "Consolidated Supervised Entities" (CSE) regulations which gave large broker-dealers (i.e., capital in excess of $1bb) the ability to elect VaR-based capital in their regulated broker-dealer in exchange for subjecting their holding company and unregulated affiliates to examination by the SEC (i.e. SEC consolidated supervision).

- While the rules were technically optional, in effect they were mandatory, as it was unlikely barring prohibitive capital charges or other clearly unfair treatment under the new CSE rules that Lehman Brothers or other US Broker/Dealers would not make the CSE election.

- November 30, 2005 Lehman Brothers Holdings Inc approved as CSE.

- The following US Broker/Dealers have been approved by the SEC to operate at CSEs:
  - Lehman Brothers
  - Goldman Sachs
  - Bear Stearns
  - Morgan Stanley
  - Merrill Lynch

Effect of CSE on US Broker/Dealers

- Summary of Capital Requirements:

  – Holding Company – Capital Adequacy Standard (Basel II) – Requires the Assessment of Market, Credit & Operational Risks. Expected Ratio of Total Allowable Capital to Risk Requirements = 10% or better.

  – Broker Dealer – Market and Credit Risks replace traditional 15c3-1 Capital Requirements (Haircuts). Minimum Capital Required raised substantially to limit the broker dealer's ability to withdraw capital initially.

Effect of CSE on US Broker/Dealers (Continued)

- Anti-Money Laundering Requirements across entire firm.
- SEC has full inspection ability over the whole consolidated group except for functionally regulated broker-dealer affiliates.
- CSEs must have an internal control and risk management system (which is similar to the B-D Lite regime) based on principles such as clear delineation and separation of responsibilities and effective monitoring and reporting procedures.
- Risk models will be subject to rigorous backtesting requirements. Exceptions to models can increase multiplication factor or may lead SEC to withdraw approval of model.
- Substantial ongoing reporting obligations imposed on CSE ("consolidating" financial info monthly)

Components of CSE Supervisory Overview

- Initial on-site examination by SEC in order to obtain approval to operate as CSE (completed).

- SEC reviews monthly, quarterly and annual filings containing financial, risk management and operations data. On a monthly basis, Holding company must file capital calculations made on a consolidated, group-wide basis consistent with the Basel Standards (ongoing).

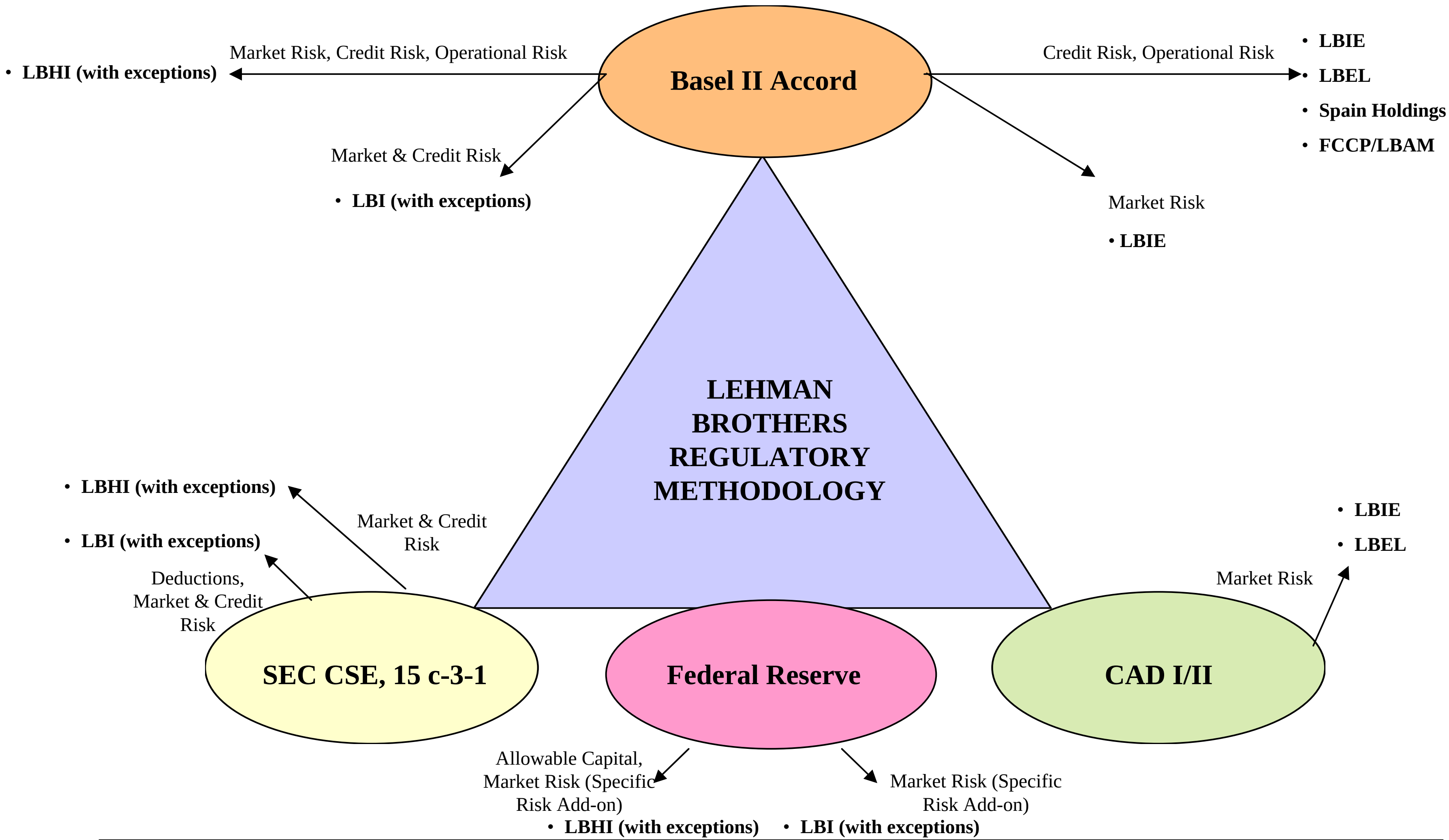
- SEC meets monthly with senior risk managers and financial controllers at the Holding company level to review the packages of risk analytics (risk measurement infrastructure, statistical models, risk governance issues, management of outsized risk exposures) prepared for senior mgmt. On a quarterly basis, SEC meets with financial controllers to review financial results, management and liquidity of the Balance Sheet, and with Internal Audit to discuss audit program implementations and findings/reports (ongoing).

- SEC conducts examinations of the books & records of the Holding company, registered broker/dealers, and material affiliates that are not subject to supervision by a principal regulator. Examinations focus on the capital calculation and on the adequacy of implementation of the firm's documented internal risk management controls (one done).

CSE Impact on Lehman Brothers

High Level Overview of Lehman Bros Regulatory Environment

(to be updated with further info on other legal entities)



CSE/Basel II Timelines

Basel II Timeline for Banks

	2007	2008	2009	2010	2011	2012
US Big Banks	Basel I	Basel I	Basel II (floored at 95% of B1)	Basel II (floored at 90% of B1)	Basel II (floored at 85% of B1)	Basel II (AIRB)
European Banks	Basel I	Basel II (floored at 90% of B1)	Basel II (floored at 80% of B1)	Basel II	Basel II	Basel II

CSE/Basel II Timeline for significant Lehman entities impacted by Basel II

LBHI	CSE (~Basel II AIRB with variations)		
LBI	CSE (derivatives) + 15c3-1 (non deriv)		
LBIE & London regulated entities	Parallel run of B2 (F-IRB approach)	Basel II (F-IRB); Mkt Risk – Cross Border impact	B1 Floor calc to 2009 (may be extended beyond 2009)
Bankhaus	Parallel run of B2 (Std approach)	Basel II (Std approach)	May move to Advanced Internal Ratings Based (AIRB) model in the future but no specific timing
LBJ/KK	Awaiting guidance from regulators	TBD	
LBCB, LBB	Draft reg guidance indicates flexibility in choosing between different approaches in B2	TBD	

Specific CSE Impact on Product Controllers

- Providing complete/accurate Banking book population and required fields to Risk Management for credit risk calculations
- Providing daily clean P&L for Risk Management backtesting
- Assigning and maintaining Trading book/Banking book flags in Pathfinder accounts
- Additional Reconciliation Requirements:
  - Reconciliation/explanation of differences between Trading book positions vs Market risk population
  - Reconciliation/explanation of differences between Banking book positions vs Credit risk population
  - Substantiation of Trading/Banking book positions vs General ledger
- Meeting with SEC on quarterly basis to review financial results
- Preparing detailed analysis of new business/acquisition transactions
- All legal entities (regulated or unregulated) consolidated into the Holding company are subject to queries/audits by SEC or other other international regulators

Specific CSE Impact on Risk Management

- Calculating Market Risk, Operational Risk and Credit Risk regulatory charges
- Performing daily backtesting of VaR against Clean P&L
- Performing stress testing of Risk models used for risk calculations
- Developing Risk models and calculations to conform to Basel II requirements
- Additional Reconciliation Requirements:
  - Reconciliation/explanation of differences between Trading book positions vs Market risk population
  - Reconciliation/explanation of differences between Banking book positions vs Credit risk population
- Meeting with SEC on monthly basis to review Risk statistics
- Preparing risk impact analysis of new business/acquisition transactions
- All legal entities (regulated or unregulated) consolidated into the Holding company are subject to queries/audits by SEC or other other international regulators

Specific CSE Impact on Legal Entity Controllers

- Additional Reporting & Governance Requirements:
  - Consolidating Balance Sheet
  - Consolidating Income Statement
  - Legal entity organizational chart (and material changes thereof)
- Additional Data/Calculation Requirements:
  - Details of cash balances (counterparty details, maturity, amounts)
  - Details of fails balances (aging, amounts)
  - Details of "other" receivables balances (counterparty details, maturity, amounts)
- Additional Reconciliation Requirements:
  - Reconciliation/explanation of differences between risk populations vs general ledger
- Provision of variance explanations &/or drill downs into specific legal entity or general ledger balances
- Meeting with SEC on quarterly basis to review financial results
- All legal entities (regulated or unregulated) consolidated into the Holding company are subject to queries/audits by SEC or other other international regulators

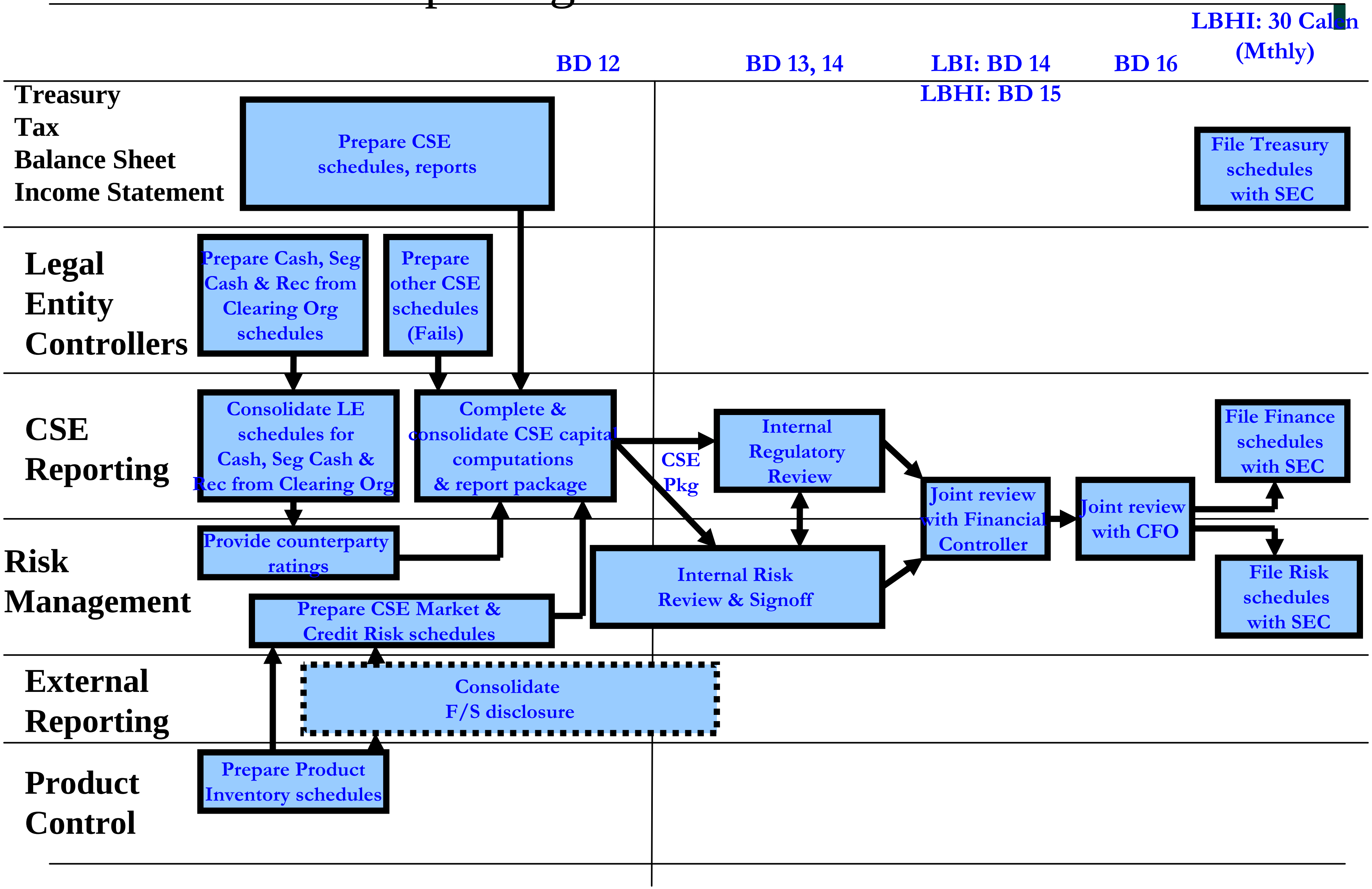
Specific CSE Impact on Treasury

- Additional Reporting & Governance Requirements:
  - Liquidity Report
  - Unsecured Borrowings and Lines of Credit
  - Management of optimal CSE Capital structure
- Additional Data/Calculation Requirements:
  - Eligible CSE debt issuances
- Meeting with SEC on quarterly basis to review Treasury activities
- All legal entities (regulated or unregulated) consolidated into the Holding company are subject to queries/audits by SEC or other other international regulators

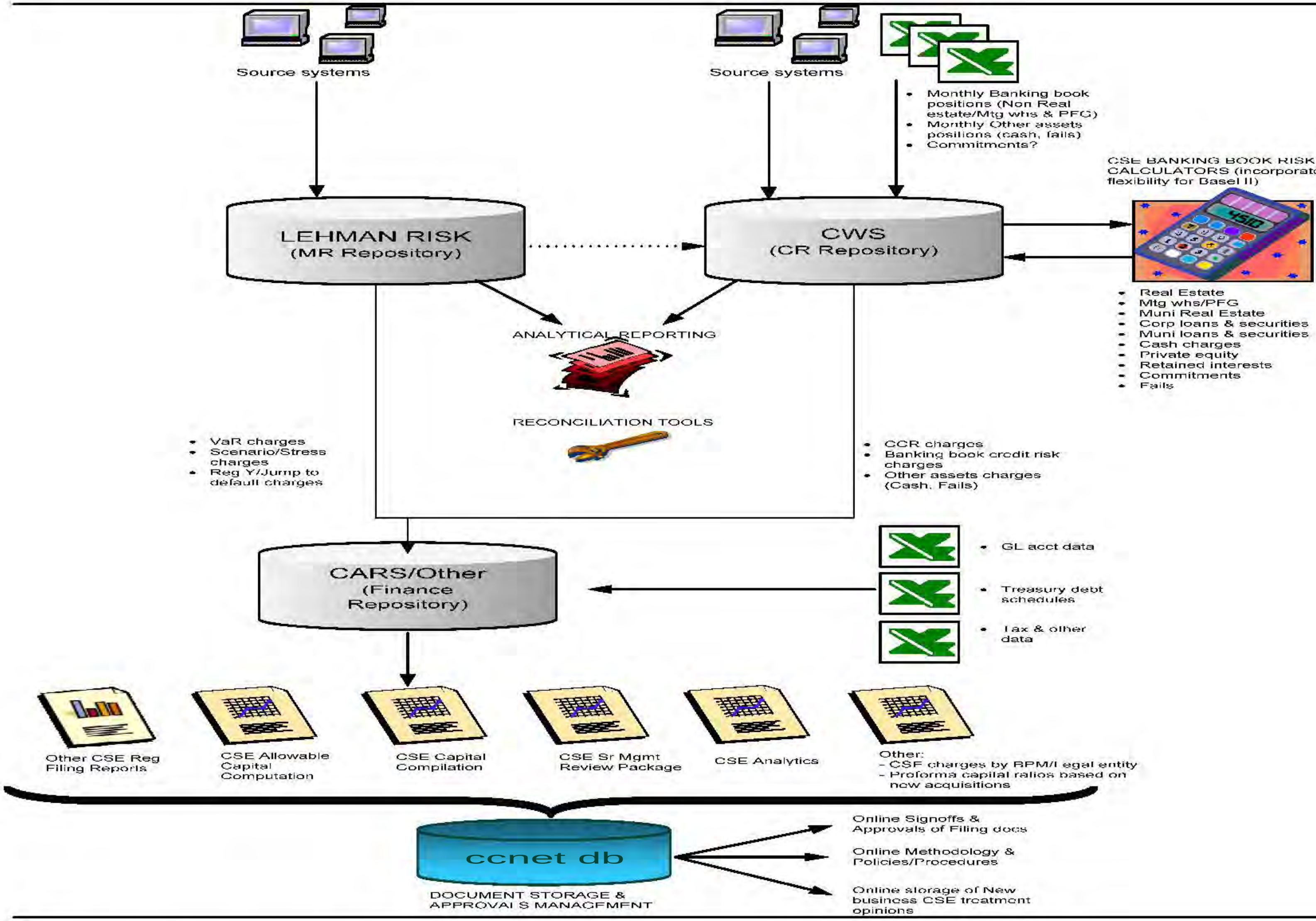
Specific CSE Impact on Regulatory Reporting

- Overall co-ordination of the end-to-end CSE reporting process across all departments (Risk Mgmt, Product Control, Financial Control, Treasury, External Reporting, Operations, Legal)
- Consolidation, review and preparation of the monthly SEC filings and review packages
- Interpretation and dissemination of regulatory guidances to all constituents, and assisting constituents with application of rules to calculations and processes
- Oversight/Quality control responsibility over the controls and reconciliations supporting the reporting process
- Driving automation and process/control efficiency initiatives to enhance the end-to-end reporting process
- Preparing Regulatory reporting analysis of new business/acquisition transactions
- Co-ordination of audit queries from Internal and External auditors and regulators

Current CSE Reporting Process



Planned CSE Future State



Lehman Brothers CSE Methodology

CSE Components

- Capital Ratios
- Allowable Capital
- Trading Book vs Banking Book classification
- Market Risk
- Credit Risk
- Other Assets Risk
- Operational Risk

CSE Capital Ratios

◆Total Capital Ratio

$$\frac{\text{Total Allowable Capital}}{\text{(Credit risk + Market risk + Operational risk) RWA}} = \text{SEC min capital ratio} \geq 10\%$$

◆Tier 1 Capital Ratio

$$\frac{\text{Tier 1 Capital}}{\text{(Credit risk + Market risk + Operational risk) RWA}} = \text{Not disclosed to nor monitored by SEC}$$

◆Total Capital (excluding LTD) Ratio

$$\frac{\text{Total Allowable Capital (excluding Long-term debt)}}{\text{(Credit risk + Market risk + Operational risk) RWA}} = \text{Not disclosed to nor monitored by SEC}$$

◆CSE Ratio

$$\frac{\text{Total Allowable Capital}}{\text{(Credit risk + Market risk + Operational risk) allowances}} = \text{SEC min 110\%}$$

CSE Total Allowable Capital Components

Allowable Capital is the sum of:

Common stockholders' equity

Plus: Non-cumulative Perpetual Preferred stock (unrestricted)

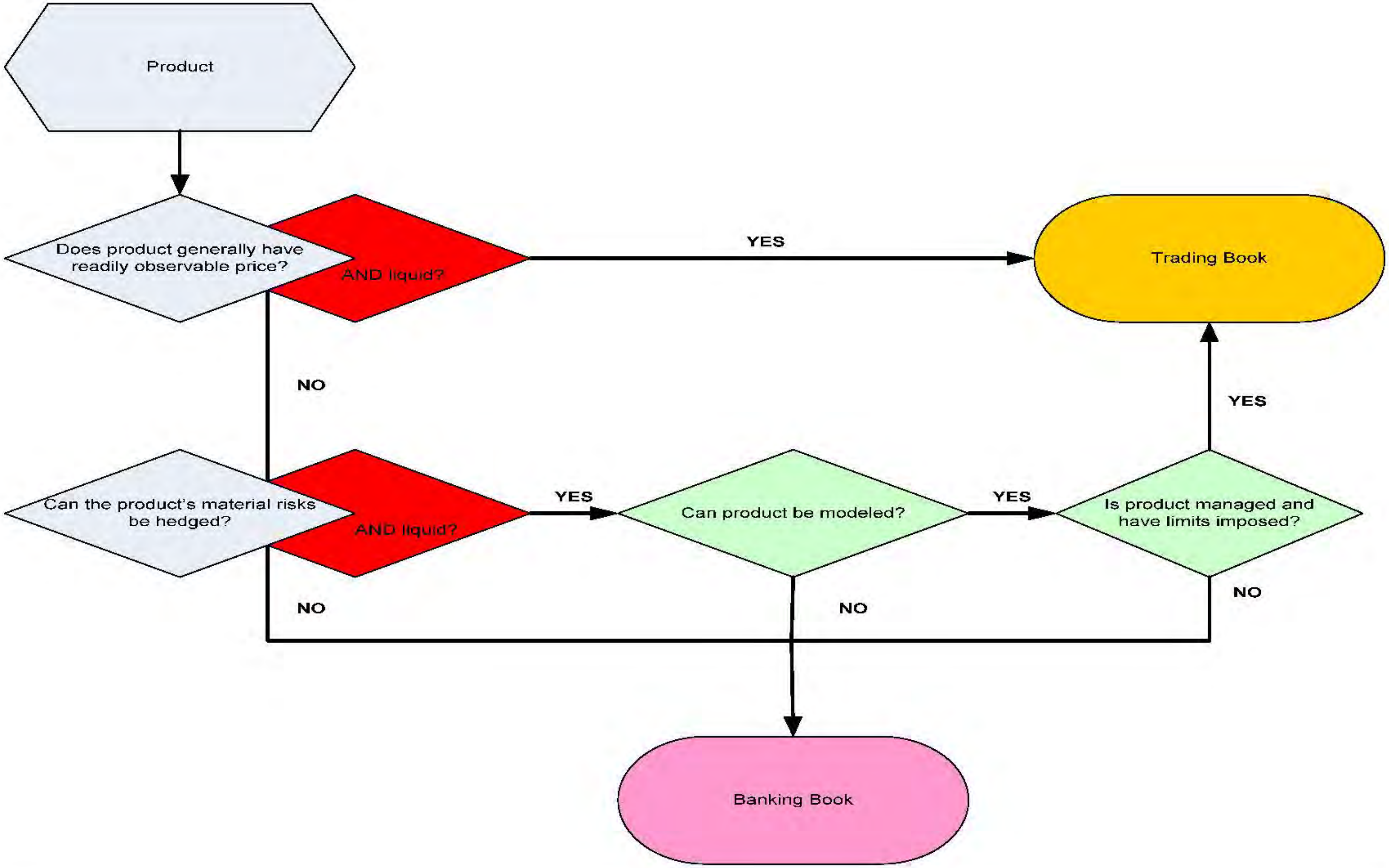
Less:
Goodwill and intangible assets and
Deferred tax assets (except for the amount expected to be realized within one year);

Plus Restricted Core Capital:
Cumulative Perpetual Preferred stock;
Trust Preferred, less Equity in Trust held;
Mandatory Convertible Preferred Securities;

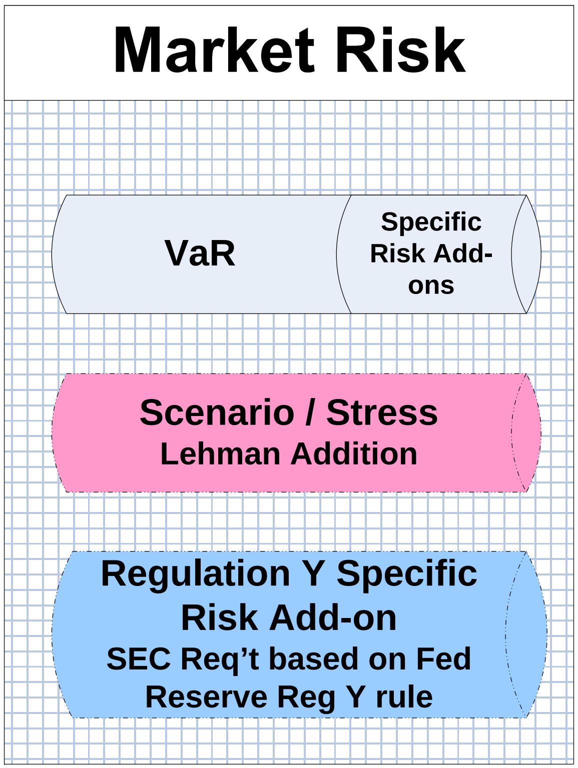
Less: Capital requirement for insurance entities;

Plus: Eligible subordinated debt; and
Plus: Eligible long-term debt (recognition disallowed after 11/2008).

CSE Trading Book vs. Banking Book - Criteria



Market Risk Components



<u>VaR – Value at Risk</u>

- **Calculated as One Day**
  - **Risk Appetite uses 95% confidence interval**
  - **Regulators want 99% confidence interval**
  - **Regulators require 10 Day Holding period (multiply by $\sqrt{10}$)**
- **Multiply by 3 (if backtesting exceptions at or below 4)**
- **Calculate Specific Risk add-ons**
- **Calculate 60 Day moving average of VaR**
- **Select greater of 3 x 60 Day average or last business day of Month.**
- **Add Specific Risk add-on.**

<u>Calculate Scenario / Stress</u>

- **Fund Derivative Gap stress**
- **M&A deal break scenarios**

<u>Calculate Specific Risk Add-on</u>

- **Calculate Regulation Y add-on (LBHI and LBI currently)**
- **Jump to Default (Incremental Default) Risk Add-on (will replace Reg Y add-on)**

Credit Risk Components

Credit Risk

- Counterparty Credit Risk
- A - IRB
- Mortgage Warehouse/PFG
- Supervisory Slotting – HVCRE / IPRE
- Retained Interests (Securitizations)
- Private Equity (Principal investments)

- **Counterparty Credit Risk (CCR)**
  - Counterparties for Repo-style, Forward settling & Derivatives in the Trading Book
  - Netting Sets
  - Hedging
  - Collateral
  - MPE (Maximum Potential Exposure) or EPE (Effective Positive Exposure)
- **A – IRB (Advanced – Internal Ratings Based) Approach**
  - Do not calculate EL as MtM (Fair Value) valuation includes Expected Loss
- **Mtg Whs/PFG (Secured Lending or Repo-style treatment)**
  - Approach is similar to F-IRB whereby Exposure is increased by VaR (99%, 20day)
  - LGD is assumed to be 60% for Secured Lending, and for Repo-style, collateral is applied to reduce LGD
- **Supervisory Slotting (for High Volatility Commercial Real Estate or Income Producing Real Estate)**
  - Strength Assessment
  - Mapping to ratings and risk weights (70% to 250% rw)
- **Not currently applying Basel II Securitization Framework**
  - Unrated or Below BB- rated Banking book Retained Interests attract charge that is the equivalent of deduction
  - Rated Retained Interests use Standardized Securitizations approach for mapping to risk weights
- **Private Equity – uses 300% or 400% risk weight of Accord's paragraph 344 for "other" equity exposures. Only 100% for "grandfathered" positions. (Being reviewed)**

CSE Other Assets Risk Components

Cash deposits (nostros)

- Basel II A-IRB approach

Unsettled Trades & Fails

- Basel II Annex 3* approach (based on aging)

Investments in Joint Ventures/Partnerships

- Basel II Equity Investment approach (simple risk weight method)

Other

- 100% risk weight approach

***** In BIS Basel II document published June, 2006

CSE Operational Risk Components

- **Basic Indicator Approach (BIA)– Currently applied in CSE charges**
  - **15% of average of previous three years' gross income (i.e. net interest income plus net non-interest income)**

- **Standardised Approach - Will not be used for CSE**
  - **Mapping of Business Lines**
  - **Assignment of risk weights based on gross income and a "β eta" for each business line.**
  - **Alternative Standardised Approach allows for Retail and Commercial Banking loans and advances to substitute for gross income and an "m" multiplier.**

- **Advanced Measurement Approach (AMA) – Forthcoming**
  - **Historical – up to date business and control factors.**
  - **Scenario – potential losses under certain circumstances – "Fat tails" captured – 99.9% confidence interval.**
  - **External - Industry database of events – losses**

➢ **VaR calculation of Operational Risk**

Pillar 2 - CSE

- **Stress Tests (see next slide) -**
- **Backtesting of VaR**
- **90 Day Notification of significant new businesses**
- **Backtesting of Counterparty Credit Risk – In discussion**
- **Monthly reporting**
- **Quarterly reporting**
- **Annual reporting**
- **Notifications:**
  - **Early Warning of Low Capital (Holding Company)**
  - **Holding company files a Form 8–K**
  - **Material affiliate declares bankruptcy**
  - **NRSRO has determined to reduce materially its assessment of the creditworthiness of a material affiliate.**
  - **Any financial regulatory agency or self-regulatory organization has taken significant enforcement or regulatory action against a material affiliate.**
  - **The occurrence of any backtesting exception that would require that the ultimate holding company use a higher multiplication factor in the calculation of its allowances for market or credit risk**

Pillar 2 – Stress Tests

- **Bull Steepening**
  - Post 9/11 Flight to Quality (Sep 11, 2001 - Sep 25, 2001)
- **Bull Flattening**
  - Period before the major rates backup in the summer of 2003. Generally strong market tone across all asset classes due to signs of economic recovery and low inflation expectations, but reduced demand for energy. (May 1, 2003 - May 15, 2003)
- **Bear Flattening**
  - Period before the major rates backup in the summer of 2003. Generally strong market tone across all asset classes due to signs of economic recovery and low inflation expectations, but reduced demand for energy. (May 1, 2003 - May 15, 2003)
- **Bear Steepening**
  - Post LTCM. (Sep 28, 1998 - Oct 13, 1998)
- **EMG Crisis**
  - Market meltdown driven by EMG (Russian default) with spiked idiosyncratic risk, higher defaults, higher correlations, falling energy demand (Aug 17, 1998 - Aug 30, 1998)
- **Rating/Default & HF Risk**
  - Significant rating risk (e.g. GM), one name default in CDX or HVOL coupled with hedge fund blow-out on structured credit products causing panic selling, significant market widening with CDS basis gapping out. (Jul 18, 2002 - Aug 2, 2002)
- **HY / LBO / Default Risk**
  - Global default rate increase coupled with lower recovery. Investor demand dries up after "hot" market, leading to a longer syndication time line or no syndication in large LBO or M&A loan deals. (Sep 16, 2002 - Oct 17, 2002)
- **Equity Crash (1987)**
  - Weakening US dollar, deteriorating US current account deficit, escalating US government debt, High P/E's low dividend yields (Oct 5, 1987 - Oct 19, 1987)
- **Parallel Move Down**
  - Modeled after Post 9/11 Flight to Quality (Sep 11, 2001 - Sep 25, 2001)
- **Parallel Move Up**
  - Similar to Oct 30, 2001 - Nov 14, 2001 period
- **Black Monday**
  - Oct16-Oct19 1987
- **Oil Supply Crisis**
  - Major oil supply disruption at the source, likely due to political events in oil producing countries and/or terrorism, with great uncertainty around supplies returning to normal levels in the near future.
- **Liquidity Crunch**
  - Hawkish Federal Reserve and major Central Banks continuing on a path of raising rates, draining the extra liquidity enjoyed previously, resulting in a decline in the risky assets and spread products.

Pillar 3 – CSE Perspective

- **Currently, CSE firms are prohibited by SEC from publicly disclosing CSE capital information**
- **As an industry group, CSE firms recently developed a Disclosure proposal that was presented to and accepted by SEC on July 26, 2007. Highlights of the proposal include:**
  - **Phased-in approach:**
    - **Commencing Q1, 2008: Disclose Allowable capital components and aggregated RWA figures for Market Risk, Credit Risk and Operational Risk**
    - **Commencing Q4, 2008: Disclose granular components of Market and Credit Risk exposure categories**
  - **Disclosures would be provided quarterly and placed in the MD&A section of the 10-Q, 10-K**
  - **Quantitative figures would be supplemented by qualitative commentary to provide the public with pertinent info such as methodology and population parameters**
- **SEC will present the proposal to UK FSA and US regulatory agencies on behalf of the CSE firms to solicit disclosure equivalency recognition**
- **CSE firms are still expected to bilaterally apply for disclosure acceptance by local regulators**

Pillar 3 – Sample CSE Disclosure Format

Commencing Q1, 2008

I. Allowable Capital

(in millions)	**Current Reporting Period**		**Prior Reporting Period**	
Common shareholders' equity	$	xxx	$	xxx
Less: Goodwill		(xxx)		(xxx)
Less: Deferred tax assets		(xxx)		(xxx)
Less: Other intangible assets		(xxx)		(xxx)
Less: Other deductions		(xxx)		(xxx)
Qualifying cumulative and noncumulative preferred stock		xxx		xxx
Subtotal		xxxx		xxxx
Other components of allowable capital				
Qualifying subordinated debt		xxx		xxx
Qualifying long-term debt		xxx		xxx
Excess of eligible credit reserves over total expected credit losses		xxx		xxx
Hybrid capital instruments		xxx		xxx
Total Allowable Capital	$	xxxx	$	xxxx

II. Risk-Weighted Assets

Credit Risk	$	xxx	$	xxx
Market Risk		xxx		xxx
Operational Risk		xxx		xxx
Total	$	xxxx	$	xxxx

III. Total Capital Ratio	xx.xx%	xx.xx%

Pillar 3 – Sample CSE Disclosure Format

DRAFT - FOR DISCUSSION PURPOSES ONLY

Commencing Q4, 2008

Comprehensive Risk-Weighted Asset Information Under Advanced Internal Ratings-Based Approaches for Regulatory Capital Purposes
$mm

		Non-Defaulted and Defaulted Exposures					
Exposure Category		**Balance Sheet Amount ($)** [1]	**Unfunded Amount ($)**	**Exposure at Default (EAD) ($)**	**Risk-Weighted Assets (RWA) ($)**	**Weighted Average Expected Loss (%)** [2]	**Methodology** [3]
Cash and Cash Equivalents / Segregated Cash and Securities Deposited with Clearing Organizations							AIRB
Securities Financing Transactions (SFT)		-			-		
Securities Repurchased/Sold Under Agreements to Resell/Repurchase							
Securities Borrowed/Loaned							
Warehouse Loans							
Loans		-	-		-		
Corporate Loans							
Consumer Loans							
Real Estate Loans							
Derivatives		-			-		
Interest Rate and Credit							
Equities							
Commodities							
Foreign Exchange							
Customer margin (net)		-			-		
Wholesale							
Retail							
Securitization Exposures							
Equity Exposures/Partnership Interests							
Other Assets		-			-		
Other Receivables, Net							
Office Facilities							
All Other Assets							
Total Credit Risk Equivalent		-			-		
Market Risk Equivalent Assets							
General Market Risk [4]							
Specific Risk [5]							
Total Market Risk Equivalent					-		
Total Operational Risk Equivalent							
TOTAL					-		

1. Represents net replacement value, net of collateral.
2. Calculated as PD x LGD, weighted by EAD (PD weighted by EAD before credit risk mitigation, LGD weighted by EAD including the effects of guarantees, credit derivatives and collateral)
3. Could be disclosed separately or handled in qualitative disclosure.
4. Includes both standardized VaR and systematic VaR.
5. Includes specific risk VaR, specific risk add-on charges and incremental default charge, as applicable.

Pillar 3 – Sample CSE Disclosure Format

Commencing Q4, 2008

Table 3A – Credit Exposure by Geographic Region

	As at <Q4, 2008>
Europe and Middle East	20%
Asia Pacific and Other	15%
Total Non–Americas	35%
U.S.	60%
Other Americas	5%
Total Americas	65%
Total Credit Exposure	100%

Table 3B – Credit Exposure by Counterparty

	As at <Q4, 2008>
Bank	30%
Corporate	30%
Sovereign	20%
Retail	20%
Total Credit Exposure	100%

[1] Credit exposure is the exposure upon default of the obligor on the direct outstandings and unfunded commitments, subject to recognizing the effects of on-balance sheet netting and collateral.