

*Confidential Presentation to:*

# Finance Committee of Board of Directors

## Risk, Liquidity, Capital, and Balance Sheet Update

*September 11, 2007*

# LEHMAN BROTHERS

# Agenda

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◆ **Overview**

**Chris O'Meara**

◆ **Risk**

**Madelyn Antoncic**

- Recent Market Stress
- Exposure to Key Products/Markets
- Risk Appetite Usage and Counterparty Credit Exposure
- Global Stress Tests

◆ **Liquidity**

**Paolo Tonucci**

- Funding Framework
- Funding Update
- Contingent Liquidity Risk

◆ **Capital Management and Balance Sheet**

**Paolo Tonucci**

- Equity and Balance Sheet Growth
- Equity Adequacy
- Credit Ratings
- Share Repurchases

# Overview

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## **2007 has seen a significant amount of risk, financing and capital activity, driven by business growth generally and high levels of activity in specific businesses**

- ◆ Risk appetite usage increased from \$2.12 billion at the end of 2006 to \$3.27 billion, but remains within the established risk limits. The Firm's credit portfolio remains very high quality, and 97.8% of our counterparty exposure is to investment grade names
- ◆ Our risk management stress test results for both the Subprime Mortgage and the Leveraged Lending business showed that the losses we actually incurred were consistently within the range predicted by our management models
- ◆ While the funding markets have become more difficult to access, this has had a limited impact on our liquidity. The liquidity pool has increased to \$36 billion at the end of the 3<sup>rd</sup> quarter from \$25.7 billion at the end of the 2<sup>nd</sup> quarter, and the cash capital surplus has increased to \$8.1 billion from \$2.5 billion
- ◆ Common stockholders' equity growth has been significant with full year growth projected to be around \$3.6 billion, up 20% vs. 2006. Adjusted (or Leverage) equity growth is projected to be around \$5 billion, up 27% vs. 2006
- ◆ The Firm's Net Leverage has increased to 16.2x, in line with peers. In 2007, we worked with regulatory and rating agencies to implement more sophisticated equity adequacy measures. As a result, we are comfortable with this level of leverage
- ◆ Fitch Ratings has upgraded us to AA-, the same level as our larger peers. Moody's and S&P affirmed our credit rating as A1/Outlook Positive and A+/Outlook Stable respectively
- ◆ Our share buybacks have been lower than in previous years, due to a significant slowdown in option exercises

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## Risk Update

*September 11, 2007*

**LEHMAN BROTHERS**

# Agenda

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- ◆ Recent Market Stress
- ◆ Securitized Products
- ◆ High Yield Exposures
- ◆ The Commercial Paper Market
- ◆ Hedge Funds
- ◆ Risk Appetite Usage and Counterparty Credit Exposure
- ◆ Global Stress Tests

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**Recent Market Stress**

# Recent Market Stress

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## The markets have experienced significant turmoil in 2007

- ◆ The initial tremors were felt at the end of 2006, when the poor loan performance of sub-prime borrowers began to be a cause for concern in the market place. This was evidenced by a gradual spread widening in the asset backed index.
- ◆ Through the 1<sup>st</sup> quarter of 2007, the spread widening was largely confined to the lower-rated tranches of sub-prime deals which by March 2007, had widened by from 250bps to 1,000bps in BBB- cash bonds, while AAA bonds had only widened from 16bps to 23 bps.
- ◆ After a brief pause in May, the market continued to widen as it became apparent that the performance problems in mortgage loans was not going to abate and was no longer limited to the sub-prime market but might also affect the Alt-A product.
- ◆ By mid-June, Bear Stearns Asset Management reported significant stress in two funds totaling \$2 billion of capital with over 15 times levered exposure in sub-prime mortgages. Requests for redemptions were suspended and they subsequently ran out of liquidity to make margin calls and eventually shut down the funds.
- ◆ By early July, after other high profile hedge fund failures with the backdrop of a large supply of HY product coming to market, we saw the fear of contagion to other markets causing a rout in all credit products, of every rating including all the way up to AAA bonds.
- ◆ By early August, we saw a significant delevering of hedge funds across asset classes including long/short equity strategies adding additional stress to the market as paper was put up for bid.
- ◆ Currently the CP market, particularly ABCP, is facing challenging conditions, with very little liquidity. Funding for almost any type of mortgage or ABS product dried up. This extended to the ABCP market which ultimately was forced to rely on backstop liquidity providers and extend maturities on extendible CP, as paper would not roll.
- ◆ The total U.S. CP market has declined by almost \$300bn or 13% in outstandings in August to a seasonally adjusted total of \$1.93 trillion. The ABCP overnight rate has increased by more than 80bps last month to 6.15%.
- ◆ The potential for ABCP conduits and SIVs to have to unwind and liquidate vast amounts of ABS paper continues to weigh on the market.
- ◆ Currently, some liquidity is returning to the market as real money players are taking advantage of the historically wide spreads in AAA product, and distressed debt funds are being raised to invest across the credit spectrum.

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## Securitized Products

# Securitized Products

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The firm is engaged in a number of activities in the securitized products business, which covers a global, diversified range of asset classes and businesses which are vertically integrated from origination through securitization and distribution

## ◆Origination

- The Mortgage Capital Division has several origination entities spanning the US, Europe and Asia. Total origination year-to-date through August 31 was \$45.1 billion. The primary products originated include:
  - Alt-A Mortgages – This represents 66% of our total originations. Borrowers are typically higher quality with an average 710 FICO score, an average loan size of \$240K and an 90% CLTV. Typically 20% of these borrowers have full documentation.
  - US Sub-prime Mortgages – This represented 16% of our originations through July. We have discontinued originating sub-prime mortgages. Borrowers are typically lower quality with an average 620 FICO score, an average size of \$235K and an 80% LTV. Typically 65% of these borrowers have full documentation.
  - UK Non-Conforming Mortgages – This represents 12% of total origination (49% Near Prime, 51% Sub-prime)
  - Small Balance Commercial Loans – This represents 4% of total origination. Borrowers are small businesses. Loans are secured by the borrowers and the operational property (real estate). Average loan size is \$650K with an average 69% LTV against the property. Borrowers average FICO score is 718.

# Securitized Products (continued)

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## ◆ Trading

- We position mortgages through both new issue and secondary trading. In the new issue market, we take positions in loans purchased from our origination platforms as well as from other originators including both private labels and GSEs. We make markets in every product we create in the new issue market.
- US businesses use \$43.7bn of balance sheet. Businesses include:
  - Prime Mortgage trading (uses \$18.3bn of balance sheet).
  - Non Prime Mortgage trading (uses \$8.1bn of balance sheet).
  - Agency REMIC/Pass-Throughs/Options (uses \$9bn of balance sheet).
  - US ABS Trading (uses \$3.3bn of balance sheet).
- International Businesses uses \$9.7bn of balance sheet. European Mortgages, primarily UK non-confirming, accounts for the majority of the international exposure. Asia uses \$1.9bn of the balance sheet.

## ◆ Finance

- In addition to funding clients positions through our Financing Desk, we provide term financing alternatives for clients in both the mortgage and non-mortgage asset classes.
  - We provide mortgage warehouse lines for mortgage originators. These are secured, revolving lines of credit which can be drawn down to support origination flow. We have a security interest in the mortgages, and make margin calls if the collateral value drops below designated thresholds. We currently have \$2.8bn in commitments, with \$1.6bn funded as of 8/31.
  - We provide financing for non-mortgage assets such as auto loans and small business loans. In addition, we finance Regulation XXX reinsurance reserve credit for term life insurance businesses. We currently have \$1.65bn in total commitments with \$818mm funded at 8/31.
  - We provide acquisition financing in transactions where a whole business securitization can be executed. We currently have \$2.1bn in commitments as of 8/31.

# Mortgage Originators

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## Counterparty Credit Losses to Mortgage Originators

- ◆ Since mid-2006, nearly 150 mortgage originators have filed for bankruptcy or have closed their doors
  - Most sub-prime originators have failed or have wound down the business, including New Century, Fremont, HSBC Finance, Ameriquest, Accredited, People's Choice, and BNC
  - Contagion into the prime space is occurring and has claimed several large Alt-A originators, including Greenpoint Mortgage, First Magnus, and American Home Mortgage. All of these were large clients of the Firm.
  
- ◆ Lehman has reserved for expected losses associated with 29 of these failed clients as part of our normal reserve review process.
  - Our largest expected loss relates to representation and warrant (R&W) claims associated with whole loan purchases from First Magnus, formerly the largest Aurora correspondent which represented nearly a quarter of Aurora's purchased loan production.
  
- ◆ Additional reserves have been set aside for all other R&W claims, both from failed originators and expected future claims against active correspondents.

# Mortgage Warehouse Lines Exposure

**Warehouse facilities to sub-prime and Alt-A originators total approximately \$2.8bn of which \$1.6bn is outstanding as of 8/31**

- ◆ Our commitments are down from \$5.7bn (\$1.9bn funded) a year ago.
  - All warehouse lines are collateralized and margined on a regular basis, with collateral having to satisfy specific requirements as to quality and aging. Pricing of the collateral is done by Lehman trading desk.
  - Total losses from defaulted borrowers is approximately \$22mm. The bulk of this (\$20mm) was associated with misrepresented loans from ResMae, a failed sub-prime originator purchased out of bankruptcy by Citadel.
- ◆ Following summarizes the current mortgage warehouse lines of the Firm to all counterparties.

## Warehouse Lines as of 8/31/07 (\$mm)

Counterparty	Commitment	Funded
ResMae (Citadel)	\$ 800.0	\$ 619.6
GMAC-RFC	600.0	234.5
Security National	260.0	207.4
C-Bass	240.2	144.6
Aegis (Servicing Advance Line)	16.0	5.0
Plaza Home Mtg	150.0	4.5
Central Pacific Mortgage	7.0	1.8
Ion Capital	15.0	0.5
NBGI	25.0	0.2
CTX Mortgage	200.0	-
<b>Totals</b>	<b>\$ 2,813</b>	<b>\$ 1,570</b>

# Changes In Origination Guidelines

**We have been tightening our lending criteria, particularly from 2<sup>nd</sup> half of 2006. As of September we have entirely eliminated the origination of sub-prime mortgages. As a result of the changes, we expect to see improvements in the performance of our originated loans**

## Tightening of Subprime Lending Criteria

- ◆ 100% financing (80% LTV 1<sup>st</sup> and 20% 2<sup>nd</sup> lien)
  - Eliminated
- ◆ Stated documentation loans (i.e., limited docs)
  - 100% combined LTV eliminated
  - Decreased maximum debt-to-income ratio by 5% to 50%
  - Increased minimum FICO requirements per LTV bucket 20 to 60 points, depending on other credit characteristics
- ◆ First-time homebuyers
  - Decreased maximum Combined LTV by 10% to 90% LTV
  - Single family property only
- ◆ Underwriting credit exceptions
  - Eliminated for FICO and LTV

## Tightening of Alt-A Lending Criteria

- ◆ Non Full Documentation loans
  - Raised Minimum FICO by at least 20 points
  - Reduced maximum Combined LTV by 5% to 95%
- ◆ Second Homes
  - Raised minimum FICO requirements by at least 20 points depending on LTV
- ◆ 95% LTV cashout Refinancing
  - Eliminated
- ◆ First-time homebuyers
  - Increased reserve requirements to at least twice previous amounts
- ◆ Total borrower exposure
  - Limited to two loans with Lehman

# Comprehensive Risk Framework

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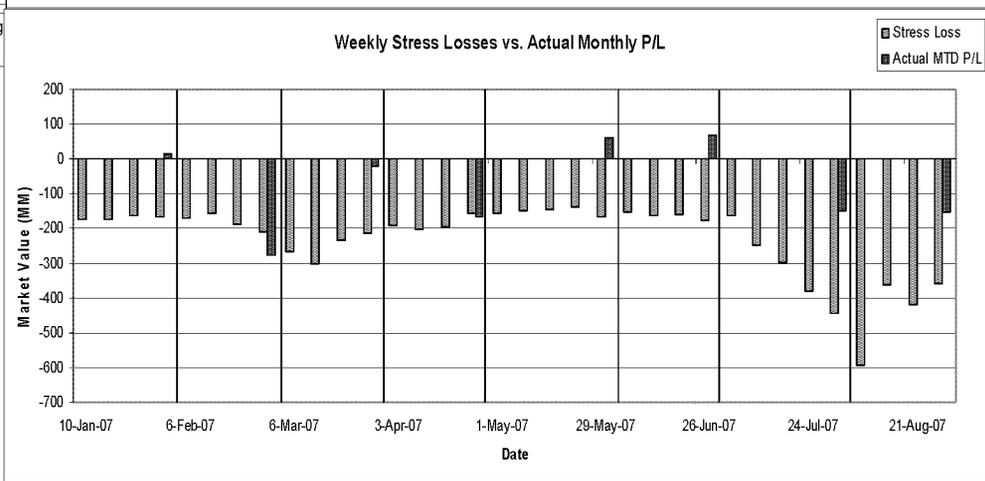
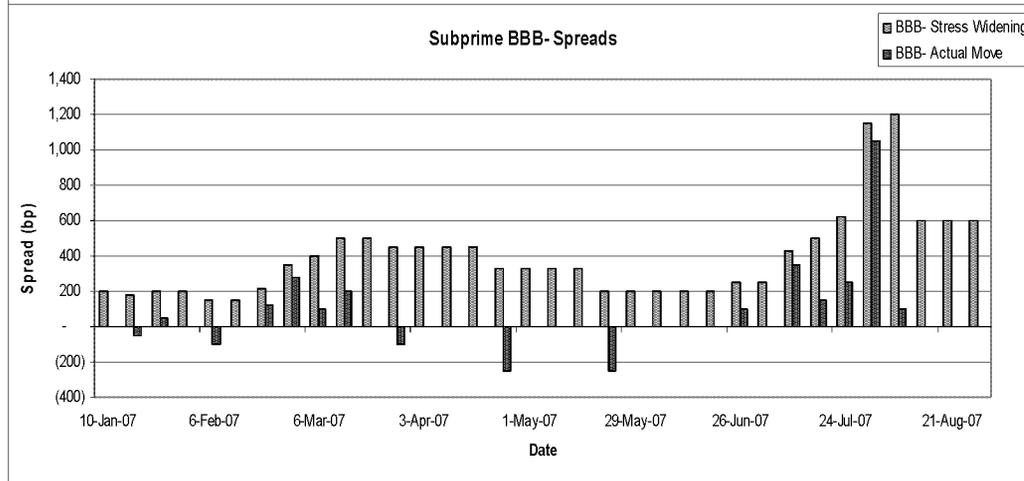
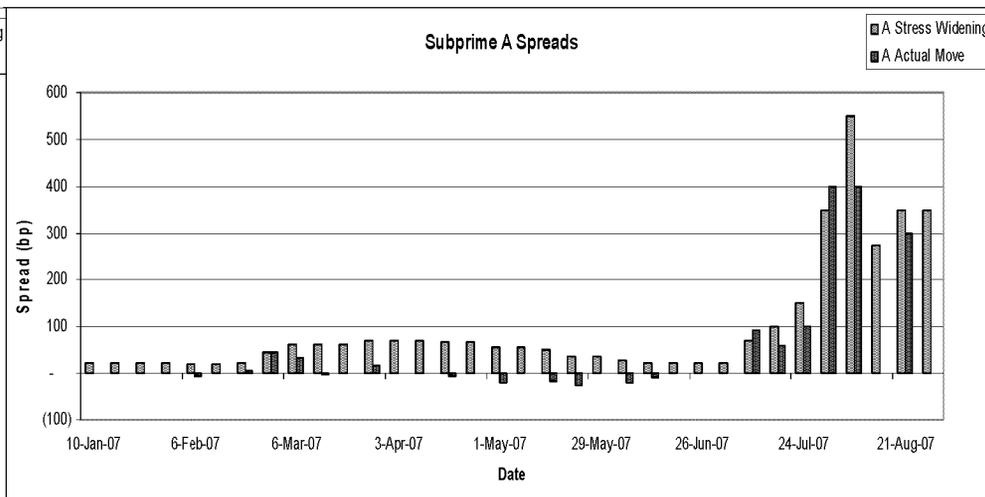
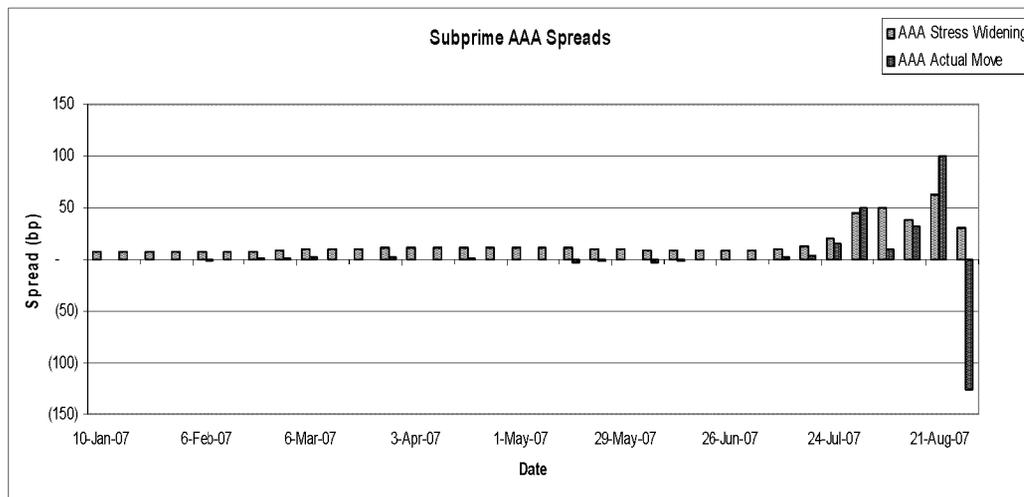
## **Risks in the Securitized Products businesses are managed within the overall Lehman Risk Management framework**

- ◆ We monitor and actively manage the risk of the origination business.
  - Dedicated risk manager onsite for residential Americas origination platform .
  - Monthly risk review process covering production and origination trends and loan performance, both current inventory and previously securitized loans.
  - Extensive risk reporting, scorecards, and tools to evaluate actual performance of loan products vs expectations and also to monitor our correspondents and brokers to ensure they conform to our standards for performance.
  - The Firm has a process for monitoring exposure to Representations and Warranties (R&W) fraud along with Early Payment Defaults (EPD).
  - Our probability based EPD model is used in in the decision to underwrite loans and help determine what additional compensating factors are required to approve the loan.
- ◆ Counterparty credit risk framework starts with client selection and screening where we perform background checks on all new accounts and perform rigorous due diligence to assess the credit quality of proposed counterparties.
  - All warehouse lines are collateralized and margined on a regular basis, with collateral having to satisfy requirements as to quality and aging. Pricing of the collateral is done by Lehman.
- ◆ Risk appetite is measured daily, calculated at a 95% confidence level. The market risk component of risk appetite employs a simulated P&L approach using 4 years of historical data, weighting the data more heavily for the most recent time period, taking both linear and non-linear components of risk into account. We incorporate event risk into our risk appetite calculation measuring losses associated with increases in defaults and property value declines.
- ◆ We conduct regular stress testing to see the impact on our P&L of dramatic spread widening.

# Sub-Prime Weekly Stress Test

## Risk Management produces a weekly stress test on the sub-prime whole loan and securities inventory and their associated hedge positions

- ◆ Our results show our assumed stressed spread widening was consistently greater than actual spread widening.
- ◆ As a result, we consistently predicted greater stressed losses than actually occurred.



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**High Yield Exposure**

# High Yield Leveraged Loans

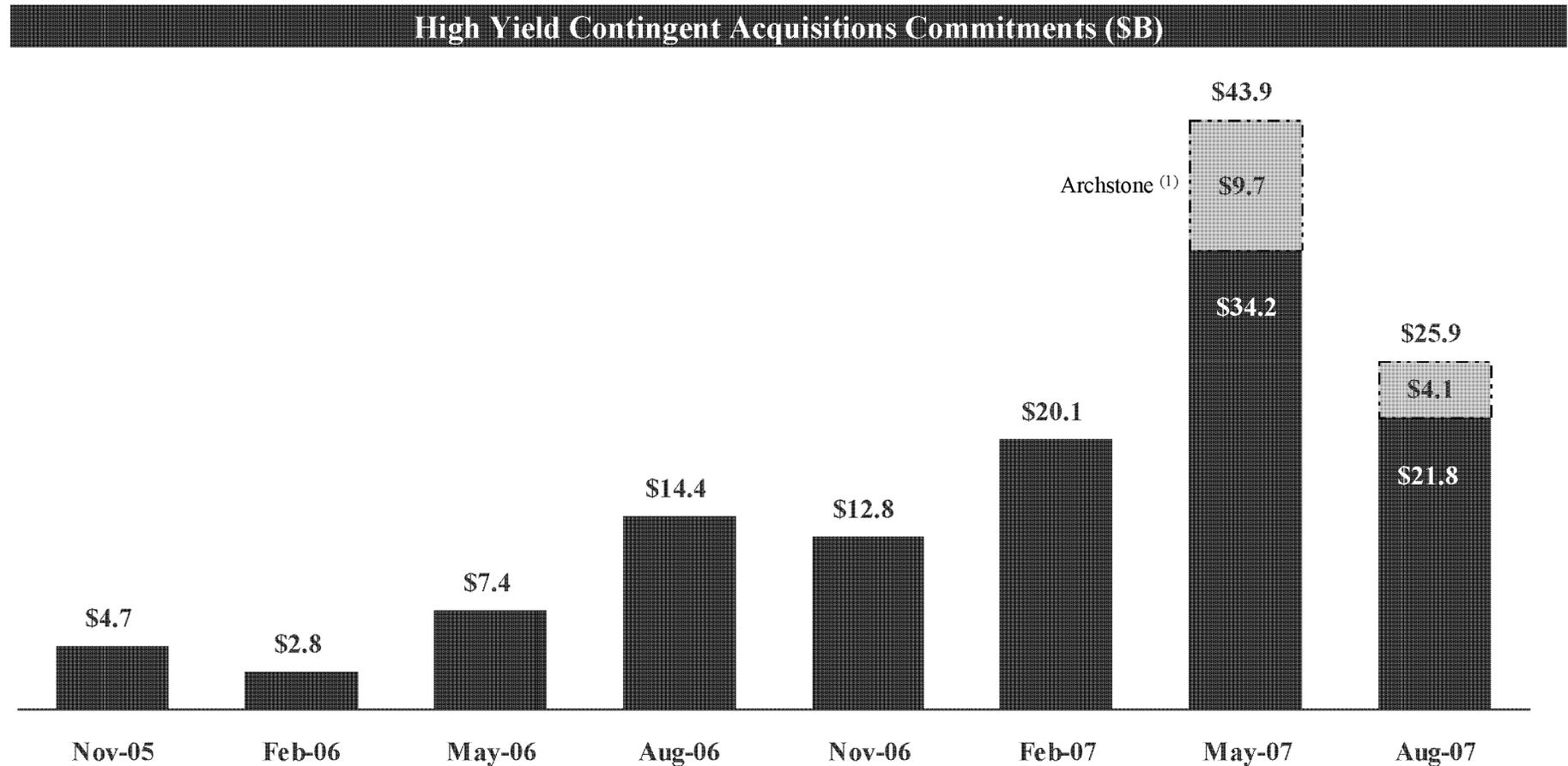
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## **The Firm's High Yield exposure originates from several sources within the High Yield and Leveraged Finance Businesses**

- ◆ Trading
  - We actively trade a wide variety of High Yield asset classes including bonds, loans and default swaps.
  - We provide market making in the secondary market as well as take proprietary positions.
- ◆ High Yield exposure also emanates from our M&A activities in connection with our advisory business for which clients rely on us to provide financing
  - Corporate Acquisitions – traditional M&A activity where one corporation buys another with a strategic fit to expand business. We will provide financing to the acquirer.
  - Sponsor related LBOs – M&A activity associated with a Private Equity fund's purchase of a corporation as one of its portfolio investments. We will provide financing to the sponsor.
  - Staple Financing – M&A activity where we are advising the seller company and offer to provide financing to the buyer for the purchase of the asset.
- ◆ Underwriting
  - We underwrite debt associated with M&A transactions as well as straight refinancing of existing debt. In the event we are unable to fully syndicate and sell-down the debt, we may be left with exposure.
- ◆ Our investments in sponsor related advisory and financing business have resulted in increased market share with these clients. The clients have also been the most active issuers of high yield debt. The net results are significant increases in commitments and lending activities

# Contingent & Mandated (but not closed) High Yield Bridge & Loan Commitment Growth

Consistent with the growth in market share in M&A activities and the resultant share in leveraged financing activities, our commitments have grown to \$21.8Bn (\$25.9Bn including Archstone)

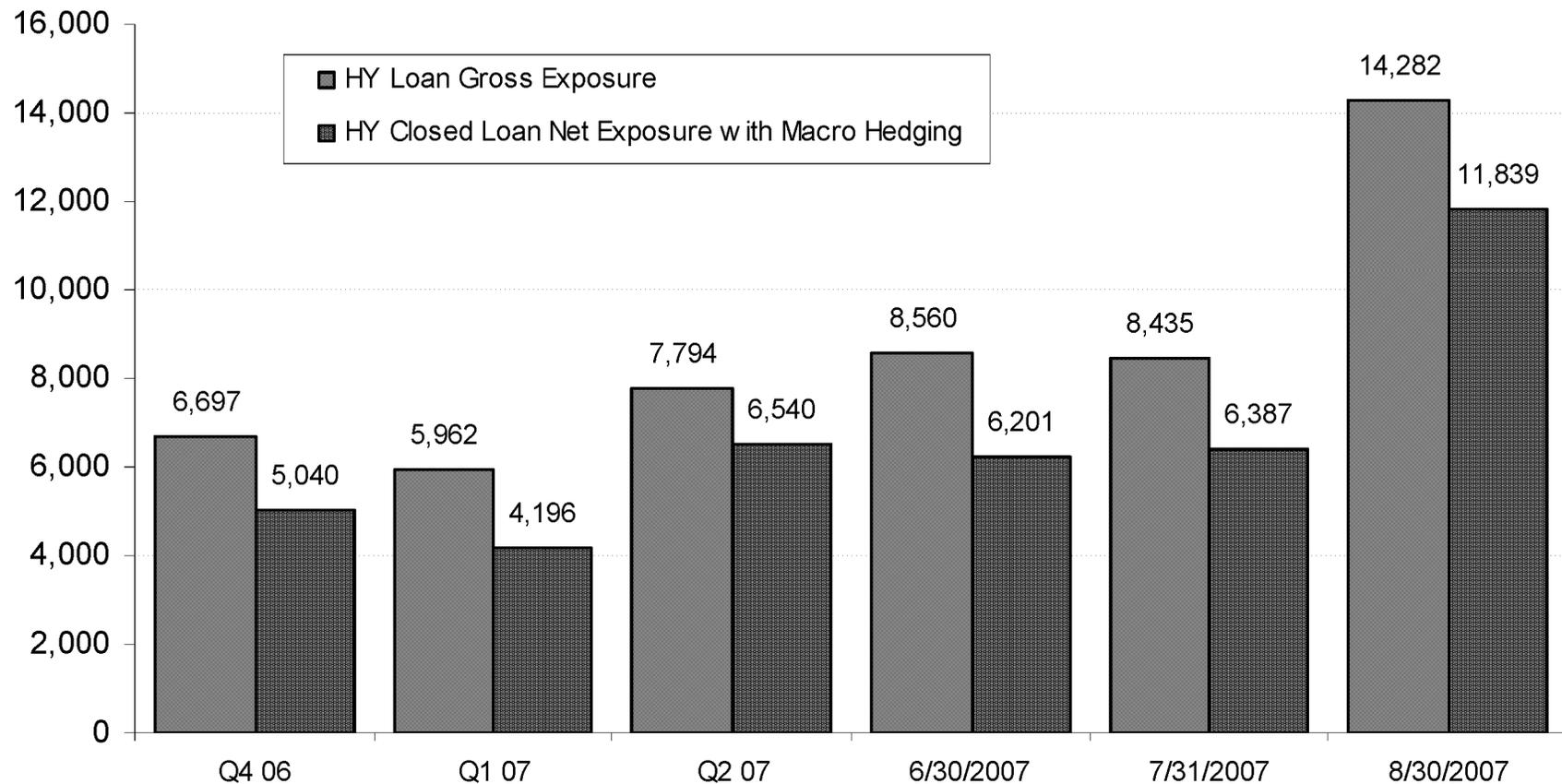


(1) Archstone commitment totaled \$11.1B, of which \$9.7B was debt (\$8.55B debt + \$1.15B junior mezzanine), \$1.15B was Bridge Equity and \$0.25B is permanent equity

# Closed High Yield Bridge and Loan Exposure

Our disciplined approach to risk mitigation through syndication, outright sales, sales through silent partner participation, single-name and macro portfolio hedging enabled us to keep our net exposure largely unchanged through July. Given the current market conditions, our exposure has materially increased over the past month

Closed HY Bridge and Loan Inventory Exposure and Hedging



# Changes in the Leveraged Finance Market

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## Record LBO Size and Volume

- ◆ Deal size increased dramatically
  - TXU (\$44B) largest LBOs to date
  - Valuations reached record highs

## Longer Commitment Periods

- ◆ More Public-to-Private deals requiring shareholder approval
- ◆ Longer review period for transactions in regulated industries

## Advent of Equity Bridges

- ◆ Sponsors seeking equity from banks, rather than partnering in club deals

## High Yield Market Re-Pricing

- ◆ Factors leading to recent sell-off:
  - Subprime spillover into credit markets
  - Hedge Funds deleveraging
  - CLO market shrinking
  - Huge anticipated new issue supply
  - Worsening credit quality – increase in leverage multiples (from 6x-7x to 8x-9x), decrease in free cash flows
  - Aggressive structures (covenant-lite and PIK toggle)
  - Rising Treasury yields

# Comprehensive Market and Credit Risk Framework

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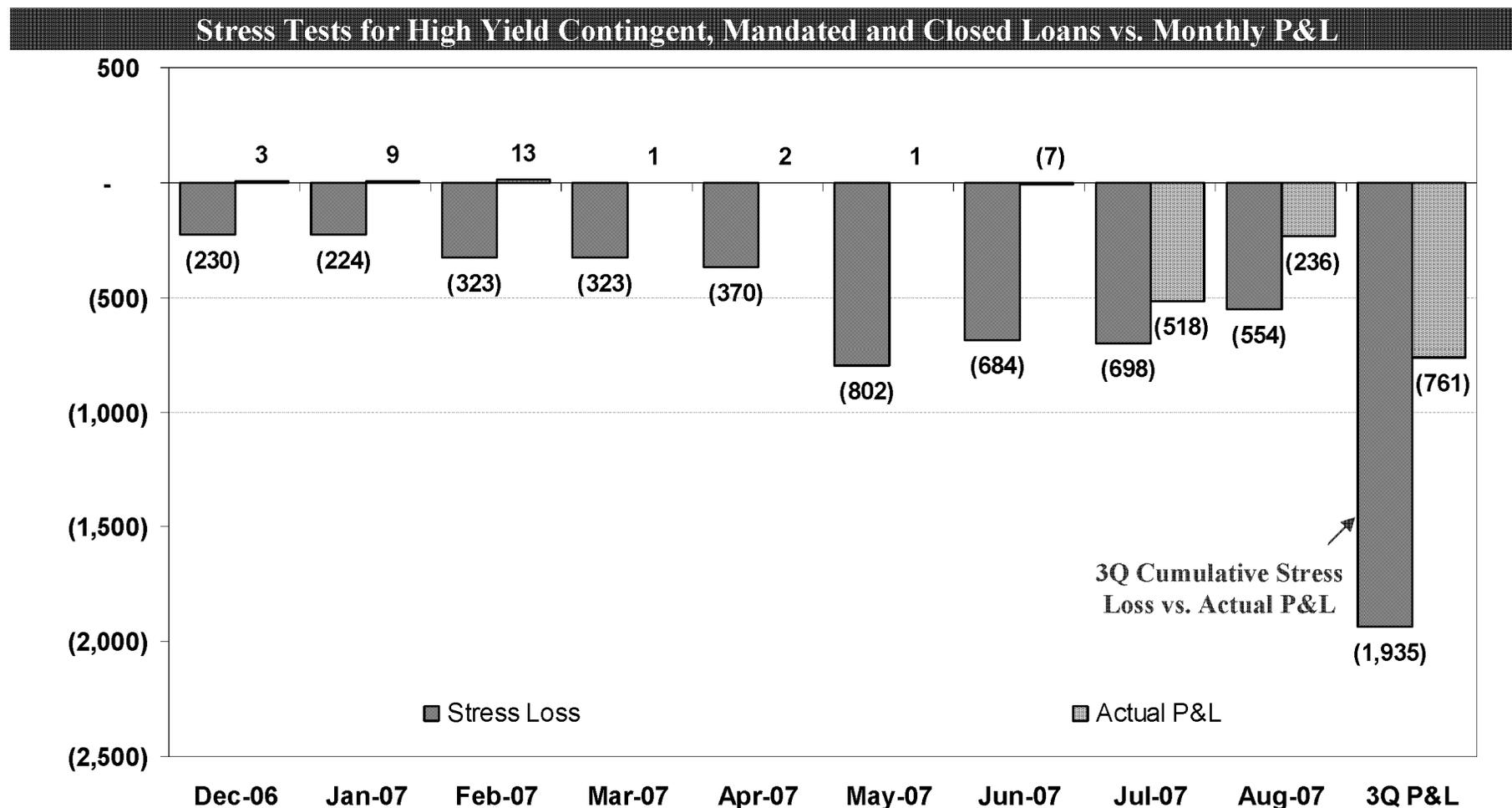
## **Lehman has a comprehensive framework and process for ensuring tight controls around high yield risk**

- ◆ The Firm has numerous committees to oversee risk taking activities and to ensure that controls are appropriately administered and reviewed. No one person commits the Firm’s capital in the primary markets. We screen transactions, employing several layers of committees, starting with business level transaction approval committees. Deliberation of transactions, moves up the management chain, for further review at Firm-wide transaction approval committees, and then finally to management oversight committees, such as the Executive Committee. The committee structure ensures checks and balances and helps guard against the silo effect.
- ◆ We have a unique and comprehensive risk framework for high yield exposure that takes into account risk as a deal flows through each stage starting with its being only a potential or conditional deal and evolving through a contingent, mandated or closed stage. We measure risk across the entire pipeline and incorporate that measurement in our risk appetite on a deal probability weighted basis to ensure we are picking up all risk associated with potential deals becoming actual deals so to avoid any surprises.
- ◆ We employ an additional risk analysis to calculate potential losses in a variety of market conditions including “closed,” “difficult,” and “friendly” markets. This analysis provides the Firm the tool to detect early warning signs based on deal and portfolio size, leverage, quality, capital structure, deal probability and syndication strategy.
- ◆ Comprehensive scenario and stress analyses are performed regularly on all of our High Yield exposures, including commitments. These stress analyses replicate previous credit market corrections such as those experienced in 1998 or 2002.
- ◆ Risk management works with finance and treasury to ensure the Firm has adequate capital and liquidity to support the business.
- ◆ Risk transfer and mitigation.
  - In addition to risk mitigation through syndications, sales and hedging, the business has established a risk transfer mechanism through non-traditional means such as silent participation partners such as Sumitomo, GECC and RBC. Our objective is to establish a program to provide confidence that the Firm can regularly reduce our High Yield commitment exposure.

# Stress Testing

## Risk Management Performs Monthly Stress Tests on Leveraged Loan Exposures

- ◆ Our stress tests consistently predicted greater stressed losses than actually occurred on both a monthly and cumulative basis.



# Stress Analysis

In addition to our monthly stress tests, Risk Management performs comprehensive scenarios analyses on all of our High Yield exposures including commitments. These stress analyses replicate previous credit market corrections such as those experienced in 1998 and 2002

- ◆ Our stress tests consistently predicted greater stressed losses than actually occurred.

## Historical 1998 scenario – External shock causing risk re-pricing, leverage and liquidity unwind

	Exposure (\$Bn) *	Loss (\$mm)
US Loans	16.9	356
US Bridges	5.2	578
Europe Loans	3.1	61
Europe Mezz/2nd lien	1.5	102
Equity/PIK	1.7	514
<b>Total Loss</b>	<b>28.4</b>	<b>1,611</b>

## Historical 2002 scenario – Recession with EBITDA and multiple contraction coupled with higher default

	Exposure (\$Bn)	Loss (\$mm)
US Loans	16.9	571
US Bridges	5.2	1,798
Europe Loans	3.1	94
Europe Mezz/2nd lien	1.5	253
Equity/PIK	1.7	770
<b>Total Loss</b>	<b>28.4</b>	<b>3,487</b>

\*As of May 20, 2007. Exposure includes mandated (not closed) loan and bridge commitments.

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## The Commercial Paper Market

# Commercial Paper

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## **The Firm is engaged in a number of activities involving Commercial Paper**

- ◆ We act as dealer/placement agent for secured and unsecured issuers globally.
  - The unsecured CP market stands at \$941 billion and historically Lehman's market share has been 15%.
  - The asset-backed CP (ABCP) market currently stands at \$974 billion and historically Lehman's market share has been approximately 15%.
  
- ◆ Our trading desk makes a secondary market in CP and ABCP
  - Provides liquidity to clients in addition to the normal issuance process.
  
- ◆ We are a backstop liquidity provider to CP programs.
  - We have \$12.1bn of backstops to corporate CP issuers, of which \$760mm is drawn. Of those commitments, \$7.5bn are for non-financial issuers and \$4.6bn are financial companies. We have hedged approximately 50% of this credit exposure.
  - We have only \$919mm of ABCP backstops, of which \$160mm is funded for Landale Funding, a ABCP conduit financing prime UK mortgages originated by HBOS.

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## Hedge Funds

# Hedge Funds

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## **The Firm is engaged in a number of activities involving hedge funds**

- ◆ Institutional flow trading in both Fixed Income and Equities.
  - Cash and derivative products
  - Derivatives
  - Foreign exchange
  - Financing and securities lending
  - Futures
- ◆ Prime Brokerage
  - Lehman has a robust prime brokerage offering and receives consistent industry recognition for the quality of our product and the excellence of our service levels.
- ◆ Principal Investments in hedge fund managers
  - Strategic majority stakes include:
    - Libertyview: 100% (multi-strategy hedge fund manager)
    - Lehman Brothers Alternative Investment Management (“LBAIM”): 100% (fund-of-funds)
  - Strategic minority stakes include:
    - GLG: 18% stake (European multi-strategy hedge fund complex with \$17bn of AUM)
    - Ospraie: 20% stake (US-based multi strategy manager with \$6.0bn of AUM)
    - Marble Bar: 20% stake (European manager with \$3.5bn of AUM)
    - Spinnaker: 20% stake (European manager with \$6.0bn of AUM)
    - DE Shaw: 20% stake (US-based multi-strategy manager with \$34bn of AUM)

# Comprehensive Credit Risk Framework

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**Lehman has a comprehensive framework for ensuring tight controls around hedge fund risk. The main components of this framework are:**

- ◆ Client Selection and Screening: Background checks are performed on all new accounts. Salespersons have broad “Know Your Customer” responsibility and are accountable for ensuring suitability of the client’s trading activity.
- ◆ Credit Due Diligence: Within Credit Risk Management (“CRM”), we have dedicated teams of specialists organized by region and industry who perform due diligence and assess the credit quality of proposed counterparties.
- ◆ Ratings: CRM employs a rigorous credit rating framework to assess the relative riskiness of our counterparties.
- ◆ Limits: CRM sets credit limits to constrain aggregate exposure concentrations to any individual counterparty or group of related counterparties.
- ◆ Documentation and Margin: We require master documentation with all clients providing for, among other protections, the ability to net exposure across transactions. We also require collateral and structure margin requirements to substantially mitigate our risk. Collateral is our first line of defense. Virtually all of our activity with hedge funds is margined, with liquid collateral covering marked-to-market exposure and, to varying degrees, potential future exposure.
- ◆ Exposure Monitoring: On a daily basis we calculate exposure against limits and aggregate exposure across all activity with each individual counterparty and across related counterparties using sophisticated modeling of portfolio volatility, stress-test methodologies as well as concentration and liquidity analysis.
- ◆ Credit Monitoring: We perform ongoing credit monitoring on active counterparties, including monthly performance tracking, meetings with the client and formal annual reviews.

# Hedge Fund Credit Exposure

As of August 31, 2007, total Hedge Fund Current Credit Exposure (CCE), which is our mark-to-market exposure less collateral posted, was \$354 million, or less than 1% of total CCE across the Firm. This small exposure reflects our conservative margin requirement policy which ensures we are well collateralized

Largest hedge fund credit exposures aggregated at the fund family level as at August 31, 2007

*USD Millions*

Hedge Fund Manager	CCE <sup>(1)</sup>	MPE <sup>(2)</sup>
Goldman Sachs Asset Management	6.5	104.3
Citadel Investment Group	27.3	80.0
SAC Capital Advisors	29.8	78.0
Moore Capital Management	8.9	72.1
Bridgewater Associates	38.2	70.3
Ashmore Investment Management	4.1	57.2
Bluebay Asset Management	1.3	50.5
CQS Management	1.6	44.2
Ellington Management Group	5.6	32.7
Capula Investment Management	5.0	30.0

<sup>(1)</sup> Current Credit Exposure (Mark-to-Market less collateral)

<sup>(2)</sup> Maximum Potential Exposure @ 99%

# Hedge Fund Credit Exposure

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**Despite recent volatility and widely reported problems incurred by a number of funds, we have not experienced any recent credit losses from hedge funds. This is not to say that we don't take risk, but rather our controls are designed to ensure that the risks are reduced substantially, especially those relating to the taking and monitoring of collateral**

- ◆ Examples of recent hedge fund failures where Lehman had exposure but did not incur losses:
  - Bear Stearns Asset Management (June 2007)

Two funds totaling \$2bn of capital with leveraged exposure to the sub-prime market suspended redemptions and subsequently defaulted on margin calls. We had financing and derivatives exposures with sufficient collateral across the positions to avoid a credit loss and successfully unwound our exposures.
  - Basis Capital Management (July 2007)

Two funds totaling \$1bn of capital with leveraged exposure to the sub-prime market suspended redemptions and failed on margin calls after liquidity drain from asset write-downs. Lehman had financing exposure with sufficient collateral protection to avoid a credit loss. We successfully unwound our exposure to the more troubled fund and have good collateral coverage on our financing of non-ABS bonds for a second fund.
  - Sowood Capital Management (July 2007)

Multi-strategy fund with \$3.5bn of capital incurred losses and narrowly avoided default by selling most of its portfolio to Citadel. The fund met all margin calls and did not default to Lehman. We had financing and derivatives positions with Sowood that were either unwound or assigned to Citadel.
  - Highland Financial (July 2007)

\$2bn AUM manager of mortgage-related hedge funds and CDOs. A Highland fund that was focused on lower rated tranches of ABS/MBS CDOs suffered heavy losses and ran out of liquidity. We had financing exposure with sufficient collateral and worked with Highland to liquidate positions without a loss to Lehman.
  - United Capital Asset Management/Horizon Funds (August 2007)

\$450 million AUM hedge fund arm of broker-dealer specializing in less-liquid ABS securities. Funds failed to meet margin calls after experiencing liquidity drain due to asset mark-downs and inability sell assets. We had financing exposure with sufficient collateral to avoid a loss.

# Hedge Fund Credit Concerns

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**In the current market environment, many hedge funds are incurring trading losses and having difficulty liquidating positions to reduce risk, bolster liquidity and satisfy investor redemptions. Hedge fund counterparties having difficulties include:**

◆ **Sailfish Multi-Strategy Fixed Income Master Fund**

\$1.8bn NAV credit-focused hedge fund that incurred trading losses (Aug. -9.4%; YTD -3.7%) and is facing Q3 investor redemptions with diminishing liquidity. Lehman is active in financing and derivatives. CCE = 0.

◆ **Carlyle Capital Corporation**

\$630mm NAV listed permanent capital vehicle with leveraged exposure to agency CMOs. Fund incurred heavy losses (Aug -25%; YTD -33%) on MBS portfolio and also on a subsequently-liquidated bank loan portfolio. Carlyle extended \$100mm loan for 1 year and another \$100mm on a short-term basis, but fund liquidity remains tight. Lehman is active in financing. CCE = 0.

◆ **Cheyne Capital**

This manager has \$13bn AUM in hedge funds and a \$35bn ABS business. Cheyne Finance, a \$6.6bn SIV, has had liquidity problems and is winding down. We did not have any exposure to this entity, but we do have trading relationships with 7 Cheyne funds and are carefully monitoring their ABS funds, including:

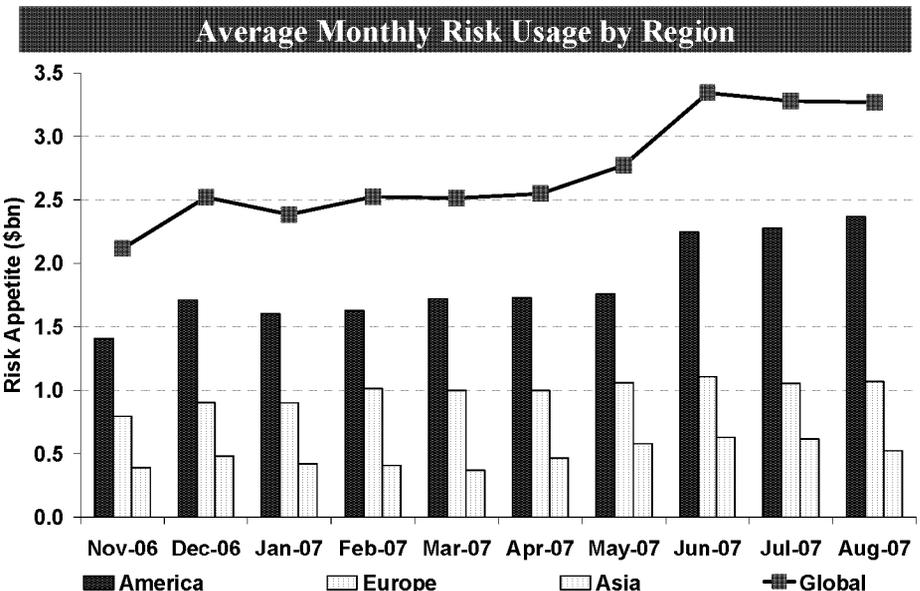
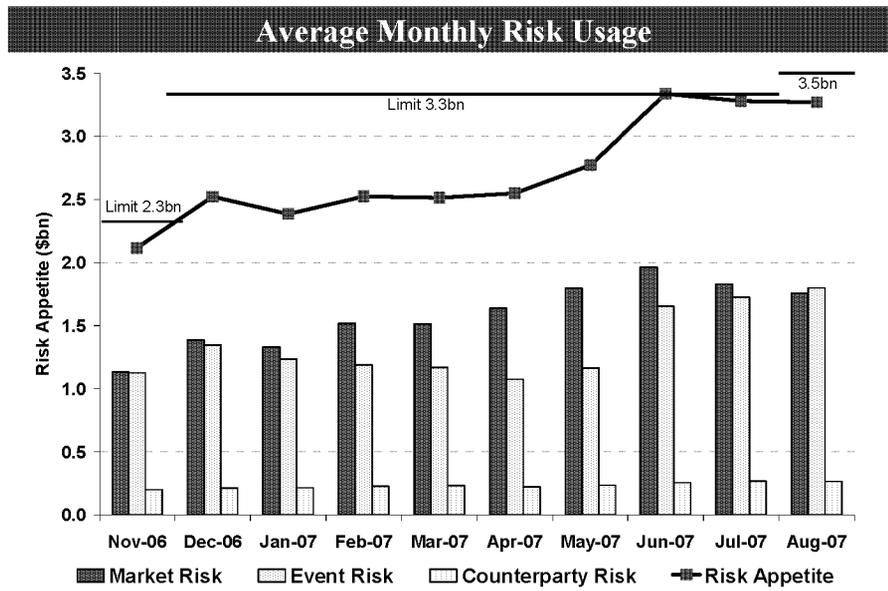
- Queens Walk Investment Ltd, a \$284mn NAV listed permanent capital vehicle that invests in ABS residuals. It has posted poor results (-29% YTD) due to sub-prime exposure. Lehman has some activity in derivatives. CCE = 0.
- Cheyne Asset Backed Fund, a NAV \$245mm hedge fund that invests across MBS capital structure with some exposure to ABS. YTD performance -7%. Lehman has some activity in financing. CCE = 0.

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## **Risk Appetite & Counterparty Credit Exposure**

# Risk Appetite Usage – Firm

- ◆ Risk appetite usage is composed of market risk, event risk and counterparty credit risk and is calculated daily both on a global, consolidated basis, and at regional, divisional, and line-of-business levels.
- ◆ Risk Appetite usage is monitored on a daily basis against the limits.
- ◆ Our franchise is highly diversified due to our product and business mix, as well as our international presence.
- ◆ Given the growth in the Firm’s revenue generating ability and capital base, in the Spring of 2006, at our strategic offsite the Firm made the decision to increase our risk profile and utilize more of our risk appetite capacity.
  - Consistent with the increase in the limit, average Risk Appetite usage rose from \$2.12 billion in November 2006, to \$3.27 billion in August 2007.
  - Risk Appetite increased in all regions as we have expanded our geographic presence.



# Counterparty Credit Risk

- ◆ We continue to be prudent in our approach to counterparty credit risk.
  - We have a very low tolerance for delays on receiving collateral, where applicable.
  - We give very close scrutiny to the value of customer collateral posted against margin loans.
- ◆ We have a very high quality credit portfolio.
- ◆ 97.8% of our counterparty exposure is in investment grade names.

## Credit Exposure Trend by Rating

(US\$ million)

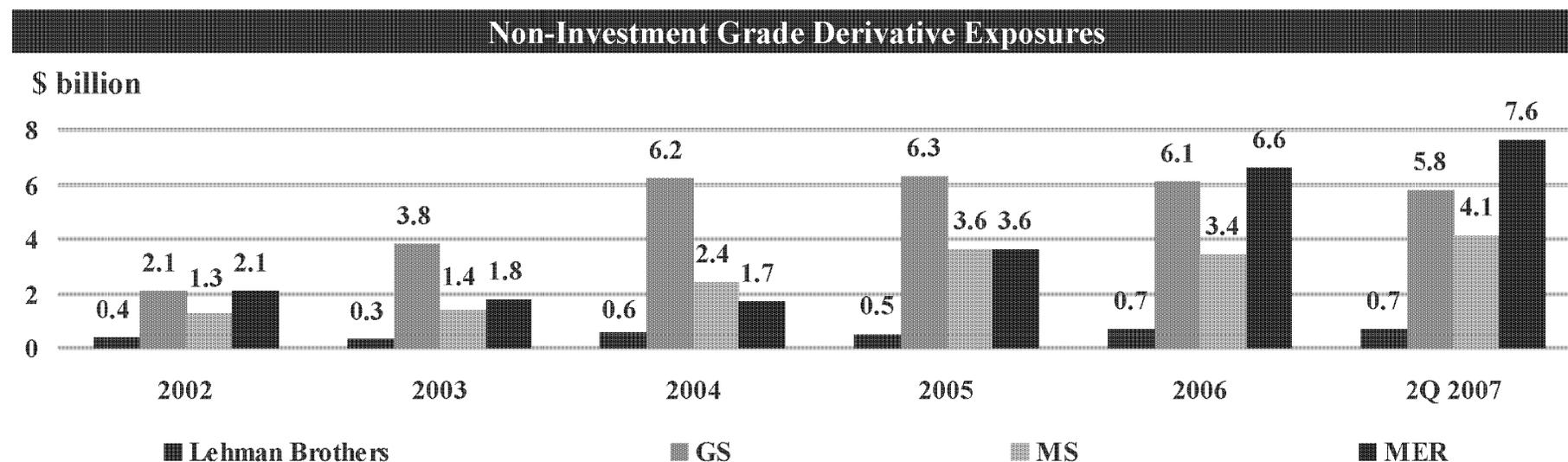
	Ratings					Percentages				
	2Q '06	3Q '06	4Q '06	1Q '07	2Q '07	2Q '06	3Q '06	4Q '06	1Q '07	2Q '07
<b>AAA</b>	5,506	5,097	5,312	6,771	6,967	20.5%	21.3%	20.6%	23.8%	21.7%
<b>AA</b>	11,930	10,469	10,487	10,506	14,464	44.5%	43.7%	40.8%	36.9%	45.1%
<b>A</b>	6,987	6,140	6,873	8,063	7,443	26.1%	25.7%	26.7%	28.3%	23.2%
<b>BBB</b>	2,010	1,658	2,348	2,231	2,520	7.5%	6.9%	9.1%	7.8%	7.8%
<b>BB</b>	308	421	559	690	461	1.1%	1.8%	2.2%	2.4%	1.4%
<b>B or Lower</b>	81	138	161	243	241	0.3%	0.6%	0.6%	0.8%	0.8%
<b>Total</b>	<b>26,822</b>	<b>23,923</b>	<b>25,740</b>	<b>28,504</b>	<b>32,096</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

	2Q '06	3Q '06	4Q '06	1Q '07	2Q '07
<b>Investment Grade</b>	98.6%	97.6%	97.2%	96.8%	97.8%
<b>Below Investment Grade</b>	1.4%	2.4%	2.8%	3.2%	2.2%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Note: Does not include money market deposits.

# Non-Investment Grade Derivatives Exposure

Lehman Brothers has continually had the lowest non-investment grade derivative exposure in absolute terms and as a percentage of total tangible equity compared to peers



**Non-Investment Grade Derivative Exposure as % Total Tangible Equity**

	2002	2003	2004	2005	2006	2Q 2007
<b>Lehman Brothers</b>	4%	3%	5%	3%	4%	3%
<b>GS</b>	15%	23%	28%	25%	19%	15%
<b>MS</b>	6%	5%	8%	12%	9%	10%
<b>MER</b>	10%	7%	6%	11%	17%	19%

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## Stress Tests

# Stress Testing

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- ◆ Stress tests and scenario analyses are performed regularly to evaluate the potential P&L impact on the Firm's portfolio of abnormal yet plausible market conditions.
  - Analyses of movements in interest rates, stock prices, FX, volatility, etc., are run over a wide range of possible scenarios to determine the impact on the current portfolio of these extreme instantaneous shocks.
  - These analyses are conservative because they do not allow for re-hedging or selling down a position either actively or through the automatic execution of existing stop-losses.
  
- ◆ Our stress tests are run regularly on a suite of scenarios, including:
  - Re-runs of historical episodes of extreme market moves, for example:
    - 9/11 terrorist attacks
    - Russia default contagion and LTCM
    - November 2001 volatile bond market
    - October 1987 stock market crash
  - Hypothetical scenarios due to shocks that have some probability of occurrence and are driven by macro fundamental shifts, for example:
    - Liquidity Crunch due to central banks globally raising rates to reduce excess liquidity and investors reducing their riskier bets in high yielding assets.
    - Oil price jump due to a major supply disruption with uncertainty on when production will return to its pre-shock levels. This shock is accompanied by deflation fears which result in significant rate reductions by major central banks.
    - Major shifts in the yield and spread curves such as steepening or flattening, or parallel shifts up or down.
  - Other ad-hoc hypothetical scenarios
  
- ◆ We subject both our trading and counterparty portfolio to stress tests.

# Stress Tests

**Stress tests indicate a worst-case loss of \$1.86bn on the trading portfolio. This is a reduction from \$2.25bn in November 2006**

## Revenue Impact on Trading Portfolio (\$ Millions)

Portfolio Date	Bull Steepening	Bull Flattening	Bear Flattening	Bear Steepening	EMG Crisis	Rating / Default & HF Risk	HY / LBO / Default Risk	Equity Crash (1987)	Parallel Move Down	Parallel Move Up	Black Monday	Oil Supply Crisis	Liquidity Crunch
Fixed Income	(256)	(379)	150	(136)	(345)	(482)	(568)	(327)	(573)	191	(323)	81	(96)
Equities	36	40	221	(73)	218	(73)	54	200	50	149	279	4	(87)
Global Trading Strategies	(474)	144	341	(193)	(541)	(220)	(499)	(1,187)	(483)	340	(778)	(536)	(364)
Investment Management	(291)	64	186	(215)	(275)	(98)	(304)	(571)	(292)	187	(388)	(312)	(239)
Global Principal Strategies	(70)	7	(22)	(167)	(161)	(166)	(125)	51	(62)	(23)	(4)	(21)	(150)
Prime Services	2	13	(17)	(11)	1	2	(1)	(4)	4	(10)		6	(22)
Investment Banking	(7)	2	5	(3)	(7)	(1)	(8)	(20)	(7)	5	(13)	(9)	(5)
Non-Core	(1)		1	(1)	(2)	0	(2)	(4)	(1)	1	(3)	(2)	(1)
<b>07/31/07 Firm Total</b>	<b>(1,061)</b>	<b>(108)</b>	<b>865</b>	<b>(799)</b>	<b>(1,111)</b>	<b>(1,040)</b>	<b>(1,452)</b>	<b>(1,862)</b>	<b>(1,365)</b>	<b>842</b>	<b>(1,230)</b>	<b>(788)</b>	<b>(964)</b>
<b>11/30/06 Firm Total</b>	<b>(1,099)</b>	<b>306</b>	<b>1,035</b>	<b>(515)</b>	<b>(1,407)</b>	<b>(1,061)</b>	<b>(1,650)</b>	<b>(2,248)</b>	<b>(1,328)</b>	<b>951</b>	<b>(1,570)</b>	<b>(1,218)</b>	<b>(1,015)</b>

*Note: These represent revenue losses associated with instantaneous market moves that in actuality occurred over two-week periods. These analyses are conservative because they do not allow for re-hedging or selling down a position either actively or through the automatic execution of existing stop-losses.*

*Confidential Presentation to:*

# Finance Committee of Board of Directors

## Balance Sheet Snapshot

*September 11, 2007*

**LEHMAN BROTHERS**

# Balance Sheet Assets Snapshot

Year to date, balance sheet has grown by over 30%. Inventory growth has been more significant in Mortgage and Corporate Loans, and Corporate Securities

<b>Inventory</b>	<b>2006</b>	<b>Q3 '07</b>	<b>Q3 '07 vs 2006</b>
Mortgages and Mortgage-Backed positions:			
Securities	11.8	17.3	5.5
Loans	45.8	73.5	27.7
Government and Agencies	47.3	40.2	(7.1)
Corporate Debt and Other:			
Bonds	28.6	31.7	3.1
Loans	15.2	26.0	10.8
Corporate Equities	43.1	59.3	16.2
Derivatives and other Contractual Agreements	22.7	32.3	9.6
Real Estate held for sale	9.4	18.8	9.4
Commercial Paper and Money Market instruments	2.6	3.5	0.9
Other <sup>1</sup>	42.4	55.3	12.9
<b>Net Balance Sheet Assets</b>	<b>268.9</b>	<b>357.9</b>	<b>89.0</b>

<b>Financing</b>			
Governments	115.2	145.6	30.4
Corporates	32.7	28.9	(3.8)
Equities	48.6	63.2	14.6
Other Inventory <sup>2</sup>	22.6	10.6	(12.0)
Other Gross Assets <sup>3</sup>	15.5	49.3	33.8
<b>Gross Balance Sheet Assets</b>	<b>503.5</b>	<b>655.5</b>	<b>152.0</b>

<b>Leverage Equity</b>	<b>18,567</b>	<b>22,108</b>	<b>3,541</b>
<b>Net Leverage</b>	<b>14.5x</b>	<b>16.2x</b>	<b>1.7x</b>

1. Primarily Cash & Cash Equivalents and Receivables

2. Primarily Mortgage Backed Securities

3. Segregated Cash & Securities, Securities Received as Collateral, Goodwill & Intangibles

*Confidential Presentation to:*

# Finance Committee of Board of Directors

## Liquidity Update

*September 11, 2007*

**LEHMAN BROTHERS**

# Overview

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- ◆ Our liquidity framework is based on a conservative approach to funding the balance sheet:
  - No reliance on short term unsecured funding, and reliance on secured funding only where we see a deep and liquid pool of lenders who understand the collateral
  - Long term funding is used for less liquid collateral
  - Long term funding is sourced from a wide variety of markets, and includes our internal banks sourcing insured deposits
  - Liquidity is tracked at a granular level which incorporates specific entity dynamics
- ◆ Our long term debt had grown to \$118 billion at the end of the 3<sup>rd</sup> quarter from \$81.2 billion at the end of 2006. Year to date we have issued \$67 billion at an average life of 6.9 years. The average life of the portfolio has risen slightly to 6.6 years at the end of the 3<sup>rd</sup> quarter.
- ◆ In the last two months liquidity has been considerably more challenging to source. The result has been higher credit spreads particularly for financial companies. Despite the fact that the markets have been more difficult to access, we have been able to limit the effect on our liquidity through alternative funding sources and our in-house banks.
- ◆ The 3<sup>rd</sup> quarter liquidity pool has increased to a record \$36 billion (from \$25.7 billion at the end of the 2<sup>nd</sup> quarter). This represents the strongest quarter end liquidity position for the Firm. The cash capital surplus has increased to \$8.1 billion from \$2.5 billion at the end of the 2<sup>nd</sup> quarter and against a \$2 billion policy minimum. This level of surplus also represents an all time record.
- ◆ The challenge in the 4<sup>th</sup> quarter will be to maintain strong surpluses against a significant pipeline of loans and real estate purchases. We currently do not project the need to tap the capital markets to raise additional long term debt, as we currently have significant liquidity to fund these activities.

# Funding Framework

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**The Funding Framework represents the Firm's policies and guidelines for financing. The guidelines establish the funding requirements at the asset level**

## Policy

**Cash Capital Sources** represent long term funding available. Long term debt (> 1 year) and equity are supplemented by internal bank sources and long term secured funding facilities.

**Cash Capital Uses** are asset level requirements and include illiquid assets, pre funding for loan commitments, entity capital requirements and requirements for operational friction.

**Maximum Cumulative Outflow** provides a granular detail of cash outflows over a one year period. This mirrors the cash capital model and determines the appropriate size of the liquidity pool.

**Reliable Secured Funding** measures the reliability of secured funding for more liquid assets. It ensures there is sufficient depth and diversity in our shorter term secured sources.

## Application

Tracking of cash capital sources and uses is produced at least weekly and daily over the recent liquidity squeeze. Forecasts for the medium and long term cash capital requirements are produced to determine the issuance plans.

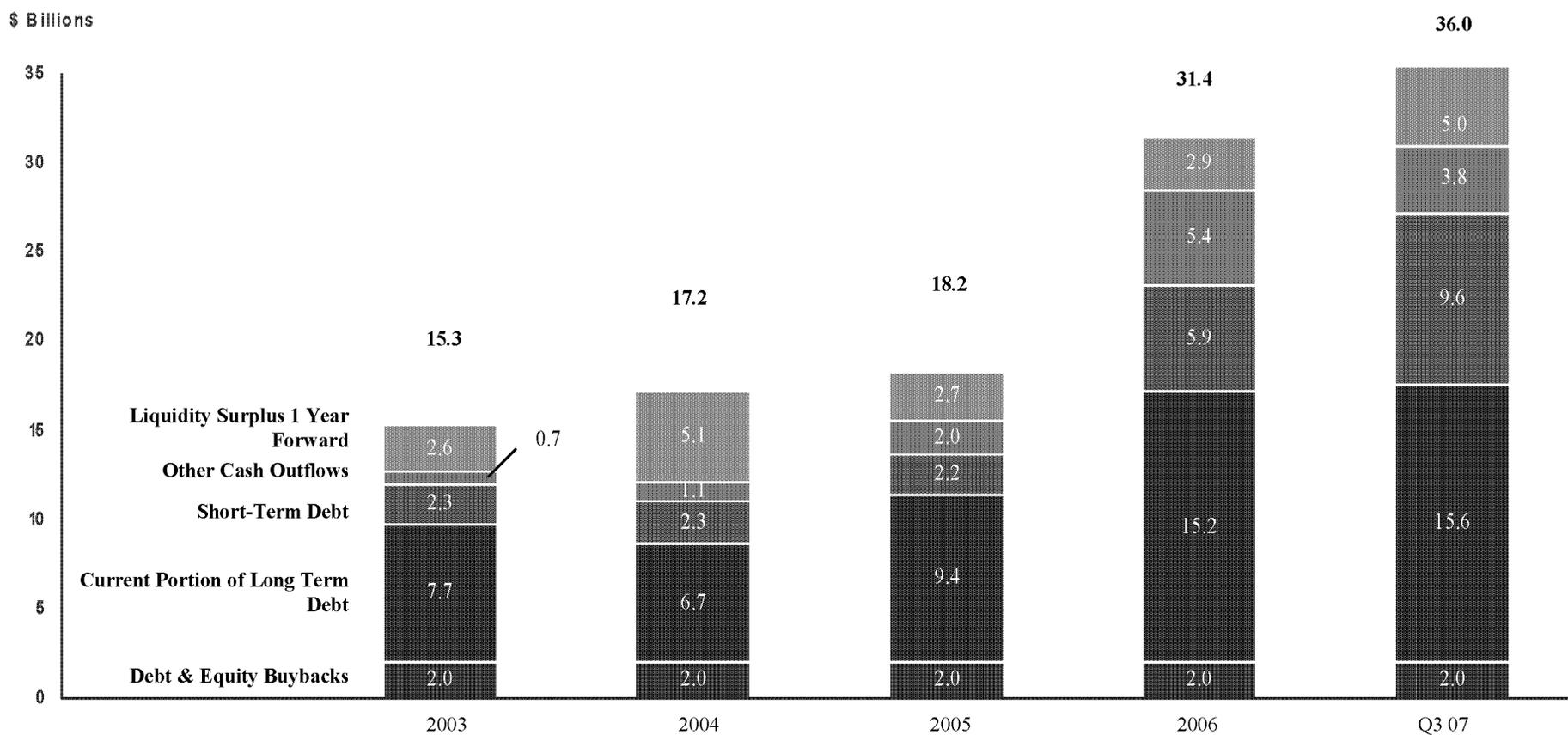
Granular tracking of the potential outflows and sufficiency of the liquidity pool.

Daily reviews of secured funding counterparty activity, haircut charges, and pricing changes.

# Liquidity Pool

Our liquidity pool has increased in the 3<sup>rd</sup> quarter and remained sufficient to absorb all forecasted cash flows over a one year period. This is largely required to fund the maturity of debt, as well as other contingent cash requirements, such as loan funding. The increase in funding of contingent acquisition facilities has introduced additional volatility in our liquidity requirements, and is discussed in detail later

## Liquidity Pool



# Liquidity & Short Term Debt: Competitor Comparison

Relative to our principal competitors, we maintain one of the most conservative liquidity pools in relation to the amount of short term debt and long term debt maturing within the current year

2007 Q2 Short-Term Debt – Liquidity Pool Comparison

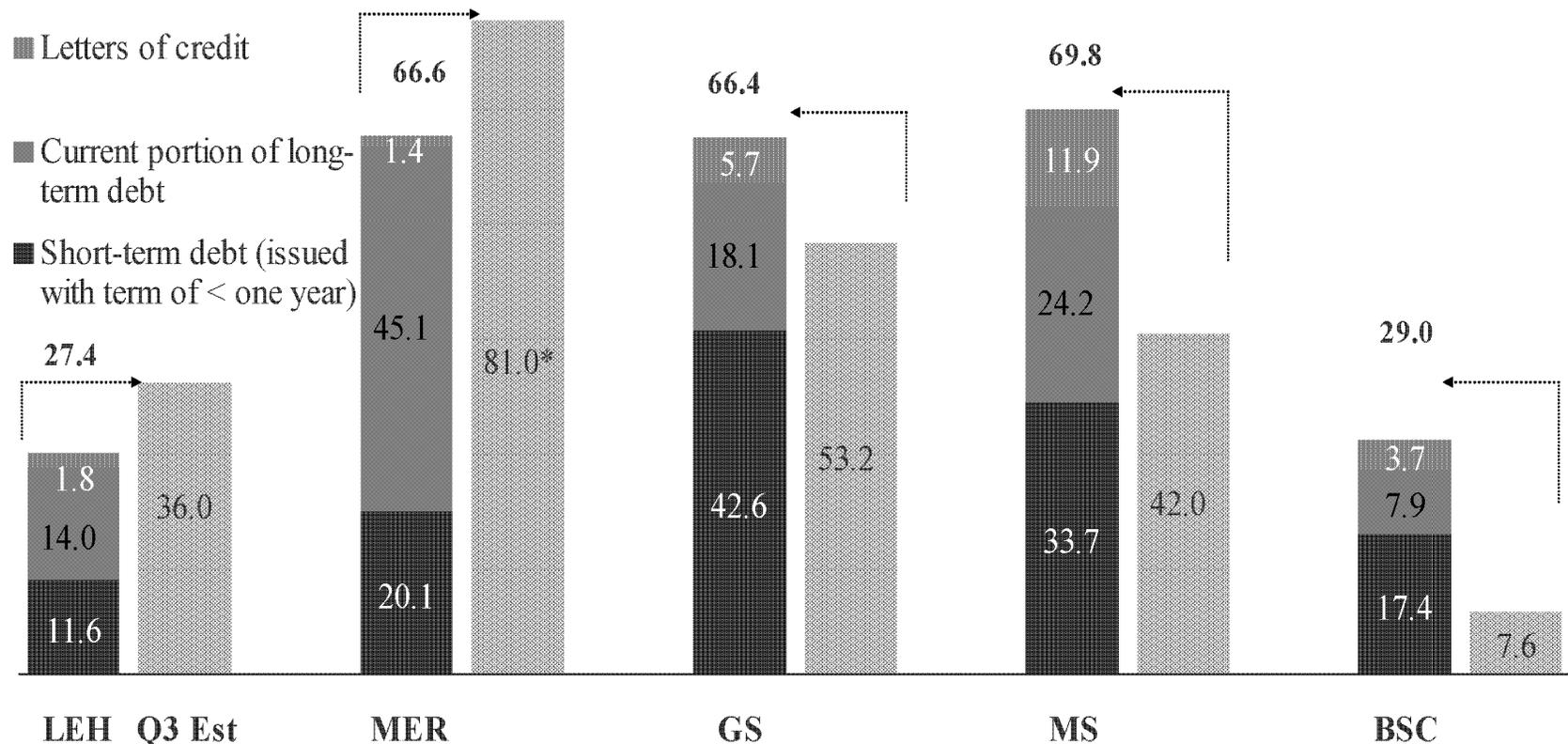
\$ Billions

■ Liquidity

■ Letters of credit

■ Current portion of long-term debt

■ Short-term debt (issued with term of < one year)

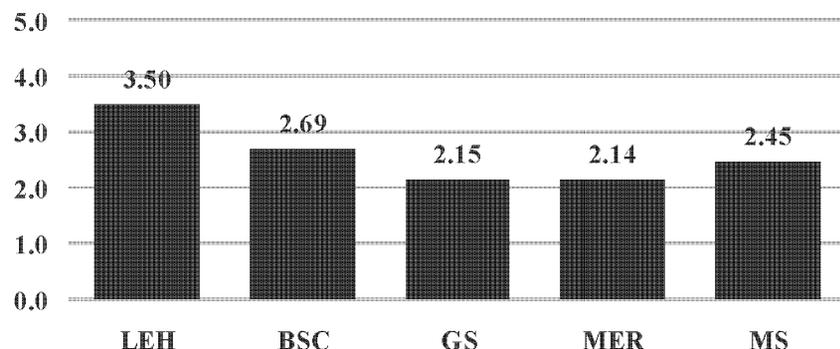


\*Merrill Lynch's disclosure includes liquidity at regulated entities

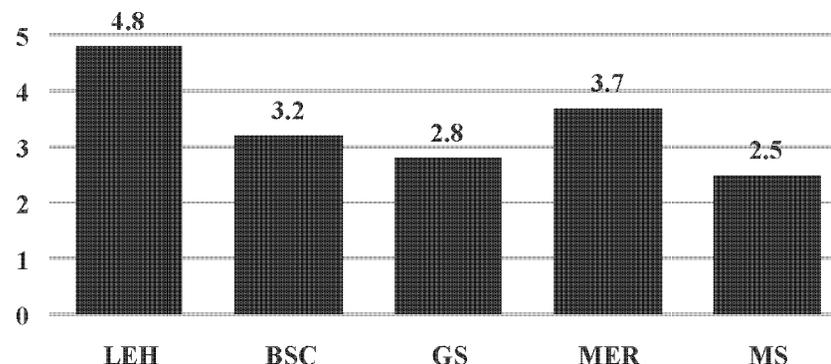
# Competitor Comparison: Rating Agencies View

## Rating agencies have recognized the conservatism of our liquidity management

- ◆ In August 2007, Fitch Ratings' liquidity analysis of the U.S. securities firms showed Lehman Brothers liquidity strength to be greater than the peer group



■ Liquid Asset Coverage of Short Term Debt



■ Short Term Debt Coverage from Balance Sheet

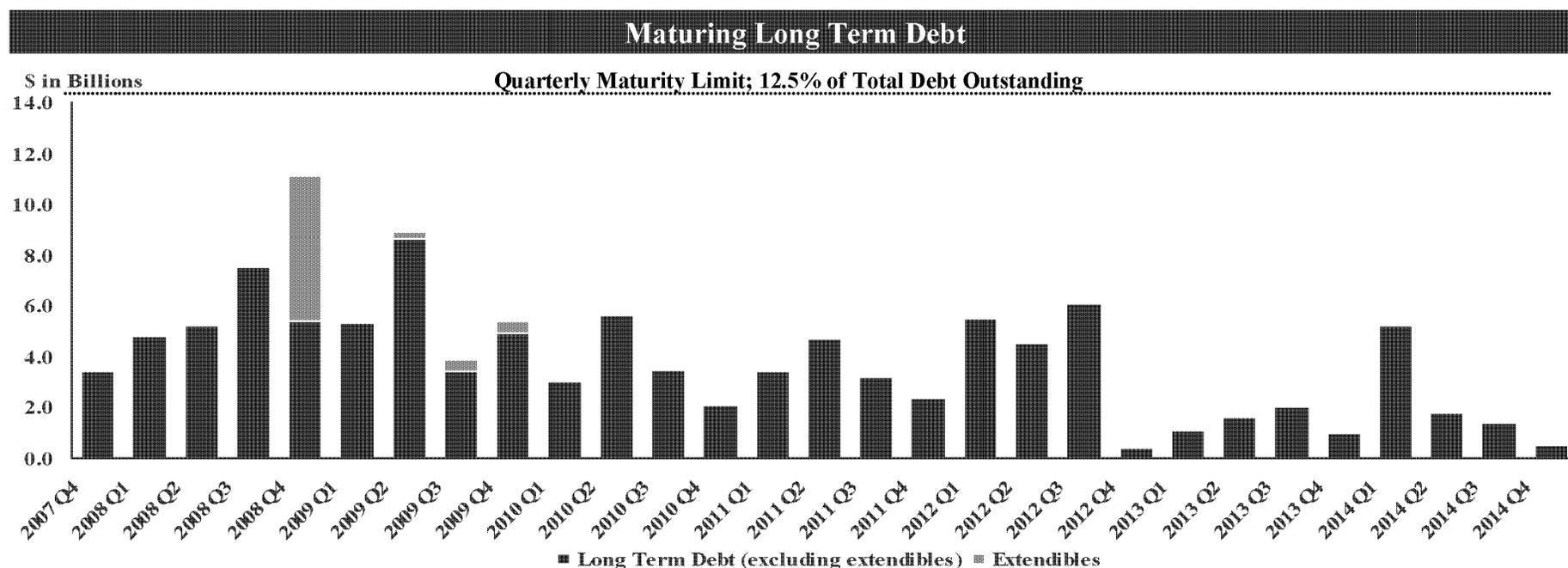
- ◆ On August 20<sup>th</sup>, Standard & Poor's reaffirmed Lehman Brothers Holdings Inc's liquidity saying. "We consider Lehman's liquidity to be strong, and we expect it to remain more than sufficient to meet near-term funding requirements."
- ◆ In May 2007, Moody's stated that "Moody's views the liquidity profile of Lehman Brothers Holdings Inc. as very strong...Lehman maintains an ample liquidity cushion of high quality unencumbered assets capable of being pledged or sold to repay all commercial paper, short and long term debt maturing within a year and to meet other contingent liquidity needs"

*Liquid asset coverage of short term debt: Net cash and securities minus short term debt and letters of credit over excess unencumbered portfolios*  
*Short term debt coverage from balance sheet: Net assets over total short term debt and letters of credit*

# Liquidity Risk Mitigation: Refinancing Risk & Cash Capital Surpluses

Refinancing risk is kept to a minimum by limiting usage of short term debt and adhering to strict limits on the maturity profile of long term debt

- Our short term debt remains low and lower than our peers
- Our maturity profile is well distributed
- No 3 month, 6 month or 12 month period is in breach of roll-off limits



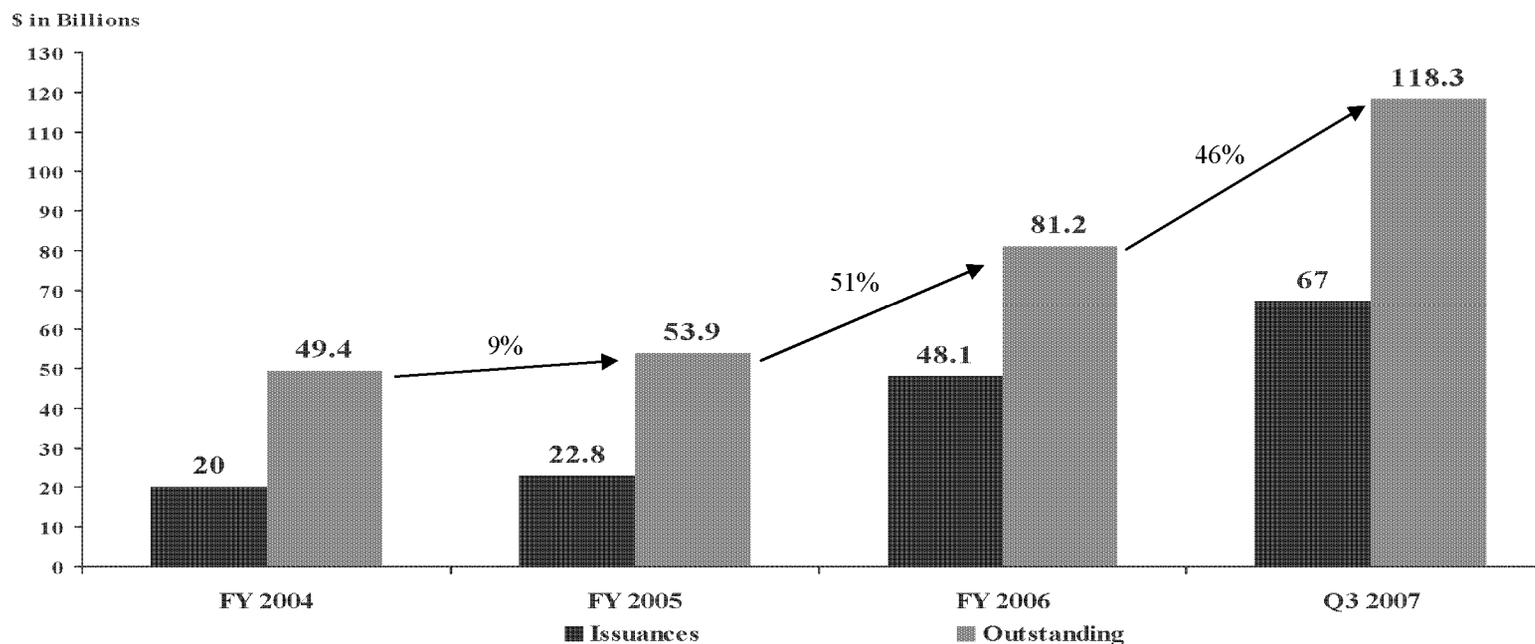
\$ in Billions

Maturity Bucket	Limits		Actual		Capacity	Period with Largest Refinancing
3 months	12.5%	\$14.6	9.4%	\$11.1	\$3.5	4Q 08
6 months	17.5%	\$20.5	14.0%	\$16.4	\$4.1	4Q 08 – 1Q 09
12 months	30.0%	\$35.1	25.0%	\$29.2	\$5.9	4Q 08 – 3Q 09

# Debt Issuance

In 2007, we have issued a record \$67 billion of long term unsecured debt

## Long Term Debt Outstanding vs. Long Term Debt Issuances



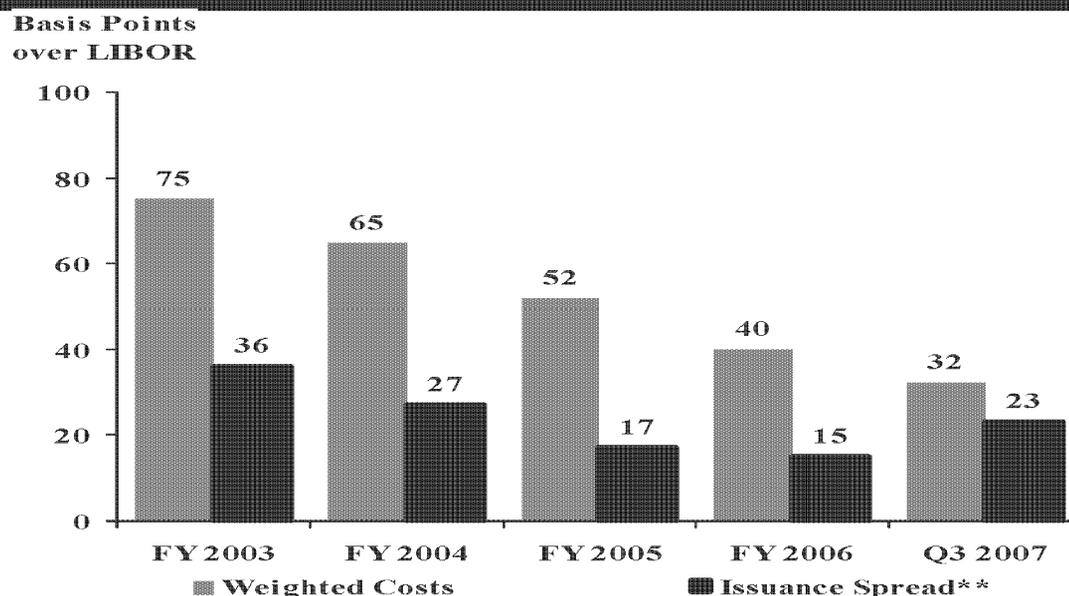
## Avg. Contractual Life of Issuance

FY 2004	FY 2005	FY 2006	Q3 2007
7.4	8.5	5.5	6.9

# Debt Issuance

The average cost has been decreasing. However, in 2007 the issuance cost increased as both very long term and subordinated issuance increased. Despite this, debt issuance has been achieved at very attractive levels. Spreads on an absolute basis and versus our peers are much wider now, which will introduce some additional costs

**Weighted Cost vs. Issuance Spread**



\*\* Spreads are inclusive of all issuances: vanilla, structured, hybrid, non-cash cap, sub debt

**Secondary Spreads vs. Competitors As of 8/31/07**

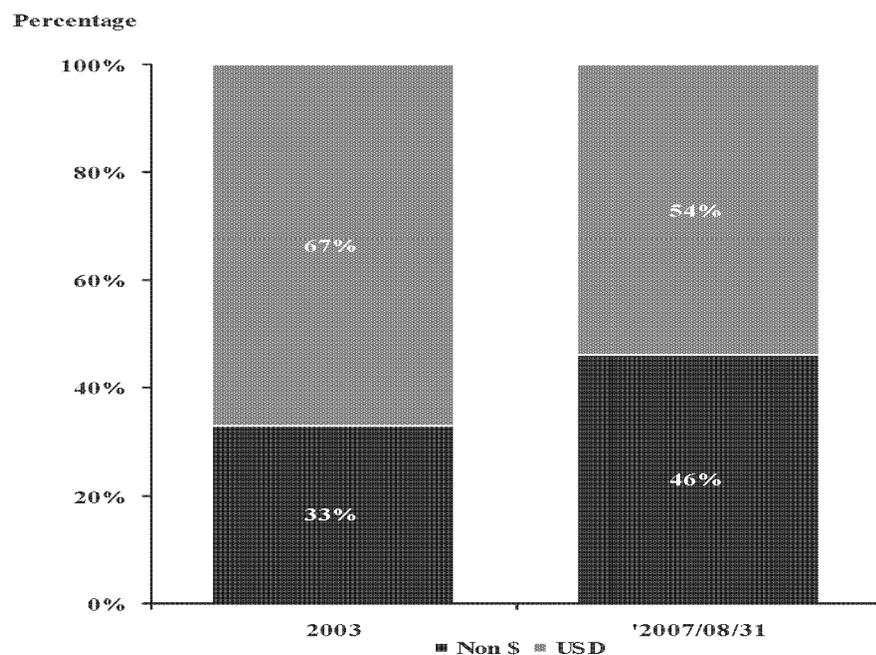
Avg Spreads over Libor (bps)	3Y	5Y	7Y	10Y
LEH	175	118	128	140
GS	137	78	93	110
MS	137	78	93	110

# Diversification of the Debtholder Base

We have continued to diversify our debtholder base by:

- Issuing in non-USD; 46% of issuance in 2007 has been non-USD; 51% of issuance over the last 5 years has been non-USD.
- Issuing structured notes where investors are less sensitive to Lehman's credit; 24% of 2007 issuance and 26% issuance over the last 5 years has been in structured notes.
- We have also continue to issue in new markets: notably, GBP 6 years deal, largest Samurai multi-tranche transaction, and HKD private placement

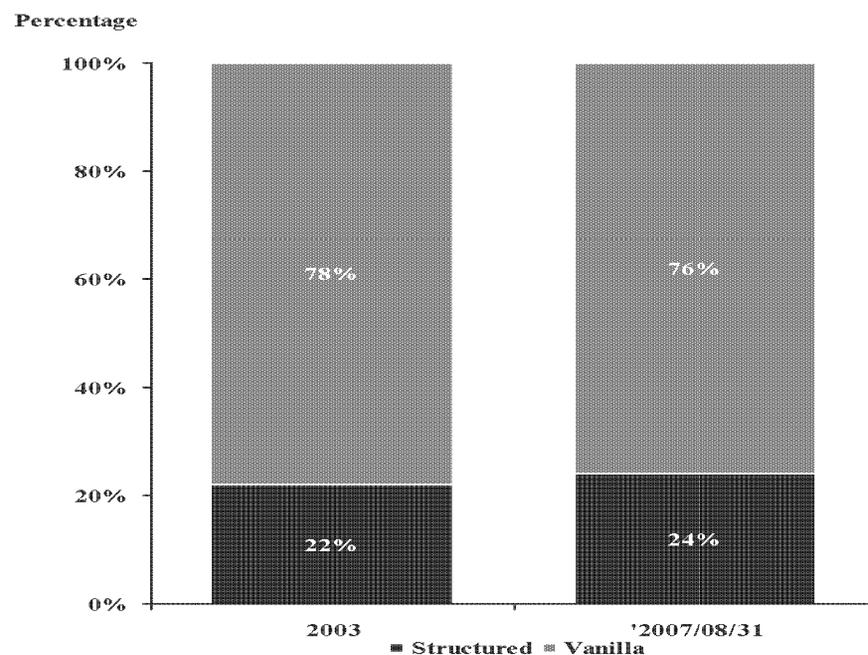
Mix by Currency



Total Outstanding (\$ in billions)

USD	24	64
Non \$	12	54
	<u>36</u>	<u>118</u>

Mix by Type

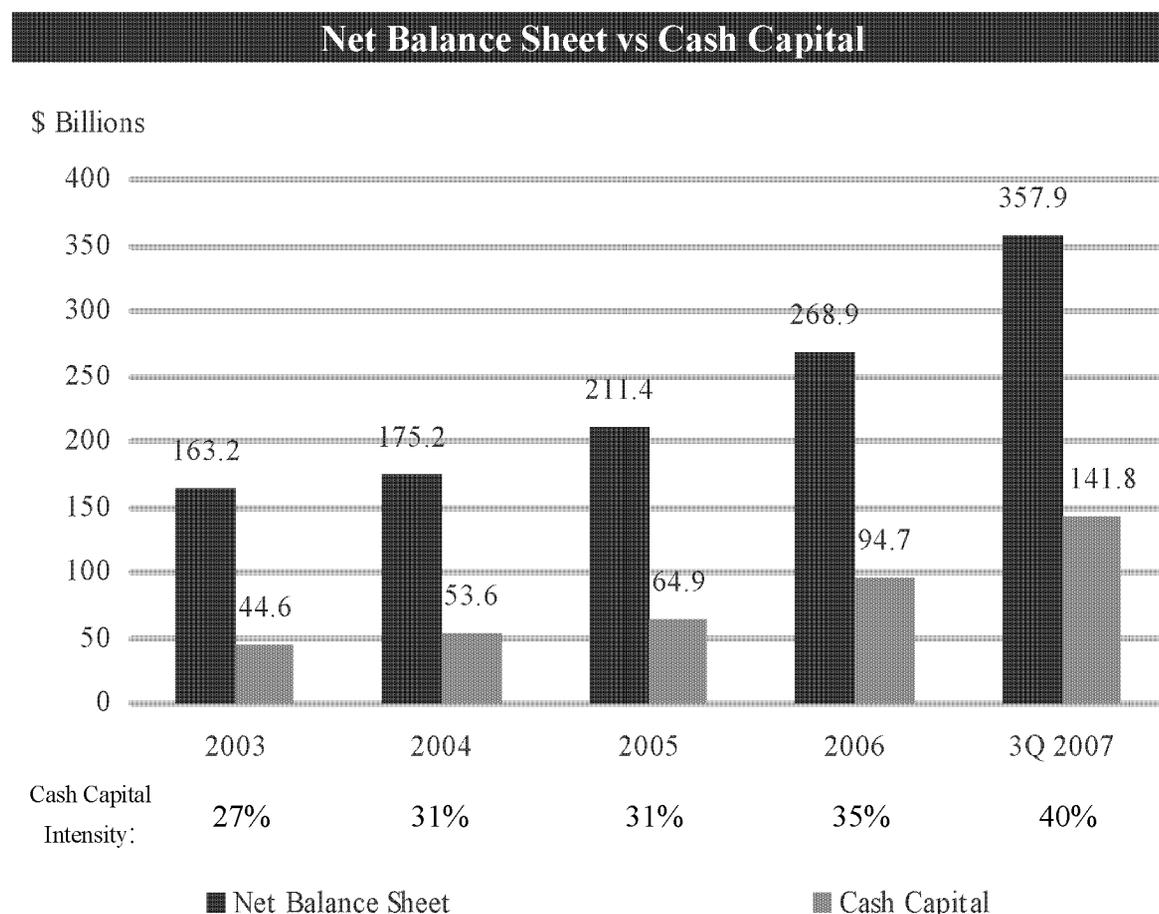


Total Outstanding (\$ in billions)

Vanilla	28	89
Structured	8	29
	<u>36</u>	<u>118</u>

# Cash Capital

Cash Capital usage increases with Balance Sheet, but is affected by the composition of inventory between more liquid and less liquid asset classes. With growth in corporate and commercial real estate lending, cash capital usage has increased at a faster pace than Balance Sheet



\$ Billions

Business	Q3 YTD CC Δ
<b>Fixed Income</b>	
Real Estate	17.5
High Yield	5.0
Securitized Products	2.8
Global Rates	2.8
Other FID businesses	3.2
<b>Total Fixed Income</b>	<b>31.3</b>
<b>Equity</b>	
Volatility	2.6
Other EQ businesses	1.0
<b>Total Equities</b>	<b>3.6</b>
IMD	3.3
IBD	2.4
GPS	1.6
GTS	1.0
CMPS	0.9
Non-Trading Assets	2.5
Other	0.5
<b>Total Other</b>	<b>12.2</b>
<b>Total Change in Usage</b>	<b>47.2</b>

# Liquidity and Cash Capital

- ◆ Liquidity Pool as of August 31 was \$36.0 billion. This compares to \$25.7 billion at the end of Q2 and \$29.8 billion at the end of Q1.
- ◆ Cash Capital estimated Q3 surplus is \$8.1 billion.
- ◆ Taking the most conservative assumption around loan financing we still expect our liquidity pool to remain in surplus through the end of the year.

<b>LBHI Cash Capital Projection</b>	
<b>CC Projection for the month ending 8/31 (Q3)</b>	
	<b>8.1</b>
	<b>Change in Liabilities</b>
Projected Structured Issuance	3.3
Public Debt Issuance	1.5
Additional Facilities	
- Racers Cash Capital Facility	1.0
- Dresdner Cash Capital Facility	1.0
- Metlife Cash Capital Facility	1.0
Chase Cash Capital Facility Drawdown	2.0
Roll into Current Portion	(4.6)
Equity	0.5
	<u>5.6</u>
	<b>Change in Business Usage</b>
High Yield	
- Loan Funding	(13.0) <sup>1</sup>
- Syndication/Selldown	2.4
	<u>Total HY/HG (10.6)</u>
High Grade	
- Loan Funding	(0.4) <sup>2</sup>
- Syndication/Selldown	-
	<u>Total HY/HG (0.4)</u>
Real Estate	
- Archstone Funding	(2.4)
- Loan Funding	(7.9)
- Securitization/Syndication/Selldown	10.4
	<u>Total Real Estate 0.1</u>
Other	(0.9)
	<u>Total Change in Business Usage (11.8)</u>
<b>CC Projection for the month ending 11/30 (Q4)</b>	
	<b>2.0</b>

1. \$13.0 billion of high yield loan funding excludes \$5.9 billion which will be funded in the banks and conduits.

2. \$0.4 billion of high grade loan funding excludes \$0.6 billion which will be funded in the banks and conduits.

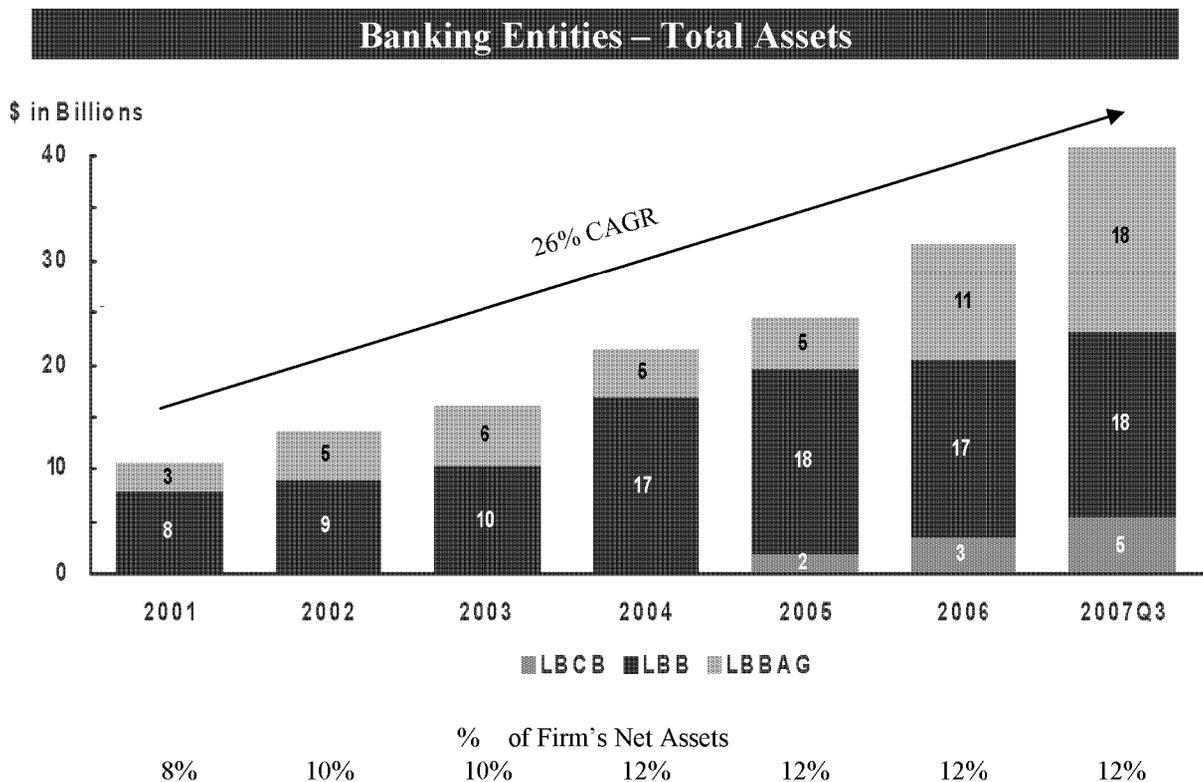
# Liquidity Risk Mitigation - Bank Entities

**Lehman owns 3 banking entities: Lehman Brothers Bank (Delaware based thrift institution), Lehman Brothers Commercial Bank (Utah based industrial loan corporation) and Lehman Brothers Bankhaus (German bank). These entities all benefit from depositor protection, meaning that financing can be raised very cost effectively and with very limited sensitivity to Lehman Brothers Holdings (making it a very reliable source of funding). Use of these entities has increased significantly: they are the primary entities for loan funding**

**LBB :** Funds all US residential mortgage origination. Additionally funds commercial mortgages and investment grade US loans. Cost of funds is Libor + 15bps.

**LBCB :** Funds commercial mortgages, derivative receivables and corporate & industrial loans. Cost of funds is Libor + 14bps.

**LBBAG:** Funds securities on repo and loans (commercial, residential and corporate). Cost of funds is Libor + 17bps.



# Contingent Liquidity Risk Management

**Contingent liquidity risk arises where there is uncertainty around financing activity, and predominantly relates to loan commitments and contingent loan commitments**

## Unfunded High Grade Commitments

- ◆ \$29.6 billion against 150+ counterparties diversified across several industry sectors. Average facility size per counterparty is approximately \$180 million
- ◆ \$15.2 billion of these commitments have been originated at the three Lehman banks which are able to fund up to \$625 million per name.
- ◆ The three banks have a FHLB line of \$11 billion, access to the Fed discount window, and the ECB, and are able to raise funding in the CD markets of over \$1 billion per week.
- ◆ We have \$2.5 billion of prefunding established across Holdings and the banks
- ◆ We have a \$6 billion facility with a third party bank prefunded to \$2.4 billion

## Unfunded High Yield Commitments

- ◆ \$13.6 billion against 250+ counterparties with average exposure of less than \$60 million
- ◆ \$1.5 billion are currently held at Lehman banks which are able to fund up to \$400m per name
- ◆ We have a \$2 billion high yield loan funding facility through a third party bank
- ◆ Historical analysis over the past two years has shown draws of high yield facilities to be a maximum 20% year on year. We have \$2.7 billion of cash capital prefunding across Holdings and the banks

## Contingent High Grade Acquisition Facilities

- ◆ \$3.8 billion against 4 counterparties
- ◆ These commitments can all be placed at the Firm's banks which have a combined loan to one borrower limit of \$625 million
- ◆ We have a conduit structure backed by a third party bank that has \$2.5 billion of prefunding
- ◆ Even in current market environment, there has been success at syndication of high grade credit

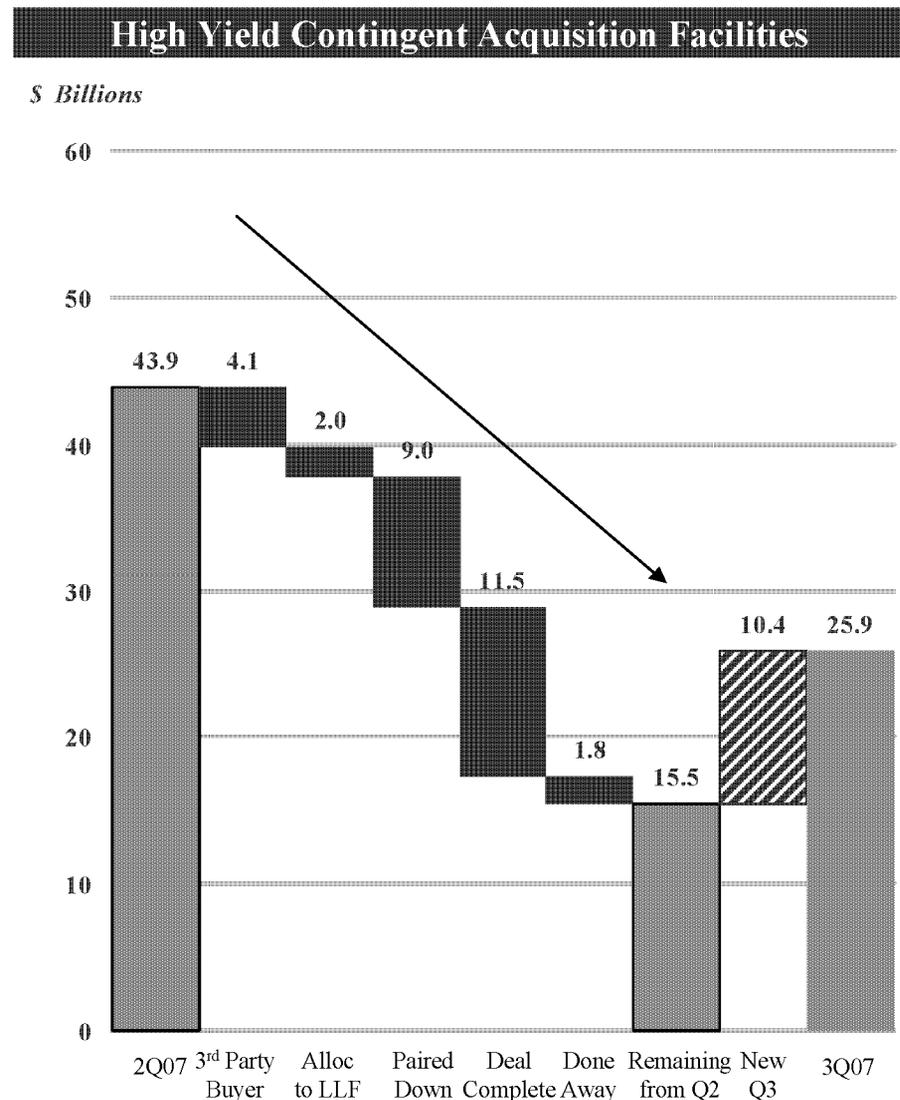
## Contingent High Yield Acquisition Facilities

- ◆ \$25.9 billion against 27 counterparties
- ◆ Our expected allocation is generally lower than the headline reported number: if the sponsor fails to complete, has multiple commitments for the financing it needs, deal is downsized, etc.
- ◆ Our banks can take up to \$400 million of high yield counterparty loans
- ◆ We have a \$7.5 billion funding facility for high yield contingent commitments
- ◆ We have \$5.3 billion of committed long term debt facilities and a cash capital surplus currently at \$8.1 billion that we can use if necessary

*All financials above Q3 estimates*

# High Yield Contingent Acquisition Facilities

- ◆ Contingent acquisition facilities are financial commitments that Lehman makes to sponsors to enable them to acquire other companies or parts of companies
- ◆ High yield Contingent Acquisition Facilities reduced from \$43.9bn at May 31, 2007 to \$25.9bn at August 31, 2007
- ◆ The main drivers for the reduction were deal completions (\$11.5bn), reductions in Lehman's share of deals (\$9.0bn) and the sale of \$4.1bn of Archstone Smith debt. This was offset by \$10.4bn of new commitments
- ◆ Of the \$11.5bn of deals completed, \$7.4bn were syndicated or sold and \$4.1bn remain on Lehman's books



*Confidential Presentation to:*

# Finance Committee of Board of Directors

## Capital Management

*September 11, 2007*

**LEHMAN BROTHERS**

# Executive Summary

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- ◆ Equity capital is one of the most important resources of the firm. We manage this resource to support the firm's growth, maintain the appropriate risk profile, and ultimately create value to our shareholders
- ◆ While the funding framework addresses the aggregate amounts of funding, equity capital management focuses on the mix of debt and equity
- ◆ Our approach when developing the Capital Plan is to ensure:
  - Assets are sufficient to support revenue targets
  - Equity Capital is sufficient to support the mix of assets and the risk they generate
  - ROE does not fall below acceptable levels
- ◆ In 2007, we implemented several initiatives
  - Further developed our equity adequacy metrics by introducing a new internal Equity Adequacy Framework (EAF). The model received a very positive reaction from the rating agencies
  - Stepped up issuance of hybrid equity to optimize our equity mix
  - Reestablished buyback acceleration triggers to take advantage of price dips
- ◆ Our equity capital position is strong, with all key metrics within established boundaries

# The Equity Management Dashboard

Summary

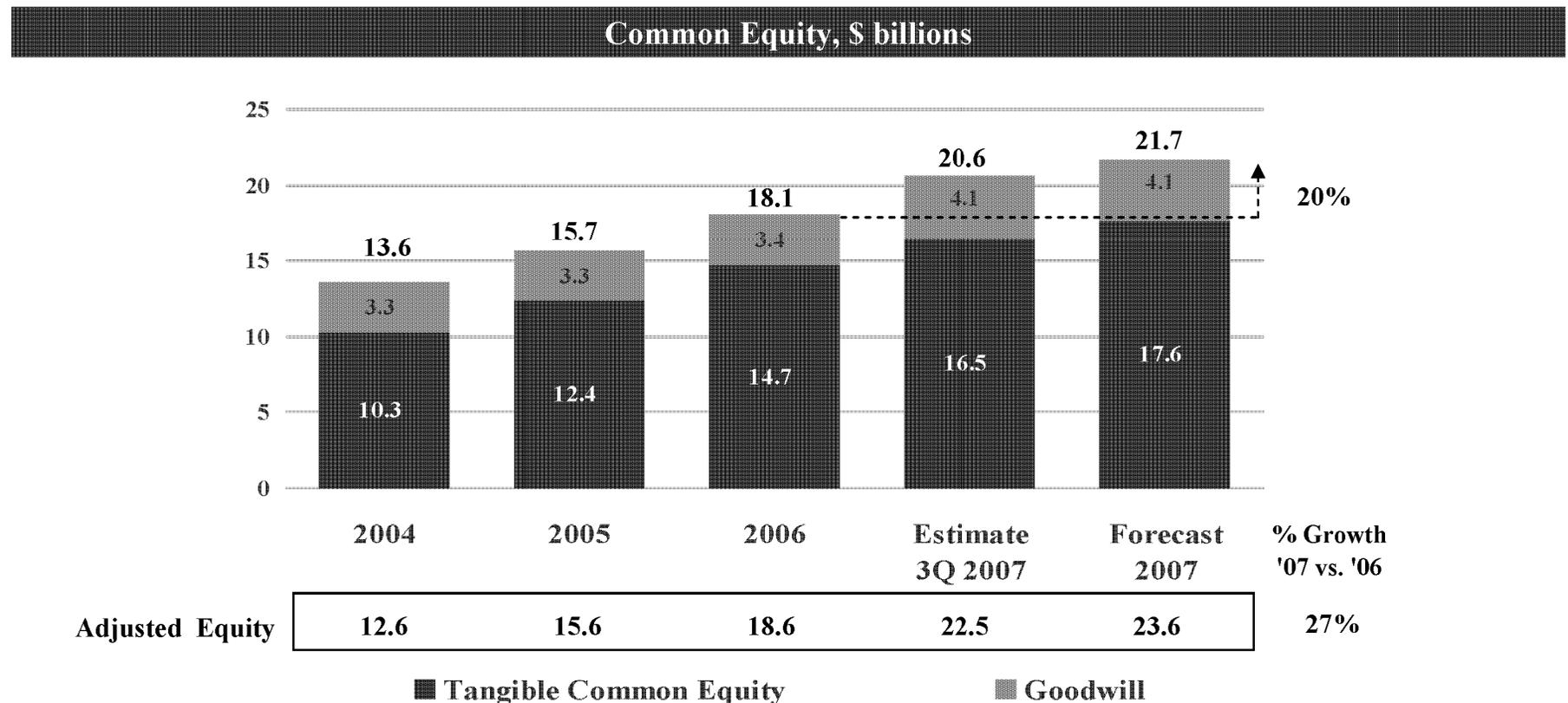
Measures	Description	Target/Limit	2007 Projection
<b>Equity Adequacy</b>			
– Net Leverage	◆ Crude but common accounting measure	◆ In line/below peers	◆ 15.9x
– CSE Capital Ratios	◆ Regulatory measures	◆ T1 ratio above 6% “well-capitalized”	◆ 7.5% (3Q’07)
– Risk Equity	◆ Internal risk equity model	◆ Equity surplus	◆ 1.7 B <sup>(1)</sup>
– Equity Adequacy	◆ Internal economic equity model	◆ Equity Surplus of \$1.5B	◆ \$2.2 B
<b>Share Dilution</b>			
– Book Value shares	◆ Point-in-time share count; used in calculation of BVPS	◆ Long-term stable or declining	◆ 1% reduction <sup>(2)</sup>
– Diluted EPS shares	◆ Time-averaged count inclusive of equity awards; used in calculation of EPS	◆ Long-term stable or declining	◆ 3.2% reduction <sup>(2)</sup>
– Adjusted overhang	◆ Percent dilution, if all awarded RSUs/Options are instantly delivered/exercised	◆ Lower than 10%	◆ 8.7%

1. As of June '07 period end

2. Relative to YE 2005

# Equity Trend and Mix

By year-end we project Common Equity to grow by 20% reaching \$21.7 billion or \$1.0 billion over budget. The Firm's Adjusted Equity, which includes preferred stock and hybrids, is projected to grow by 27% to \$23.6 billion, \$1.5 billion higher than budget. As in 2006, our Adjusted Equity<sup>(1)</sup> exceeds common, providing extra leverage to support growth without causing dilution



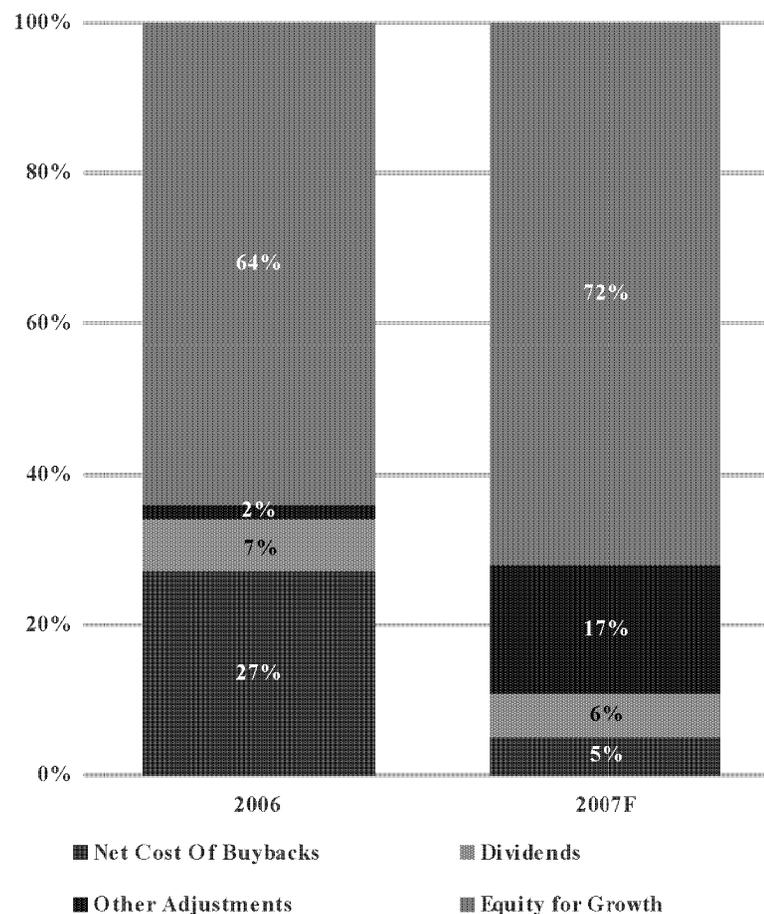
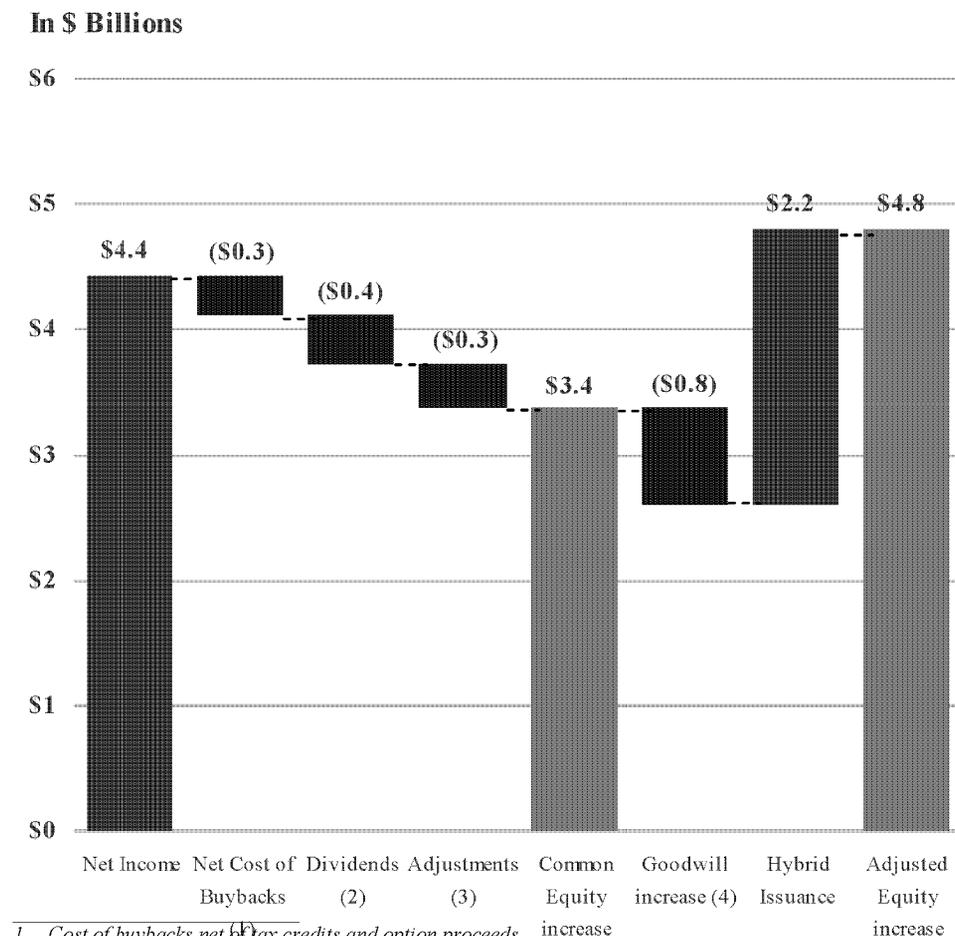
1. Adjusted equity consists of Tangible Common equity plus Hybrid equity. Used in equity adequacy calculations

# Sources and Uses of Equity

The primary source of equity growth is the Firm's Net Income, supplemented by issuance of hybrid securities. Most of the equity generated is reinvested in growth

**Equity Sources and Uses, 2007F, \$millions**

**Composition of Equity Uses**

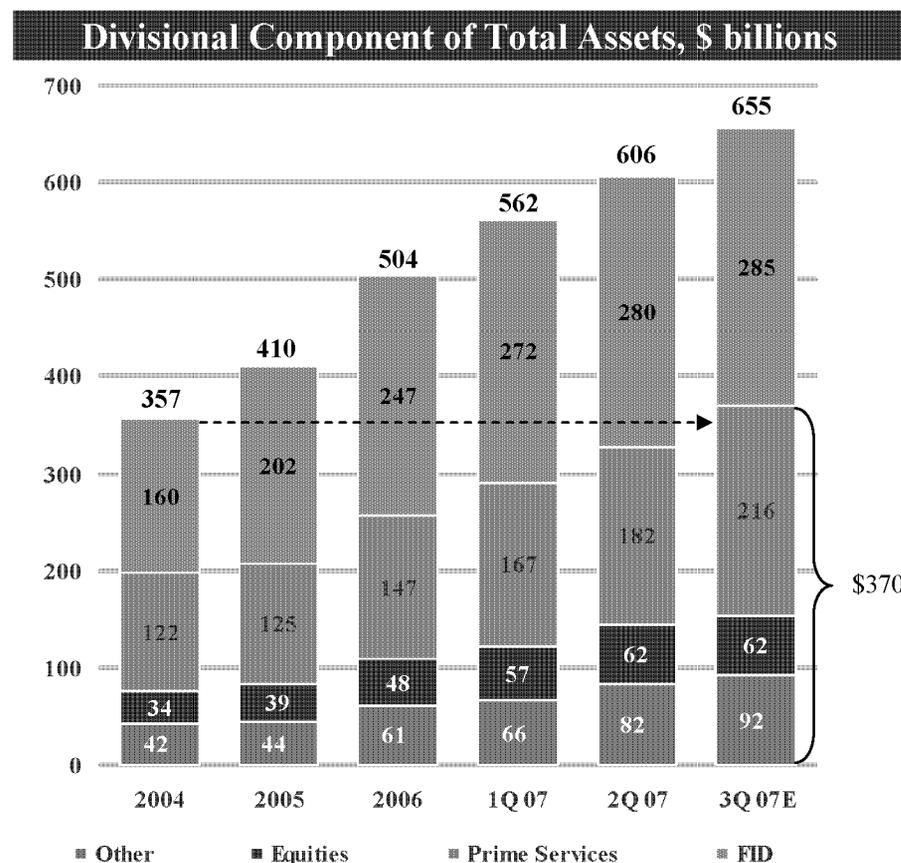
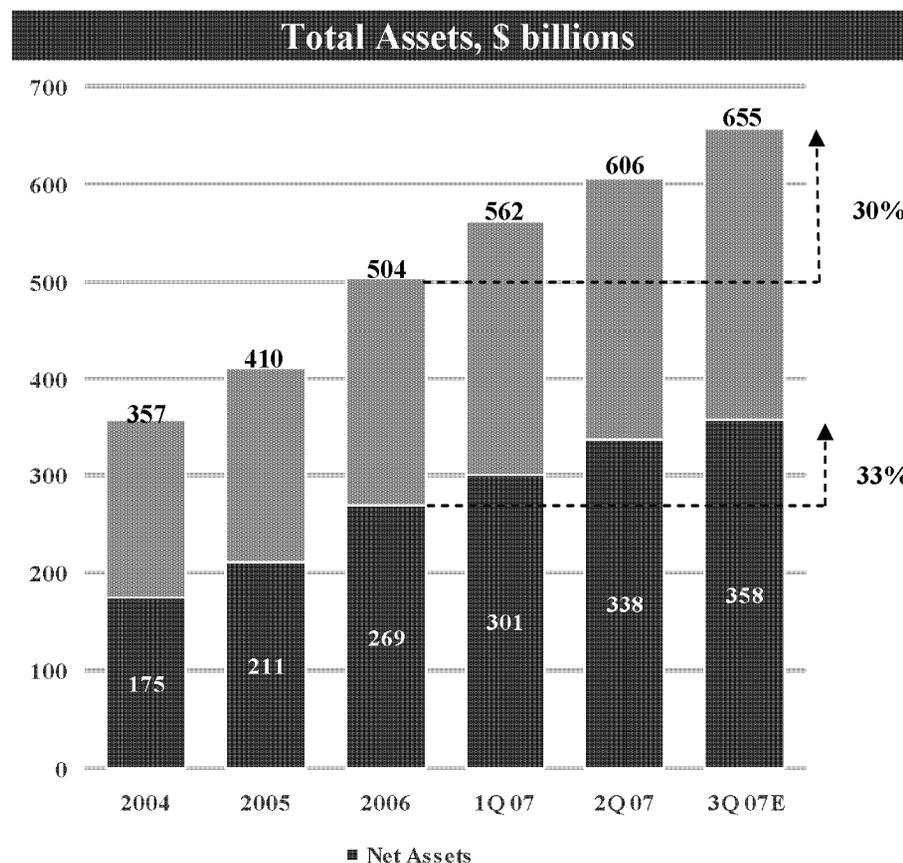


1. Cost of buybacks net of tax credits and option proceeds  
 2. Includes Common and Preferred  
 3. Primarily Pension adjustment - \$230mm  
 4. Primarily includes Eagle Energy, Capital Crossing, and Grange

# Growth and Diversity of Our Asset Base

Equity, Balance Sheet, and Adequacy

For the 3rd quarter we expect total assets to come in at \$655 billion and net assets at \$358 billion. Fixed Income remains the largest balance sheet user, yet other businesses have also grown rapidly. The combined non-Fixed Income businesses are roughly the size of the entire Firm just three years ago

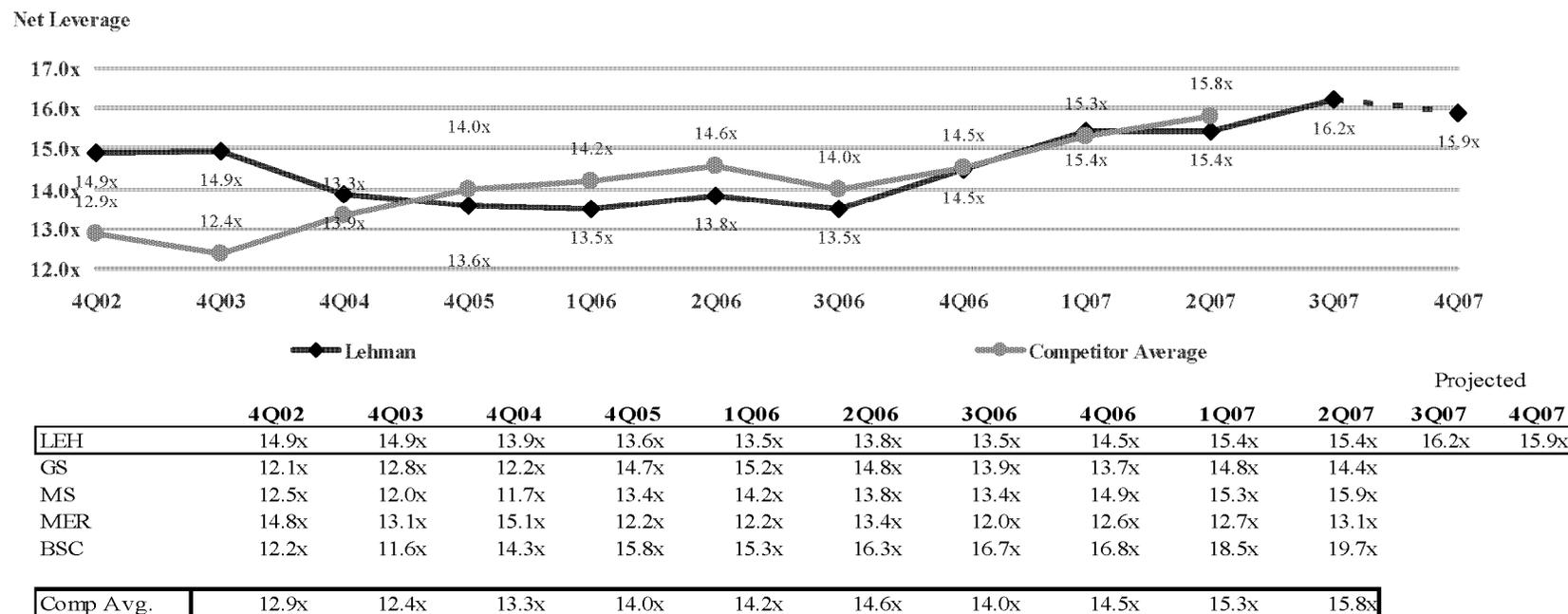


1. Net assets is defined as total assets less segregated cash and securities, securities received as collateral, securities purchased under agreements to resell, securities borrowed, goodwill and intangibles.

# Net Leverage

In the past, leverage was the key measure of equity adequacy. Between 2003 and 2006 we significantly reduced leverage. Low leverage was positively viewed by rating agencies and contributed to our 2005 upgrades. In 2006 and 2007, we worked with the regulatory and rating agencies to implement more accurate adequacy measures. As a result, we were comfortable with allowing our leverage to increase

Net Leverage 4Q 2002 – 4Q 2007



1. MER restated their financials due to the adoption of FAS 123. Data shown prior to 4Q03 is not restated.  
 2. Net leverage ratio is defined as net assets divided by Leverage Equity. Leverage Equity includes an internal limit for equity credit given to hybrids at a maximum of 25% of Total Tangible Equity.

# Equity Adequacy Measures

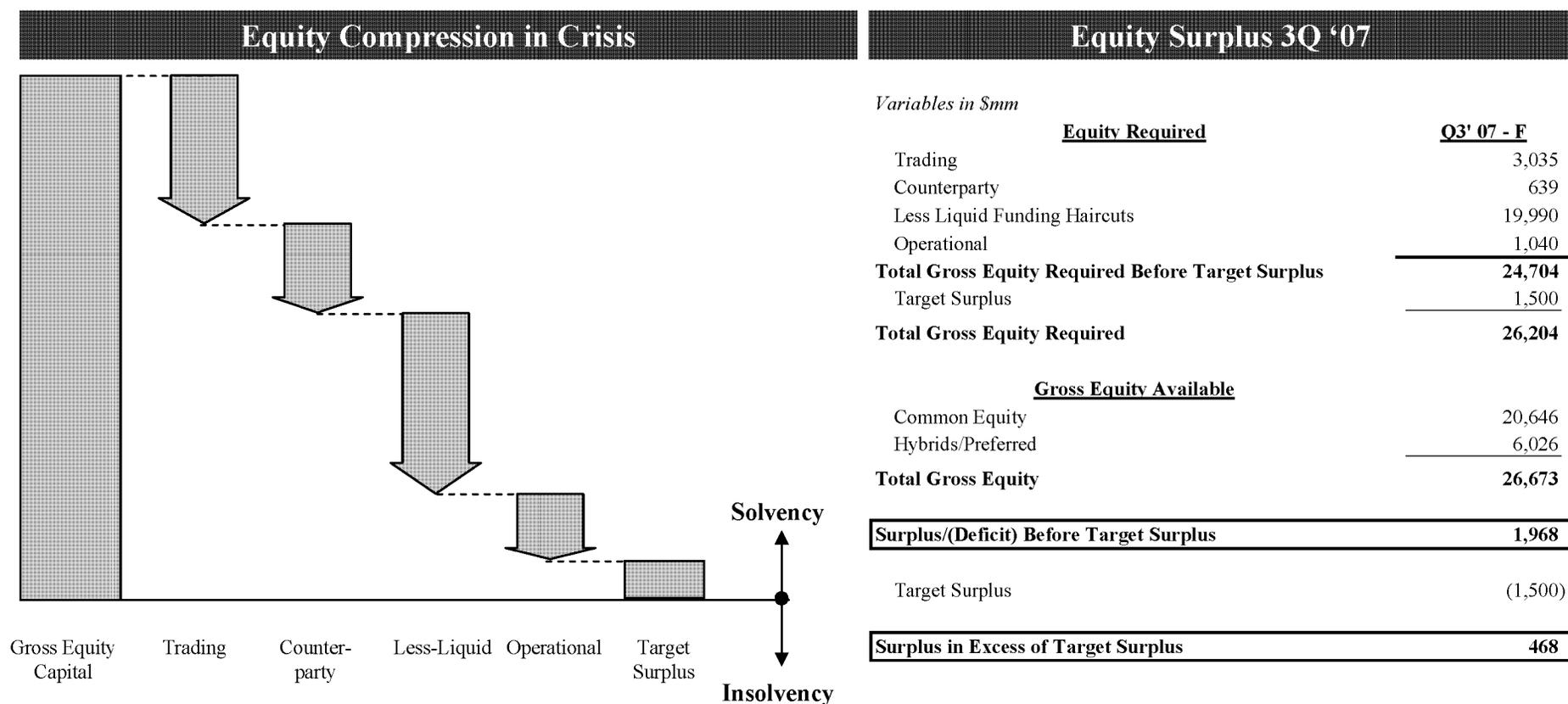
To monitor equity adequacy, we use three measures: Risk Equity, CSE Capital Ratios and our internal Equity Adequacy Framework. The Equity Adequacy Framework is based on externally available information and logically extends our liquidity and risk equity frameworks

Risk Equity	CSE Capital Ratios	Equity Adequacy Framework
<ul style="list-style-type: none"> <li>◆ Internal measure of equity capital required to protect the Firm against market, event, counterparty and operational risks with 99.5% confidence level over 1 year time horizon</li> <li>◆ Accounts for on- and off-balance sheet assets with different risk profiles</li> <li>◆ Complicated calculation, requires large amount of data</li> </ul>	<ul style="list-style-type: none"> <li>◆ Measures by which regulators determine whether a bank is adequately capitalized                             <ul style="list-style-type: none"> <li>– Tier 1 and Total Capital Ratio</li> </ul> </li> <li>◆ Account for on- and off-balance sheet assets with different risk profiles</li> <li>◆ Complicated calculation</li> </ul>	<ul style="list-style-type: none"> <li>◆ Multi-factor model that determines the Gross Equity requirement                             <ul style="list-style-type: none"> <li>– Additive charges for Trading, Counterparty, Operational, and Less Liquid Assets</li> </ul> </li> <li>◆ Accounts for off-balance sheet assets with different risk profiles</li> <li>◆ Inputs are primarily from reported 10-K/10-Q's</li> </ul>
<p style="text-align: center;">▼</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Risk Equity Excess <sup>1</sup> = \$1.7B</div>	<p style="text-align: center;">▼</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Tier 1 Capital Ratio = 7.5%<sup>2</sup></div>	<p style="text-align: center;">▼</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Equity Surplus = \$2.0 B<sup>2</sup></div>

1. As of June 2007  
2. As of Q3 2007

# Equity Adequacy Framework Model

To protect our senior unsecured creditors – thus enabling restructuring outside of bankruptcy – the Firm’s available equity capital should be sufficient to absorb the losses caused by a crisis and to support refinancing or liquidation without the support of unsecured creditors. To be conservative, we assume that the requirements are additive and include a substantial target surplus



# Credit Rating Actions

**In 2007, Fitch upgraded us to AA-, the same level as our larger peers. Moody's and S&P affirmed our credit as A1/Outlook Positive and A+/Outlook Stable respectively. Given a very difficult economic environment, we see these actions as votes of confidence in our fundamentals**

The Firm's Credit Ratings			Recent Rating Actions	
	LBHI	LBI	(Listed Chronologically)	
<b>Moody's Investor Service</b>			<b>Moody's Investor Service</b>	
Short-term	P-1	P-1	<b>August 2007 - Ratings Affirmed</b>	
Long-term (Senior)	A1	Aa3	June 2006 - Outlook Changed to Positive	
Long-term (Subordinated)	A2	A1	October 2003 - Ratings Upgraded	
<b>Standard &amp; Poor's</b>			<b>Standard &amp; Poor's</b>	
Short-term	A-1	A-1+	<b>August 2007 - Ratings Affirmed</b>	
Long-term (Senior)	A+	AA-	October 2005 - Ratings Upgraded	
Long-term (Subordinated)	A	A+		
<b>Fitch Ratings</b>			<b>Fitch Ratings</b>	
Short-term	F-1+	F-1+	<b>August 2007 - Ratings Affirmed</b>	
Long-term (Senior)	AA-	AA-	<b>June 2007 - Ratings Upgraded</b>	
Long-term (Subordinated)	A+	A+	July 2005 - Ratings Upgraded	
<b>Dominion Bond Rating Service</b>			<b>Dominion Bond Rating Service</b>	
Short-term	R-1	R-1	<b>August 2007 - Ratings Affirmed</b>	
Long-term (Senior)	A (high)	AA (low)	September 2006 - Outlook Changed to Positive	
Long-term (Subordinated)	A	A (high)		

- ◆ Fitch (Credit Analysis - August 2007): "Lehman's capital adequacy estimate exceeds its CSE requirement. Fitch expects capital to remain higher than regulatory well capitalized levels. Lehman's capital adequacy sufficiently captures sensitivities to stress and liquidation following an extended crisis."
- ◆ Moody's (Credit Opinion - August 2007): "Lehman has evolved into a firm that consistently follows a disciplined, pragmatic customer-focused approach to all risk and strategic decisions that it makes...Lehman has solid liquidity and a sound liquidity framework..."
- ◆ S&P (Summary Analysis - August 2007): "Ratings... reflect its strong franchise in institutional securities trading, investment banking and investment management... also reflect growing product diversity and strengthened global platform"

# Share Repurchases

**In 2007, as in previous years, the primary objective of our share repurchase program is to offset equity award dilution**

- ◆ In 2007, equity award dilution has been substantially lower than projected, primarily due to a slowdown in option exercises. To accommodate the reduction, we reduced open market repurchases by 11 million shares
- ◆ The net cost of buybacks is also expected to be substantially lower than budgeted, driven by a reduction of repurchases and lower than expected share price
- ◆ The number of EPS shares, which is time-weighted, has decreased because of the front-loading of repurchases

## 2007 Equity Award Dilution

<i>(# of Shares in Millions)</i>	2005	2006	2007B	Forecast 2007
Equity Award Dilution				
RSU Amortization	25	19	34	35
Option Exercises	51	22	30	14
<b>Total Dilution</b>	<b>76</b>	<b>42</b>	<b>64</b>	<b>49</b>
Repurchases				
Tenders	21	14	10	9
Open Market	60	39	45	35
<b>Total Repurchases</b>	<b>81</b>	<b>53</b>	<b>55</b>	<b>44</b>
<b>Dilution</b>	<b>(4)</b>	<b>(11)</b>	<b>9</b>	<b>5</b>
Average Purchase Price	\$51.59	\$69.61	\$84.65	\$74.54
Net Cost of Buyback (in \$mm)	(852)	(1,285)	(830)	(326)
Basic EPS Shares	556.3	543.0	543.6	540.3
Diluted EPS Shares	587.2	578.4	574.8	568.6

*Note: 2007 share buyback authorization is up to 100 million shares*

# Stock Overhang

Share Buybacks and Dilution

With lowered use of stock options since 2004, yet continued option exercises, our RSUs and options overhang has declined significantly versus the 2004 level. In 2007, due to lower than projected option exercises, the number of outstanding options has declined less than expected. As a result, the equity overhang is likely to remain flat relative to 2006

## Stock Overhang

	Actual FY 2004	Actual FY 2005	Actual FY 2006	Forecast FY 2007	2006 vs 2007F
RSUs Outstanding	128.5	120.4	100.4	116.1	15.6
Options Outstanding	147.1	101.8	81.4	66.7	(14.7)
Gross Shares in Overhang	275.6	222.2	181.8	182.8	0.9
Shares in RSU Trust	(77.7)	(69.1)	(64.7)	(77.8)	(13.1)
<b>Net Shares in Overhang</b>	<b>197.8</b>	<b>153.1</b>	<b>117.1</b>	<b>104.9</b>	<b>(12.2)</b>
Option Proceeds	(97.6)	(50.6)	(36.8)	(31.7)	5.1
Tax Benefit from Options	(19.8)	(20.4)	(17.8)	(14.0)	3.8
Tax Benefit from RSUs	(13.5)	(18.8)	(16.5)	(12.0)	4.5
Total Adjustments	(130.8)	(89.9)	(71.2)	(57.7)	13.5
<b>Adjusted Shares in Overhang</b>	<b>67.0</b>	<b>63.1</b>	<b>46.0</b>	<b>47.3</b>	<b>1.3</b>
Basic EPS Shares Outstanding	549.4	556.3	543.0	540.3	(2.7)
<i>Gross Overhang</i>	50.2%	39.9%	33.5%	33.8%	0.3%
<i>Net Overhang</i>	36.0%	27.5%	21.6%	19.4%	-2.1%
<b><i>Adjusted Overhang</i></b>	<b>12.2%</b>	<b>11.3%</b>	<b>8.5%</b>	<b>8.7%</b>	<b>0.3%</b>

Note: Wavg Exercise Price of Options O/S

\$27.79

\$31.36

\$33.32

\$34.23