

# **Presentation to the Risk Oversight Committee**

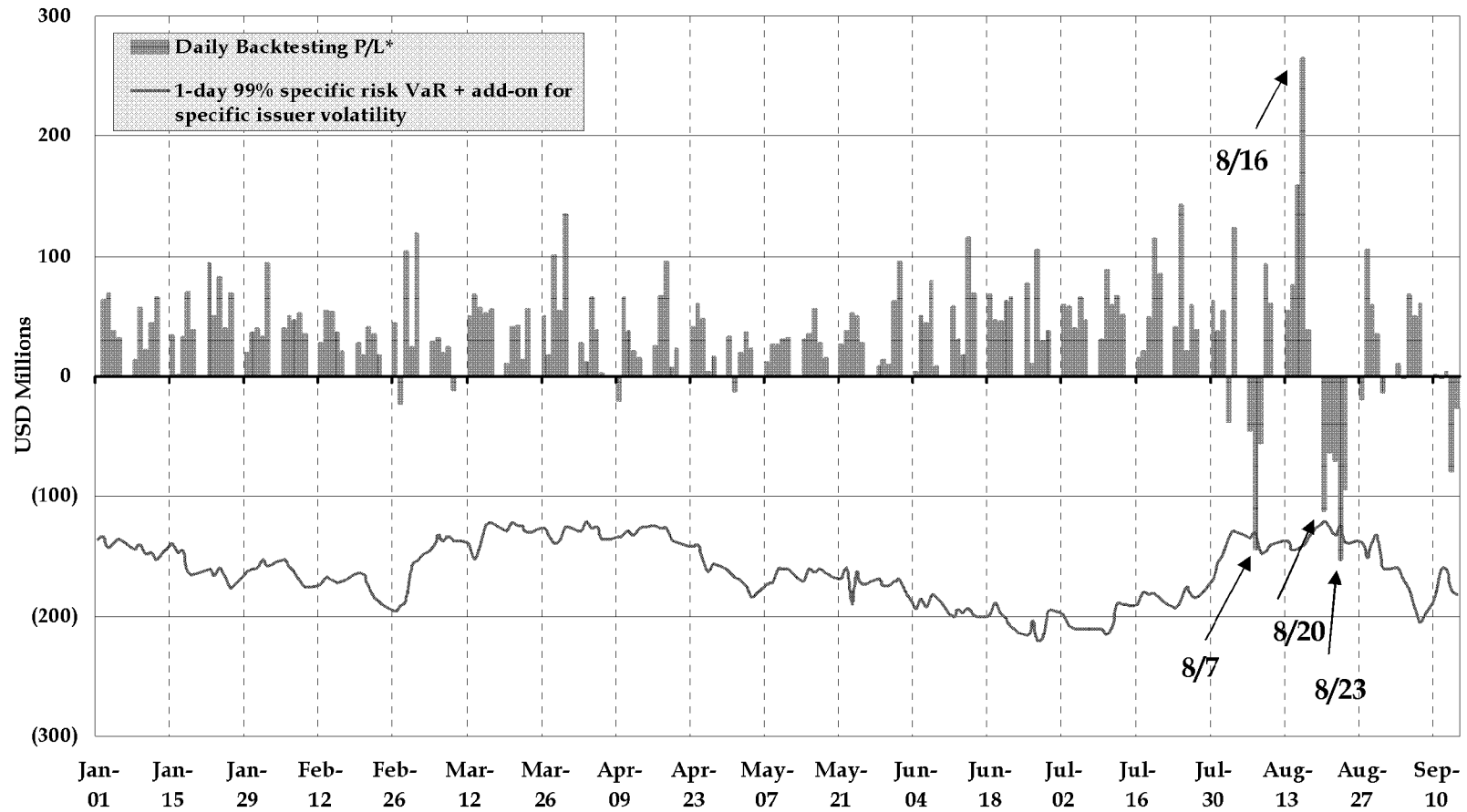
## **Market Risk Management Update**

September 26, 2007

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# MRM Presentation to the Risk Oversight Committee

## VaR Backtesting



\*Daily Backtesting P/L is intended to reflect profits or losses driven by market price changes on the day. The base P/L is Greensheets Principal Transactions, which excludes interest, dividends, fees and commissions. In some cases, Daily Backtesting P/L is also adjusted to eliminate material non-market driven accounting adjustments, new deal P/L, and in some cases intraday trading. The backtesting P&L does not include RPI and CDO Super Senior re-marking P&L due to the frequency of MTM.



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## ML & Co. VaR Backtesting

### VaR Backtesting (Cont'd)

#### Highlight of P/L Movements

(\$Millions)

P&L Date	Daily Gain / (Loss)	Key MPUs	P&L Contribution	Comment
Aug-07	(144)	Equity SRG	(53)	Proprietary trading losses in Statistical Arbitrage business
		GSFI	(39)	Losses on macro hedge due to tightening swap spreads and an equity market rally
		Credit Trading	(19)	Losses driven by CDX spread P/L and bond re-marks
		All Others	(33)	Small losses in various businesses with \$12mm from Principal Credit Group Americas
Aug-16	265	Currencies	111	Gains driven by long volatility positions in JPY, CHF, NZD and MXN as well as from short positions in TRL and NZD and long positions in JPY.
		Credit Trading	111	Gains due to macro hedges in super-senior book, implemented by buying protection on monolines and through ABX index trades
		Global Rates	41	Gains from long USD interest rate positions and long EUR and USD interest rate vega
Aug-20	(112)	Currencies	(71)	Losses driven by lower volatility in JPY, AUD, NZD and TRY
		Credit Trading	(17)	Losses driven primarily by US proprietary trading
		All Others	(24)	~\$13mm from U.S. and Japan GELP
Aug-23	(152)	Credit Trading	(51)	Losses in the super-senior book on ABX index hedges and long protection on monolines
		Currencies	(48)	Losses in options trading due to lower JPY, AUD and NZD volatilities
		GSFI	(35)	Losses due to adverse market movements causing losses in ABX positions
		Global Rates	(20)	Drop in interest rate volatilities combined with a re-mark of FX volatilities in the Long Term Complex FX Option business



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**ML & Co. VaR Backtesting**  
*VaR Backtesting (Cont'd)*

**Impact of Recent Volatility**

- **Significantly higher volatility than the four year history (see below)**

	Volatility		
	Prior Period*	After 7/10/2007	% Increase
S&P 500	11%	22%	100%
CDX High Yield 5yr	4%	13%	225%
Treasury Rate 5yr	89 bp	117 bp	31%
Dollar / Yen 1y Implied Volatility	19%	84%	342%

*\* Based on current MRM system definition*

- **Liquidity driven market event (such as Stat. Arb.) is an evident challenge**
- **Macro hedge positions are significantly reduced from the peak**
- **The challenges are industry-wide; feedback from supervisors indicates that ML experience is not extraordinary compared to peers**

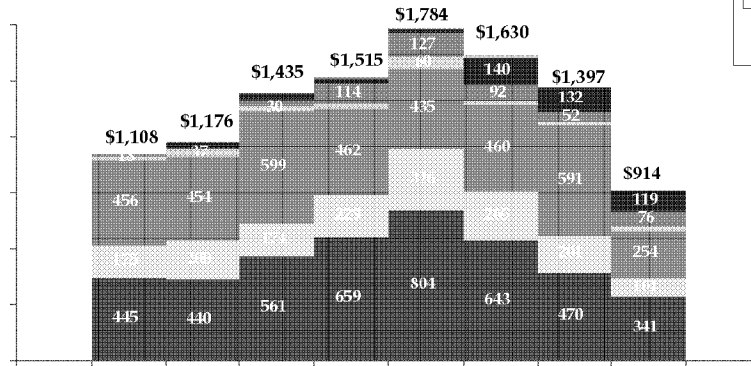


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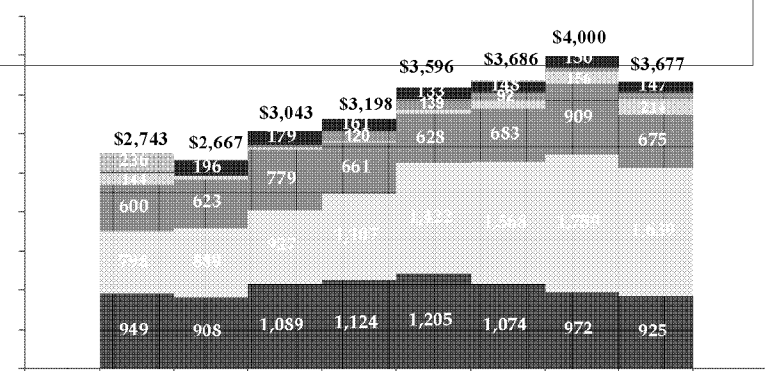
## ML&Co. Credit Event Scenarios Trend

Once in 10 Years Spread Widening Scenario\*

By Collateral Type: Trading



By Collateral Type: Trading+Non-Trading



■ Residential Real Estate ■ Commercial Real Estate ■ Corporate & Commercial Finance ■ Consumer Credit ■ Sovereigns ■ CDO ■ Other

\*2005 data represents monthly averages; quarterly data represents weekly averages; Credit SES does not include correlation risk which has a separate stress limit of \$250mm

### Residential Real Estate Exposure Summary

	SES (\$mm)					MV (\$bn)				
	9/14	vs. 2Q07		vs. 06 Avg.		9/14	vs. 2Q07		vs. 06 Avg.	
		\$	%	\$	%		\$	%	\$	%
<b>Trading+Non-Trading</b>	925	(46)	-5%	(108)	-10%	50.2	(16.9)	-25%	(21.7)	-30%
<b>Americas</b>	816	(80)	-9%	(175)	-18%	42.1	(8.7)	-17%	(18.7)	-31%
Prime	346	(4)	-1%	(32)	-8%	18.9	(10.9)	-37%	(10.1)	-35%
Non-Prime	470	(76)	-14%	(143)	-23%	23.2	2.2	10%	(8.6)	-27%
MLEMEA	76	17	28%	33	78%	7.0	(8.3)	-54%	(3.6)	-34%
PACRIM	33	17	113%	33	NM	1.1	0.1	13%	0.7	182%
<hr/>										
		vs. 2Q07		vs. 06 Avg.			vs. 2Q07		vs. 06 Avg.	
<b>Trading</b>	341	(130)	-28%	(276)	-45%	8.9	(15.5)	-64%	(23.1)	-72%
<b>Americas</b>	323	(130)	-29%	(270)	-45%	8.8	(6.2)	-41%	(16.5)	-65%
Prime	20	(40)	-67%	(59)	-75%	1.8	(5.8)	-77%	(4.7)	-73%
Non-Prime	303	(91)	-23%	(210)	-41%	7.0	(0.4)	-5%	(11.7)	-63%
MLEMEA	18	1	4%	(6)	-25%	0.1	(9.3)	-99%	(6.6)	-99%
PACRIM	0	0	NM	0	NM	0.0	0.0	NM	0.0	NM



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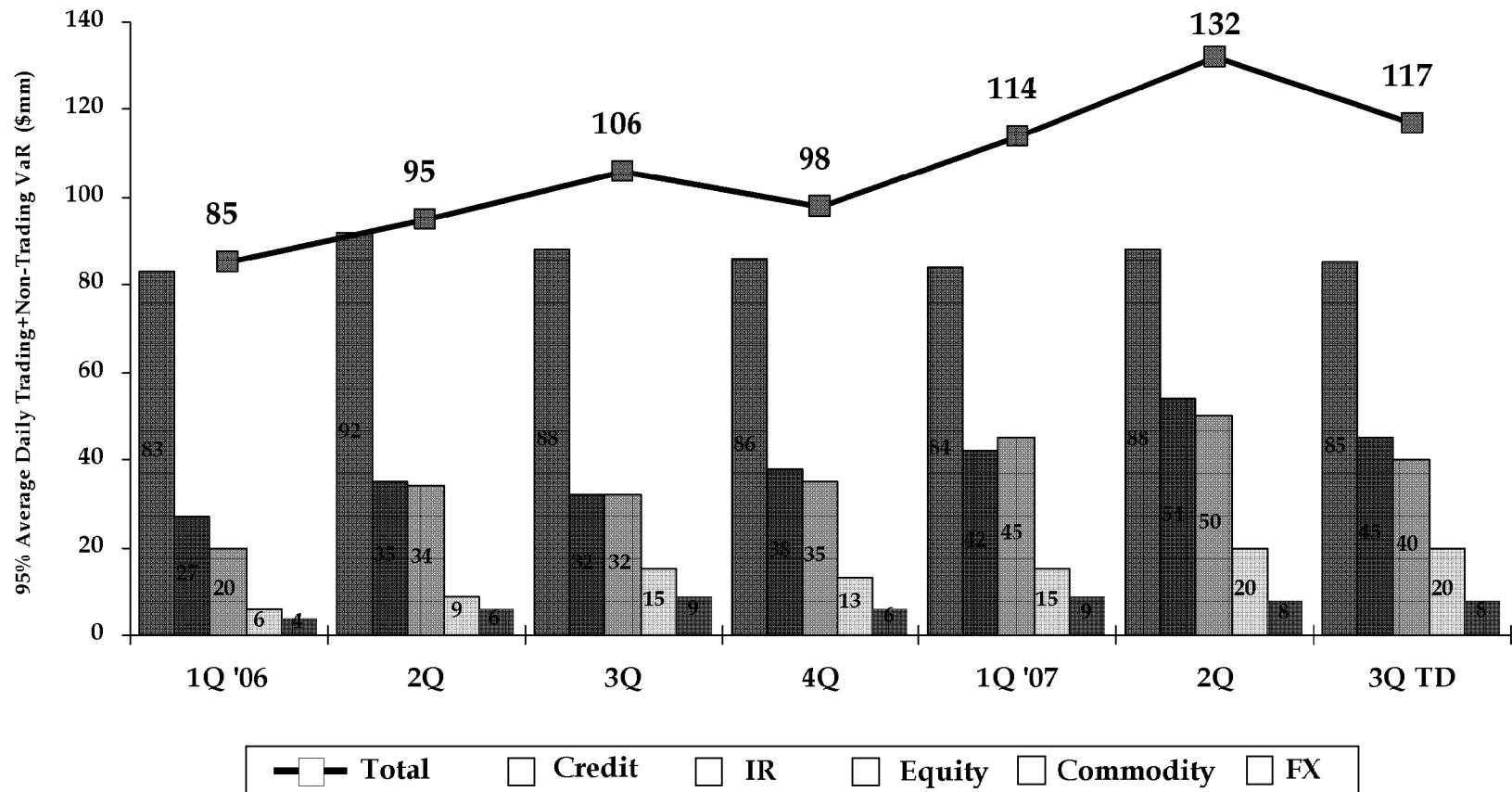
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## VaR Growth by Asset Class

2006 - 2007 TD

### Quarterly Average Trading+Non-Trading VaR

- Credit portfolio risk increase has been contained as discussed at Risk Oversight Committee. We always had significant concentration in credit spread risk.



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## ABS CDOs Risk Update

### ▪ Issues

- Until February 2007, we were able to buy protection to make the risk very far out-of-the-money, hence DV01 was modest. The real challenge started when monolines stopped selling protection on mezzanines.
- After the start of Subprime crisis, the first order focus was to reduce the junior tranche exposure.
- Underlying collateral analysis is extremely challenging due to the complexity of ABS asset combination
- The very low usage in Stress Event Scenario was due to the combination of the far out-of-the-money risk nature and the very low historical volatility of the Super AAA time series mapping.
- Desk-level DV01 limits were set at a modest level for AAA risks.

### ▪ Current Status

- \$5 billion reduction on 50%-100% High Grade risk, possibly more
- Business / Risk / Finance working on new valuation methodology based on fundamental analysis
- Infrastructure challenges in Credit Derivatives

### ▪ Exposure Update

(\$Millions)	Retained Super Senior			Total	Spread DV01	
	High Grade	Mezzanines	CDO2		\$	Limit
AUG-06	5,580	1,610	-	7,190	2.35	Stress \$75mm
SEP-06	7,210	2,075	-	9,285	2.76	3.00
JAN-07	12,810	4,524	-	17,334	2.42	5.70
FEB	15,175	4,737	370	20,282	4.78	5.70
MAR	18,620	6,109	700	25,429	6.84	7.40
APR	23,220	6,192	1,340	30,752	6.01	7.40
MAY	22,310	6,117	440	28,867	5.98	7.40
JUN	22,310	6,423	1,620	30,353	6.79	7.40
JUL	24,120	6,438	1,505	32,158	6.60	7.40
AUG	18,286	6,228	1,201	25,715	5.40	7.40
SEP	18,158	6,173	1,201	25,532	5.30	7.40



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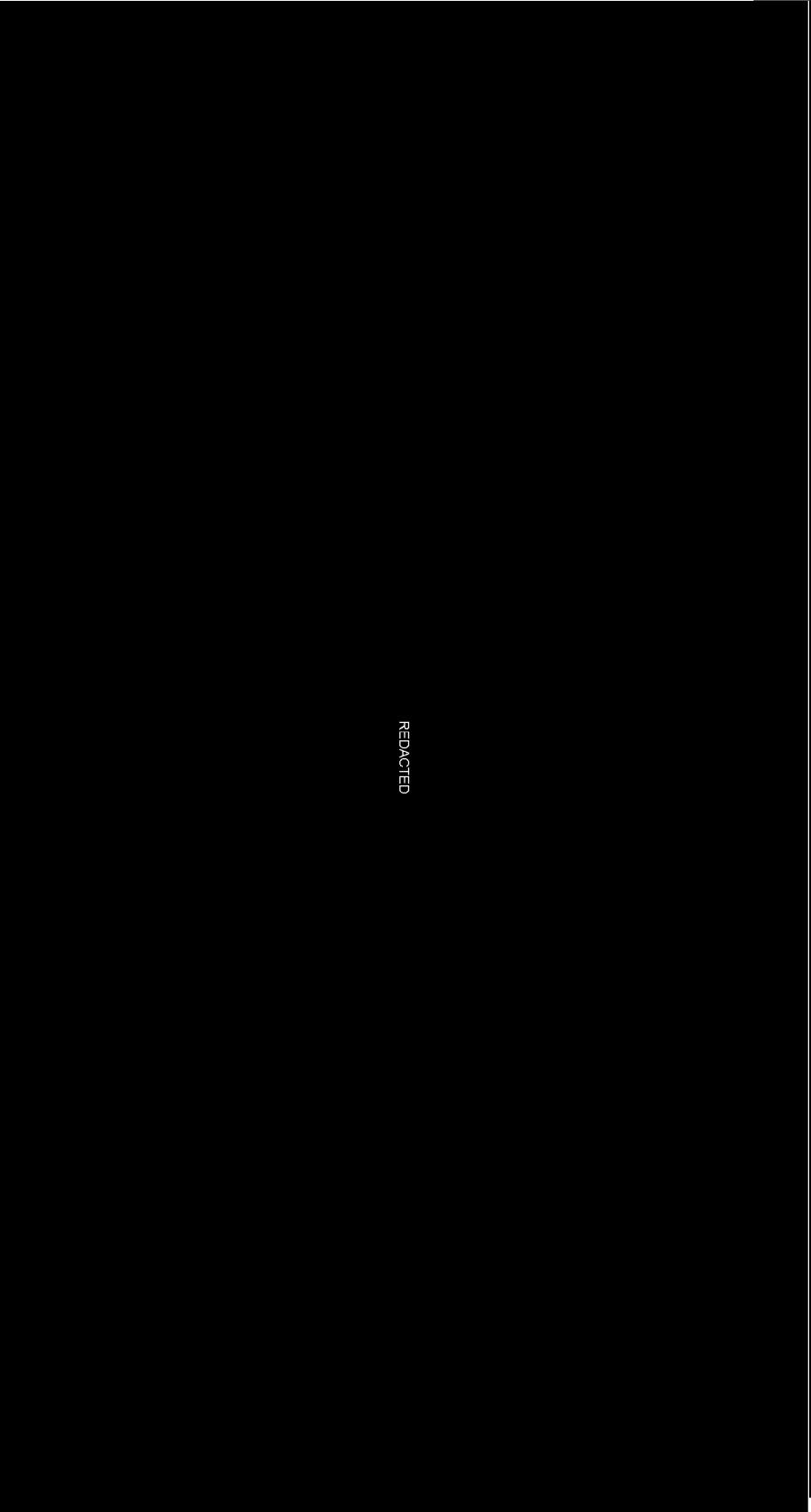
## ABS CDOs Risk Update (Cont'd)

### Follow-up for the Future

- **Revised methodology for Subprime stress scenarios based on fundamental analysis (see page on Real Estate Price Shock Scenario)**
- **Review of other large B/S or far out-of-the-money risk concentration with senior management**
- **Examples:**
  - GSFI lending (\$40bn+)
  - Investment Portfolio (\$20bn+ and MLBUSA ABCP)
  - Commercial Real Estate Lending (\$25bn+ including ML Capital)
  - Treasury Liquidity Portfolio (\$20bn+ in CMO Floaters)
  - Convertibility risk (Korea, India, Brazil, Turkey, etc.)
  - GELP non-recourse financing and Hedge Fund derivatives
  - OTM Derivative risk in GELP and CFXO (shorter Vega as markets sell off)



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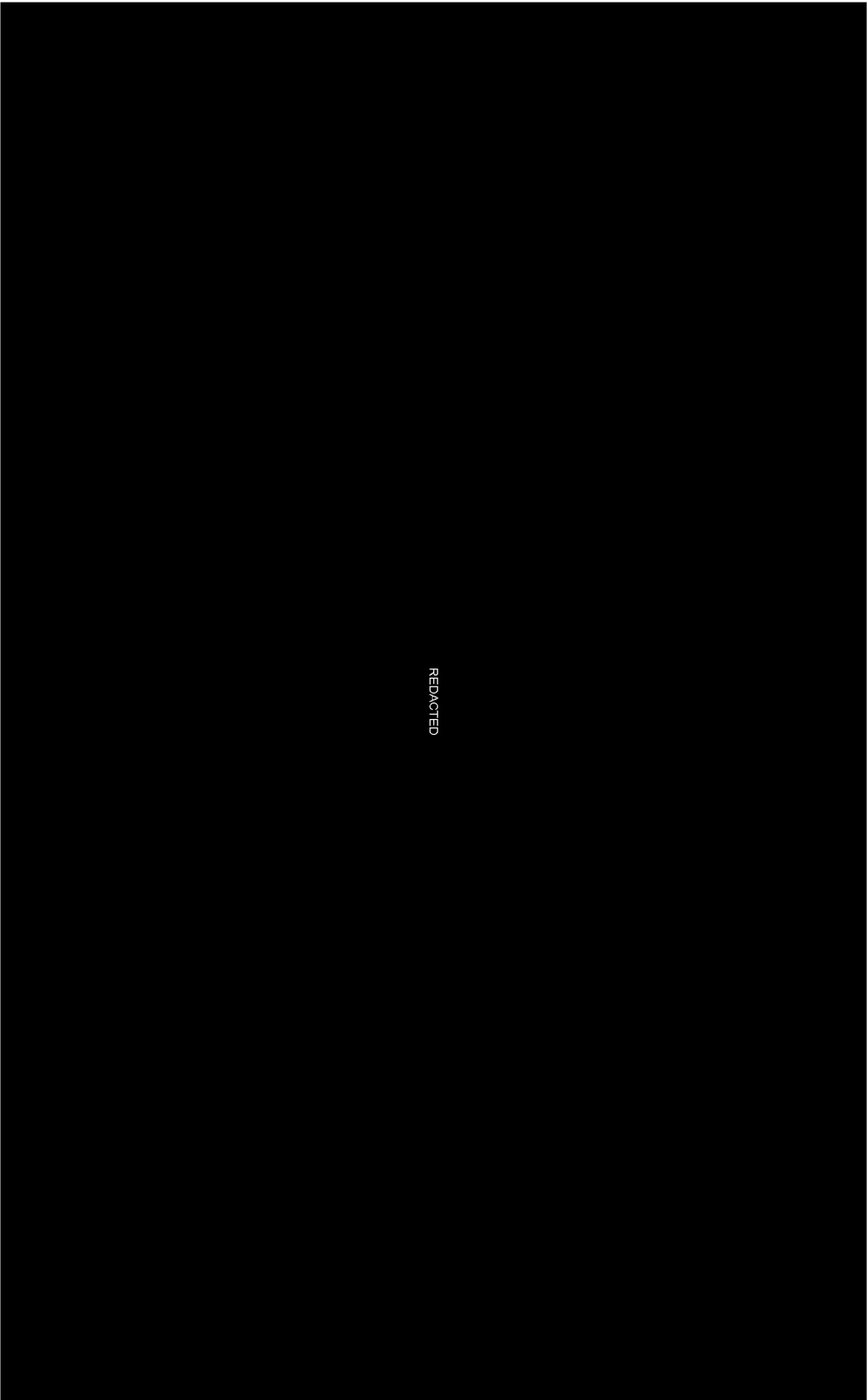
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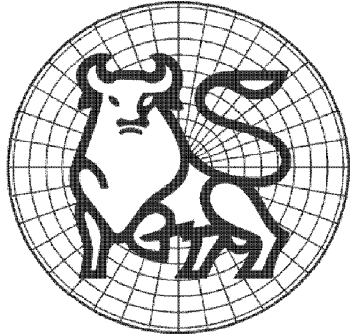
VAR Modeling Update



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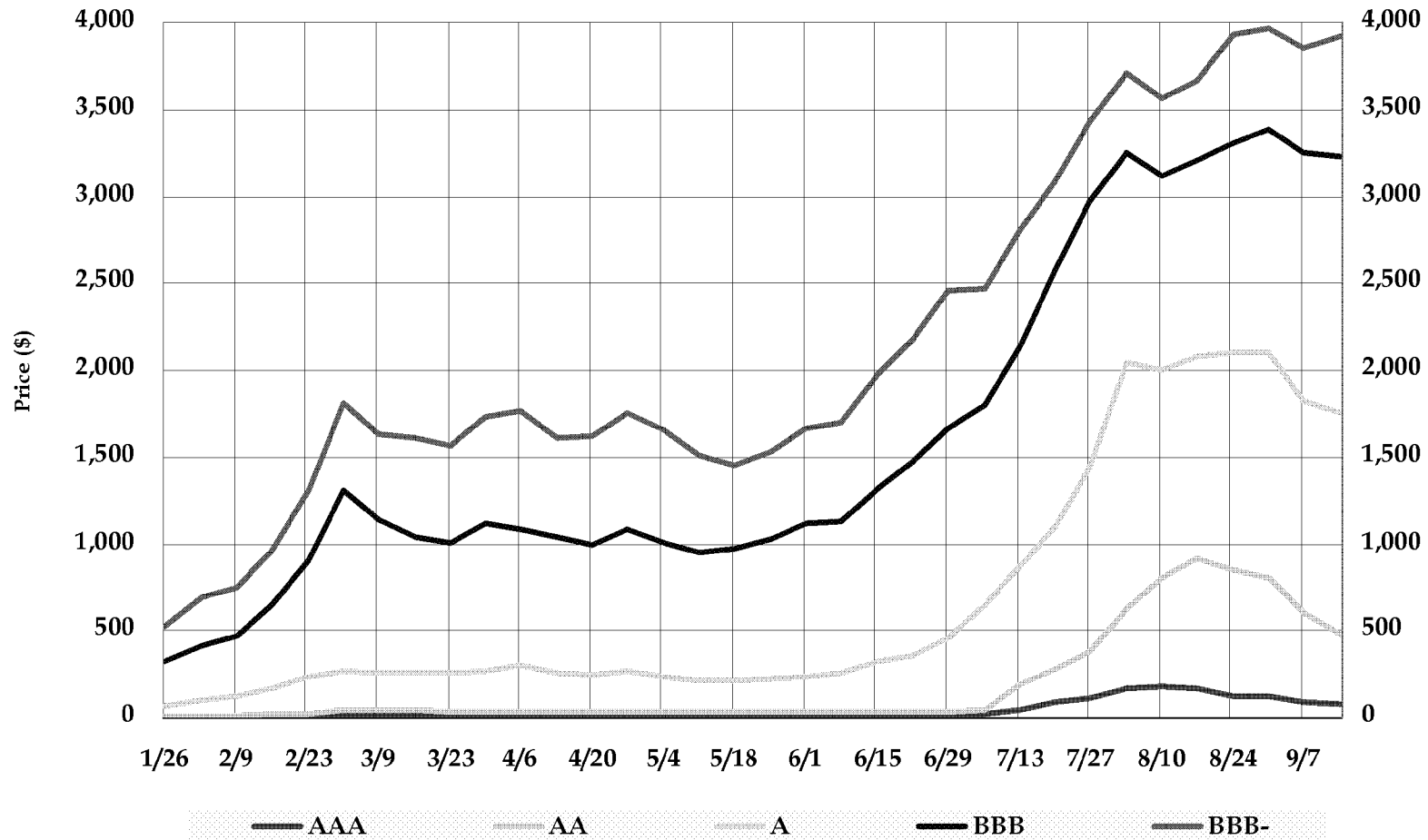


*Global Market Risk Management - Appendix  
Risk Profile Update*

# MRM Presentation to the Risk Oversight Committee

ABX HE 07-1

## 2007-to-Date Weekly Price Trend by Rating

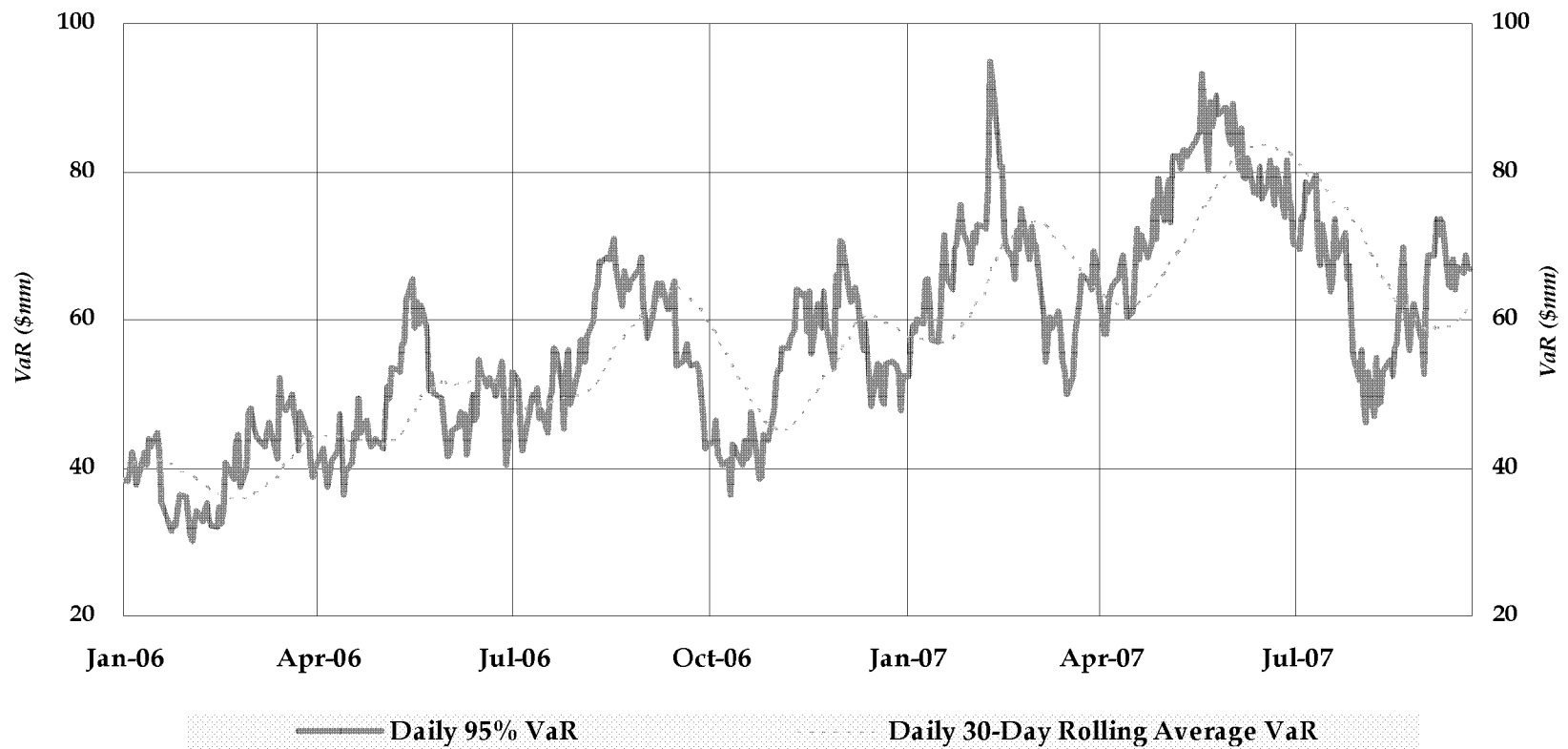


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# ML&Co. Daily 95% Trading VaR

January 2006 – September 20, 2007

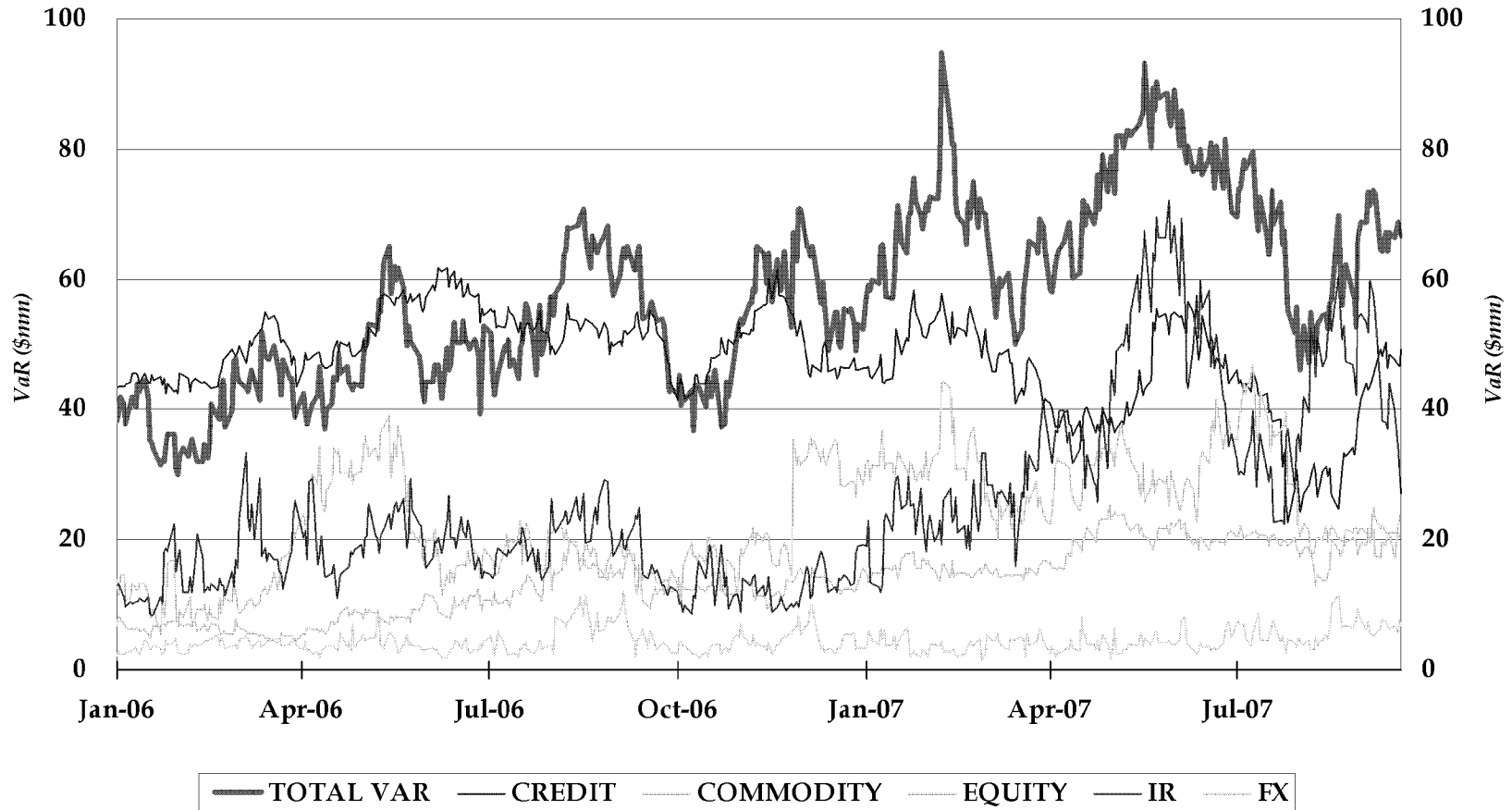
	Q4 '05	Q1 '06	Q2 '06	Q3 '06	Q4 '06	Q1 '07	Q2 '07	9/27/07
VaR (\$mm)	\$38mm	40mm	54mm	43mm	52mm	65mm	70mm	67mm



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# ML&Co. Daily 95% Trading VaR Trend by Risk Factor

January 2006 – September 20, 2007



Note: Credit Risk = Spread Volatility + Credit Product Spread + Credit Product Market Value

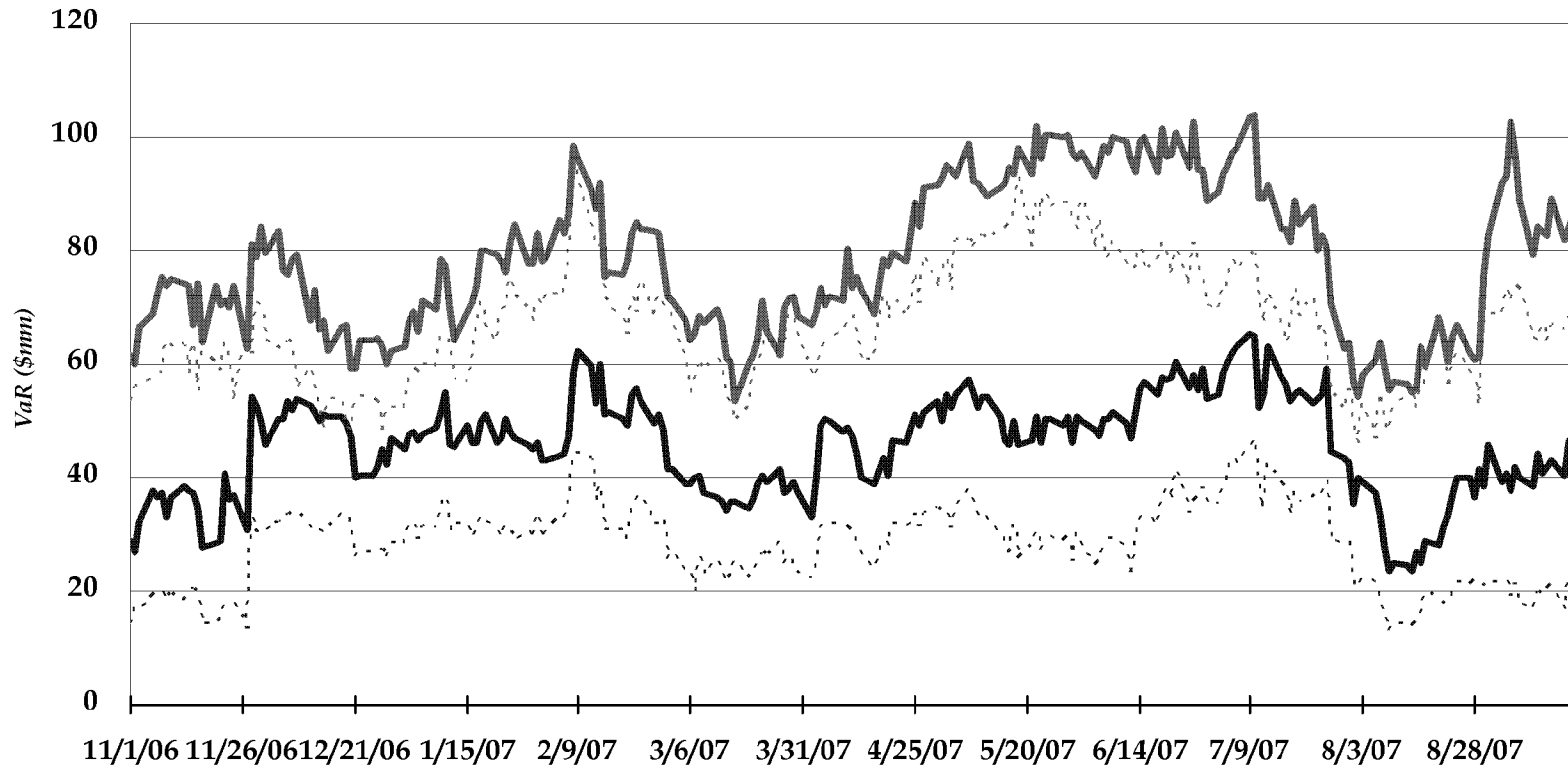


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# ML&Co. Equity Specific Risk

November 2006 – September 20, 2007



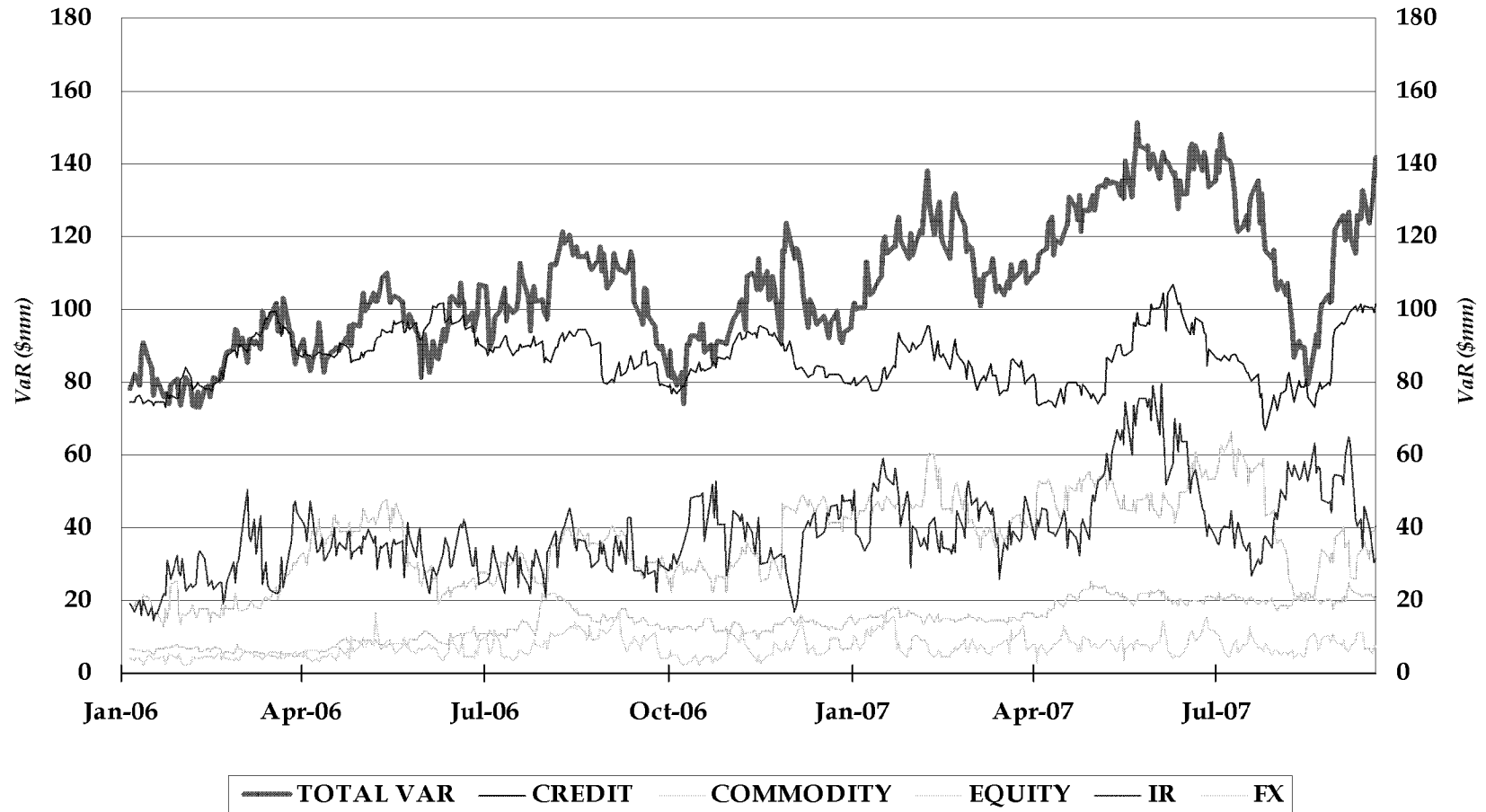
— Total VaR w/ Eqty Sp. Risk      — Equity VaR w/ Eqty Sp. Risk  
..... Total VaR w/ Gen. Mkt Risk      ..... Equity VaR w/ Gen. Mkt Risk



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**ML&Co. Daily 95% Stand-alone VaR: Trading+Non-Trading**  
January 2006 – September 20, 2007

**By Risk Factor**



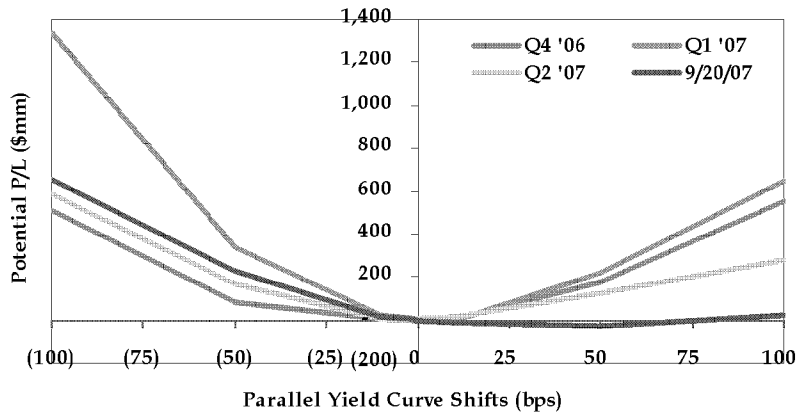
Note: Credit Risk = Spread Volatility + Credit Product Spread + Credit Product Market Value



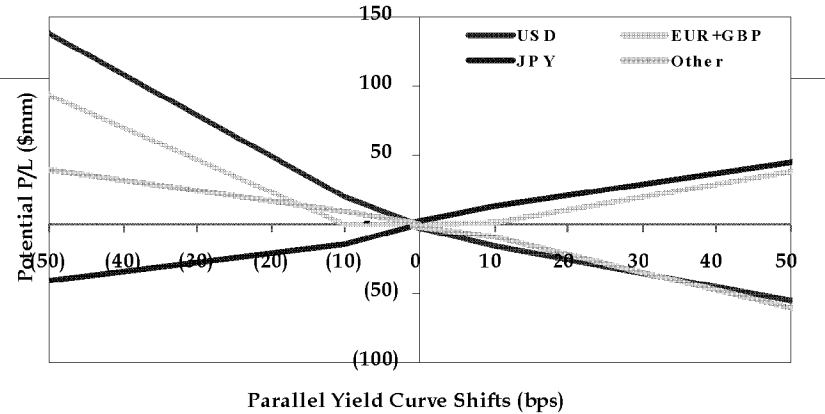
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# ML&Co. Interest Risk Trading

ML&Co. P&L Profile

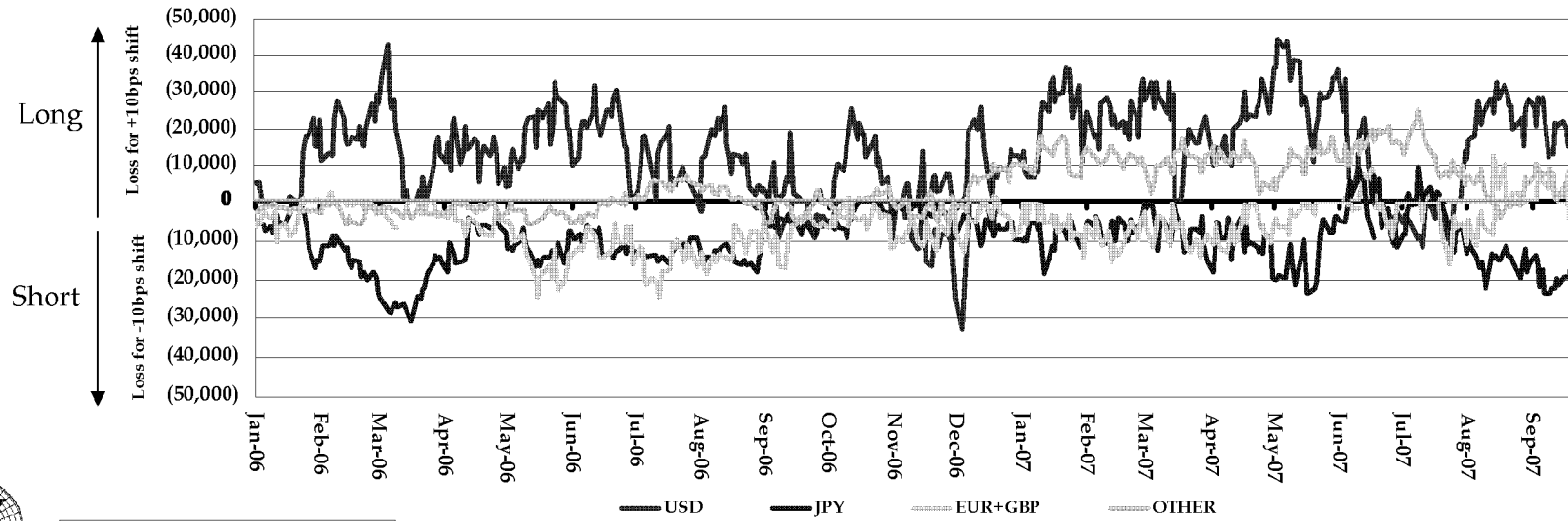


P&L Profile by Major Currency: 9/20/07



P&L Trend: January 2006 – September 20, 2007

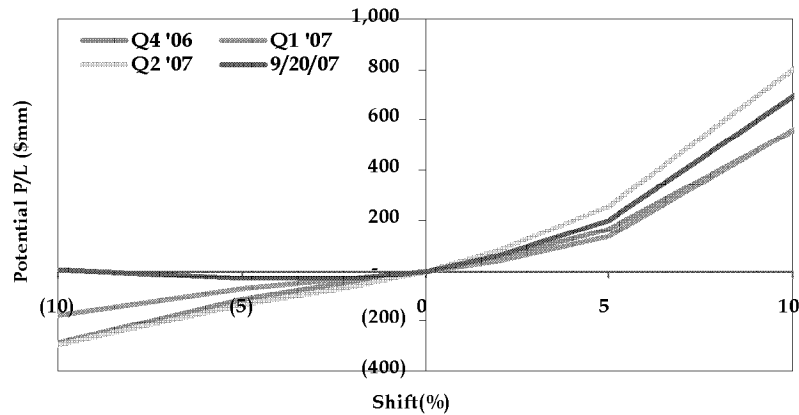
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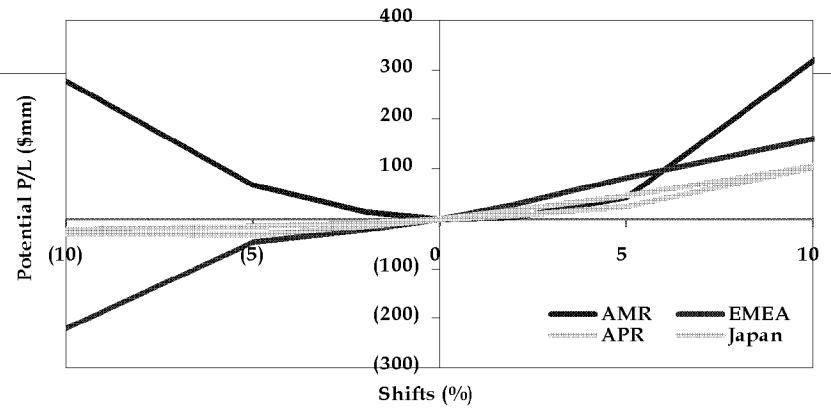
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# ML&Co. Equity Risk Trading

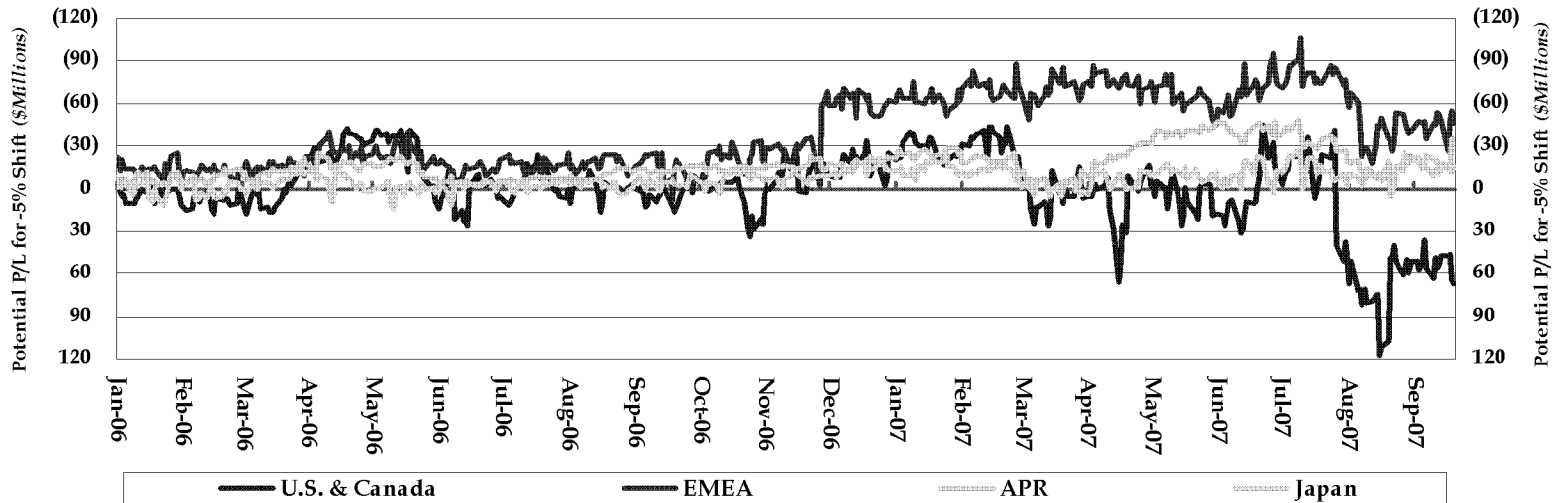
**ML&Co. P&L Profile**



**P&L Profile: 9/20/07**



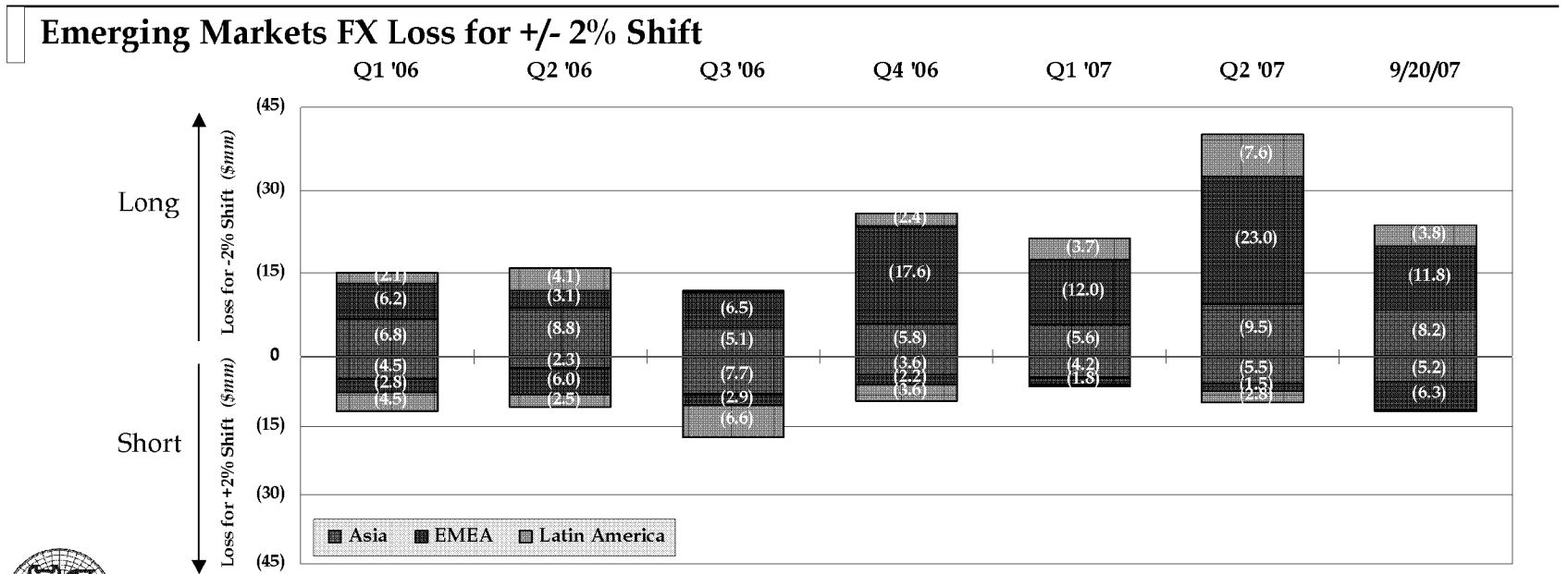
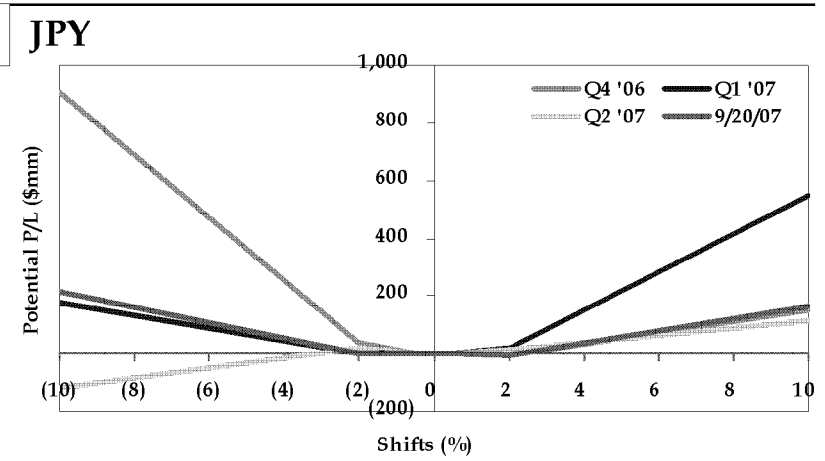
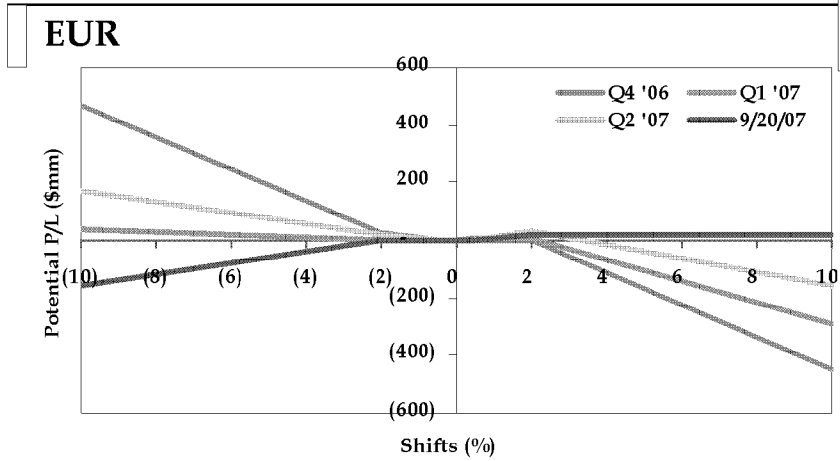
**P&L Trend: January 2006 – September 20, 2007**



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# ML&Co. Currency Risk Trend

## Trading

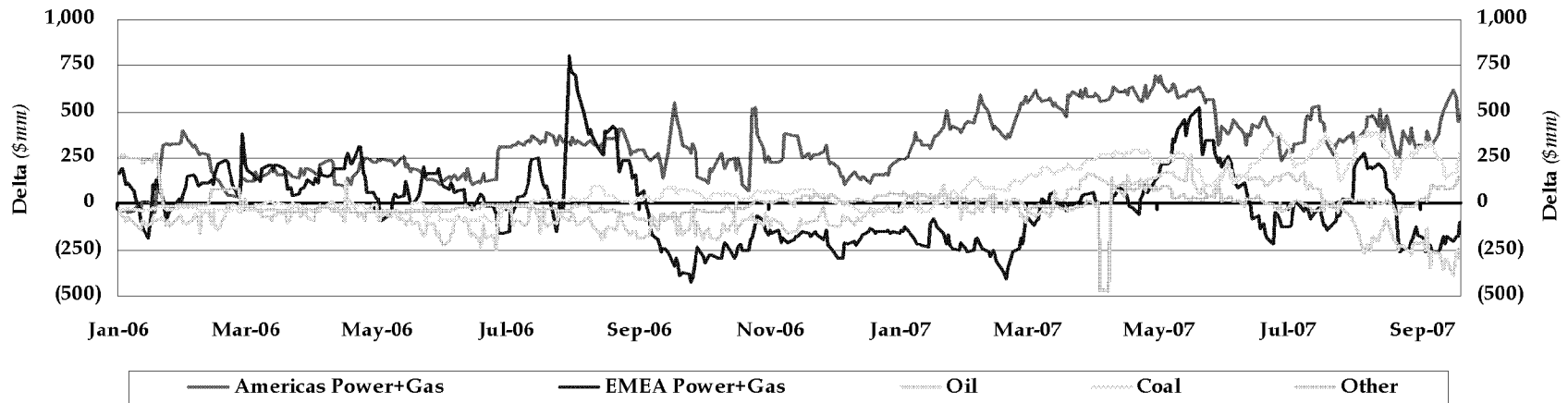


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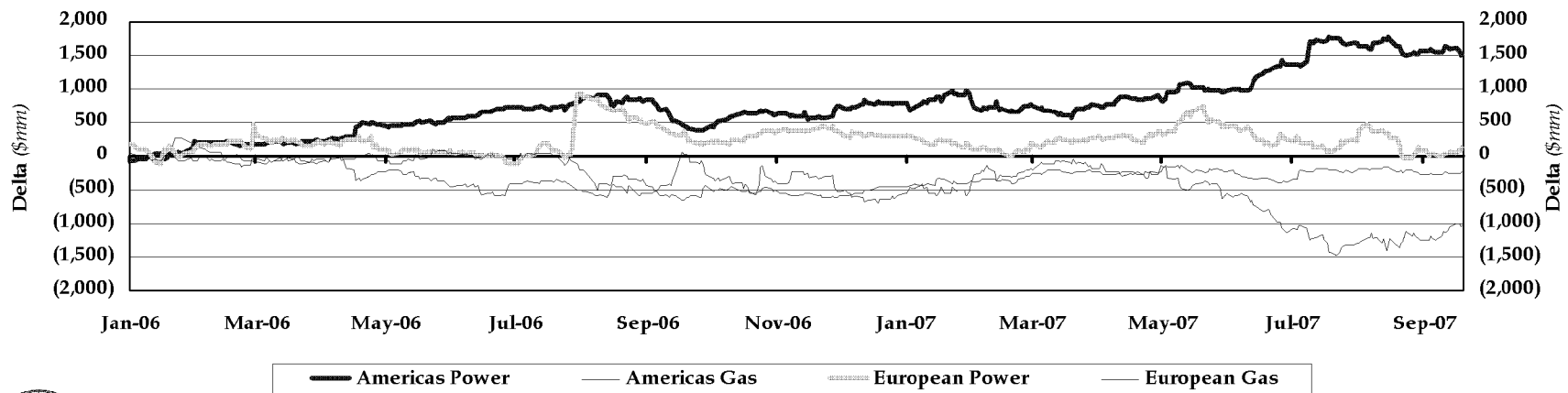
# ML&Co. Commodity Risk Analysis

January 2006 – September 20, 2007

## Delta by Product



## Regional Delta by Product



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