# **APPENDIX**

February 4, 2009

Volume I



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# Appendix A. Company Overview

American International Group, Inc.

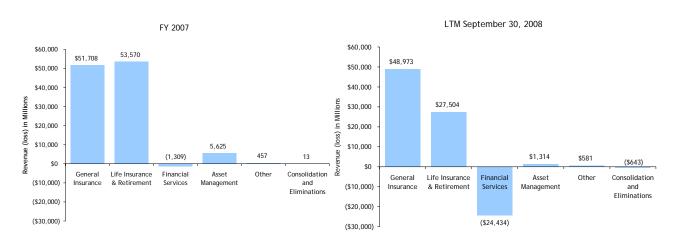
EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM AMERICAN INTERNATIONAL GROUP, INC.'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2008, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

#### A. Business Overview

AIG, a Delaware corporation, is a holding company which, through its subsidiaries, is engaged in a broad range of insurance and insurance-related activities in the United States and internationally. AIG's primary activities include both General Insurance and Life Insurance & Retirement Services operations. Other significant activities include Financial Services and Asset Management. AIG maintains operations in more than 130 countries and jurisdictions. AIG companies serve commercial, institutional and individual customers through the most extensive worldwide property casualty and life insurance networks of any insurer. In addition, AIG companies are providers of retirement services, financial services and asset management to clients around the world. AIG's common stock is listed on the New York Stock Exchange under the ticker symbol AIG, as well as the stock exchanges in Ireland and Tokyo.

On October 3, 2008, AIG announced an asset disposition plan which is discussed in greater detail later in this report. In conjunction with this plan, AIG will keep its property and casualty business, and retain a minority ownership interest in its foreign life business while exploring divestiture opportunities for its remaining businesses.

#### Revenue by Line of Business



Sources: SEC filings (Annual Report, 10-K, 10-Q).

Note: Revenues include an unrealized market valuation loss on AIG Financial Products' ("AIGFP") super senior credit default swap portfolio and an other-than-temporary impairment charge on AIGFP's available for sale investment securities reported in other income.

AIG provides products and services under four major business segments: (1) General Insurance Operations, (2) Life Insurance & Retirement Services Operations, (3) Financial Services Operations, and (4) Other Operations.

#### General Insurance Operations

AlG's General Insurance subsidiaries write substantially all lines of commercial property and casualty insurance, and various personal lines both domestically and abroad. Domestic General Insurance operations are comprised of the Domestic Brokerage Group ("DBG"), Reinsurance, Personal Lines, and Mortgage Guaranty. AlG is diversified both in terms of classes of business and geographic locations. No state, except for California and New York, which account for 10% and 7% of premiums, respectively, or foreign country accounts for more than 5% of such premiums. The majority of AlG's General Insurance business is in the casualty class, which tends to involve longer periods of time for the reporting and settling of claims.

- DBG: DBG writes substantially all classes of business insurance, accepting such business mainly from insurance brokers.
- Reinsurance: Transatlantic Holdings, Inc. ("Transatlantic") is a public company owned 59% by AIG and is included in AIG's consolidated financial statements. The subsidiaries of Transatlantic offer reinsurance on both a treaty and facultative basis to insurers in the United States and abroad.
- Personal Lines: AlG's Personal Lines operation provides automobile insurance through aigdirect.com, the newly formed operation resulting from the 2007 combination of AlG Direct and 21st Century Insurance Group operations, and the Agency Auto Division. Personal Lines also provides a broad range of coverages for high net worth individuals through the AlG Private Client Group.
- Mortgage Guaranty: The main business of the subsidiaries of United Guaranty Corporation ("UGC") is the issuance of residential mortgage guaranty insurance, both domestically and internationally. This covers the first loss for credit defaults on high loan-to-value conventional first lien mortgages for the purchase or refinance of one to four family residences. UGC subsidiaries also write second lien and private student loan quaranty insurance.
- Foreign General Insurance: AIG's Foreign General Insurance group accepts risks primarily underwritten through American International Underwriters ("AIU"), a marketing unit consisting of wholly owned agencies and insurance companies.

## **Life Insurance & Retirement Services Operations**

AIG's Life Insurance & Retirement Services operations provide insurance, financial and investment oriented products throughout the world. Insurance oriented products consist of individual and group life, payout annuities (including structured settlements), endowment and accident and health policies. Retirement savings products consist generally of fixed and variable annuities.

- Foreign Life Insurance & Retirement Services: The Foreign Life Insurance & Retirement Services companies have over 285,000 full- and part-time agents and independent producers that sell products largely to indigenous persons in local and foreign currencies. In addition to the agency outlets, these companies also distribute products through direct marketing channels, such as mass marketing, and through brokers and other distribution outlets, such as financial institutions.
- Domestic Life Insurance & Retirement Services: AIG's principal Domestic Life Insurance & Retirement Services operations include AGLA, AIG American General, AIG Annuity, USLIFE, VALIC and AIG SunAmerica. These companies utilize multiple distribution channels including independent producers, brokerage, career agents and financial institutions to offer life insurance, annuity and accident and health products and services, as well as financial and other investment products.

#### **Financial Services Operations**

AlG's Financial Services subsidiaries engage in diversified activities including aircraft and equipment leasing, capital markets, consumer finance and insurance premium finance. Together, the Aircraft Leasing, Capital Markets and Consumer Finance operations generate the majority of the revenues produced by the Financial Services operations. A.I. Credit also contributes to Financial Services income principally by providing insurance premium financing for both AlG's policyholders and those of other insurers.

- Aircraft Leasing: Aircraft Leasing operations represent the operations of ILFC, which generates its revenues primarily from leasing new and used commercial jet aircraft to foreign and domestic airlines.
- Capital Markets: Capital Markets represents the operations of AIGFP, which engages as principal in a wide variety of financial transactions, including standard and customized financial products (including CDS contracts) involving commodities, credit, currencies, energy, equities and rates.
- Consumer Finance: Consumer Finance operations include AGF as well as AIGCFG. AGF provides a wide variety of consumer finance products, including real estate and non-real estate loans, retail sales finance and credit-related insurance to customers in the United States, the U.K., Puerto Rico and the U.S. Virgin Islands.

#### <u>Asset Management Operations</u>

AlG's Asset Management operations comprise a wide variety of investment-related services and investment products. These services and products are offered to individuals, pension funds, and institutions globally through AlG's Spread Based Investment business, Institutional Asset Management, and Brokerage Services and Mutual Funds business. Also included in Asset Management operations are the results of certain SunAmerica sponsored partnership investments.

#### Other Operations

Certain AIG subsidiaries provide insurance-related services such as adjusting claims and marketing specialized products. Several wholly owned foreign subsidiaries of AIG operating in countries or jurisdictions such as Ireland, Bermuda, Barbados and Gibraltar provide insurance and related administrative and back office services to affiliated and unaffiliated insurance and reinsurance companies, including captive insurance companies unaffiliated with AIG. AIG has several other subsidiaries that engage in various businesses.

# Asset Disposition Plan (Announced October 3, 2008)

AIG hired a Vice Chairman and Chief Restructuring Officer to oversee the asset disposition plan to sell assets and businesses to repay the Fed Facility.

AIG intends to retain the majority of its U.S. property and casualty and foreign general insurance businesses, and to retain an ownership interest in certain of its foreign life insurance operations. AIG is exploring divestiture opportunities for its remaining businesses. "This is keeping with our view that property casualty would be deemed as the core of AIG's businesses, with foreign life a close second...AIG is also exploring options for the financial products business, but this probably means an orderly wind down over several years, with possibly some negotiated settlements along the way." <sup>1</sup>

In connection with AIG's asset disposition plan, subsequent to September 30, 2008, AIG entered into negotiations to sell certain operations in its General Insurance, Life Insurance and Retirement Services, Financial Services and Asset Management operating segments. These operations had total assets and liabilities with carrying values of approximately \$9 billion and \$6 billion, respectively, at September 30, 2008. Dispositions of certain businesses may be subject to regulatory approval.

<sup>&</sup>lt;sup>1</sup> Ransom, G. (2008, October 3). Outline of the AIG Plan - Smaller Nimbler. *Fox-Pitt Kelton Cochran Caronia Waller*.

## B. Balance Sheet Composition

### **Summary Balance Sheet**

(\$ in millions)				
	12/31/2005	12/31/2006	12/31/2007	9/30/2008
Fixed Maturity Securities	\$385,680	\$419,142	\$428,935	\$402,046
Equity Securities	23,588	30,650	41,646	33,59
Mortgage and other Loans Receivable, Net	24,909	28,418	33,727	33,72
Financial Services Assets	142,788	175,764	151,898	141,398
Securities Lending Invested Collateral	59,471	69,306	75,662	41,51
Other Invested Assets	31,072	42,111	58,823	58,723
Short-term Investments, at cost	15,342	27,483	51,351	52,484
Total Investments and Financial Services Assets	\$682,850	\$792,874	\$842,042	\$763,483
Cash	\$1,897	\$1,590	\$2,284	\$18,570
Total Assets	\$853,051	\$979,410	\$1,048,361	\$1,022,23
Reserve for Losses and Loss Expenses	\$77,169	\$79,999	\$85,500	\$90,87
Future Policy Benefits for Life/Accident/Health Contracts	108,807	121,004	136,387	146,80
Policyholders' Contract Deposits	227,027	248,264	258,459	259,79
Unrealized Loss on Swaps, Options and Forward Transactions	12,740	11,401	14,817	6,325
Federal Reserve Bank of New York Credit Facility	-	-	_	62,960
Commercial Paper and Extendible Commercial Notes	9,208	13,363	13,114	5,600
Other Long-Term Borrowings	100,641	135,316	162,935	155,990
Fotal Debt	120,896	168,356	184,380	232,95
Total Liabilities	766,548	877,542	952,460	950,95
Preferred Shareholders' Equity in Subsidiary Companies	186	191	100	10
Fotal Equity	\$86,317	\$101,677	\$95,801	\$71,18
Tangible Equity	78,224	93,049	86,387	60,84

Sources: SEC Filings and SNL Financial.

Total investments and financial services assets declined \$78.6 billion over the past nine months to \$763.5 billion as of September 30, 2008, from \$842.0 billion as of December 31, 2007. This decline is due in part to realized capital losses totaling \$30.5 billion (largely from OTTI of RMBS) and unrealized depreciation of investments (largely RMBS) totaling \$20.9 billion during the past nine months.

Unrealized loss on swaps, options and forward transactions liabilities are comprised of \$47.1 billion of Level Two classified liabilities and an incremental \$34.9 billion of Level Three classified liabilities (of which the majority relate to the super senior multi sector CDS portfolio), offset by counterparty netting of \$75.7 billion. AIG defines its total counterparty netting (\$75.9 billion including netting related to other liabilities) as follows: Represents netting of derivative exposures covered by a qualified master netting agreement in accordance with Fin 39 of \$42.8 billion, offset by cash collateral posted and received by AIG of \$33.1 billion. As of September 30, 2008, the fair value of derivative liability of the AIGFP super senior CDS portfolio was \$32.3 billion, which includes the impact of \$21.7 billion of unrealized market valuation losses over the nine month period.

Total borrowings (defined as commercial paper and extendible commercial notes, FRBNY credit facility, and other long-term borrowings) increased \$48.5 billion, from \$176 billion as of December 31, 2007, to \$225 billion as of September 30, 2008.

It should be noted that the figures above, as of September 30, 2008, incorporate the effects of the September 16, 2008 agreement with the FRBNY whereby the FRBNY agreed to lend up to \$85 billion to AIG (the "Fed Facility") and the U.S. government effectively got a 79.9% equity stake in the form of warrants and equity participation notes.

As of September 30, 2008, the amount owed under the Fed Facility was \$63 billion. Subsequent to September 30, 2008, AIG has borrowed additional amounts under the Fed Facility.

The stated book equity value as of September 30, 2008 is \$71.2 billion, but this includes \$23 billion of preferred share proceeds. Without the government assistance, shareholders' equity would have been \$48.2 billion. Similarly, tangible book equity would have been \$37.8 billion without the government assistance.

# Breakdown of RMBS and CMBS Investment Portfolio December 31, 20007 through September 30, 2008

AIG Insurance Investment Portfolios (Amortized Cost)						
(\$ in billions)						
	12/31/2007	3/30/2008	6/30/2008	9/30/2008		
Real Estate Investments						
RMBS						
U.S. Agencies	\$14.6	\$14.5	\$16.6	\$17.4		
Prime non-agency	21.6	18.7	17.6	15.7		
Alt-A	25.3	23.7	20.2	15.0		
Other housing-related	4.3	3.8	3.1	2.1		
Subprime	24.1	21.6	20.0	14.5		
Total RMBS	89.9	82.3	77.5	64.7		
CMBS	\$23.9	\$23.0	\$22.9	\$20.0		
Total RMBS and CMBS	113.8	105.4	100.5	84.8		
Ratings						
RMBS						
AAA	91.2%	90.3%	86.7%	82.4%		
AA	6.5%	5.7%	8.3%	9.4%		
A	1.8%	1.8%	1.5%	3.2%		
BBB and below	0.6%	2.1%	3.5%	5.0%		
CMBS						
AAA	78.0%	78.0%	79.5%	79.0%		
AA	10.9%	12.7%	12.2%	12.0%		
Α	8.7%	8.1%	6.7%	7.0%		
BBB and below	2.4%	1.2%	1.6%	2.0%		

Source: AIG Investor Relations Conference Call Credit Presentations 2007 Q1-Q3 2008.

As of September 30, 2008, AIG had total invested assets of \$791 billion (as compared to \$853 billion as of December 31, 2007). The majority of assets backing insurance liabilities at AIG consist of intermediate and long duration fixed maturity securities.

#### RMBS Investment Portfolio

Of the \$791 billion of total invested assets as of September 30, 2008, holdings of global residential mortgage market products accounted for approximately \$64.7 billion (amortized cost), or 8.2%. Approximately 82% of the RMBS portfolio is composed of agency and AAA rated securities.

#### **CMBS Investment Portfolio**

As of September 30, 2008, holdings of global CMBS accounted for \$20.0 billion, or 2.5% of invested assets. Approximately 79% of the CMBS portfolio is composed of AAA rated securities.

As of September 30, 2008, AIG's available for sale and held to maturity securities accounted for \$464 billion, or 58.7% of invested assets. This is a decline of \$53 billion compared to available for sale and held to maturity securities of \$517 billion as of December 31, 2007.

#### Historical Financial Performance Balance Sheet Ratios

	12/31/2005	12/31/2006	12/31/2007	9/30/2008
Balance Sheet				
Cash & Investments / Assets	80.56%	81.37%	80.76%	76.72
Policy Reserves / Equity	5.19%	4.78%	5.43%	7.58
Tangible Equity / Tangible Assets	9.26%	9.58%	8.31%	6.0
Assets / Equity	9.88x	9.63x	10.94x	14.3
Assets / (Assets - Liabilities)	9.86x	9.61x	10.93x	14.3

Source: SNL Financial.

Balance sheet performance ratios have suffered in fiscal 2007 and YTD September 30, 2008 as a result of decreased investment values and reductions in book equity.

## Overview of Super Senior Credit Derivatives

#### December 31, 2007 through September 30, 2008

(\$ in billions)							
	12/31/2007		3/30/2008		6/30/2008		9/30/2008
		Q1		Q2		Q3	
Net Notional Exposure	Exposure	Change	Exposure	Change	Exposure	Change	Exposure
Regulatory Capital Portfolio:							
Corporate Loans	\$229.6	(\$38.0)	\$191.6	(\$18.9)	\$172.7	(\$40.9)	\$131.8
Prime Residential Mortgages (European)	149.1	(\$5.8)	143.3	(\$10.7)	132.6	(\$16.0)	116.6
Other	-	\$0.0	-	\$1.6	1.6	\$0.0	1.6
Total - Regulatory Capital Portfolio	378.7	(43.8)	334.9	(28.0)	306.9	(56.9)	250.0
Arbitrage:							
Multi-Sector CDOs w/ Subprime	\$16.8	\$0.1	\$16.9	\$40.9	\$57.8	(\$2.7)	\$55.1
Multi-Sector CDOs w/out Subprime	61.4	(0.8)	60.6	(38.1)	22.5	(6.0)	16.5
Corporate Debt/CLOs	70.4	(13.3)	57.1	(3.3)	53.8	(3.1)	50.7
Total - Arbitrage Portfolio	148.6	(14.0)	134.6	(0.5)	134.1	(11.8)	122.3
Total Net Exposure	527.3	(57.8)	469.5	(28.5)	441.0	(68.7)	372.3

Source: AIG Investor Relations Conference Call Credit Presentations 2007 Q1-Q3 2008.

# Credit Default Swaps<sup>2</sup>

AIG has written CDSs against CDOs, which are securities backed by pools of debt. A CDS is essentially an insurance policy that reimburses the holder of the CDO for specified covered events. There are two key problems that developed with AIG's CDSs. First, even though defaults on the securities and loans in the underlying pools have not risen to levels that have required AIG to incur significant credit losses, the market prices of the underlying CDOs have declined sharply. As a result, AIG has been required to writedown its CDS positions. These writedowns have caused a decline in AIG's book equity, which in turn contributed to downgrades by credit ratings agencies.

In addition, AIG's CDS contracts also specify that under certain conditions, AIG is required to post cash collateral to swap counterparties. This confluence of events has been particularly acute in AIG's multi sector CDSs, which account for less than 25% of AIG's total swap portfolio (as of November 10, 2008), but about 95% of AIG's CDS writedowns.

As of September 30, 2008, AIG had approximately \$372 billion of net notional exposure of AIGFP's super senior CDS portfolio (excluding \$5.0 billion of credit derivatives written by AIGFP on tranches below super senior on certain regulatory capital relief trades) related to \$493 billion of gross notional value. This compares to exposure as of June 30, 2008 of \$441 billion of net notional exposure related to \$588 billion of gross notional value.

As of September 30, 2008, the fair value of derivative liability of the AIGFP super senior CDS portfolio was \$32.3 billion, which includes the impact of \$21.7 billion of unrealized market valuation losses over the nine month period.



<sup>&</sup>lt;sup>2</sup> Thomson StreetEvents Q3 2008 American International Group Earnings Conference Call dated November 10, 2008.

## Arbitrage Portfolio (including multi sector CDOs)

As of September 30, 2008, approximately \$122 billion of the \$377 billion in net notional exposure on AIGFP's super senior CDSs were arbitrage motivated transactions written on multi sector CDOs or designated pools of investment grade corporate debt or CLOs. Of this \$122 billion, approximately \$71.6 billion relates to AIG's multi sector CDSs (Note: On December 2, 2008, AIG terminated \$46.1 billion of its \$71.6 billion targeted multi sector CDO exposure through transactions with counterparties). While certain CDSs written on corporate debt and multi sector CDOs provide for cash settlement, the large majority of the AIGFP CDSs written on multi sector CDOs and CLOs require physical settlement.

As part of the November 10, 2008 TARP agreement, AIG and the FRBNY have created a financing entity that will purchase up to approximately \$70 billion face amount of multi sector CDOs on which AIG has written CDSs. AIG will provide up to \$5 billion in subordinated funding and the Federal Reserve will provide up to \$30 billion in senior funding to the financing entity. The CDS contracts will be terminated on the multi sector CDOs that are purchased. AIG will continue to have exposure to CDS contracts on multi sector CDOs that are not terminated as AIG winds down its financial products division. It will also have exposure to other types of remaining CDS contracts (non multi sector), but these have historically generated substantially smaller total collateral demands than the CDSs in AIG's multi sector CDOs.

#### Regulatory Capital Portfolio

As of September 30, 2008, approximately \$250 billion (consisting of corporate loans and prime residential mortgages) of the \$377 billion in net notional exposure of AIGFP's super senior CDS portfolio represented derivatives written for financial institutions, principally in Europe, for the purpose of providing regulatory capital relief rather than risk mitigation. In exchange for a periodic fee, the counterparties receive credit protection with respect to diversified loan portfolios they own, thus improving their regulatory capital position. These transactions generally provide for cash settlement; however, AIGFP does not expect to be required to make payments under these contracts during their estimated life as these transactions are generally expected to terminate at no additional cost to AIGFP when the transactions no longer provide such regulatory capital benefit.

#### Securities Lending Program

In addition to the multi sector CDSs, AIG's securities lending program has created issues related to liquidity.

As part of AIG's securities lending program, AIG lends securities from its portfolios to third parties, who give AIG cash collateral in return. AIG invests the cash collateral for the term of the loan. Much of AIG's collateral was invested in residential mortgage backed securities. With the turmoil in the housing and the mortgage markets, these RMBSs have declined sharply in price, to levels well below those implied by the underlying cash flows that they are producing.

When securities lending trades expire or are unwound, AIG has to return cash to its counterparties. Recently, the combination of an ill-liquid market for RMBSs and the decline in market values has resulted in unprecedented liquidity pressures for AIG.

As part of the November 10, 2008 TARP agreement, AIG and the FRBNY have established a facility under which approximately \$40 billion principal amount (\$23.5 billion fair value as of September 30, 2008) of RMBSs related to AIG's U.S. securities lending program will be transferred by certain AIG insurance subsidiaries to a newly formed limited liability company (RMBS LLC) that will be financed by the FRBNY and AIG. Proceeds to the insurance company subsidiaries, together with other AIG funds, will be used to return all cash collateral posted by securities borrowers, including approximately \$19.9 billion to be returned to the FRBNY. After all collateral is returned, AIG's U.S. securities lending program will be terminated.

The aggregate proceeds to the AIG insurance company subsidiaries will be equal to the estimated fair value of the RMBS at October 31, 2008, adjusted for collections and certain other events between such date and the closing date of the purchase. AIG will provide \$1 billion of proceeds to the AIG entities and the FRBNY will provide the remainder of the proceeds up to \$22.5 billion.

On September 15, 2008, Moody's and S&P downgraded AlG's senior unsecured debt and AlG posted another \$14.5 billion in collateral (in addition to the \$16.5 billion of capital collateral that had been posted through the second quarter). As of September 30, 2008, AlG had posted approximately \$33.1 billion in collateral related to CDSs and its securities lending program.

#### **Variable Interest Entities**

In addition to the above balance sheet items, AIG enters into various off-balance-sheet (unconsolidated) arrangements with VIE in the normal course of business. AIG's involvement with VIEs ranges from being a passive investor to designing and structuring, warehousing and managing the collateral of VIEs. AIG engages in transactions with VIEs as part of its investment activities to obtain funding and to facilitate client needs. AIG purchases debt securities (rated and unrated) and equity interests issued by VIEs, makes loans and provides other credit support to VIEs, enters into insurance, reinsurance and derivative transactions and leasing arrangements with VIEs, and acts as the warehouse agent and collateral manager for VIEs. Interest holders in the VIEs generally have recourse only to the assets and cash flows of the VIEs and do not have recourse to AIG, except when AIG has provided a guarantee to the VIEs' interest holders. AIGFP has written regulatory relief super senior CDSs on VIEs used by lenders to fund their corporate loan and residential mortgage loan portfolios.

A significant portion of AIG's overall exposure to VIEs results from AIG Investment's real estate and investment funds.

AIG's primary exposure to unconsolidated VIEs at September 30, 2008 consists of debt and equity investments of approximately \$17 billion which are included in AIG's total investments and financial services assets on the consolidated balance sheet. AIG's total maximum exposure to loss on unconsolidated VIEs continued to decline as a result of the termination of certain AIGFP transactions and the effects of overall

market deterioration. In addition, AIG has certain regulatory capital relief CDSs written by AIGFP with VIEs, including CDSs with VIEs where AIG also has a debt or equity interest. These regulatory capital relief CDSs continue to have a zero fair value and AIGFP's exposure is included in the total net notional amount of AIGFP's regulatory capital CDS portfolio of \$250 billion.

#### **Litigation**

AlG is involved in a number of litigations including claims for punitive damages. The practices of AlG and its subsidiaries are being reviewed by several federal, state and foreign regulatory and governmental agencies. These agencies are reviewing certain public disclosures, transactions and practices of AlG and its subsidiaries. The reviews include inquiries by the SEC and U.S. Department of Justice related to valuation of and disclosures in connection with the AlGFP super senior credit default swap portfolio. It has been alleged that AlG's management and analysts made false and misleading statements in the quarterly and year-end filings and conference calls related to AlGFP's super senior credit default swap portfolio, which resulted in artificial inflation in AlG's stock. These lawsuits require significant time of the top management and affect the financial and operational performance of AlG.<sup>3</sup>

DUFF&PHELPS

<sup>&</sup>lt;sup>3</sup> November 2008. American International Group, Inc. - Financial and Strategic Analysis Review. Global Markets Direct.

#### C. Financial Overview

### **Summary Income Statement**

(\$ in millions)				
	FY 2005	FY 2006	FY 2007	LTM 9/30/2008
Premiums and Other Considerations	\$70,310	\$74,213	\$79,302	\$83,883
Net Investment Income	22,584	26,070	28,619	\$22,098
Net Realized Capital Gains (Losses)	341	106	(3,592)	(\$33,112
Jnrealized Market Valuation Losses on AIGFP super				
senior credit default swap portfolio	0	0	(11,472)	(\$32,846
Other Income	15,546	12,998	17,207	13,272
Total Revenue	\$108,781	\$113,387	\$110,064	\$53,295
ncurred Policy Losses and Benefits	\$64,100	\$60,287	\$66,115	\$69,674
Other Benefits and Expenses	29,468	31,413	35,006	40,262
ncome Before Taxes and M.I.	\$15,213	\$21,687	\$8,943	(\$56,641
Net Income	\$10,477	\$14,048	\$6,200	(\$42,922
Operating Income by Business Line:				
General Insurance	\$2,315	\$10,412	\$10,526	\$1,622
Total Life Insurance & Retirement	8,965	10,121	8,186	(\$18,275
Financial Services	4,424	383	(9,515)	(\$33,403
Asset Management	1,963	1,538	1,164	(\$3,351
Other	(2,765)	(1,435)	(2,140)	(\$3,482
Consolidation and Eliminations	311	668	722	\$248

Source: SEC Filings.

#### Revenue

Total revenue for the first nine months of 2008 was \$34.9 billion, a \$56.7 billion (62.0%) decline from \$91.6 billion for the prior year period. The reasons for the decline in revenue relate primarily to a 31% decline (\$6.5 billion) in net investment income, net realized capital losses of \$30.5 billion, and unrealized market valuation losses of the AIGFP super senior CDS portfolio of \$21.7 billion.

Premiums and other considerations increased to \$63.5 billion for the nine month period ended September 30, 2008 (compared to \$58.9 billion for the prior year period) primarily due to increases of \$2.9 billion, \$1.7 billion, and \$513 million in premiums from Foreign Life Insurance & Retirement Services, Foreign General Insurance, and Domestic Life Insurance, partially offset by a decrease of \$855 million in premiums from Commercial Insurance.

Net investment income decreased to \$14.6 billion for the nine month period ended September 30, 2008 compared to \$21.1 billion for the prior year period due to losses from partnerships, hedge funds and mutual funds, as well as policyholder trading losses and higher trading account losses related to certain investment oriented products in the U.K. for Life Insurance & Retirement Services.

Net realized capital losses were \$30.5 billion for the nine months ended September 30, 2008 compared to a loss of \$962 million for the prior year period primarily due to an increase in OTTI charges. OTTI charges included the change in AIG's intent and ability to hold to recovery the securities held as collateral in the securities lending program;

an increase in severity losses primarily related to certain RMBSs, other structured securities and securities of financial institutions due to rapid and severe market valuation declines where the impairment period was not deemed temporary; and issuer specific credit events partially offset by the favorable effect of foreign exchange transactions due to strengthening of the U.S. dollar.

The unrealized market valuation losses on AIGFP's super senior CDS portfolio were \$21.7 billion for the nine month period ended September 30, 2008 as compared to \$352 million for the prior year period. The decline was due to significant widening in credit spreads and the downgrades of RMBS and CDO securities by rating agencies who were driven by the credit concerns resulting from U.S. residential mortgages and the severe liquidity crisis affecting the markets.

Other Income decreased in the nine month period ended September 30, 2008 compared to the same period in 2007 primarily due to a \$1.7 billion decrease in Financial Services revenues and a \$1.2 billion decrease in Asset Management revenues. Financial Services revenues decreased principally as a result of a net \$1.4 billion credit valuation adjustment loss on AIGFP's assets and liabilities which are measured at fair value. Asset Management revenues decreased primarily as a result of lower guaranteed investment contract revenue due to lower partnership income.

#### **Expenses**

Incurred policy losses and benefits increased in the nine month period ended September 30, 2008 compared to the same period in 2007 primarily due to a \$1.6 billion increase in Commercial Insurance as a result of higher catastrophe-related losses principally from hurricanes lke and Gustav in 2008, a \$1.2 billion increase in Foreign General Insurance as a result of higher catastrophe related losses and severe but non catastrophic losses, and a \$1.4 billion increase in Mortgage Guaranty reflecting the deterioration of the U.S. housing market. Increases in incurred policy losses and benefits of \$2.7 billion in Life Insurance & Retirement Services were more than offset by a reduction in losses and benefits arising from policyholder trading losses of \$3.8 billion (discussed above in net investment income).

#### Net Income

Net income for the nine month period ended September 30, 2008 was a loss of \$37.8 billion, or (\$14.40) per share, compared to an \$11.5 billion profit, or \$4.40 per share, for the same period in 2007.

#### Historical Financial Performance

# **Profitability Ratios**

Profitability Ratios				
	12/31/2005	12/31/2006	12/31/2007	9/30/2008 <sup>1</sup>
Profitability				
Investment Yield	3.40%	3.58%	3.01%	-1.31%
Return on Average Assets	1.26%	1.54%	0.60%	-4.09%
Return on Average Equity	12.23%	15.34%	6.05%	-50.32%
Return on Average Tangible Equity	13.56%	16.89%	6.61%	-55.03%

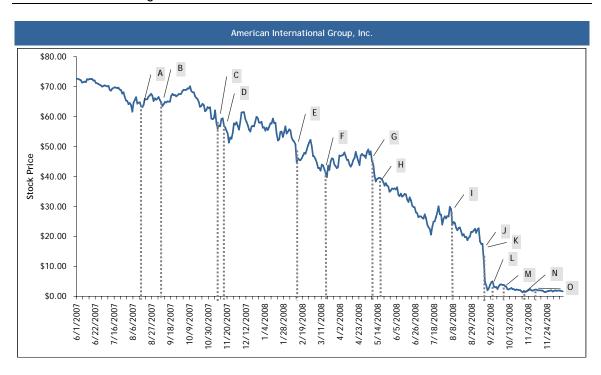
<sup>&</sup>lt;sup>1</sup>Profitability performance ratios reflect LTM figures as of 9/30/08.

Source: SNL Financial.

AlG's profitability ratios significantly declined in 2007 and LTM September 30, 2008 relative to fiscal 2005 and 2006. As of September 30, 2008, all profitability performance ratios were negative, with the largest decline in return on average tangible equity falling from 6.6% in fiscal 2007 to -55.0%. Return on average assets also experienced a significant drop from its highs in fiscal 2006, falling to 0.6% in fiscal 2007 and to -4.1% YTD September 30, 2008.

#### D. Stock Price Performance and Valuation Multiples

Stock Price Performance June 1, 2007 through December 12, 2008



#### Notable Company Events

- A.) August 9, 2007: Joseph Cassano, President and CEO of AIG Financial Products, on a conference call with investors discussing CDOs, stated that: "It is hard for us with, and without being flippant, to even see a scenario within any kind of realm of reason that would see us losing \$1 in any of those transactions...We see no issues at all emerging. We see no dollar loss associated with any of that business." Source: Thomson StreetEvents Q2 2007 AIG Earnings Conference Call.
- B.) September 4, 2007: AIG announced that its board of directors declared a quarterly cash dividend on the company's common stock of 20 cents per share, payable on December 21, 2007 to shareholders of record on December 7, 2007. Source: CapitallQ.
- C.) November 7, 2007: AIG reports a \$352 million in unrealized losses related to its credit default swap portfolio. Source: SEC Filing 8-
- D.) November 14, 2007: AlG declared a quarterly common stock cash dividend of 20 cents. The dividend is payable on March 21, 2008 to shareholders of record as of March 7, 2008. Source: CapitallQ.
- E.) February 11, 2008: AIG's auditor, PriceWaterhouseCoopers discovered a "material weakness" in its valuation of credit default swaps. Source: SEC Filling 8-K.
- F.) March 12, 2008: The Board of Directors of AIG. declared a quarterly cash dividend on the company's common stock of 20 cents per share, payable on June 20, 2008 to shareholders of record on June 6, 2008. Source: CapitallQ.
- G.) May 8, 2008: AIG reports a Q1 2008 loss of \$7.81 billion, largely related to write-downs of mortgages. AIG increases its estimate of unrealized losses in 2008 to \$9.1 billion through the end of March, for a grand total loss of \$20.6 billion over 2007 and 2008. The Company also discloses that it had posted an aggregate of \$9.7 billion of collateral over the past two years. Sources: SEC Filing 10-Q, ProPublica.

May 8, 2008: The Board of Directors of AIG declared a quarterly cash dividend on the company's common stock of 22 cents per share. The dividend is payable on September 19, 2008 to shareholders of record on September 5, 2008. This represents a 10% increase in the quarterly cash dividend and the twenty-third consecutive year that AIG has increased its dividend. *Source: CapitalIQ.* 

H.) May 20, 2008: The Company raises \$20 billion in private capital. Source: Market Watch.

Additional notable events continue on the following page.



- I.) August 6. 2008: AIG reports a Q2 2008 loss of \$5.4 billion and discloses that it has posted a total of \$16.5 billion in collateral through the second quarter. Sources: SEC Filing 8-K, 10-Q, ProPublica.
- J.) September 15, 2008: Moody's and Standard & Poor's downgrade AlG's senior unsecured debt, and the Company is forced to post another \$14.5 billion in collateral due to the downgrade. *Source: Bloomberg*.
- K.) September 16, 2008: The Federal Reserve lends AIG \$85 billion and in return takes a 79.9% equity stake in the Company. The two-year loan is secured by all of the assets of AIG. Source: Federal Reserve.
- L.) September 23, 2008: AIG announced that its board of directors has decided to suspend the declaration of dividends on the insurer's common stock. Source: CapitallO.
- M.) October 8, 2008: The Federal Reserve agreed to provide AIG with a loan of up to \$37.8 billion. Under the new program, the Federal Reserve Bank of New York will borrow up to \$37.8 billion in investment-grade, fixed income securities from AIG in return for cash collateral. Source: Federal Reserve.
- N.) October 30, 2008: AIG announced that it has approved \$4.6 billion in dividends for its policy owners in 2009. The payout represents a dividend interest rate of 6.5% on unborrowed funds of most life insurance policies. Source: CapitalIQ.
- O.) November 10, 2008: The Federal Reserve Board and the U.S. Treasury announced a restructuring of the government's financial support of AIG. The U.S. Treasury will purchase \$40 billion of newly issued preferred shares under the TARP. The preferred equity purchase will allow the Federal Reserve to reduce the total amount available to AIG under the credit facility from \$85 billion to \$60 billion. Source: Federal Reserve.

#### Valuation Multiples

Valuation Multiples					
	12/31/2005	12/31/2006	12/31/2007	9/30/2008	11/10/2008
Price / Book Equity	2.05x	1.83x	1.54x	0.13x	0.09x
Price / Tangible Book Equity	2.27x	2.00x	1.71x	0.15x	0.10x
Price / Earnings	17.1x	13.4x	24.4x	NM	NM
Dividend Yield	0.9%	0.9%	1.4%	0.0%	0.0%

Source: SEC Filings

#### E. Outlook

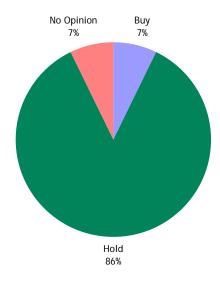
As of December 12, 2008, 18 analysts were covering AIG and 14 were publishing recommendations. The consensus recommendation for AIG was a "Hold" rating with 12 analysts, or 86% of those publishing recommendations recommending that investors "Hold" AIG stock. One analyst, or 7% of the current coverage universe, recommended that investors "Buy" AIG stock and one analyst offered no investment opinion.

Wall Street Analyst Recommendations December 12, 2008

Wall Street Analyst American Internation	Recommendations onal Group (NYSE: AlC	G)				
Date	12/12	/2008	1 Month Prior	3 Months Prior	Cha	ange
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months
Buy	1	7%	1	1	0	0
Buy/Hold	0	0%	0	2	0	-2
Hold	12	86%	12	10	0	+2
Weak Hold	0	0%	0	0	0	0
Sell	0	0%	0	2	0	-2
No Opinion	1	7%	2	1	-1	0
Total	14	100%	15	16		

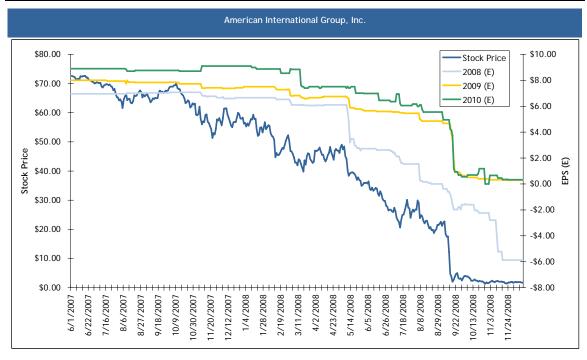
Source: Standard & Poor's Stock Report, December 12, 2008.

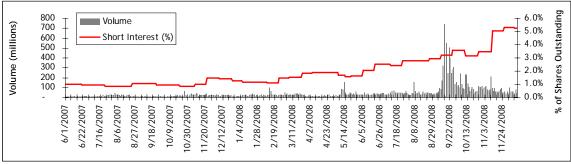
### Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008.

Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008





Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the average estimate for AIG's expected 2009 EPS declined from an average estimated EPS of \$8.00 to an average estimated EPS of \$0.30. Expectations for 2010 EPS are similar.

# FPK, November 10, 2008<sup>4</sup>

- The \$40 billion TARP investment into AIG will "ease liquidity issues" at AIG and provide an additional three years (now five years) "to have an orderly sale" of AIG's subsidiaries. The additional time will increase the likelihood that AIG will obtain a reasonable price for the divested subsidiaries.
- The effect of the \$40 billion investment and restructuring of the Federal Reserve Board lending facility from \$85 billion for two years to \$60 billion for

<sup>&</sup>lt;sup>4</sup> Ransom, G. (2008, Nov. 10). Redo With the Government is the Main 3Q News. *Fox-Pitt Kelton Cochran Caronia Waller*.

five years will be to provide AIG with additional time and allow the sale of subsidiaries to be completed without the "pressure and cost" of the original Federal Reserve Board plan. Along with the benefits to AIG, "the taxpayer is being compensated through dividends, interest, and upside on the purchased assets." FPK believes that the \$40 billion TARP investment "improves the potential for AIG to emerge as an operating entity at the end of this process."

# FPK, September 24, 2008<sup>5</sup>

- FPK lowered earnings estimates of AIG due to the dilution that resulted from the Federal Reserve's investment in AIG, as well as shrinking premiums on the property casualty business and slower growth or declines in life earnings in 2009.
- Additionally, FPK noted that "there remains considerable uncertainty as to the resolution of AlG's plan." The probability of economic losses related to the derivative portfolio and an extended period of deteriorated market values of asset backed securities represents the downside for AlG. The upside potential for AlG is associated with the divestiture of its subsidiaries and the stabilization of credit markets and values. FPK believes that the "risk/reward balance appears to be in rough balance."

### Credit Suisse, August 25, 2008<sup>6</sup>

- Credit Suisse notes that in addition to AIG's exposure related to CDS on CDOs and its investment portfolio, "there is also uncertainty regarding future potential losses arising from both its VIEs and the CDS contracts AIG categorizes as regulatory capital arbitrage transactions."
- Because AIG has less than a 50% interest in the majority of its VIEs, these interests are off balance sheet.
- A review of AIG's financial position reveals that at the end of 2007 "AIG participated in \$275 billion worth of VIEs and as of Q2 2008 had max loss exposure of \$39 billion related to VIEs."

<sup>&</sup>lt;sup>6</sup> Gallagher, T. (2008, Aug. 25). Lowering 3Q EPS Estimate and Price Target to Reflect Weakening Credit Markets. *Credit Suisse*.



<sup>&</sup>lt;sup>5</sup> Ransom, G. (2008, Sept. 24). Limited or Unclear Upside, Downgrading to In-Line. *Fox-Pitt Kelton Cochran Caronia Waller*.

#### **Credit Default Swaps**

#### June 1, 2007 through December 12, 2008



A.) November 10, 2008: The U.S. Treasury will purchase \$40 billion of newly issued preferred shares of AIG. The money will come from the \$700 billion that Congress allocated to the Troubled Asset Relief Program (TARP). Source: Federal Reserve

Sources: Capital IQ, Bloomberg.

CDSs are used to hedge against losses or to speculate on the ability of a company to repay their debt. The spread on a CDS rises as investor confidence deteriorates. A basis point ("bps") on a credit-default swap contract protecting \$10 million of debt from default for five years is equivalent to \$1,000 a year.

As demonstrated in the figure above, the spread on AlG's five year credit-default swaps has increased 635.92 bps from 11.25 bps at June 1, 2007 to 647.17 bps at December 12, 2008. The spread peaked at 2,923.27 bps on November 7, 2008 before returning to more moderate levels as a result of the TARP investment into AlG. This increase indicates heightened concern that AlG will default on its debt.

# Credit Ratings December 12, 2008

Credit Ratings			
	Long Term Debt Rating	Short Term Debt Rating	Rating Outlook
Fitch Ratings	А	P-1	Stable
Moody's Investor Service	A3	F1	Watch Neg.
Standard & Poor's	A-	A-1	Watch Neg.

Sources: Bloomberg, SNL Financial.

## Moody's and S&P, September 15, 2008<sup>7</sup>

In the late afternoon of September 15, 2008, S&P downgraded AlG's long-term debt rating by three notches, Moody's downgraded AlG's long-term debt rating by two notches and Fitch downgraded AlG's long-term debt rating by two notches. As a consequence of the rating actions, AlGFP estimated that it would need in excess of \$20 billion in order to fund additional collateral demands and transaction termination payments in a short period of time. Subsequently, in a period of approximately 15 days following the rating actions, AlGFP was required to fund approximately \$32 billion, reflecting not only the effect of the rating actions but also changes in market levels and other factors.

# S&P and Fitch, September 17, 20088

On September 17, 2008 S&P and Fitch raised their credit ratings on AIG as a result of the Federal Reserve's actions to provide AIG with liquidity. S&P raised its rating on AIG short term debt from "A-2" to "A-1." Fitch analysts said the "evolving" outlook reflects the "highly dynamic nature" of AIG's financial situation, which could develop positively or negatively for different units and securities. "For AIG as a whole, Fitch views this transaction as a favorable development that alleviates significant near term liquidity concerns and provides a source of funding for potential future collateral requirements."

### Moody's, October 3, 2008

On October 3, 2008 Moody's downgraded its rating on AIG long term debt from "A2" to "A3."

Postal, A. (2008, Sept. 18) Rating Agencies Upgrade, but Remain Cautious. NU Online News Service. Retrieved from http://www.oswaldcompanies.com.



<sup>&</sup>lt;sup>7</sup> Son, H. (2008, Sept. 15). AIG's Ratings Cut by S&P, Moody's, Threatening Fund Raising. Bloomberg. Retrieved from http://www.bloomberg.com.

<sup>&</sup>lt;sup>8</sup> Sources: Linnane, C. (2008, Sept. 17). UPDATE 1-Fitch Revises AIG Outlook to Evolving from Negative. Reuters. Retrieved from http://www.reuters.com.



# Appendix B. Company Overview

**Bank of America Corporation** 

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM BANK OF AMERICA CORPORATION'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2007 AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

#### A. Business Overview

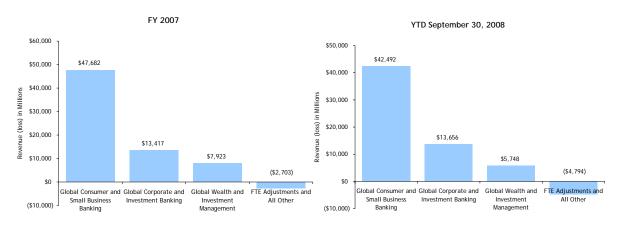
BofA is a global diversified financial services holding company headquartered in Charlotte, North Carolina, with operations throughout the United States and in more than 30 foreign countries. As one of the largest financial institutions in the world, BofA provides banking, investing, asset management and other financial and risk management products and services for individual consumers, small and middle market businesses and large corporations. BofA had \$1.8 trillion in assets and \$161.0 billion in total stockholders' equity as of September 30, 2008. BofA is listed on the NYSE under the ticker BAC and is a member of the Dow Jones Industrial Average.

BofA provides a wide range of financial products and services under three major business segments: Global Consumer and Small Business Banking ("GCSBB"), Global Corporate and Investment Banking ("GCIB"), and Global Wealth and Investment Management ("GWIM").

#### **Overview of Major Business Segments** Bank of America \*\*\* Global Consumer & Global Wealth & Global Corporate & **Small Business** Investment **Investment Banking** Banking Management **Businesses: Businesses:** Businesses: Deposits and Debit Global Commercial Premier Banking and Banking Investments Card Services Global Investment U.S. Trust, Bank of Consumer Real Estate Banking America Private and Insurance Wealth Management Global Markets Small Business • Columbia Global Product Banking Management Solutions • e-Commerce / ATM International

Source: SEC filings (2007 10-K); BofA Investor Reports (2008 Mid-Year Report).

#### Revenue by Line of Business



Sources: (1) SEC filings (2007 10-K, 10-Q for 3Q08).

#### Global Consumer and Small Business Banking

GCSBB is BofA's retail banking arm that provides checking, savings, credit and debit cards, home equity lending and mortgages to consumers, as well as diversified merchant services for small businesses. Eighty-two percent of the U.S. population is located within BofA's retail footprint, which consists of a distribution channel with more than 6,100 banking centers, 18,500 domestic ATMs and online, e-commerce, sales and telephone banking associates. GCSBB is BofA's largest business segment in both revenue and net income.

#### Global Corporate and Investment Banking

GCIB provides financial services covering both commercial and investment banking to business banking clients, large multinational corporates, governments and institutional investors. Core services include business lending, M&A advisory, debt and equity underwriting, credit and treasury services, and international banking services. In addition, GCIB provides sales and trading, risk management, and research products for institutional investors and issuers. In September 2008, BofA exited the prime equity brokerage business, which provided services primarily for hedge funds, with the sale of this unit to BNP Paribas.

#### Global Wealth and Investment Management

GWIM delivers personalized investment management services to more than three million individual and institutional clients through three service lines: (1) Premier Banking and Investments; (2) U.S. Trust, Bank of America Private Wealth Management; and (3) Columbia Management. Premier Banking and Investments offers full service banking and investment advisory services through Bank of America, N.A. and investment products through Banc of America Investment Services, Inc. U.S. Trust provides brokerage services for high net worth clients who typically have investable assets of \$3 million or more. Columbia Management provides asset management products to retail and institutional investors. In addition, GWIM offers Alternative Investment Solutions, which provides qualified individual investors and institutions

access to hedge funds, private equity funds, and tailored investments and retirement fund management through Bank of America Retirement and GWIM Client Solutions. Although GWIM is the smallest of BofA's three business units, the pending acquisition of Merrill Lynch is expected to greatly strengthen BofA's brokerage services.

#### **Major Developments**

#### LaSalle and U.S. Trust Acquisitions

Over the past several years, BofA has undertaken several acquisitions to strengthen its geographic footprint and broaden its financial services and product offerings. Notable past acquisitions include FleetBoston Financial Corporation (2004) and MBNA Corporation (2006). In 2007, BofA completed two large transactions: (1) the acquisition of U.S. Trust from Charles Schwab for \$3.3 billion in July 2007, and (2) the acquisition of LaSalle from ABN Amro North America in October 2007 for \$21.0 billion. The acquisition of LaSalle expanded BofA's consumer and commercial banking in the metropolitan Chicago and Detroit markets, and increased its overall presence in Illinois, Michigan and Indiana.

#### **Countrywide Acquisition**

On July 1, 2008, BofA completed its acquisition of Countrywide for \$4.2 billion. Under the terms of the agreement, Countrywide common shareholders received 0.1822 of a share of BofA common stock in exchange for one share of Countrywide common stock. In effect, 583 million shares of Countrywide common stock were exchanged for 107 million shares of BofA common stock. BofA had previously invested \$2.0 billion into Countrywide in August 2007 for an approximate 16% ownership stake. The acquisition of Countrywide greatly strengthened BofA's mortgage and loan service offerings.

#### Merrill Lynch Acquisition

On September 15, 2008, BofA announced that it agreed to acquire Merrill Lynch for \$44.4 billion in an all-stock transaction. Merrill Lynch common shareholders will receive 0.8595 of a share of BofA common stock in exchange for one share of Merrill Lynch common stock. The transaction is expected to significantly enhance BofA's investment banking capabilities, including debt and equity underwriting and global mergers and acquisitions advisory. In addition, the acquisition will add more than 16,000 Merrill Lynch financial advisors and a 49.8% interest in publicly traded investment management firm BlackRock, Inc. The combined companies would become the world's largest brokerage with more than 20,000 financial advisors and approximately \$2.5 trillion in client assets. The transaction closed on January 1, 2009.

# **B.** Balance Sheet Composition

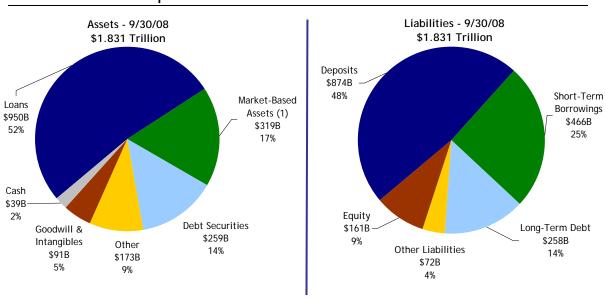
# **Summary Balance Sheet**

	FY2005	FY2006	FY2007	9/30/2008
Loans	\$580,446	\$716,013	\$899,180	\$949,744
Earning Assets - Average	1,137,363	1,303,874	1,425,581	1,588,833
Earning Assets - End of Year	1,128,161	1,246,343	1,484,899	1,568,172
Risk-Weighted Assets	901,693	1,054,533	1,212,834	1,328,084
Total Assets	1,291,803	1,459,737	1,715,746	1,831,177
Deposits	\$634,670	\$693,497	\$805,177	\$874,051
Tangible Equity	\$53,512	\$65,819	\$64,034	\$74,761
Total Equity	101,533	135,272	146,803	161,039

Source: SNL Financial.

BofA's balance sheet as of September 30, 2008 reflects the acquisition of Countrywide, which added \$164.4 billion in assets and \$140.4 billion in liabilities.

# **Balance Sheet Composition**



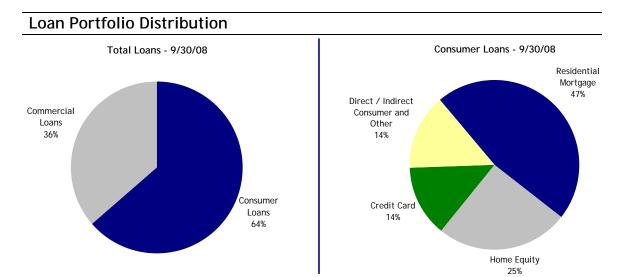
(1) Market-Based Assets include trading account assets of \$175 billion, time deposits of \$12 billion, federal funds sold and resell agreements of \$87 billion and derivative assets of \$46 billion. Sources: SEC filing (10-Q for 3Q08); BofA Investor Presentation for 3Q08.

#### Loan Portfolio

As of September 30, 2008, BofA had \$949.7 billion in loan balances, which included \$20.3 billion for allowances for loan losses and \$27.4 billion in loans held-for-sale. Total loan balances at September 30, 2008 increased by \$50.5 billion or 5.6% from December 31, 2007, primarily due to the acquisition of Countrywide in July 2008, offset partially by the sale of BofA's prime equity brokerage business.

Consumer loans, accounting for 64% of BofA's total loan portfolio as of September 30, 2008, consisted primarily of residential mortgages, home equity lines, credit card debt, student loans and other consumer lending instruments. Residential mortgages and home equity lines combined to comprise over 70% of BofA's consumer loans and approximately 45% of BofA's total loan balances as of September 30, 2008.

Commercial loans, consisting primarily of business lending, commercial real estate loans, acquisition financing, bridge loans, commercial lease financing and other business purpose loans, comprised 36% of BofA's total loan portfolio as of September 30, 2008. Commercial business lending accounted for 73% of the total commercial loans, while commercial real estate loans consisted of 19% as of September 30, 2008.



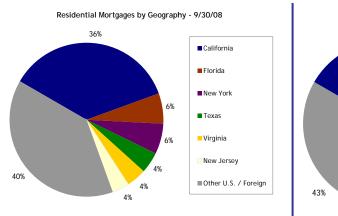
Source: SEC filing (10-Q for 3Q08).

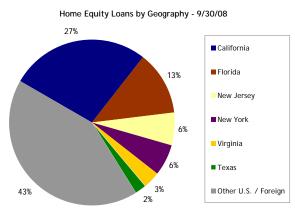
#### Residential Mortgage / Home Equity

BofA's acquisition of Countrywide added \$26.8 billion in residential mortgages to BofA's loan assets as of September 30, 2008. Residential mortgages to borrowers in California accounted for 36% of total residential mortgages followed by Florida at 6% as of September 30, 2008. California and Florida combined to represent 43% of the total residential mortgages, however, the two states generated 59% of the net charge-offs for the nine months ended September 30, 2008 ("YTD September 2008"). Approximately 7% of BofA's total residential mortgage portfolio consisted of loans with refreshed FICO credit scores lower than 620.

The Countrywide acquisition added approximately \$29.0 billion in home equity loans, which drove the 32% increase in outstanding home equity loans at September 30, 2008 compared to December 31, 2007. California and Florida combined to represent 40% of the total home equity loans, however, the two states generated 64% of the net charge-offs for the YTD September 2008 period. Approximately 9% of BofA's total home equity loan portfolio consisted of loans with refreshed FICO credit scores lower than 620.

# Residential Mortgages and Home Equity Loans by Geography



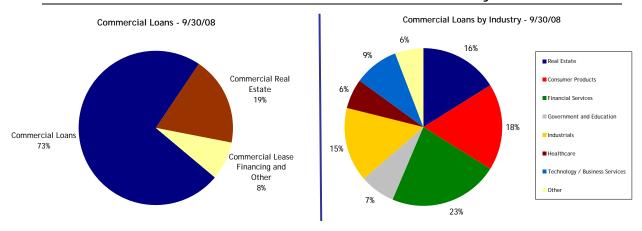


Source: SEC filing (10-Q for 3Q08).

#### **Commercial Loans**

Commercial loans increased to \$343.8 billion as of September 30, 2008 from \$325.1 billion as of December 31, 2007 due to increased commercial business loan activity. However, total commercial loans were down 1% at the end of the third quarter ended September 30, 2008 ("3Q08") compared to the second quarter ended June 30, 2008 ("2Q08"). Commercial credit quality continued to deteriorate due to the weakness in the housing and financial markets, which resulted in significant increases in net charge-offs and non-performing loans. Non-performing commercial loans were \$4.9 billion as of September 30, 2008 as compared to \$2.2 billion as of December 31, 2007.

## Commercial Loan Mix and Commercial Residential Loans by Sector



Note: Commercial loans by industry estimated by Duff & Phelps, LLC. Source: SEC filing (10-Q for 3Q08).

#### **Deposits**

BofA grew deposits to \$874.1 billion as of September 30, 2008, up from \$805.2 billion as of December 31, 2007. The increase was driven by a strong flight to safety from consumer and business customers resulting from market instability and the impact of the acquisition of Countrywide. BofA added 1.8 million and 3.0 million net new checking and savings accounts during 3Q08 and the first nine months of 2008, respectively. During the first nine months of 2008, domestic interest-bearing deposits increased as a percentage of total deposits from 63% to 66%, while foreign interest-bearing deposits decreased as a percentage of total deposits from 14% to 11%.

#### **Balance Sheet Ratios**

	FY2005	FY2006	FY2007	9/30/2008
Balance Sheet				
Loans / Deposits	90.41%	101.87%	108.84%	107.85%
Tangible Equity / Tangible Assets	4.30%	4.73%	3.92%	4.28%
Leverage Ratio <sup>(1)</sup>	5.89%	6.36%	5.04%	5.51%
Tier One Ratio <sup>(2)</sup>	8.25%	8.64%	6.87%	7.55%
Risk Based Capital Ratio <sup>(3)</sup>	11.04%	11.88%	11.02%	11.54%
Asset Quality				
Reserve for Loan Losses / Loans	1.37%	1.24%	1.27%	2.10%
Reserve for Loan Losses / Non-Performing Assets	469.05%	458.77%	187.83%	138.71%
Net Charge-Offs / Average Loans	0.83%	0.68%	0.82%	1.399
Loan Loss Provision / Net Charge-Offs	87.99%	110.38%	129.40%	170.419

Source: SNL Financial.

#### **Definitions:**

(1) Leverage Ratio is calculated as Tier One Capital divided by tangible assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Leverage Ratio of 4%. Federal bank regulators generally consider a Leverage Ratio of 5% or above as well capitalized.

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

<sup>(2)</sup>Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is expected to meet a minimum risk based capital ratio of 4%. Federal bank regulators consider a Tier One Capital Ratio of 6% or above as well capitalized.

<sup>(3)</sup>Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators consider a Risk Based Capital Ratio of 10% or above as well capitalized.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

Stockholders' equity was \$161.0 billion at September 30, 2008. BofA distributed \$9.5 billion in dividends to shareholders during the nine months ended September 30, 2008. BofA announced in October 2008 that it will decrease its quarterly dividend on its common stock by 50% to \$0.32 per share to help shore up BofA's capital position.

As of September 30, 2008, BofA's Tier One Ratio increased by 68 basis points ("bps") to 7.55% from December 31, 2007, however, the Tier One Ratio was down 70 bps from

June 30, 2008 due to the completion of the Countrywide acquisition. BofA's Tier One Ratio is expected to realize additional improvement following BofA's \$10 billion common stock offering and \$15 billion TARP preferred equity injection, both of which occurred in October 2008. In BofA's 10-Q filing for 3Q08, BofA management indicated that after taking into account for the October capital raise and TARP investment and "including the impact of the announced acquisition of Merrill Lynch...we expect to exceed 8 percent for Tier [One] Capital." According to Fox-Pitt Kelton Cochran Caronia Waller, BofA's Tier One Ratio, on a pro forma basis, would increase to 9.93% when taking into account the Merrill Lynch acquisition, the \$10 billion capital raise, BofA's \$15 billion TARP investment and Merrill Lynch's agreed to \$10 billion TARP investment. Merrill Lynch and the Treasury agreed to delay Merrill's TARP investment until after the close of the BofA-Merrill Lynch transaction. Additionally, J.P. Morgan estimated that "the lower dividend [on BofA's common stock] should add about 11 bp[s] to Tier [One] capital ratio per quarter and conserve about \$6 billion of capital annually."

In terms of liquidity, BofA management stated in the 3Q08 filing that BofA "maintains a cushion of excess liquidity that would be sufficient to fully fund the holding company and nonbank affiliate operations for an extended period during which funding from normal sources is disrupted." S&P noted in a December research report that "[a]Ithough we believe it to be unlikely, should BofA find itself in need of extraordinary government support, as a highly systemically important institution, we expect such assistance would be extended." However, a few analysts believe that BofA will be running into liquidity and capital issues due to its deteriorating credit quality of assets, rising loan losses, and thin capital levels. Banking analysts at Atlantic Equities expect BofA will need to raise \$15 billion in common equity and that there "is a high chance of a dividend cut from both BofA and Wells Fargo." A Friedman, Billings, Ramsey analyst also commented that "[BofA] should cut its quarterly dividend to a penny from 32 cents and conserve as much capital as possible."

In terms of asset quality, "[c]redit trends in the [third quarter of 2008] indicate [non-performing] assets have not decelerated as prime mortgages, consumer and small business continue to deteriorate at a rapid pace akin to [the second quarter of 2008] while commercial and commercial real estate are accelerating." Non-performing loans increased from \$5.6 billion as of December 31, 2007 to \$11.7 billion as of September 30, 2008, with "deterioration across virtually every aspect of its massive consumer loan book, highlighting unsettling risk concentrations and performance in the credit bubble states of California and Florida."

<sup>&</sup>lt;sup>1</sup>Marquard, A. (2008, Nov. 19). BAC to Increase Stake in China Construction Bank. *Fox-Pitt Kelton Cochran Caronia Waller*.

<sup>&</sup>lt;sup>2</sup>Vivek, J., Curcuruto, T. and Sun, J. (2008, Oct. 7). Credit, Cap Mkts Drove Very Weak 3Q, Capital Raise, Dividend Cut - Weak Outlook. *J.P. Morgan North America Research*.

<sup>&</sup>lt;sup>3</sup>Bartko, J. and Sprinzen, S. (2008, Dec. 19). S&PCORRECT: Bank of America Corp. Ratings Lowered to 'A+/A-1'; Outlook Negative. *Standard & Poor's Ratings Services*.

<sup>&</sup>lt;sup>4</sup>Kotoky, A. (2008, Dec. 10). Bank of America, Wells Fargo Need More Equity - Analyst. *Reuters*.

<sup>&</sup>lt;sup>5</sup>Wahba, P. (2008, Dec. 15). Bank of America Stock Could Sink to \$9: Analyst. *Reuters*.

<sup>&</sup>lt;sup>6</sup>Ramsden, R., Foran, B., Thomasen, F., Mai, Q. (2008, Oct. 7). Lowering Earnings Expectations and Raising Capital. *Goldman Sachs Global Investment Research*.

<sup>&</sup>lt;sup>7</sup>Hesser, V., Parekh, M. (2008, Oct. 7). "Perfect Storm" Produces a Capitulation. *HSBC Global Research*.

## Special Purpose Entities and Variable Interest Entities

BofA enters into various on and off-balance sheet financing arrangements with SPEs and VIEs in the normal course of business to meet balance sheet management, funding and liquidity needs. BofA has liquidity arrangements with SPEs under which BofA is obligated to provide funding or credit support in the event that such SPEs run into liquidity issues. This liquidity exposure pertains to consolidated and unconsolidated SPEs, which include VIEs and QSPEs. Liquidity exposure to consolidated and unconsolidated VIEs and QSPEs totaled \$91.4 billion as of 3Q08, down \$12.7 billion from December 31, 2007. The following table illustrates BofA's consolidated and unconsolidated liquidity exposure.

# **Special Purpose Entity Liquidity Exposure**

(\$ in millions)	VI	Es	QSPEs		
	Consolidated	Unconsolidated	Unconsolidated	Total	
As of December 31, 2007					
Corporation-Sponsored Multi-Seller Conduits	\$16,984	\$47,335	\$0	\$64,319	
Municipal Bond Trusts and Corporate SPEs	7,359	3,120	7,251	17,730	
Asset Acquisition Conduits	1,623	6,399	0	8,022	
Customer-Sponsored Conduits	0	1,724	0	1,724	
Collateralized Debt Obligation Vehicles	3,240	9,026	0	12,266	
Total Liquidity Exposure	\$29,206	\$67,604	\$7,251	\$104,061	
As of September 30, 2008					
Corporation-Sponsored Multi-Seller Conduits	\$13,110	\$42,440	\$0	\$55,550	
Municipal Bond Trusts and Corporate SPEs	4,148	4,714	4,735	13,597	
Home Equity Securitizations	0	0	13,315	13,315	
Asset Acquisition Conduits	1,130	5,619	0	6,749	
Customer-Sponsored Conduits	0	1,142	0	1,142	
Collateralized Debt Obligation Vehicles	0	1,051	0	1,051	
Total Liquidity Exposure	\$18,388	\$54,966	\$18,050	\$91,404	

Sources: SEC filings (2007 10-K and 10-Q for 3Q08).

## Collateralized Debt Obligation Exposure

The CDO market has continued to deteriorate over the first nine months of 2008, as security illiquidity negatively impacted the reliability of pricing. CDO exposure can be divided into super senior liquidity commitments, other uncommitted super senior exposure and purchased securities from liquidated CDOs. As of September 30, 2008, BofA had a total CDO exposure of \$7.4 billion, which includes \$4.3 billion exposure to subprime CDOs. The following table illustrates BofA's super senior CDO exposure.

# Super Senior CDO Exposure

(\$ in millions)	Net Subprime Exposure		Net Non-Subprime Exposure		Total Net Exposure	
	12/31/07	9/30/08	12/31/07	9/30/08	12/31/07	9/30/08
Super Senior Liquidity Commitments						
High Grade	\$2,170	\$0	\$2,996	\$688	\$5,166	\$68
Mezzanine	358	337	0	0	358	33
CDO-Squared	2,227	0	0	0	2,227	
Total	4,755	337	2,996	688	7,751	1,02
Other Super Senior Exposure						
High Grade	1,667	942	458	2,396	2,125	3,33
Mezzanine	795	179	0	0	795	17
CDO-Squared	959	1,432	0	0	959	1,43
Total	3,421	2,553	458	2,396	3,879	4,94
Purchased Securities from Liquidated CDOs	0	1,458	0	0	0	1,45
Total	\$8,176	\$4,348	\$3,454	\$3,084	\$11,630	\$7,432

Sources: SEC filings (2007 10-K and 10-Q for 3Q08).

#### C. Financial Overview

### Historical Financial Performance Summary Income Statement

	FY2005	FY2006	FY2007	LTM 9/30/2008
Net Interest Income	\$30,737	\$34,591	\$34,441	\$41,419
Non-Interest Income	23,142	34,358	26,648	24,869
Gain/Loss on Sale of Securities	3,296	2,746	4,244	1,342
Nonrecurring Revenue	-	885	1,500	2,276
Total Revenue	\$57,175	\$72,580	\$66,833	\$69,906
Provisions for Loan Losses	\$4,014	\$5,010	\$8,385	\$21,600
Total Non-Interest Expenses	\$28,269	\$34,792	\$36,884	\$39,992
Income Before Taxes	\$24,480	\$31,973	\$20,924	\$7,315
Net Income	\$16,465	\$21,133	\$14,982	\$6,065

Source: SNL Financial.

#### Financial Impact from Merger Activity in 2008

On July 1, 2008, BofA completed its acquisition of Countrywide. The transaction, which was announced on January 11, 2008, significantly enhanced BofA's mortgage originating and servicing capabilities. Countrywide's financial results were included for the first time in BofA's financial results for 3Q08, contributing \$2.3 billion in revenues and \$259 million in net income in the period. The Countrywide acquisition did not have a significant impact on the provision of loan losses as impaired loans acquired from Countrywide were initially recorded at fair value.

On January 1, 2009, BofA completed its acquisition of Merrill Lynch in an all-stock transaction. As such, financial results for Merrill Lynch are not included in BofA's results through the YTD September 2008 period. BofA management has indicated that the Merrill Lynch transaction is expected to have a 3% dilutive earnings impact in 2009 and be breakeven in 2010.

#### Net Interest Income / Non-Interest Income

Net interest income on a fully taxable equivalent basis increased \$6.8 billion in the YTD September 2008 period compared to the same period in 2007. The significant increase was driven primarily by the acquisitions of Countrywide and LaSalle, increased yields on market-based activity and the positive impact from the current interest rate environment and hedge income.

#### Non-Interest Income Analysis

	FY 2005	FY 2006	FY 2007	LTM 9/30/2008
Card Income	\$5,753	\$14,290	\$14,077	\$13,803
Service Charges	7,704	8,224	8,908	10,172
Investment and Brokerage Services	4,184	4,456	5,147	5,327
Investment Banking Income	1,856	2,317	2,345	2,189
Equity Investment Income (Loss)	2,212	3,189	4,064	1,647
Trading Account Profits (Losses)	1,763	3,166	(5,131)	(7,432)
Mortgage Banking Income	805	541	902	2,950
Gains on Sales of Debt Securities	1,084	(443)	180	471
Other Income (Loss)	1,077	2,249	1,394	(1,146)
Total Non-Interest Income	\$26,438	\$37,989	\$31,886	\$27,981

Sources: SEC filings (10-Ks for 2007 and 2006, 10-Q for 3Q08).

In the first nine months of 2008, non-interest income decreased \$3.9 billion to \$24.8 billion, a 13.5% decline from the same period last year. The decrease was primarily attributable to a reduction in gains in equity investment income driven by lack of liquidity in the marketplace and impairments taken on BofA's investments in Freddie Mac and Fannie Mae. In addition, BofA's exposure to CDOs and the impact of market disruptions in its structured products sales and trading activities adversely impacted BofA during the period. Structured products include sales and trading positions, and hedging activities in collateralized mortgage backed securities, residential mortgage backed securities, structured credit and counterparty credit.

The extreme dislocation in the financial markets and the decoupling of typical market correlations created less liquidity, a flight to quality, greater volatility, a widening of credit spreads, and a lack of price transparency, which all contributed to the adverse impact on BofA's trading and hedging activities. Specifically, trading account activity generated losses of \$1.8 billion in the YTD September 2008 period as compared to an income of \$0.5 billion in the same period last year. BofA's trading account losses in YTD September 2008 comes on the heels of \$5.1 billion in trading account losses in 2007.

#### **Provision for Loan Losses**

The provision for credit losses in the YTD September 2008 period rose to \$18.3 billion compared to \$5.1 billion in the same period last year. The dramatic increase in credit losses was attributable to higher net charge-offs and substantial reserve increases in BofA's home equity, residential mortgage and homebuilder portfolios driven by continued deterioration in the housing markets. The slowing economy and increases in unemployment and bankruptcies contributed to substantial increases in net charge-offs in unsecured lending, credit card portfolios and small business loans.

#### Non-Interest Expense

Non-interest expense in the YTD September 2008 period was \$30.6 billion, an increase of \$3.5 billion or 12.8% over the same period last year. The increase was primarily driven by the acquisition of Countrywide in July 2008 and the full period's impact from the acquisition of LaSalle, which was consummated in October 2007.

#### **Earnings Performance**

The first nine months of 2008 continued to be challenging for BofA as its earnings were severely depressed by a rapidly deteriorating economic and credit environment, and continued exposure to CDOs. BofA generated net income of \$5.8 billion in the YTD September 2008 period, down 60.1% from the same period last year. Although BofA largely avoided direct losses from subprime lending, which BofA had exited a few years earlier, BofA sustained large writedowns of the value of structured products that backed these loans. Earnings for the YTD period were impacted by a \$3.1 billion loss from CDOs and related subprime exposure, the need to support certain structured investment vehicle funds, and the markdown of BofA's preferred stock investment in Fannie Mae and Freddie Mac. In addition, poor sales and trading and hedging activities, and the continued rise in credit costs driven by increased stress on BofA's credit card and residential mortgage portfolios, and deteriorating credit quality in BofA's commercial loan assets, exacerbated BofA's earnings decline in the period.

On October 6, 2008, BofA reported net income for the third quarter 2008 of \$1.18 billion, or 15 cents a share, which was a 68% decline from net income reported for the same quarter in 2007 and significantly less than analyst consensus estimates of 61 cents per share. In connection with its earnings release, BofA announced a dividend cut and that it planned to raise \$10 billion in common equity. The following day, October 7, 2008, BofA announced that 455 million shares were issued at a price of \$22.00 per share. BofA's stock dropped from \$32.22 on October 6, 2008 to \$23.77 on October 7, 2008, representing a 26.2% decline. According to a Wall Street Journal article published on October 8, 2008, an analyst at NAB research had indicated that "BofA had trouble finding enough investors willing to buy shares at the price BofA was seeking."

#### Net Interest Margin

Net interest margin declined 22 bps in 2007 to 2.60% due primarily to spread compression and the impact of the LaSalle acquisition, while partially offset by market-based yield improvements. In the YTD September 2008 period, net interest margin increased 20 bps to 2.80%, driven by higher yields on market-based activity and income from hedging activity. This increase was partially offset by the addition of lower yielding assets from the LaSalle and Countrywide acquisitions.

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<sup>&</sup>lt;sup>8</sup>Fitzpatrick D. (2008, Oct. 8). BofA Offering Fails to Lure Investors. Wall Street Journal.

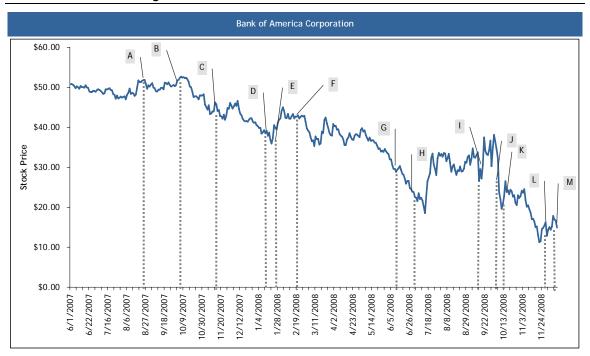
# Historical Financial Ratios Profitability Ratios

	FY2005	FY2006	FY2007	9/30/2008 <sup>1</sup>
Profitability				
Net Interest Margin	2.84%	2.82%	2.60%	2.80%
Return on Average Assets	1.30%	1.44%	0.94%	0.34%
Return on Average Equity	16.49%	16.20%	10.96%	3.87%
Non-Interest Income / Revenue	42.95%	49.83%	43.62%	37.52%

 $<sup>^{1}\</sup>mbox{Profitability performance ratios reflect LTM figures as of 9/30/08.}$  Source: SNL Financial.

#### D. Stock Price Performance and Valuation Multiples

# Stock Price Performance June 1, 2007 through December 12, 2008



#### Notable Company Events

- A.) Aug-22-2007: BofA invests \$2 billion in preferred shares in Countrywide in an attempt to restore investor confidence in Countrywide. Preferred investment results in a 16% ownership share in Countrywide. Source: Company Press Release.
- B.) Oct-1-2007: BofA completes the acquisition of LaSalle Bank Corp. from ABN Amro North America for \$21 billion. The transaction was announced on April 22, 2007. Source: Company Press Release.
- C.) Nov-13-2007: BofA announces it may need to writedown \$3 billion in debt securities that have lost value because of defaults on subprime mortgages. Source: BofA Investor Presentation.
- D.) Jan-11-2008: BofA announces it will acquire Countrywide for \$4.2 billion in an all-stock transaction. Source: Company Press Release.
- E.) Jan-23-2008: BofA announces plans to raise \$12 billion in equity securities to shore up its capital ratios. Source: Company Press Release.
- F.) Feb-19-2008: BofA's addition to the Dow Jones Industrial Average is effective. Source: Reuters.
- G.) Jun-10-2008: BNP Paribas enters into a definitive agreement to acquire BofA's prime equity brokerage business. Source: BNP Paribas Press Release.
- H.) Jul-1-2008: BofA completes the acquisition of Countrywide. Source: Company Press Release.
- I.) Sep-15-2008: BofA announces an agreement to acquire Merrill Lynch in a \$44.4 billion all-stock transaction, a 70% premium over Merrill Lynch's closing stock price from the previous trading day. Source: Company Press Release.
- J.) Oct-6-2008 / Oct-7-2008: BofA reports a 68% earnings decline for 3Q08 compared to the same period last year. In connection with its earnings release, BofA announces a 50% cut to its quarterly dividend to 32 cents a share beginning in the fourth quarter of 2008. BofA also announces plans to raise \$10 billion in equity capital. The following day, October 7, 2008, the common equity offering was priced at \$22.00 per share. BofA shares drop 26 percent to \$23.77 on the same day. Source: Company Press Releases.
- K.) Oct-14-2008: The U.S. Treasury will invest \$250 billion to buy stakes in several major financial institutions as part of its \$700 billion bailout, including a \$15 billion stake in BofA. Source: Bloomberg.
- L.) Nov-28-2008: BofA acquires an additional 8.38% stake in China Construction Bank Corp. for approximately \$7.0 billion. Source: Company Press Release.
- M.) Dec-11-2008: BofA plans to reduce 30,000 to 35,000 jobs over the next three years reflecting the pending merger with Merrill Lynch and the weak economic environment. Source: Company Press Release.

# Valuation Multiples

	FY2005	FY2006	FY2007	9/30/2008	10/14/2009
Price / Book Equity	1.82x	1.80x	1.29x	1.17x	0.88
Price / Tangible Book Equity	3.47x	3.78x	3.07x	3.15x	2.39
Price / Earnings	11.4x	11.6x	12.5x	30.4x	22.9
Dividend Yield	4.3%	4.2%	6.2%	7.3%	4.89

Source: SNL Financial.

#### E. Outlook

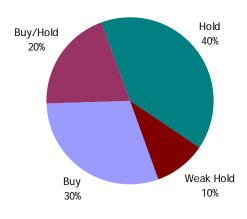
According to S&P, as of December 12, 2008, 22 analysts covered BofA and 20 were publishing recommendations. The consensus recommendation for BofA was a "Hold" rating, with 8 analysts, or 40% of the current coverage universe advising investors to Hold BofA stock. Six analysts carried a "Buy" rating, four analysts carried a "Buy/Hold" rating and two analysts carried a "Weak Hold" rating. This is a slight improvement compared to analyst recommendations for BofA three months earlier at which point three analysts carried a "Buy/Hold" rating, one analyst carried a "Buy" rating, three analysts carried a "Weak Hold" rating and 13 analysts, or 62% of the coverage universe, carried a "Hold" recommendation.

#### Wall Street Analyst Recommendations December 12, 2008

Wall Street Analyst Bank of America (N							
Date	12/12	/2008	1 Month Prior	3 Months Prior	Change		
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months	
Buy	6	30%	6	1	0	+5	
Buy/Hold	4	20%	4	3	0	+ 1	
Hold	8	40%	9	13	-1	-5	
Weak Hold	2	10%	1	3	+1	-1	
Sell	0	0%	0	0	0	0	
No Opinion	0	0%	0	1	0	-1	
Total	20	100%	20	21			

Source: Standard & Poor's Stock Report, December 12, 2008.

#### Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008.

Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008



Sources: Capital IQ, Bloomberg.

From June 1, 2007 to December 12, 2008, the average consensus estimate for BofA's projected 2009 EPS declined 58.3% from an average estimated EPS of \$5.87 to \$2.45 per share for the fiscal year ending December 31, 2009. This significant decline in EPS estimates highlights the shift in the near-term outlook for BofA in tandem with BofA's dilutive equity offerings, the pending merger with Merrill Lynch, and continued deterioration in economic and credit conditions. An overview of some of the recent commentary supplied by equity analysts that cover BofA is provided below.

#### FBR, December 15, 20089

• FBR rated BofA "Underperform" as a result of BofA's "thin tangible common equity." To improve BofA's capital position, FBR believes that BofA will have to

<sup>&</sup>lt;sup>9</sup>Wahba, P. (2008, Dec. 15). Bank of America Stock Could Sink to \$9: Analyst. *Reuters*.

- raise a substantial amount of equity that will result in further dilution for existing shareholders.
- FBR noted that "We recommend that investors stay away from [BofA's] stock until this initial raise is complete."

#### S&P, December 12, 2008<sup>10</sup>

- S&P downgraded its recommendation on BofA from "Buy" to "Hold" and lowered its target price from \$25 to \$17. The downgrade was based on BofA's announcement that it will layoff 30,000 to 35,000 employees over the next three years resulting from the economic slowdown and Merrill Lynch integration.
- S&P stated the expected layoffs are "proof that 2009 is shaping up to be a tougher year than management previously expected."
- S&P also noted that it was "wary of [BofA's] tangible capital levels, which are significantly lower than those of peers" and "[BofA] may be forced to cut its dividend once again to preserve equity and [BofA] may have to raise additional equity capital should levels deteriorate further."

#### UBS, November 28, 2008<sup>11</sup>

- UBS lowered its price target for BofA from \$29 to \$14 due to continued illiquidity in the credit markets and increased likelihood of additional asset writedowns. UBS noted that the current credit market tightness "will likely put further pressure on both consumers and commercial borrowers, leading to higher credit losses in 2009."
- UBS believes the capital market pressures and widening credit spreads will hinder Merrill Lynch's profitability and could lead to additional writedowns for both Merrill Lynch and BofA.

#### Oppenheimer, October 7, 2008<sup>12</sup>

- Oppenheimer maintained its "Perform" rating on BofA following BofA's 3Q08 earnings announcement of \$0.15, well below Oppenheimer's estimate of \$0.40.
- With regards to BofA's \$10 billion common equity raise, Oppenheimer noted that "...we believe a 'sooner is better' mentality will prevail as far as capital raises and distinguish survivors and the more challenged among banks."

# JPMorgan, October 6, 2008<sup>13</sup>

JPMorgan maintained its "Overweight" rating on BofA despite a weak 3Q08 earnings announcement and the announcement that writedowns were much higher than had been expected. JPMorgan believes that plans to raise \$10 billion of common equity and a cut in dividends by 50% signals a weak outlook for BofA in 2009.

<sup>&</sup>lt;sup>13</sup>Juneja, V. (2008, Oct. 6). Credit, Cap Mkts Drove Very Weak 3Q, Capital Raise, Dividend Cut - Weak Outlook. *J.P. Morgan North America Equity Research*.



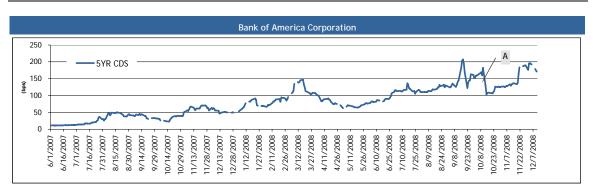
<sup>&</sup>lt;sup>10</sup>Plesser, S. (2008, Dec. 12). S&P Downgrades Opinion on Shares of Bank of America to Hold from Buy. *Standard & Poor's Equity Research.* 

<sup>&</sup>lt;sup>11</sup>O'Connor, M. (2008, Nov. 28). Bank of America "Lowering Target Price". UBS Research.

<sup>&</sup>lt;sup>12</sup>Whitney, M. (2008, Oct. 7). BAC Pre-Announces 3Q08 EPS of \$0.15; To Raise \$10B in Equity & Cut Dividend. *Oppenheimer & Co., Inc.* 

 JPMorgan stated that "Credit quality continues to deteriorate with sharply higher credit losses in most loans and another large loan loss reserve build."

# Credit Default Swaps June 1, 2007 through December 12, 2008



A.) Oct-14-2008: The U.S. Treasury will buy \$15 billion in preferred stock from Bank of America. The money will come from the \$700 billion that Congress allocated for the Trouble Asset Relief Program. Source: Bloomberg.

Source: Capital IQ, Bloomberg.

CDSs are used to hedge against losses or to speculate on the ability of a company to repay their debt. The spread on a CDS rises as investor confidence deteriorates. A basis point ("bps") on a credit-default swap contract protecting \$10 million of debt from default for five years is equivalent to \$1,000 a year.

As demonstrated in the figure above, the spread on BofA's five-year credit-default swaps has increased 163.97 bps from 11.01 bps at June 1, 2007 to 174.98 bps at December 12, 2008. This increase indicates heightened concern that BofA will default on its debt. The spread on BofA's five year CDSs spiked following the announcement of the pending bankruptcy of Lehman on September 15, 2008 and peaked on September 17, 2008 at 206.85 bps.

#### Credit Ratings December 19, 2008

Credit Ratings	Senior Commercial			
	Debt	Paper	Outlook	
Fitch Ratings	A+	F1+	Stable	
Moody's Investor Service	Aa2	P-1	N/A	
Standard & Poor's	A+	A-1	Negative	

Source: Bloomberg.

#### S&P, December 19, 2008<sup>14</sup>

On December 19, 2008, S&P downgraded BofA's long-term counterparty credit rating from AA- to A+ and its short-term ratings from A-1+ to A-1 with a negative ratings outlook. The downgrade by S&P was taken within the context of a larger global sector review where S&P lowered ratings for twelve major U.S. and European financial institutions. The ratings downgrade took into consideration "the weakening economic environment, [BofA's] pending acquisition of Merrill Lynch, and government support made available to the banking sector" as well as S&P's view that the "U.S. banking sector will continue to experience credit deterioration, banks will need to rebalance their funding profiles, and macroeconomic weakness could be protracted."

Further, S&P cites BofA's high exposure to the weakening consumer and small business market, where BofA generates 60% to 70% of its revenues. S&P believes that the acquisition of Merrill Lynch will expose BofA to additional earnings risk, increased exposure to writedowns related to commercial real estate and leveraged loans and integration risk. However, S&P stated that "the successful combination of [Merrill Lynch's] strong business lines with BofA's second-tier investment banking and asset management positions creates a top-tier commercial and investment banking group with significant growth potential once the financial industry emerges from its current downturn."

# Moody's, September 15, 2008<sup>15</sup>

On September 15, 2008, Moody's placed BofA's long-term debt ratings on review for potential downgrade following BofA's announcement of the pending Merrill Lynch acquisition. While Moody's believes that the acquisition of Merrill Lynch would considerably improve BofA's investment banking, asset management and financial advisory capabilities, BofA will be exposed to significant integration risk, particularly related to client and employee retention. In addition, Moody's stated that "despite

<sup>14</sup>Bartko, J. and Sprinzen, S. (2008, Dec. 19). S&PCORRECT: Bank of America Corp. Ratings Lowered to 'A+/A-1'; Outlook Negative. *Standard & Poor's Ratings Services*.

<sup>15</sup>Young, R. and Fanger, D. (2008, Sep. 15). Moody's Puts Ratings of Bank of America Corporation (Aa2 Senior) on Review for Downgrade. Retrieved from Bloomberg.

the increased ratings pressure, creditor protection at BofA remains strong...supported by BofA's unmatched U.S. direct retail and business banking franchise and its leading position in credit cards. These businesses generate a relatively stable core earnings base with which to absorb credit costs."



# Appendix C. Company Overview

Citigroup Inc.

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM CITIGROUP INC.'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2007, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

#### A. Business Overview

Citigroup is a global diversified financial services holding company whose businesses provide a broad range of financial services to consumer and corporate customers. Citigroup has more than 200 million customer accounts and does business in more than 100 countries. Citigroup was incorporated in 1988 under the laws of the State of Delaware and is publicly traded on the NYSE under the ticker symbol C.

Citigroup is a bank holding company within the meaning of the U.S. Bank Holding Company Act of 1956 registered with, and subject to examination by, the Board of Governors of the Federal Reserve System. Some of Citigroup's subsidiaries are subject to supervision and examination by their respective federal and state authorities.

Citigroup is organized into four major segments: Global Cards, Consumer Banking, Institutional Clients Group ("ICG") and Global Wealth Management ("GWM").

#### Global Cards

In March 2008, Citigroup consolidated all of its United States and international credit card businesses into a single global business unit called Global Cards. This segment includes Citigroup's MasterCard, VISA, private label, and Amex (United States) businesses.

#### **Consumer Banking**

Citigroup's Consumer Banking provides an array of banking, lending, insurance and investment services through a network of 8,527 branches, approximately 20,000 ATMs and 530 automated lending machines, the Internet, telephone and mail, and the Primerica Financial Services sales force. The consumer business serves more than 200 million customer accounts, providing products and services to meet the financial needs of both individuals and small businesses. Consumer Banking operates in four divisions: Consumer Finance, Retail Distribution, Retail Banking, and Commercial Business. Consumer Finance services include real estate lending, student loans and auto loans. Retail Distribution includes services provided through Citibank branches, CitiFinancial branches and Primerica Financial Services. Retail Banking consists of Citigroup's retail bank branches, small and middle market commercial banking, investment services, retirement services, real estate lending, personal loans and sales finance. Commercial Business involves small and middle market commercial banking.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Reuters, Citigroup company profile.

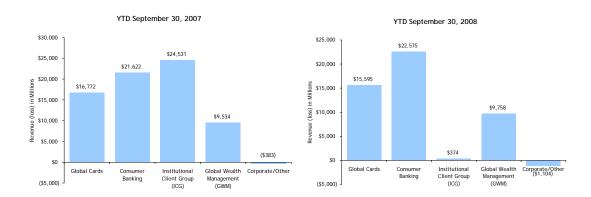
#### **Institutional Clients Group**

ICG consists of three major categories including Securities and Banking ("S&B"), Transaction Services, and Investment Research. S&B consists of investment banking, debt and equity markets, corporate and commercial lending, private equity, hedge funds, structured products and managed futures. Transaction Services include cash management, trade services, custody and fund services, clearing services and agency/trust services. Investment Research covers the breadth of the equity and fixed income markets.

#### Global Wealth Management

GWM offers services to ultra high net worth and high net worth clients, emerging affluent, as well as institutional clients. This segment provides wealth management services to ultra high net worth individuals through Citi Private Bank and advisory services through its Smith Barney Family Advisory business. Smith Barney provides advisory services, financial planning and brokerage services to high net worth individuals. GWM also provides retirement services and banking services to its high net worth clients. This segment provides financial life services to emerging affluent individuals.<sup>2</sup>

#### Revenue by Line of Business



Source: Citigroup Form 10-Q for the Quarterly Period Ended September 30, 2008.

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<sup>&</sup>lt;sup>2</sup> Reuters, Citigroup company profile.

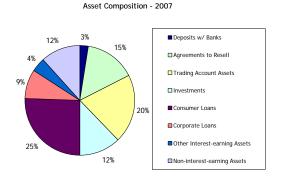
#### B. Balance Sheet Composition

#### **Summary Balance Sheet**

(\$ in millions)				
	FY2005	FY2006	FY2007	9/30/2008
Loans	\$588,052	\$684,473	\$810,740	\$719,416
Earning Assets - Average	1,338,699	1,503,552	1,956,763	1,955,240
Earning Assets - End of Year	1,328,274	1,694,151	1,933,385	1,734,735
Risk-Weighted Assets	885,472	1,057,872	1,253,321	1,175,706
Total Assets	1,494,037	1,884,318	2,187,480	2,050,131
Deposits	\$591,828	\$712,041	\$826,230	\$780,343
Tangible Equity	\$73,609	\$80,785	\$62,541	\$75,478
Total Equity	112,537	119,783	113,447	126,062

Source: SNL Financial.

#### **Asset Composition**



Source: Citigroup 2007 Annual Report.

#### Loan Portfolio

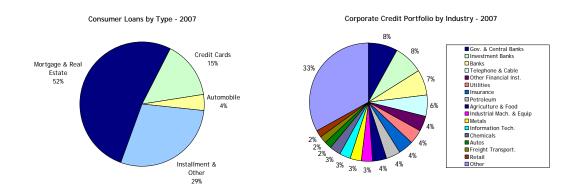
Loans are an extension of credit to individuals, corporations, and government institutions. Loans vary across regions and industries and primarily include credit cards, mortgages, other real estate lending, personal loans, auto loans, student loans, and corporate loans.

As of December 31, 2007, consumer and corporate loans comprised 76% and 24%, respectively, of total loans (net of unearned income and before the allowance for loan losses). Consumer loans increased by \$73 billion in 2007, or 14%, primarily due to: (1) \$44 billion, or 19%, increase in installment and revolving credit; and (2) \$37 billion, or 14%, increase in mortgage and real estate loans.

These increases were partially driven by acquisitions. Corporate loans increased \$19 billion, or 11%, primarily driven by an increase of \$22 billion, or 16%, in commercial

and industrial loans. During 2007, average consumer loans (net of unearned income) of \$553 billion yielded an average rate of 9.1%, compared to \$480 billion and 9.0% in the prior year. Average corporate loans of \$188 billion yielded an average rate of 8.5% in 2007, compared to \$153 billion and 7.6% in the prior year.

#### Portfolio Distribution



Source: Citigroup 2007 Annual Report.

#### **Trading Account Assets**

Trading account assets include debt and marketable equity securities, derivatives in a receivable position, residual interests in securitizations, and physical commodities inventory. All trading account assets and liabilities are reported at their fair value, except for physical commodities inventory which is carried at the lower of cost or market, with unrealized gains and losses recognized in current income. Trading account assets increased by \$145 billion, or 37%, as of December 31, 2007 due to:

- \$87 billion, or 93%, increase in corporate and other debt securities, including \$45 billion of securities related to the consolidation of the Citigroup advised SIVs.
- \$27 billion, or 55%, increase in revaluation gains primarily consisting of increases from interest rates, foreign exchange, and credit derivative contracts, offset by an increase in netting permitted under master netting agreements;
- \$20 billion, or 53%, increase in mortgage loans and collateralized mortgage securities:
- \$19 billion, or 58%, increase in foreign government securities;
- \$12 billion, or 28%, decrease in Treasury and federal agency securities; and
- \$10 billion, or 24%, net decrease in other trading securities.

Total average trading account assets were \$441 billion in 2007, compared to \$290 billion in 2006, yielding average rates of 4.2% and 4.1%, respectively.

#### Agreements to Resell<sup>3</sup>

Federal funds sold and federal funds purchased consist of unsecured advances of excess balances in reserve accounts held at Federal Reserve Banks. When Citigroup advances federal funds to a third party, it is selling its excess reserves. Similarly, when Citigroup receives federal funds, it is purchasing reserves from a third party. These interest-bearing transactions typically have an original maturity of one business day. Securities borrowed and securities loaned are recorded at the amount of cash advanced or received. With respect to securities borrowed, Citigroup pays cash collateral in an amount in excess of the market value of securities borrowed, and receives excess in the case of securities loaned. Citigroup monitors the market value of securities borrowed and loaned on a daily basis with additional collateral advanced or obtained as necessary. Interest received or paid for these transactions is recorded in interest income or interest expense.

A decrease of \$9 billion in 2007, or 3%, in federal funds sold and securities borrowed or purchased under agreements to resell, and a decrease of \$45 billion, or 13%, in federal funds purchased and securities loaned or sold under agreements to repurchase, were primarily driven by lower funding requirements for long and short positions.

#### <u>Investments</u>

Investments consist of fixed income and equity securities. Fixed income includes bonds, notes and redeemable preferred stock, as well as loan-backed securities (such as MBSs) and other structured notes. Equity securities include common and non-redeemable preferred stocks. These instruments provide Citigroup with long-term investment opportunities while in most cases remaining relatively liquid.

Investments decreased by \$59 billion, or 22%, in 2007, principally due to: (1) a \$37 billion decrease in MBSs, primarily caused by the winding down of an MBS program in the U.S. Consumer Lending business; (2) a \$5 billion decrease in Treasury and federal agency securities; and (3) net \$17 billion decrease in other securities.

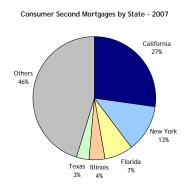
#### Other Assets

Other assets are composed of cash and due from banks, deposits with banks, brokerage receivables, goodwill, intangibles, and various other assets.

<sup>&</sup>lt;sup>3</sup> Federal Funds Sold (Purchased) and Securities Borrowed (Loaned) or Purchased (Sold) Under Agreements to Resell (Repurchase)

#### U.S. Consumer Mortgage Lending





Sources: Citigroup 2007 Annual Report.

Citigroup's U.S. consumer mortgage portfolio consists of both first and second mortgages, originated primarily by the U.S. Consumer Lending and U.S. Retail Distribution businesses. As of December 31, 2007, the first mortgage portfolio totaled approximately \$150 billion while the second mortgage portfolio was approximately \$63 billion. Approximately 84% of the first mortgage portfolio had FICO credit scores of at least 620 at origination; the remainder was originated with FICO scores of less than 620. In the second mortgage portfolio, the majority of loans are in the higher FICO categories. However, approximately 33% of that portfolio had loan-to-value ratios ("LTVs") of 90% or more at origination.

As of September 30, 2008, Citigroup changed its valuation methodology for its housing price exposures from the S&P Case-Shiller Index to the Loan Performance Index due to the new index's more comprehensive data. Despite this change in the underlying index, the two national indices have tracked each other closely in the past. Citigroup changed its home price appreciation assumption to a peak to trough decline of 32% from a decline of 23% as of 2Q08. This shift is very close to the forecasted peak to trough decline of the Case-Shiller futures market, which is at 33%. Citigroup's new assumptions include a decline of 16% in 2008 and 10% in 2009. Furthermore, Citigroup's mortgage default model has been updated for mortgage performance data from the first half of 2008 which was characterized by sharp home price declines and high levels of mortgage foreclosures. <sup>4</sup>

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<sup>&</sup>lt;sup>4</sup> Whitney, M. (2008, Oct. 17). Citigroup Inc: Review of 3Q Results Focus on Negative Operating Leverage. *Oppenheimer & Co. Inc. Equity Research*.

#### Historical Financial Performance Balance Sheet Ratios

Balance Sheet Ratios				
	FY2005	FY2006	FY2007	9/30/2008
Balance Sheet				
Loans / Deposits	98.59%	95.39%	94.16%	91.88%
Tangible Equity / Tangible Assets	5.06%	4.38%	2.93%	3.77%
Leverage Ratio <sup>1</sup>	5.35%	5.16%	4.03%	4.70%
Tier One Ratio <sup>2</sup>	8.79%	8.59%	7.12%	8.19%
Risk Based Capital Ratio <sup>3</sup>	12.02%	11.65%	10.70%	11.68%
Asset Quality				
Reserve for Loan Losses / Loans	1.64%	1.29%	1.95%	3.23%
Reserve for Loan Losses / Non-Performing Assets	NA	NA	154.78%	156.38%
Net Charge-Offs / Average Loans	1.49%	1.14%	1.33%	2.12%
Loan Loss Provision / Net Charge-Offs	97.24%	95.56%	171.09%	173.86%

Source: SNL Financial.

#### **Definitions:**

<sup>(1)</sup>Leverage Ratio is calculated as Tier One Capital divided by tangible assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Leverage Ratio of 4%. Federal bank regulators generally consider a Leverage Ratio of 5% or above as well capitalized.

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

<sup>(2)</sup>Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Tier One Ratio of 4%. Federal bank regulators generally consider a Tier One Ratio of 6% or above as well capitalized.

<sup>(3)</sup>Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators generally consider a Risk Based Capital Ratio of 10% or above as well capitalized.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

In the third quarter of 2008, Citigroup incurred total credit costs of \$8.8 billion which included net credit losses of \$4.9 billion up from \$2.5 billion in the third quarter of 2007 and a net build of \$3.9 billion to credit reserves. The build consisted of \$3.2 billion in Consumer Banking (\$2.3 billion in North America and \$855 million in regions outside of North America), \$612 million in ICG and \$64 million in GWM. The incremental net charge to increase loan loss reserves of \$1.7 billion was mainly due to Consumer Banking and Cards in North America, and \$&B. The consumer loans loss rate was 3.35%, a 153 basis-point increase from the third quarter of 2007. Corporate cash-

basis loans were \$2.7 billion at September 30, 2008, an increase of \$1.4 billion from year-ago levels. The allowance for loan losses totaled \$28.6<sup>5</sup> billion at September 30, 2008, representing a coverage ratio (reserve for loan losses/loans) of 3.23% of total loans.

Stockholders' equity and trust preferred securities were \$149.7 billion at September 30, 2008. Citigroup distributed \$2.1 billion in dividends to shareholders during the quarter. On October 20, 2008, Citigroup decreased the quarterly dividend on its common stock to \$0.16 per share. Citigroup maintained its "well-capitalized" position with a Tier One Capital Ratio of 8.19% at September 30, 2008.

From the second quarter of 2008 to the third quarter 2008, Citigroup's Tier One Ratio declined from 8.7% to 8.2%. Upon release of third quarter 2008 results, Citigroup noted that "the sale of its German operations in 4Q08 would add approximately 60 bps to its Tier One Ratio." Following the announcement that the U.S. government had developed a new plan to assist Citigroup, equity analysts noted that "One concrete benefit [to this plan] is new capital. Citi gets new Tier 1-eligible preferred of \$24B and \$16B freed-up from credit guarantees (20% risk weighting on protected assets), which improves Tier 1 from 8.2% to 14.8%." Another analyst commented that taking into consideration the capital injection from this plan, Citigroup's pro-forma Tier One Ratio of 14.8% would be "by far the highest among commercial banks." In conjunction with this new plan, Citigroup has cut its quarterly dividend on its common stock to \$0.01 per share from \$0.16 per share.

#### **Off-Balance Sheet Arrangements**

Citigroup and its subsidiaries are involved with numerous types of off-balance-sheet arrangements, including SPE, lines and letters of credit and loan commitments.

An SPE is an entity in the form of a trust or other legal vehicle designed to fulfill a specific limited need of the company that organized it. The principal uses of SPEs are to obtain liquidity and favorable capital treatment by securitizing certain of Citigroup's financial assets, to assist clients in securitizing their financial assets, and to create investment products for clients. SPEs may be organized as trusts, partnerships or corporations. In a securitization, the company transferring assets to an SPE converts those assets into cash before they would have been realized in the normal course of business. This is achieved by the SPE's issuing debt and equity instruments, certificates, commercial paper, and other notes of indebtedness, which are recorded on the balance sheet of the SPE and not reflected on the transferring company's balance sheet, assuming applicable accounting requirements are satisfied. The SPE can typically obtain a more favorable credit rating from rating agencies than the transferor could obtain for its own debt issuances, resulting in less expensive financing costs.

<sup>6</sup> SNL Financial.

<sup>&</sup>lt;sup>9</sup> Mitchell, J. (2008, Nov. 24) New Government Guarantee and Capital Infusion. *The Buckingham Research Group Equity Research*.



<sup>&</sup>lt;sup>5</sup> SNL Financial.

<sup>&</sup>lt;sup>7</sup> Whitney, M. (2008, Oct. 17). Review of 3Q Results Focus On Negative Operating Leverage. *Oppenheimer & Co Inc. Equity Research.* 

<sup>&</sup>lt;sup>8</sup> Mayo, M. (2008, Nov. 24). Citigroup: New Government Program. *Deutsche Bank Securities Inc. Global Market Research.* 

Investors that finance the SPE through debt or equity interests, or other counterparties that provide other forms of support, such as guarantees, subordinated fee arrangements, or certain types of derivative contracts, are holders of the entity. The holder that will absorb a majority of the entity's expected losses, receive a majority of the entity's expected residual returns, or both, is deemed to be the primary beneficiary and must consolidate the SPE. FIN 46-R requires that the expected variability of the SPE be quantitatively analyzed to determine whether Citigroup is the primary beneficiary of the SPE. If it is determined that Citigroup is the primary beneficiary of an SPE, the entity would have to be consolidated.

# Off-Balance Sheet Arrangements Risk Exposure and Writedowns

		Market '	Value			Face Value	Carrying
	4Q07	1Q08	2Q08	3Q08	3Q Writedown'	3Q08	Value
Leverage Loans	\$43.20	\$37.70	\$24.20	\$22.90	(\$0.80)	NA	NA
Alt-A Mortgages	22.1	19.5	16.4	13.6	(1.15)	20.7	66%
Trading	6.7	5.9	4.3	3.4	(0.57)	5.4	63%
Available for Sale	15.4	13.6	12.1	10.2	(0.58)	15.3	67%
Commercial Real Estate							
Fair Value	2.4	22.3	19.1	16.9	(0.52)	19.7	86%
Loans & Commitments	23.5	21.2	20.7	19.8	NA	NA	NA
Equity Method	6.4	5.0	5.3	5.3	NA	NA	NA
Auction Rate Securities	8.1	6.5	5.6	5.2	(0.20)	6.7	78%
Subprime-Related	37.3	29.1	22.5	19.6		34.2	57%
ABCP	NA	NA	14.4	13.3	(0.80)	23.4	57%
High Grade	NA	NA	2.0	1.1	0.20	2.8	41%
Mezzanine	NA	NA	1.6	1.7	0.30	8.0	21%
Structured Investment Vehicles (SIVs)	58.5	46.8	34.8	27.5	(2.00)	33.5	82%

<sup>&</sup>lt;sup>1</sup> Includes net profits associated with liquidations

Sources: Citigroup 2007 Annual Report, Citigroup Form 10-Q for the Quarterly Period Ended September 30, 2008, Citigroup Third Quarter 2008 Earnings Review - Oct. 16, 2008, Oppenheimer & Co. Inc.

#### Writedowns on Highly Leveraged Loans and Financing Commitments

Due to the continued dislocation of the credit markets and the reduced market interest in higher risk/higher yield instruments that began during the second half of 2007, liquidity in the market for highly leveraged financings is very limited. This has resulted in Citigroup recording additional pretax write-downs of \$792 million on funded and unfunded, highly leveraged finance exposures, bringing the total year-to-date writedowns to \$4.3 billion. Citigroup's exposure to highly leveraged financings totaled \$23 billion at September 30, 2008 reflecting a decrease of \$1 billion from June 30, 2008.

#### Writedowns on Alt-A Mortgage Securities in Securities and Banking

During the third quarter of 2008, Citigroup recorded additional pretax losses of approximately \$1.15 billion, net of hedges, on Alt-A mortgage securities held in S&B, bringing the year-to-date net loss to \$2.5 billion. For these purposes, Alt-A mortgage

securities are non-agency RMBS where: (1) the underlying collateral has weighted average FICO scores between 680 and 720, or (2) for instances where FICO scores are greater than 720, RMBS have 30% or less of the underlying collateral composed of full documentation loans. Citigroup had \$13.6 billion in Alt-A mortgage securities carried at fair value at September 30, 2008, which decreased from \$16.4 billion at June 30, 2008. Of the \$13.6 billion, \$3.4 billion were classified as trading assets, of which \$573 million of fair value writedowns, net of hedging, were recorded in earnings, and \$10.2 billion were classified as available-for-sale investments, on which, \$580 million of writedowns were recorded in earnings due to other-than-temporary impairments.

#### Write-Downs on Commercial Real Estate Exposures

S&B's commercial real estate exposure can be split into three categories: assets held at fair value; loans and commitments; and equity and other investments. For assets that are held at fair value, Citigroup recorded an additional \$518 million of fair value writedowns on these exposures, net of hedges, during the third quarter of 2008 on commercial real estate exposure, bringing the year-to-date fair value writedowns to \$1.6 billion.

#### **Losses on Auction Rate Securities**

As of September 30, 2008, ARS classified as trading assets totaled \$5.2 billion compared to \$5.6 billion as of June 30, 2008. A significant majority are ARS where the underlying assets are student loans, while the remainder are ARS where the underlying assets are U.S. municipal securities, as well as various other assets. During the third quarter of 2008, S&B recorded \$166 million in pretax losses in principal transactions, primarily due to widening spreads and reduced liquidity in the market. The total year-to-date net losses on ARS positions were \$1.4 billion, a significant majority of which relates to ARS where student loans are the underlying assets.

#### Writedowns on Subprime-Related Direct Exposures

During the third quarter of 2008, S&B recorded losses of \$394 million pretax, net of hedges, on its subprime-related direct exposures, bringing the total losses year-to-date to \$9.7 billion. Citigroup's remaining \$19.6 billion in U.S. subprime net direct exposure in S&B at September 30, 2008 consisted of (a) approximately \$16.3 billion of net exposures to the super senior tranches of CDOs, which are collateralized by asset-backed securities, derivatives on asset-backed securities or both and (b) approximately \$3.3 billion of subprime-related exposures in its lending and structuring business.

During the second half of 2007, the market interest rates on commercial paper issued by certain CDO structures increased significantly. To pre-empt the formal exercise of liquidity puts provided by Citigroup to its CDO structures, all of the outstanding commercial paper issued by these entities, which totaled approximately \$25 billion, was purchased by Citigroup. Because of these purchases, and because the value of the CDOs' commercial paper and subordinated tranches were deteriorating as the underlying collateral of the CDOs (primarily RMBS) was being downgraded, Citigroup concluded that it was the primary beneficiary of these entities and began consolidating them in the fourth quarter of 2007.

Upon consolidation, Citigroup reflected the underlying assets of the CDOs on its balance sheet in trading account assets at fair value, eliminated the commercial paper assets previously recognized, and recognized the subordinate CDO liabilities (owned by third parties) at fair value.

During the third quarter of 2008 and the fourth quarter of 2007, Citigroup recognized pretax losses of \$0.8 billion and \$4.3 billion, respectively, for changes in the fair value of the consolidated ABCP CDOs' assets.

In addition to ABCP positions in consolidated CDOs, Citigroup has retained significant portions of the "super senior" positions issued by certain CDOs. These positions are referred to as super senior because they represent the most senior positions in the CDO and, at the time of structuring, were senior to tranches rated AAA by independent rating agencies. However, since inception of these transactions, the subordinate positions have diminished significantly in value and in rating. There have been substantial reductions in value of these super senior positions since the fourth quarter of 2007. At inception of the transactions, the super senior tranches were well protected from the expected losses of these CDOs. Subsequent declines in value of the subordinate tranches and the super senior tranches in the fourth quarter of 2007 indicated that the super senior tranches now are exposed to a significant portion of the expected losses of the CDOs, based on current market assumptions. Citigroup continues to monitor its involvement in these transactions and, if Citigroup were to acquire additional interests in these vehicles or if the CDOs' contractual arrangements were to be changed to reallocate expected losses or residual returns among the various interest holders, Citigroup may be required to consolidate the CDOs.

#### Writedowns on Structured Investment Vehicles

Citigroup became the SIVs' primary beneficiary and began consolidating the SIVs on December 13, 2007 as a result of providing mezzanine financing to the SIVs, the terms of which were finalized on February 12, 2008. During the third quarter of 2008, Citigroup wrote down \$2.0 billion on SIV assets, bringing the year-to-date write-downs to \$2.2 billion. Citigroup increased its mezzanine financing to \$4.5 billion, reflecting an increase of \$1.0 billion from the original \$3.5 billion financing. This additional mezzanine financing was funded subsequent to September 30, 2008. The total SIV assets as of September 30, 2008 and June 30, 2008 were approximately \$27.5 billion and \$34.8 billion, respectively.

#### C. Financial Overview

#### Historical Financial Performance

Income Statement Summary (\$ in millions)							
	FY2005	FY2006	FY2007	LTM 9/30/2008			
Net Interest Income	\$38,728	\$39,153	\$45,378	\$52,671			
Non-Interest Revenue	34,132	39,387	42,191	31,896			
Gain/Loss on Sale of Securities	8,618	9,790	(10,918)	(33, 339)			
Nonrecurring Revenue	669	123	1,844	2,389			
Total Revenue	\$82,147	\$88,453	\$78,495	\$53,617			
Provisions for Loan Losses	\$8,174	\$6,967	\$16,982	\$28,630			
Total Non-Interest Expenses	\$44,850	\$52,160	\$58,064	\$62,565			
Income Before Taxes	\$28,765	\$29,326	\$776	(\$38,007)			
Net Income	\$24,589	\$21,538	\$3,617	(\$20,254)			

Source: SNL Financial.

Citigroup reported a \$3.4 billion loss from continuing operations (\$0.71 per share) for the third quarter of 2008. The third quarter results were impacted by higher consumer credit costs, continued losses related to the disruption in the fixed income markets, and a general economic slowdown.

Revenues were \$16.7 billion in the third quarter, down 23% from a year ago. The decline in revenues was driven by \$4.4 billion in net writedowns in S&B, lower securitization results in North America Cards, and a \$612 million writedown related to an auction rates securities settlement. Revenues across all businesses reflect the impact of a difficult economic environment and weak capital markets. Global Cards revenues declined 40%, mainly due to lower securitization results in North America. Consumer Banking revenues grew 2%, as increased revenues in North America were partially offset by declines in Latin America and Asia. ICG S&B revenues were (\$81) million, due to writedowns on SIV assets, Alt-A mortgages, highly leveraged finance commitments, commercial real estate positions, and subprime related direct exposures, as well as, downward credit value adjustments related to exposure to monoline insurers. These writedowns were partially offset by a \$1.5 billion gain from the change in Citigroup's own credit spreads for those liabilities to which Citigroup has elected the fair value option. Transaction Services revenues were up 20% to \$2.5 billion, reflecting double-digit revenue growth across all regions. GWM revenues decreased 10%, driven by a decline in capital markets and investment revenues, partially offset by higher banking and lending revenues.

Net interest revenue increased 13% as compared to the third quarter of 2007, reflecting volume increases across most products. Net interest margin in the third quarter of 2008 was 3.13%, up 79 basis points from the third quarter of 2007, reflecting lower cost of funding, partially offset by a decrease in asset yields related to the decrease in the Fed Funds rate.

Operating expenses increased 2% from the third quarter of 2007. Expense growth was partially offset by benefits from re-engineering efforts. Expenses declined for the third consecutive quarter, due to lower incentive compensation accruals and continued benefits from re-engineering efforts. Headcount was down 11,000 from June 30, 2008, and approximately 23,000 year-to-date.

# Historical Financial Performance Profitability Ratios

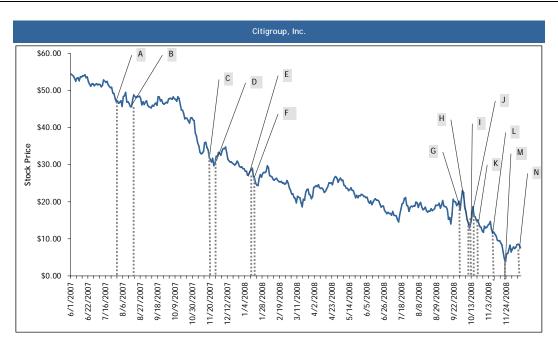
Profitability Ratios							
	FY2005	FY2006	FY2007	9/30/20081			
Profitability							
Net Interest Margin	3.05%	2.62%	2.36%	2.88%			
Return on Average Assets	1.64%	1.28%	0.17%	-0.91%			
Return on Average Equity	22.14%	18.64%	2.94%	-15.76%			
Non-Interest Income / Revenue	46.85%	50.15%	48.18%	37.72%			

<sup>&</sup>lt;sup>1</sup> Profitability performance ratios reflect LTM figures as of 9/30/08.

Source: SNL Financial.

#### D. Stock Price Performance and Valuation Multiples

# Stock Price Performance June 1, 2007 to December 12,2008



#### Notable Company Events

- A.) Aug-1-2007: Citigroup announced that it has completed the acquisition of The BISYS Group for \$1.44 billion. Source: Reuters
- B.) Aug-23-2007: Citigroup borrows \$500 million from the Federal Reserve, in an attempt to settle the U.S. financial turmoil. Source:
- C.) Nov-19-2007: Goldman Sachs downgraded Citigroup to "sell" on the basis that Citigroup may have to write off over \$15 billion over the next two quarters due to mortgage losses. Source: Reuters
- D.) Nov-25-2007: Citigroup has agreed to sell \$7.5 billion worth of Equity Units to be converted into common shares, to the Abu Dhabi Investment Authority. Source: Reuters
- E.) Jan-14-2008: Citigroup announced that it is cutting its common share quarterly dividend from \$0.54 per share to \$0.32 per share. Source: Reuters
- F.) Jan-15-2008: Citigroup announced that it is raising \$12.5 billion through the sale of convertible preferred securities in a private offering, which includes a \$6.88 billion capital infusion from various investors. Source: Reuters
- G.) Sept-29-2008: Citigroup announced that it has reached an agreement to acquire all of Wachovia Corp.'s banking subsidiaries. The transaction is valued at approximately \$53 billion. Source: Reuters
- H.) Oct-9-2008: Citigroup and Wells Fargo ended discussions regarding the sale of Wachovia Corp., reaffirming that Wells Fargo will be merging with the whole of Wachovia. Source: Reuters
- I.) Oct-14-2008: The U.S. government announced that it will invest \$700 billion into nine various banks, including an investment of \$25 billion for Citigroup. Source: Wall Street Journal
- J.) Oct-16-2008: Citigroup will delay the merger of its Japanese brokerage and investment bank. This was expected to be completed by March 2009. Source: Reuters
- K.) Oct-20-2008: Citigroup declared a lower quarterly dividend of \$0.16 payable on November 26, 2008. This is down from the previous \$0.32 per share dividend. Source: Reuters
- L.) Nov-18-2008: Citigroup announced that it is cutting the global workforce by 53,000, which is on top of the 22,000 jobs already cut earlier in 2008. The company plans to reduce spending in 2009 by 20%. Source: Financial Wire
- M.) Nov-24-2008: The U.S. government agreed to guarantee up to \$306 billion of Citigroup's problematic assets and to inject \$20 billion in capital into the bank. Citigroup also agreed not to pay a quarterly dividend greater than \$0.01 per share for three years effective in January 2009. Source: Financial Times
- N.) Dec-11-2008: The SEC resolved charges against Citigroup and UBS, alleging that both banks falsely marketed auction-rate securities. Citigroup will repurchase \$7 billion of securities from retail investors. Source: Reuters



# **Valuation Multiples**

Valuation Multiples						
	FY2005	FY2006	FY2007	9/30/2008	10/14/2008	11/24/2008
Price / Book Equity	2.17x	2.30x	1.30x	1.13x	1.03x	0.33x
Price / Tangible Book Equity	3.33x	3.43x	2.35x	2.33x	2.11x	0.67x
Price / Earnings	10.2x	12.9x	40.9x	NM	NM	NM
Dividend Yield	3.6%	3.5%	7.3%	6.2%	6.9%	10.8%

Source: SNL Financial.

#### E. Outlook

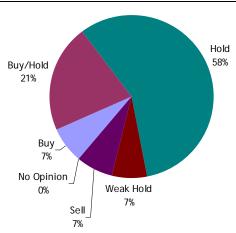
As of December 12, 2008, 14 analysts were covering Citigroup and all 14 were publishing recommendations. The consensus recommendation was a "Hold" rating, with eight analysts, or 58% of the current coverage universe, recommending that investors "Hold" Citigroup stock, three analysts were carrying a "Buy/Hold" Rating, one analyst was carrying a "Buy" rating, one analyst was carrying a "Weak Hold" rating, and one analyst was carrying a "Sell" rating. This reflects deterioration in sentiment compared to the analyst recommendations for Citigroup three months earlier, at which point three analysts were carrying a "Buy" rating. However, the consensus recommendation of a "Hold" rating remains unchanged from three months ago as eight analysts, or 58% of the coverage universe, recommended that investors "Hold" Citigroup stock.

# Wall Street Analyst Recommendations December 12, 2008

Date	12/12/2008		1 Month Prior	3 Months Prior	Change	
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months
Buy	1	7%	1	3	0	-2
Buy/Hold	3	21%	3	2	0	+1
Hold	8	58%	8	8	0	0
Weak Hold	1	7%	1	1	0	0
Sell	1	7%	1	1	0	0
No Opinion	0	0%	0	1	0	-1

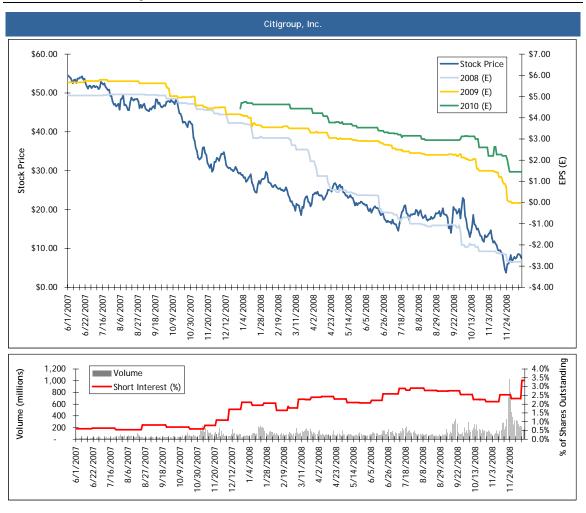
Source: SNL Financial.

# Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008

Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008



Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the average estimate for Citigroup's expected 2009 EPS declined 100% from an average estimated EPS of \$5.67 to an average estimated EPS of -\$0.03 per share for the fiscal year ending December 31, 2009. This decline in EPS estimates highlights the shift in the near-term outlook for Citigroup. As Citigroup's financial outlook continued to weaken, the market accordingly expressed its concern through a dramatic increase in short interest (expressed above as short interest as a percent of shares outstanding). An overview of some of the recent commentary supplied by equity analysts that cover Citigroup is provided below.

#### JPMorgan, November 25, 2008<sup>10</sup>

 JPMorgan, while cautious on large-cap banks, rated Citigroup at Overweight due to the relatively attractive current valuation. "At \$5.95, Citigroup trades at 0.3

<sup>&</sup>lt;sup>10</sup> Juneja, V. (2008, Nov. 25). Citigroup Inc.: Gov't Rescue: Equity Moderate, Fixed Income Positive. *J.P. Morgan North America Equity Research.* 

price-to-book multiple (adjusted for mandatory converts) and 0.7 price-to-tangible book multiple (adjusted for mandatory converts), below peer averages. EPS should improve in 2009, led by continued expansion of revenues overseas, recovery in net interest income, slower expense growth, and lower writedowns offsetting higher credit losses and lower capital markets related revenues near term."

#### Deutsche Bank, November 24, 2008<sup>11</sup>

• Although positive on the effects of a capital infusion to the broader banking system, Deutsche Bank highlighted their concern about the negative impacts to Citigroup. "The best benefit we see to the new Citigroup plan is that other large banks should now have an incrementally stronger counterparty. Citigroup gets \$40B of new capital, a cap for some losses, less extreme tail risk, and likely more confidence with depositors and debt holders that should protect against a downward spiral. Yet, it does so with more government involvement (approves compensation plan), remaining loan risk (only part of the balance sheet is covered), no changes in corporate governance (yet), and dilution to earnings 1/10th to 1/5th (preferred payments; warrant dilution), depending on reinvestment of proceeds."

#### Oppenheimer, November 24, 2008<sup>12</sup>

- Oppenheimer noted that the fundamental underlying issues at Citigroup, while buffered, still remain. "We estimate C's risky assets to be roughly \$120B, but the company has almost \$600B in consumer and card loans. We are unclear exactly which assets were targeted in the \$306B [Eligible Asset Guarantee]."
- "Clearly, this will stabilize the group near term, and the stocks this morning should reflect it. We are still cautious on the potential future dilution from further prospective capital raises for the group as well as continued higher losses related to credit and asset deflation. We rate C Underperform."

### Credit Suisse, November 24, 2008<sup>13</sup>

- Taking in to account the various headwinds facing Citigroup, Credit Suisse lowered its 2008, 2009 and 2010 EPS estimates. "Factoring in the cost of further economic deterioration (over and above that previously forecast), the cost of high risk asset write-downs this quarter, and the cost of the \$27 billion of preferred issuance, we're reducing our 4Q08 single point estimate (earnings from continuing operations) to a loss of \$1.55 (old: -\$0.11); this takes our full year 2008E to -\$3.73. Our 2009E goes to \$0.55 from \$1.50. Our 2010E goes to \$2.10 from \$2.70."
- "Factoring our estimate adjustments and this most recent capital raise into our DCF model, our fair value declines to \$10 from \$18-20. The shares remain Neutral rated."

<sup>&</sup>lt;sup>11</sup> Mayo, M. (2008, Nov. 24). Citigroup: New Government Program. *Deutsche Bank Securities Inc. Global Market Research.* 

<sup>&</sup>lt;sup>12</sup> Whitney, M. (2008, Nov. 24). Citigroup Inc.: Government Steps In To Assist C Again. *Oppenheimer & Co Inc. Equity Research.* 

<sup>&</sup>lt;sup>13</sup> Katzke Ś. (2008, Nov. 24). Citi: Déjà vu and then Some. *Credit Suisse Equity Research, Multinational Banks*.

"Our thesis on Citigroup...this is no easy fix, even for the best of managers. Consider the credit cycle, the cost of asset dispositions (sold revenues and earnings) and the need for infrastructure upgrades and integration...there's still more downside than upside risk to estimates."

Credit Default Swaps
June 1, 2007 through December 12, 2008



- A.) Nov-19-2007: Citigroup announced that it will purchase the final \$17.4 billion of assets still in SIVs that Citigroup advised. Source: Marketwatch
- B.) Nov-24-2008: The U.S. government agreed to guarantee up to \$306 billion of Citigroup's problematic assets and to inject \$20 billion in capital into the bank. Citigroup also agreed not to pay a quarterly dividend greater than \$0.01 per share for three years effective in January 2009. Source: Financial Times

Sources: Capital IQ, Bloomberg.

CDSs are used to hedge against losses or to speculate on the ability of a company to repay their debt. The spread on a CDS rises as investor confidence deteriorates. A basis point ("bps") on a credit-default swap contract protecting \$10 million of debt from default for five years is equivalent to \$1,000 a year.

As demonstrated in the figure above, the spread on Citigroup's five year CDS has increased 238.11 bps from 9.70 bps at June 1, 2007 to 247.81 bps at December 12, 2008. The price peaked on November 21, 2008 at 460.54 bps after Citigroup announced on November 19, 2008 that it will purchase the final \$17.4 billion of assets still in SIVs that Citigroup advised. This increase indicates heightened concern that Citigroup will default on its debt.

#### Credit Ratings December 19, 2008

Credit Ratings							
	Senior Debt	Commercial Paper	Outlook				
Fitch Ratings	A+	F1+	Stable				
Moody's Investor Service	A2	P-1	Stable				
Standard & Poor's	А	A-1	Stable				

Sources: Bloomberg, Citigroup Investor Relations.

#### S&P, December 19, 2008

On December 19, 2008, S&P lowered its ratings on Citigroup and units, including lowering the senior unsecured debt ratings to A from AA-, and removed the ratings from CreditWatch, where Citigroup was placed with negative implications on September 29, 2008. At the same time, S&P lowered the commercial paper rating to A-1 from A-1+. Their outlook is stable.

"The ratings on Citigroup (A/Stable/A-1) and its subsidiaries, including Citibank (A+/Stable/A-1), reflect a combination of extraordinary external support from the U.S. government for highly systemically important U.S. financial institutions and Citigroup's own credit characteristics. Citigroup has received explicit support from the U.S. government in the form of \$45 billion of hybrid securities, a guarantee on \$306 billion of its riskiest loans and securities, and access to government-backed funding. Although [S&P] does not expect it will be required, [they] believe that, given Citigroup's stature as a highly systemically important bank, further support would be forthcoming if needed. Government support should give Citigroup the time to work through the issues it faces without forced liquidations of assets." 14

#### Fitch Ratings, November 24, 2008

On November 24, 2008 Fitch Ratings downgraded Citigroup's Issuer Default Rating (IDR) to A+ from AA- and removed the rating from Rating Watch Negative. Fitch has also affirmed Citigroup's short-term IDR at F1+. Their outlook is stable.

"The downgrade of Citigroup's long-term IDR recognizes future pressures from an expected U.S. recession and continued economic difficulties globally. The magnitude of demonstrated U.S. government support is the overarching reason for the Stable Rating Outlook. Citigroup's importance to the global financial system and the demonstrated U.S. government support drive an upgrade of the support floor to A+ for both Citigroup Inc. and Citibank N.A." 15

<sup>&</sup>lt;sup>14</sup> Standard and Poor's Ratings Direct, Research Update: Citigroup Unsecured Cut To 'A' From 'AA-,' Citibank Counterparty To 'A+' From 'AA'; Off Watch (19 December 2008).

<sup>&</sup>lt;sup>15</sup> Fitch Ratings, *Fitch: Citigroup's Rating Outlook now Stable After Downgrade to 'A+'* (24 November 2008).



# Appendix D. Company Overview

The Goldman Sachs Group, Inc.

# The Goldman Sachs Group, Inc.

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM THE GOLDMAN SACHS GROUP, INC.'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED NOVEMBER 30, 2007, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED AUGUST 29, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

#### A. Business Overview

Goldman is a leading global investment banking, securities and investment management firm that provides a wide range of services worldwide to a substantial and diversified client base that includes corporations, financial institutions, governments and high net worth individuals. Goldman is publicly traded on the NYSE under the stock symbol GS. Goldman is headquartered in New York, New York, and maintained 32,569 employees as of August 29, 2008.

Goldman divides its business into three primary segments: Investment Banking, Trading and Principal Investments, and Asset Management and Securities Services.

#### **Investment Banking**

Goldman provides investment banking services to a diverse group of corporations, financial institutions, investment funds, governments and individuals.

Goldman's Investment Banking activities are sub-divided into two primary segments:

- Financial Advisory: Goldman provides advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings and spin-offs.
- Underwriting: Goldman provides public offerings and private placements of a wide range of securities and other financial instruments, including common and preferred stock, convertible and exchangeable securities, investment-grade debt, high-yield debt, sovereign and emerging market debt, municipal debt, bank loans, asset-backed securities, and real estate-related securities, such as mortgage-related securities and the securities of real estate investment trusts.

#### Trading and Principal Investments

Goldman's Trading and Principal Investment activities include facilitating client transactions with a diverse group of corporations, financial institutions, investment funds, governments and individuals. Goldman also takes proprietary positions through market making in, trading of and investing in fixed income and equity products, currencies, commodities and derivatives on these products. In addition, Goldman engages in market-making and specialist activities on equities and options exchanges and clears client transactions on major stock, options and futures exchanges worldwide. In connection with Goldman's merchant banking and other investing activities, Goldman makes principal investments directly and through funds that Goldman raises and manages.

# The Goldman Sachs Group, Inc.

Goldman's Trading and Principal Investment activities are sub-divided into three primary segments:

- Fixed Income, Currency, and Commodities ("FICC"): Through FICC, Goldman makes markets in and trades interest rate and credit products, mortgagerelated securities and loan products, and other asset-backed instruments, currencies and commodities. FICC also structures and enters into a wide variety of derivative transactions, and engages in proprietary trading and investing.
- Equities: Goldman makes markets in and trades equities and equity-related products, structures and enters into equity derivative transactions, and engages in proprietary trading. Goldman generates commissions from executing and clearing client transactions on major stock, options and futures exchanges worldwide through equities' client franchise and clearing activities. Goldman also engages in specialist and insurance activities.
- Principal Investments: Goldman makes real estate and corporate principal investments. Goldman generates net revenues from returns on these investments and from the increased share of the income and gains derived from merchant banking funds when the return on a fund's investments over the life of the fund exceeds certain threshold returns.

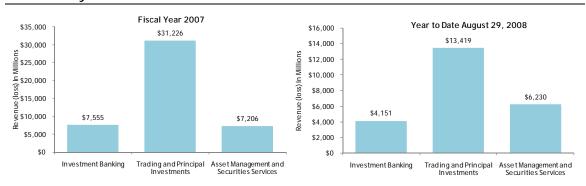
#### **Asset Management and Securities Services**

Goldman's Asset Management and Securities services include providing investment advisory and financial planning services, and investment products to a diverse group of institutions and individuals worldwide. In addition, Goldman provides prime brokerage services, financing services, and securities lending services to institutional clients (hedge funds, mutual funds, pension funds and foundations), and to high net worth individuals. As of August 29, 2008, Goldman had \$863 billion in assets under management with 31% in fixed income, 30% in money markets, 21% in equity, and 18% in alternative investments.

Goldman's Asset Management and Securities Services activities are sub-divided into two primary segments:

- Asset Management: Goldman provides investment advisory and financial planning services, and offers investment products (primarily through separately managed accounts and commingled vehicles, such as mutual funds and private investment funds) across all major asset classes. Asset Management services are provided to a diverse group of institutions and individuals worldwide. The asset management segment primarily generates revenues in the form of management and incentive fees.
- Securities Services: Goldman provides prime brokerage services, financing services and securities lending services to institutional clients (including hedge funds, mutual funds, pension funds and foundations, and to high net worth individuals worldwide). The securities services segment generates revenues primarily in the form of interest rate spreads or fees.

# Revenue by Line of Business



Sources: SEC filings.

#### B. Balance Sheet Composition

## Historical Financial Performance Summary Balance Sheet

(\$ in millions)				
	FY2005	FY2006	FY2007	8/29/2008
Total Investments	\$241,008	\$301,327	\$408,471	\$364,54
Total Assets	706,804	838,201	1,119,796	1,081,77
Risk-Weighted Assets	NA	NA	NA	\$379,16
Assets Under Management	532,000	676,000	868,000	863,00
Total Debt	\$304,252	\$368,662	\$460,619	\$404,04
Total Deposits	NA	\$10,697	\$15,370	\$29,05
Preferred Equity	\$1,750	\$3,100	\$3,100	\$3,10
Tangible Equity	22,799	30,100	37,708	40,36
Total Equity	28,002	35,786	42,800	45,59

Source: SNL Financial.

In response to the recent market turmoil, Goldman has worked to reposition its balance sheet in recent periods in order to maintain a more conservative capital structure. Goldman has worked to reduce its total assets and total debt while increasing its total equity. Between fiscal year 2007 and the third quarter ending August 29, 2008, Goldman reduced its total assets and total debt by approximately 11% and 12%, respectively, while increasing total equity by 7%.

Goldman seeks to maintain excess liquidity in the form of secured and unsecured funding sources sufficiently long-term enough to withstand a severe liquidity crisis. Goldman pre-funds what it estimates will be likely cash needs during a liquidity crisis and holds the excess liquidity in the form of unencumbered, highly liquid securities. In addition to this ("Global Core Excess"), Goldman maintains a significant amount of other unencumbered securities, including other government bonds, high-grade money market securities, corporate bonds and marginable equities. Goldman maintains its Global Core Excess and other unencumbered assets in an amount that would provide the funds necessary to replace at least 110% of its unsecured obligations that are scheduled to mature within the following 12 months. The estimated aggregate loan value of Goldman's Global Core Excess and other unencumbered assets averaged \$181.6 billion and \$156.7 billion for the three months ended August 2008 and year ended November 2007, respectively.

# Global Core Excess<sup>(1)</sup> and Other Unencumbered Assets

		Three
	Year Ended	Months Ended
	November 30, 2007	August 28, 2008
U.S. Dollar-Denominated	\$48,635	\$90,468
Non-U.S. Dollar-Denominated	11,928	11,864
Total Global Core Excess	\$60,563	\$102,332

<sup>&</sup>lt;sup>(1)</sup> The estimated amount of cash that would be advanced by counterparties against these securities. Source: SEC filings.

#### Fair Value of Financial Instruments

The table below highlights the financial instruments owned by Goldman and pledged as collateral and financial instruments sold, but not yet purchased, at fair value, as of August 29, 2008. During the third quarter of 2008, Goldman reduced its Level Three Assets by 13% to \$68 billion. At the end of the third quarter, Level Three Assets represented 6% of total assets, which is down from 7% at the end of the second quarter. The largest reductions in Level Three Assets came from corporate debt securities and other debt obligations and derivative contracts.

#### Fair Value of Financial Instruments

(\$ in millions)

				Netting and	
	Level One <sup>1</sup>	Level Two <sup>2</sup>	Level Three <sup>3</sup>	Collateral	Total
Assets					
Commercial Paper, Certificates of Deposit, Time Deposits and Other Money Market					
Instruments	\$5,965	\$11,440	\$-	\$-	\$17,405
U.S. Government, Federal Agency and Sovereign Obligations	41,439	39,793	-	-	81,232
Mortgage and Other Asset-Backed Loans and Securities	-	11,325	18,215	-	29,540
Bank Loans and Bridge Loans	-	18,089	10,956	-	29,045
Corporate Debt Securities and Other Debt Obligations	212	25,004	7,467	-	32,683
Equities and Convertible Debentures	45,571	24,222	17,485	-	87,278
Physical Commodities	-	1,374	-	-	1,374
Cash Instruments	93,187	131,247	54,123	-	278,557
Derivative Contracts	34	208,783	13,745	(100,999)	121,563
Financial Instruments Owned, at Fair Value	93,221	340,030	67,868	(100,999)	400,120
Securities Segregated for Regulatory and Other Purposes	22,743	56,448	-	-	79,191
Receivables from Customers and Counterparties	-	1,866	-	-	1,866
Securities Borrowed	-	88,617	-	-	88,617
Financial Instruments Purchased Under Agreements to Resell, at Fair Value	-	135,415	-	-	135,415
Total Assets at Fair Value	\$115,964	\$622,376	\$67,868	(\$100,999)	\$705,209
Level 3 Assets for Which the Firm Does Not Bear Economic Exposure			(\$9,598)		
Level 3 Assets for Which the Firm Bears Economic Exposure			\$58,270		
Liabilities					
U.S. Government, Federal Agency and Sovereign Obligations	\$43,012	\$799	\$-	\$-	\$43,811
Mortgage and Other Asset-Backed Loans and Securities	-	235	19	-	254
Bank Loans and Bridge Loans	-	1,757	255	-	2,012
Corporate Debt Securities and Other Debt Obligations	-	6,574	312	-	6,886
Equities and Convertible Debentures	28,722	647	11	-	29,380
Physical Commodities	-	194	-	-	194
Cash Instruments	71,734	10,206	597	-	82,537
Derivative Contracts	54	123,622	8,706	(28,478)	103,904
Financial Instruments Sold, but Not Yet Purchased, at Fair Value	71,788	133,828	9,303	(28,478)	186,441
Unsecured Short-Term Borrowings	-	27,524	4,751	-	32,275
Bank Deposits	-	655	-	-	655
Securities Loaned	-	9,255	-	-	9,255
Financial Instruments Sold Under Agreements to Repurchase, at Fair Value	-	110,204	-	-	110,204
Other Secured Financings	-	19,842	4,366	-	24,208
Other Liabilities and Accrued Expenses	-	-	1,343	-	1,343
Unsecured Long-Term Borrowings		19,575	1,918	-	21,493
Total Liabilities at Fair Value	\$71,788	\$320,883	\$21,681	(\$28,478)	\$385,874

<sup>&</sup>lt;sup>1</sup> Level One Assets use unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Source: SEC filings.

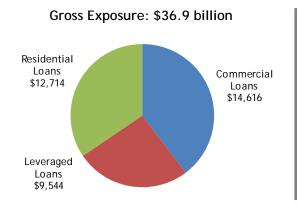
<sup>&</sup>lt;sup>2</sup> Level Two Assets use quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly.

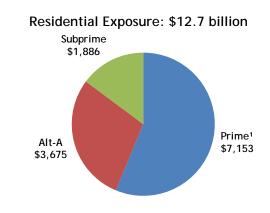
<sup>&</sup>lt;sup>3</sup> Level Three Assets use prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

As of August 29, 2008, Goldman had total exposure to residential real estate, commercial real estate, and leveraged loans of \$36.9 billion, representing a 32% decrease from the previous quarter ending May 30, 2008. Of Goldman's \$12.7 billion in exposure to residential real estate, approximately \$1.9 billion was tied to subprime loans.

# Gross Exposure to Residential Real Estate, Commercial Real Estate, and Leveraged Loans as of August 29, 2008

(\$ in millions)





Sources: SEC filings, Oppenheimer & Co. Inc.

#### Securitization

#### **Financial Assets Securitized**

(\$ in millions)

Residential Mortgages
Commercial Mortgages
Other Financial Assets
Total
Cash Flows Received on Retained Interests

Nine Months					
Ended August					
2007	2008				
\$22,852	\$5,486				
15,611	773				
31,282	6,130				
\$69,745	\$12,389				
\$548	\$404				

Source: SEC filings.

Goldman securitizes commercial and residential mortgages, home equity and auto loans, government and corporate bonds, and other types of financial assets. Retained interests in assets Goldman securitized are accounted for at fair value and are included on the previous page in the Fair Value of Financial Instruments chart.

As of August 29, 2008, Goldman held \$2.53 billion of retained interests from securitization activities, including \$2.04 billion held in QSPEs. This was down from the fiscal year ending November 30, 2007 at which time Goldman held \$2.53 billion of retained interests from securitization activities including \$2.72 billion held in QSPEs. In addition to these retained interests, Goldman held residential mortgage QSPEs

<sup>&</sup>lt;sup>1</sup> Includes U.S. government agency-issued collateralized mortgage obligations of \$5.1 billion as of August 2008.

purchased in connection with secondary market making activities of approximately \$4 billion and \$6 billion as of August 29, 2008 and November 30, 2007, respectively. The table below sets forth the weighted average key economic assumptions used in measuring the fair value of Goldman's retained interests and the sensitivity of this fair value to immediate adverse changes of 10% and 20% in those assumptions.

#### **Key Fair Value Economic Assumptions & Sensitivity**

(\$ in millions)

	As of November 2007		As of Augu	st 2008
	Type of Retained	Type of Retained Interests		ed Interests
	Mortgage-	CDOs and	Mortgage-	CDOs and
	Backed	CLOs	Backed	CLOs
Fair Value of Retained Interests	\$3,378	\$1,188	\$1,879	\$650
Weighted Average Life (years)	6.6	2.7	4.9	4.5
Constant Prepayment Rate	15.1%	11.9%	16.9%	10.1%
Impact of 10% Adverse Change	(\$50.0)	(\$43.0)	(\$16.0)	(\$4.0)
Impact of 20% Adverse Change	(\$91.0)	(\$98.0)	(\$33.0)	(\$9.0)
Anticipated Credit Losses	4.3%	N/A	1.6%	N/A
Impact of 10% Adverse Change	(\$45.0)	\$-	(\$2.0)	\$-
Impact of 20% Adverse Change	(\$72.0)	-	(\$4.0)	-
Discount Rate	8.4%	23.1%	13.0%	25.8%
Impact of 10% Adverse Change	(\$89.0)	(\$46.0)	(\$53.0)	(\$31.0)
Impact of 20% Adverse Change	(\$170.0)	(\$92.0)	(\$103.0)	(\$60.0)

Source: SEC filings.

#### Variable Interest Entities

Goldman, in the ordinary course of business, retains interests in VIEs in connection with its securitization activities and market making activities, and makes investments in and loans to VIEs for its own positions and the positions of its investors. While Goldman is routinely involved with VIEs and QSPEs in connection with its securitization activities, Goldman did not have off-balance-sheet commitments to purchase or finance any CDOs held by structured investment vehicles as of August 29, 2008 or November 30, 2007. The table on the following page sets forth Goldman's total assets and maximum exposure to losses associated with its significant variable interests in consolidated VIEs where Goldman does not hold a majority voting interest. Goldman has aggregated consolidated VIEs based on principal business activity, as reflected in the first column.

# Maximum Exposure to Loss in Consolidated VIEs without a Majority Voting Interest (\$\frac{1}{2}\$ in millions)

Real Estate, Credit-Related and Other Investing
Municipal Bond Securitizations
CDOs, Mortgage-Backed and Other Asset-Backed
Foreign Exchange and Commodities
Principal-Protected Notes
Total

As of November 30, 2007		As of August	t 29, 2008
	Maximum		Maximum
	Exposure		Exposure
VIE Assets	to Loss	VIE Assets	to Loss
\$2,118	\$525	\$1,741	\$467
1,959	1,959	1,368	1,368
604	109	206	174
300	329	566	593
1,119	1,118	395	389
\$6.100	\$4.040	\$4.276	\$2,991

Maximum Exposure to Loss in Nonconsolidated VIEs

Source: SEC filings.

The tables below present total assets in nonconsolidated VIEs in which Goldman maintains significant variable interest and the maximum exposure to loss associated with these positions. The nature of Goldman's variable interests can take different forms, as described in the columns in the chart. Between fiscal year 2007 and the third quarter 2008, Goldman reduced its maximum exposure to losses in nonconsolidated VIEs to approximately \$21.8 billion, representing a decrease of 16%.

#### Maximum Exposure to Loss in Nonconsolidated VIEs

(\$ in millions)

#### As of November 2007

		Maximum Exposure to Loss in Nonconsolidated VIEs				
		Purchased	Commitments			
		and Retained	and		Loans and	
	VIE Assets	Interests	Guarantees	Derivatives	Investments	Total
Mortgage CDOs	\$18,914	\$1,011	\$-	\$10,089	\$-	\$11,100
Corporate CDOs and CLOs	10,750	411	-	2,218	-	2,629
Real Estate, Credit-Related and Other Investing	17,272	-	107	12	3,141	3,260
Municipal Bond Securitizations	1,413	-	1,413	-	-	1,413
Other Mortgage-Backed	3,881	719	-	-	-	719
Other Asset-Backed	3,771	-	-	1,579	-	1,579
Power-Related	438	2	37	-	16	55
Principal-Protected Notes	5,698	-		5,186		5,186
Total	\$62,137	\$2,143	\$1,557	\$19,084	\$3,157	\$25,941

#### As of August 2008

		Purchased	Commitments			
		and Retained	and		Loans and	
	VIE Assets	Interests	Guarantees	Derivatives	Investments	Total
Mortgage CDOs	\$15,895	\$386	\$-	\$6,663	\$-	\$7,049
Corporate CDOs and CLOs	13,503	306	-	3,187	-	3,493
Real Estate, Credit-Related and Other Investing	26,788	-	8	-	3,636	3,644
Municipal Bond Securitizations	146	-	146	-	-	146
Other Asset-Backed	1,643	-	-	894	-	894
Power-Related	830	-	37	-	215	252
Principal-Protected Notes	6,299			6,274		6,274
Total	\$65,104	\$692	\$191	\$17,018	\$3,851	\$21,752

Source: SEC filings.

#### Historical Financial Performance Balance Sheet Ratios

	FY2005	FY2006	FY2007	8/29/2008
Balance Sheet				
Total Risk-Weighted Assets <sup>(1)</sup>	NA	NA	NA	\$379,165
Market Risk Assets as a Percentage of Total	NA	NA	NA	499
Credit Risk Assets as a Percentage of Total	NA	NA	NA	419
Operational Risk Assets as a Percentage of Total	NA	NA	NA	109
Risk Based Capital Ratio <sup>(2)</sup>	NA	NA	NA	15.20%
Gross Leverage Ratio <sup>(3)</sup>	25.24%	23.42%	26.16%	23.72%
Debt / Equity	10.87%	10.30%	10.76%	8.86%
Tier One Ratio <sup>(4)</sup>	NA	NA	NA	11.60%
Total Level Three Assets	NA	NA	\$69,151	\$67,868
Total Level Three Assets as a % of Total Assets	NA	NA	6.2%	6.009

Source: SNL Financial.

#### Definitions:

(1) Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

At August 29, 2008, Goldman was regulated by the SEC as a CSE. On September 21, 2008, Goldman became a bank holding company. As a bank holding company Goldman is now regulated by the Federal Reserve Board under the U.S. Bank Holding Company Act of 1956 and by the State of Utah Department of Financial Institutions. Subsequently, on September 26, 2008, the SEC announced that it was ending the CSE program. Goldman is now subject to Federal Reserve Board regulations and policies which will require compliance with minimum capital adequacy standards on a consolidated basis, may limit the amount of dividends Goldman can distribute to shareholders, and will subject Goldman to Federal Reserve Board scrutiny of its leverage ratio. As of August 29, 2008, Goldman was in compliance with all regulations and standards.

<sup>&</sup>lt;sup>(2)</sup> Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators generally consider a Risk Based Capital Ratio of 10% or above as well capitalized.

<sup>(3)</sup> Gross Leverage Ratio equals Total Assets divided by Total Shareholders' Equity.

<sup>&</sup>lt;sup>(4)</sup> Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Tier One Ratio of 4%. Federal bank regulators generally consider a Tier One Ratio of 6% or above as well capitalized.

Goldman has reduced its debt load over recent periods, with Gross Leverage declining from 24.3% at the end of the second quarter to 23.7% at the end of the third quarter. Goldman has also shifted to a higher mix of Tier One Capital, increasing Tier One Capital from 10.8% at the end of the second quarter to 11.6% at the end of the third quarter. In addition, Goldman has reduced its gross exposure to residential and commercial real estate and leveraged loans, decreasing its total exposure from \$54.1 billion at the end of the second quarter to \$36.9 billion at the end of the third quarter.

#### C. Financial Overview

## Historical Financial Performance Summary Income Statement

FY2005	FY2006	FY2007	LTM 8/29/2008
\$25,238	\$37,665	\$45,987	\$34,541
\$16,965	\$23,105	\$28,383	\$23,551
\$8,273	\$14,560	\$17,604	\$10,990
\$5,626	\$9,537	\$11,599	\$7,658
	\$25,238 \$16,965 \$8,273	\$25,238 \$37,665 \$16,965 \$23,105 \$8,273 \$14,560	\$25,238 \$37,665 \$45,987 \$16,965 \$23,105 \$28,383 \$8,273 \$14,560 \$17,604

Source: SNL Financial.

Goldman's total revenue for the LTM period ending August 29, 2008 was \$34.5 billion, representing a 22% decrease over the same LTM period a year earlier. The decline in total revenue is reflective of challenging market conditions, characterized by broad-based declines in asset values and a decrease in levels of client activity. During the period, Goldman experienced sharp declines in Investment Banking and Trading and Principal Investments, while experiencing a slight gain in its Asset Management business.

- Investment Banking: Investment Banking experienced significant declines as a result of much lower industry-wide mergers and acquisitions activity, and significantly lower debt underwriting due to both decreases in leveraged finance and mortgage-related activity.
- Trading and Principal Investments: Trading and Principal Investments experienced declines in revenue reflecting significant declines in FICC, Principal Investments, and Equities. Among the most significant declines was in mortgages, which experienced net losses of approximately \$1.6 billion on residential mortgage loans and securities and approximately \$700 million in losses on commercial mortgage loans and securities.
- Asset Management and Securities Services: Net revenue slightly increased in Asset Management and Securities Services as Goldman's prime brokerage business generated strong results and assets under management were higher, generating higher incentive fees.

# Historical Financial Performance Profitability Ratios

	FY2005	FY2006	FY2007	8/29/2008
Profitability				
Return on Average Assets	0.90%	1.22%	1.20%	0.699
Return on Average Equity	21.42%	30.72%	30.56%	18.339

Source: SNL Financial.

In combination with its reduction in total leverage, Goldman has pursued initiatives to expand its stable base of assets, such as with the expansion of its retail banking services (see the Historical Balance Sheet Summary). As a result of maintaining a lower debt to equity ratio, Goldman has experienced a reduction in its return on equity, declining to 0.31% as of August 29, 2008.

#### D. Stock Price Performance and Valuation Multiples

# Stock Price Performance June 1, 2007 through December 12, 2008



#### Notable Company Events

- A.) September-20-2008: Goldman reported results for the nine months ended August 31, 2007, with net earnings of \$8,384 million compared to \$6,385 million over the same period last year and declared its standard cash dividend of \$0.35 per common share to be paid on November 26, 2007. Source: Business Wire.
- B.) December-18-2007: Goldman reported net revenue of \$46.0 billion and net earnings of \$11.6 billion for the year ended November 30, 2007, both representing 22% increases from the prior year. Source: SEC Fillings.
- C.) March-18-2008: Goldman reported results for the first quarter, with net earnings of \$1.51 billion as compared with \$3.19 billion for the same period last year and declared its standard dividend to be paid on May 29, 2008. Source: Business Wire.
- D.) April-11-2008: Goldman is planning to eliminate additional positions because of the credit crisis. Source: Capital IQ.
- E.) June-17-2008: Goldman reported results for the six months ended May 30, 2008, with net earnings of \$2.087 billion as compared to \$2.33 billion for the same period last year and declared its standard cash dividend. Source: Business Wire.
- F.) June-23-2008: Goldman is cutting 10% of its investment banking staff in 2008. Source: MarketWatch.
- G.) September-16-2008: GS announced net revenues of \$6.04 billion and net earnings of \$845 million for its third quarter and declared its standard cash dividend. Source: SEC filings.
- H.) September-21-2008: Goldman switched status to become a bank holding company, allowing it to take deposits and have equal access to emergency funding from the central bank. Source: Belfast Telegraph.
  September-23-2008: GS announced Berkshire Hathaway agreed to buy \$5 billion of perpetual preferred stock in a private offering and receive \$5 billion in warrants at \$115 per share. Source: SEC fillings.
- I.) October-10-2008: Goldman filed a shelf registration, with a total registration amount of \$18.2 billion. Source: SEC filings.
- J.) October-14-2008: It was reported that the federal government will spend \$250 billion to buy equity stakes in several major financial institutions, including a \$10 billion stake in Goldman. Source: Capital IQ, Wall Street Journal.
- K.) October-23-2008: Goldman announced that it plans to cut about 3,260 jobs (-10% of the total staff) Source: Midnight Trader.
- L.) November-25-2008: Goldman announced plans to issue between \$2 billion and \$3 billion in debt backed by the government under the government's Temporary Liquidity Guarantee program. Source: Wall Street Journal.
- M.) December-3-2008: Goldman is reviewing the opportunity to launch an internet banking program to help provide additional stable funding. Analysts still expect GS to report a fourth quarter 2008 net loss of up to \$2 billion. Source: Wall Street Journal.



# **Historical Valuation Multiples**

			Valuation Multiples	
8/29/2008 10/14/2008	FY2007	FY2006	FY2005	
1.65x 1.24x	2.51x	2.68x	2.26x	Price / Book Equity
1.88x 1.41x	2.88x	3.25x	2.82x	Price / Tangible Book Equity
9.9x 7.0x	9.2x	9.9x	11.5x	Price / LTM Earnings
0.9% 1.1%	0.6%	0.7%	0.8%	Dividend Yield

Source: SNL Financial.

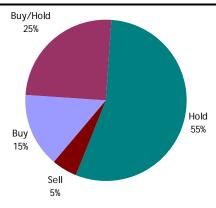
#### E. Outlook

As of December 12, 2008, 20 analysts were covering Goldman and all 20 were publishing recommendations. The consensus recommendation for Goldman was a "Hold" rating, with 11 analysts, or 55% of the current coverage universe, recommending that investors "Hold" Goldman stock, five analysts were carrying a "Buy/Hold" Rating, three analysts were carrying a "Buy" rating and one analyst was carrying a "Sell" rating. This is a slight improvement compared to the analyst recommendations for Goldman three months earlier, at which point, four analysts were carrying a "Buy/Hold" rating, two analysts were carrying a "Buy" rating, and 13 analysts, or 65% of the total, were carrying a "Hold" recommendation.

## Wall Street Analyst Recommendations December 12, 2008

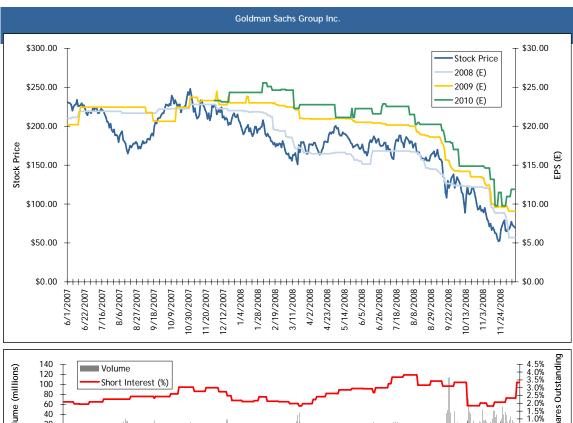
Wall Street Analyst R Goldman Sachs Grou						
Date	12/12	/2008	1 Month Prior	3 Months Prior	Cha	ange
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months
Buy	3	15%	3	2	0	+1
Buy/Hold	5	25%	5	4	0	+ 1
Hold	11	55%	11	13	0	-2
Weak Hold	0	0%	0	0	0	0
Sell	1	5%	1	1	0	0
No Opinion	0	0%	0	0	0	0
Total	20	100%	20	20		

## Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008.

# Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008



Volume (millions)

Volume (milli

Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the consensus estimate for Goldman's expected fiscal year 2009 ("FY09") EPS declined 55% from a FY09 EPS estimate of \$20.20 at June 1, 2007 to a FY09 EPS estimate of \$9.08 at December 12, 2008. This decline in the consensus EPS estimate highlights the shift in the near-term outlook for Goldman. An overview of some of the recent commentary supplied by equity analysts that cover Goldman is provided below.

#### Deutsche Bank, December 9, 2008<sup>1</sup>

- Deutsche Bank lowered earnings estimates for fourth quarter 2008 and fiscal year 2009 due to heightened concerns about declines in the value of the Company's real estate holdings
- In addition, given the reduction in Deutsche Bank's "World View," they reduced expectations for global capital markets revenue.

<sup>&</sup>lt;sup>1</sup> Mako, M. (2008, Dec. 8). Goldman Sachs: Reducing Estimates. *Deutsche Bank Securities Inc. Global Market Research.* 

 Deutsche Bank also noted that "Goldman is transitioning from a broker to a bank in a short period of time, raising questions about its future earnings power." As an example, Deutsche Bank highlighted concerns that the Fed might require Goldman to scale back activities in trading, which accounts for two-thirds of the Company's revenues.

### William Blair, November 14, 2008<sup>2</sup>

- William Blair lowered its fiscal fourth-quarter 2008 EPS estimate for the quarter ending November 28, 2008 to a loss of \$1.58 from \$2.78 per share.
- William Blair noted that "the investment banking business funding model is under attack and the return profile of [Goldman] has changed, but [Goldman does not have] any near-term funding issues or major capital needs and ultimately the return profile for [Goldman] should exceed 15%, in our opinion."

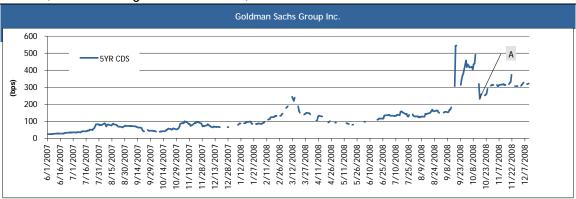
# Oppenheimer, September 24, 2008<sup>3</sup>

- The Oppenheimer report discussed investments made into Goldman by Berkshire Hathaway, who agreed to buy \$5 billion of perpetual preferred stock in a private offering, as well as the Company's \$5 billion public common equity offering. These investments helped provide Goldman with the capital needed to pursue opportunities to expand its depository base following the Company's conversion to a bank holding company.
- Oppenheimer viewed the terms of the investment as a sign of the challenges Goldman faced in raising capital noting that "the terms of this deal seem exorbitantly expensive and provide insight into how truly challenging current market conditions are."
- Oppenheimer concluded that conversion to a bank holding company would leave Goldman subject to increased regulation, causing Goldman to operate with lower leverage, and ultimately, reducing the returns on equity that Goldman is able to achieve.

<sup>&</sup>lt;sup>2</sup>Lane, M. (2008, Nov. 14). Goldman Sachs Group, Inc./Morgan Stanley: Cutting Numbers, Absolutely No Visibility; Value Should Be Recognized at Some Point. *William Blair & Company, L.L.C. Equity Research*. <sup>3</sup>Whitney, M. (2008, Sept. 24). Goldman Announces \$10B Capital Raise. *Oppenheimer & Co Inc. Equity Research*.

#### **Credit Default Swaps**

June 1, 2007 through December 12, 2008



A.) October-14-2008: It was reported that the federal government will spend \$250 billion to buy equity stakes in several major financial institutions, including a \$10 billion stake in Goldman. Source: Capital IQ, Wall Street Journal.

Sources: Capital IQ, Bloomberg.

CDSs are used to hedge against losses or to speculate on the ability of a company to repay their debt. The spread on a CDS rises as investor confidence deteriorates. A basis point ("bps") on a credit-default swap contract protecting \$10 million of debt from default for five years is equivalent to \$1,000 a year.

As demonstrated in the figure above, the spread on Goldman's five year credit-default swaps increased 320.13 bps from 24.86 bps at June 1, 2007 to 344.99 bps at December 12, 2008. Five year CDSs for Goldman peaked on September 18, 2008 at 545.14 bps suggesting heightened concerns that Goldman may default on its debt.

# Credit Ratings December 16, 2008

Credit Ratings	js .				
	Short-term Debt	Long-term Debt	Rating Outlook		
Fitch Ratings	F1+	AA-	Stable		
Moody's Investor Service	P-1	A1	Negative		
Standard & Poor's	A-1+	А	Negative		

Source: Goldman Sachs Group, Investor Information.

# Moody's, December 16, 2008<sup>4</sup>

On December 16, 2008, Moody's downgraded Goldman's senior debt, excluding FDIC-guaranteed debt, from Aa3 to A1 indicating that the downgrade reflects "(1) the increased vulnerabilities that the ongoing credit market crisis has exposed in the model of Goldman and other wholesale-funded investment, commercial, and universal banks; (2) the likelihood of increased structural subordination for Goldman creditors relative to its bank-level creditors; and (3) a persistent difficult operating environment that will continue to challenge the firm." Moody's reiterated its negative outlook for Goldman; however, Moody's did highlight that it views Goldman as a "systemically important institution" and indicated that Goldman's ratings benefit from Moody's assumption of a high likelihood of external support from the U.S. government.

## S&P, December 19, 2008<sup>5,6</sup>

On December 19, 2008, S&P cut the ratings on 11 banks in the United States and Europe by either one or two notches. The downgrades included Goldman as S&P downgraded Goldman's senior debt two notches from AA- to A and reiterated a Negative outlook for Goldman. In commenting on Goldman, which recently reported a loss for the fourth quarter of fiscal 2009, S&P stated that "the timing and extent of earnings recovery [for Goldman] are currently highly uncertain." S&P also formalized a process for taking government intervention into consideration when rating banks. S&P will now provide an issuer credit rating for select banks that are viewed as highly important to the stability of the banking sector in the U.S. or Europe, which will demonstrate that the bank would receive support from the government to maintain stability in the sector, thus making it more creditworthy.

<sup>&</sup>lt;sup>4</sup>Siew, W. (2008, Dec. 16). Moody's cut Goldman Sachs ratings one notch to "A1". *Thompson Reuters*. Retrieved from http://www.reuters.com.

<sup>&</sup>lt;sup>5</sup>"S&P cuts ratings on 11 US and European banks". Associated Press, *Business Week* 19 Dec 2008. Retrieved from http://www.businessweek.com.

<sup>&</sup>lt;sup>6</sup>Logutenkova, E. (2008, Dec. 19). Goldman, UBS, Deutsche, Morgan Stanley Lowered by S&P. *Bloomberg*. Retrieved from www.Bloomberg.com.



# Appendix E. Company Overview

JPMorgan Chase & Co.

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM JPMORGAN CHASE & CO.'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2007, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

#### A. Business Overview

Founded in 1823 and headquartered in New York, New York, JPMorgan is a leading global financial services firm with \$2.3 trillion in assets, \$145.8 billion in total stockholders' equity, and operations in more than 60 countries, as of September 30, 2008. JPMorgan is publicly traded on the NYSE under the ticker symbol JPM. As a diversified financial holding company incorporated under Delaware law in 1968, JPMorgan has leading positions in investment banking, derivatives, syndicated lending, credit cards, mortgages, and funds transfer. JPMorgan is anchored by a strong regionally based branch network that yields significant market deposits, creating a balance among the retail, commercial, and investment lines of business. A component of the DJIA and S&P 500 indices, JPMorgan serves millions of consumers in the U.S. and around the world as well as the most prominent corporate, institutional, and government clients under its JPMorgan and Chase brands.

The principal bank subsidiaries are JPMorgan Chase Bank, National Association (a national banking association with branches in 24 states) and Chase Bank USA, National Association (a national bank that is the credit card issuing bank). JPMorgan's principal nonbank subsidiaries are J.P. Morgan Securities Inc. and Bear Stearns, its U.S. investment banking firms. JPMorgan merged J.P. Morgan Securities Inc. with and into Bear Stearns and changed the name of the surviving corporation to J.P. Morgan Securities Inc.

#### Major Developments

#### Merger with Bear Stearns

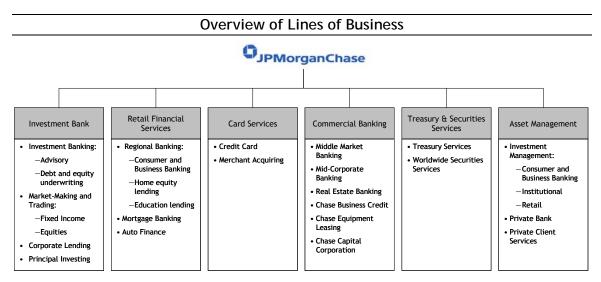
On March 24, 2008, JPMorgan increased its share price offer from \$2 to \$10 in order to acquire Bear Stearns in a stock-for-stock exchange deal, totaling \$1.5 billion. The transaction was completed on May 30, 2008. The acquisition gives JPMorgan leading market share in the global prime brokerage business; strengthens the equities and asset management businesses; enhances its capabilities in mortgage origination, securitization, and servicing; and expands the energy business platform.

#### Acquisition of the banking operations of Washington Mutual

On September 25, 2008, JPMorgan acquired the banking operations of Washington Mutual from the FDIC for \$1.9 billion through the purchase of substantially all the assets and an assumption of specified liabilities. Washington Mutual's banking operations consisted of a retail bank network with 2,244 branches, a nationwide credit card lending business, a multi-family and commercial real estate lending business, and nationwide mortgage banking activities. The transaction expands JPMorgan's consumer branch network into California, Florida, Washington, Georgia, Idaho, Nevada, and

Oregon, creating the nation's second-largest branch network in the United States. In addition, the transaction extends JPMorgan's presence in business banking, commercial banking, credit card services, consumer lending, and wealth management businesses.

JPMorgan's primary activities are organized into six lines of business, which are divided among two groups: wholesale and consumer. The wholesale lines of business include the Investment Bank ("IB"), Commercial Banking ("CB"), Treasury & Securities Services ("TSS"), and Asset Management ("AM") while the consumer lines of business include the Retail Financial Services ("RFS") and Card Services ("CS"). In addition to the six lines of business, JPMorgan has a corporate segment ("Corporate") that includes One Equity Partners, a private equity investment arm, with a portfolio of assets in the amount of \$7.5 billion and JPMorgan's Private Equity Fund Services, which offers high quality, outsourced administration and banking services to private equity firms and institutional investors.



Source: JPMorgan Chase 2007 Annual Report.

#### **Investment Bank**

JPMorgan is one of the world's leading investment banks, with clients located worldwide consisting of corporations, financial institutions, governments, and institutional investors. Its products and services include corporate strategy and structure advisory, equity and debt capital raises, sophisticated risk management, research, and market making in cash securities and derivative instruments.

#### **Retail Financial Services**

Retail Financial Services, which includes the Regional Banking, Mortgage Banking, and Auto Finance segments, serves consumers and businesses through bank branches, ATMs, online banking, and telephone banking. Customers can use more than 3,100 bank branches, 9,300 ATMs, and 300 mortgage offices. More than 14,100 branch salespeople assist customers with checking and savings accounts, mortgages, home equity and business loans, and investments across a 17 state footprint from New York

to Arizona. Consumers also can obtain loans through more than 14,200 auto dealerships and 3,500 schools and universities nationwide.

### **Card Services**

With more than 156 million cards in circulation and more than \$159 billion in managed loans, Card Services is one of the nation's largest credit card issuers. Consumers used Chase cards for more than \$272 billion worth of their spending needs for the nine month period ending, September 30, 2008. With hundreds of partnerships, JPMorgan has a market leadership position in building loyalty programs with many of the world's most respected brands. Chase Paymentech Solutions, LLC, a joint venture between JPMorgan and First Data Corporation, is a processor of MasterCard and Visa payments that handled more than 16 billion transactions for the nine month period ending, September 30, 2008.

#### Commercial Banking

Commercial Banking serves more than 30,000 clients nationally, including corporations, municipalities, financial institutions, and not-for-profit entities that have annual revenues generally ranging from approximately \$10 million to \$2 billion. In partnership with JPMorgan's other business' lines, CB provides comprehensive solutions (including lending, treasury services, investment banking, and asset management) to meet its clients' domestic and international financial needs.

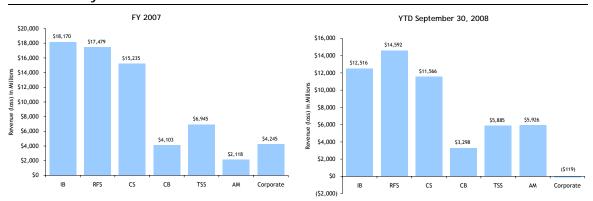
#### **Treasury & Securities Services**

Treasury & Securities Services is a global leader in transaction, investment, and information services. As one of the world's largest cash management providers and a leading global custodian, TSS provides cash management, trade, wholesale card and liquidity products and services to small and midsized companies, multi-national corporations, financial institutions, and government entities. Worldwide Securities Services holds, values, clears, and services securities, cash, and alternative investments for investors and broker-dealers, and manages depositary receipt programs globally.

#### <u>Asset Management</u>

With assets under supervision of \$1.6 trillion, as of September 30, 2008, Asset Management is a global leader in investment and wealth management. AM clients are institutions, retail investors, and high net worth individuals in every major market throughout the world. AM offers global investment management in equities, fixed income, real estate, hedge funds, private equity, and liquidity, including both money market instruments and bank deposits. AM also provides trust and estate, banking and brokerage services to high net worth clients, and retirement services for corporations and individuals. The majority of AM's client assets are in actively managed portfolios.

## **Revenue by Lines of Business**



Sources: JPMorgan Chase 2007 Annual Report, JPMorgan Chase Form 10-Q for the Quarterly Period Ended September 30, 2008.

### B. Balance Sheet Composition

#### **Summary Balance Sheet**

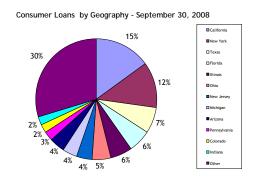
(\$ in millions)				
	FY2005	FY2006	FY2007	9/30/2008
Loans	\$412,058	\$475,848	\$510,140	\$742,329
Earning Assets - Average	1,022,774	1,144,447	1,275,121	1,433,970
Earning Assets - End of Year	1,023,761	1,167,456	1,363,071	1,940,168
Risk-Weighted Assets	850,643	935,909	1,051,879	1,377,059
Total Assets	1,198,942	1,351,520	1,562,147	2,251,469
Deposits	\$554,991	\$638,788	\$740,728	\$969,783
Tangible Equity	\$58,758	\$66,233	\$74,155	\$96,069
Total Equity	107,211	115,790	123,221	145,843

Source: SNL Financial includes Washington Mutual financial data.

#### Loan Portfolio

As of September 30, 2008, JPMorgan had loans of \$742.3 billion, which included loans equaling \$206.2 billion acquired from the Washington Mutual transaction. The majority of Washington Mutual's loan balances reside within a home loan portfolio, which represented \$176.0 billion, or 85.4% of Washington Mutual's consolidated loan portfolio. Of the \$742.3 billion of loans, JPMorgan's loan balances were \$534.1 billion with a loan loss reserve of \$14.5 billion.

## Geographic Distribution of Consumer Loans<sup>(1)</sup>



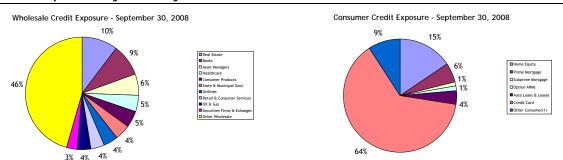
(1) Excludes loans purchased from Washington Mutual. Source: JPMorgan Chase Form 10-Q for the Quarterly Period Ended September 30, 2008.

Within consumer group (RFS and CS), JPMorgan had \$308.6 billion in outstandings, of which 70.4% were located among 12 states. The top three states (California, New York and Texas) accounted for \$105.7 billion, or 34.3%, of the reported consumer loan balances. Management commented in November that consumer "credit could deteriorate further in the future depending on home prices, unemployment, and the overall economy."

<sup>&</sup>lt;sup>1</sup>JP Morgan Chase & Co. Investor Presentation. (2008, Nov. 12). Merrill Lynch Banking and Financial Services Investor Conference.

All outstanding obligations, including both on-balance and off-balance sheet arrangements, are classified as credit exposure. JPMorgan's primary outstanding obligations comprise of the following: loan balances, derivative receivables, lending-related commitments, receivables from customers, securitized loans, loans held-for-sale, and loans at fair value.

#### Credit Exposure by Industry



Sources: JPMorgan Chase 2007 Annual Report, JPMorgan Chase Form 10-Q for the Quarterly Period Ended September 30, 2008.

#### Wholesale Credit Exposure

As of September 30, 2008, JPMorgan had total wholesale credit exposure of \$814.9 billion<sup>2</sup>, which is split 50/50 between on-balance and off-balance sheet arrangements. The wholesale credit exposure for the first nine months represented a \$103.5 billion increase from December 31, 2007, as a result of the Washington Mutual and Bear Stearns transactions, which added \$47.5 billion and \$54.3 billion of credit exposure, respectively. Post-Washington Mutual transaction, JPMorgan's real estate credit exposure totaled \$83.9 billion, or 10.5%, of total wholesale credit exposure.

#### **Consumer Credit Exposure**

Total consumer credit exposure amounted to \$1.4 trillion<sup>3</sup> for the first nine months of 2008. Off-balance sheet exposure accounted for \$910.9 billion, or 65.8%, while onbalance sheet exposure totaled \$472.9 billion. Credit cards accounted for the majority of the consumer exposure, totaling \$877.6 billion, or 63.4%. Home equity and mortgage loans also made up a substantial portion with \$328.2 billion, or 23.7% of the consumer credit exposure.

#### Earning Assets (Trading Assets and Securities)

The increase in Earning Assets was largely the result of positions acquired from the Bear Stearns merger as well as the currency and equity market volatility on foreign exchange and equity derivative receivables. Offsetting this increase were declines in the trading assets and liabilities, which reflect the challenging capital markets environment, particularly for debt securities. The available-for-sale portfolio increased from December 31, 2007, as a result of purchases and securities acquired in the Washington Mutual transaction, partially offset by sales and maturities.

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<sup>&</sup>lt;sup>2</sup>Excludes \$25.4 billion of receivables at September 30, 2008.

<sup>&</sup>lt;sup>3</sup>Excludes \$93.7 billion of securitized credit card receivables at September 30, 2008.

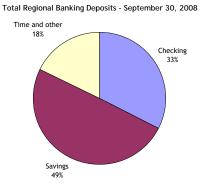
#### Deposits

With the acquisition of Washington Mutual's assets and deposits, JPMorgan further expanded its consumer banking reach and has a combined deposit base of \$969.8 billion and 5,410 branches. The additional 2,207 branches from the transaction provide JPMorgan with a new presence in states such as California, Florida, and Washington while expanding its RFS business line in existing markets.

Deposits increased, as of September 30, 2008, compared to December 31, 2007, as a result of the deposits assumed in the acquisition of Washington Mutual and increases in wholesale interest bearing and non-interest bearing deposits in TSS. The increase in TSS was driven by both new and existing clients, as well as, the heightened volatility and credit concerns in the global markets.

Complementing its strong regional base, JPMorgan (excluding Washington Mutual) was able to grow its regional banking deposits to \$211.5 billion (as of September 30, 2008) from \$206.6 billion a year ago. Over the same period, JPMorgan increased its consumer banking business by growing its number of branches and ATMs 3.6% and 4%, respectively.

# Regional Banking Deposits by Type<sup>(1)</sup>



(1)Excludes Washington Mutual deposits

Source: JPMorgan Chase Form 10-Q for the Quarterly Period Ended September 30, 2008.

#### Historical Financial Performance Balance Sheet Ratios

	FY2005	FY2006	FY2007	9/30/2008
	112003	1 12000	112007	7/30/2000
Balance Sheet				
Loans / Deposits	69.37%	66.98%	67.57%	77.56%
Tangible Equity / Tangible Assets	5.11%	5.09%	4.90%	4.36%
Leverage Ratio <sup>(1)</sup>	6.29%	6.19%	6.02%	6.51%
Tier One Ratio <sup>(2)</sup>	8.52%	8.66%	8.44%	8.85%
Risk Based Capital Ratio <sup>(3)</sup>	12.04%	12.32%	12.57%	11.56%
Asset Quality				
Reserve for Loan Losses / Gross Loans	1.69%	1.51%	1.78%	2.50%
Reserve for Loan Losses / Non-Performing Assets	241.90%	310.94%	234.31%	200.13%
Net Charge-Offs / Average Loans	0.93%	0.67%	0.95%	1.51%
Loan Loss Provision / Net Charge-Offs	91.20%	107.50%	151.26%	203.90%

Source: SNL Financial.

#### Definitions:

(1) Leverage Ratio is calculated as Tier One Capital divided by tangible assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Leverage Ratio of 4%. Federal bank regulators generally consider a Leverage Ratio of 5% or above as well capitalized.

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

<sup>(2)</sup>Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Tier One Ratio of 4%. Federal bank regulators generally consider a Tier One Ratio of 6% or above as well capitalized.

<sup>(3)</sup>Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators generally consider a Risk Based Capital Ratio of 10% or above as well capitalized.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

The strength of JPMorgan's balance sheet has allowed for "JPMorgan to fundamentally outperform its peers," as JPMorgan "was not a major player in the securitization of collateralized debt obligations" and "exercised discipline in avoiding a building in inventory" of syndicated loans. 5

<sup>&</sup>lt;sup>5</sup>Azarchs, T. (2008, Dec. 19). JPMorgan Chase & Co. Unsecured Cut To 'A+'; JPMorgan Chase Bank N.A. Downgraded To 'AA-'. *Standard & Poor's Ratings Services*.



<sup>&</sup>lt;sup>4</sup>Katze, S. (2008, Nov. 25). What's in the Cards? *Credit Suisse*.

The Washington Mutual transaction, a "sweetheart deal," provides JPMorgan with "all of the positive aspects of Washington Mutual - i.e., its deposits and branches," which is added to a stable capital base.<sup>6</sup> "JPMorgan recorded deposit growth, despite difficult market conditions in September and October 2008," stated by Moody's in November.<sup>7</sup>

Management states in the 2007 Annual Report that in this current environment, "maintaining (and continuing to maintain) extremely high liquidity," is critically important. JPMorgan "currently has on average a range of \$20 billion to \$50 billion in overnight investments," for its liquidity needs. JPMorgan's additional liquidity sources are "unpledged securities and unutilized FHLB [Federal Home Loan Banks]."<sup>8</sup>

"Capital is adequate" noted S&P in October "after the \$11.5 billion of equity raised in connection with the Washington Mutual transaction." Unlike its peers, JPMorgan "has not needed to raise capital to offset large write-offs," but "did so in connection with the acquisition of Washington Mutual." S&P believes that "further support would be forthcoming" from the Treasury if needed in the future.

Compared to its peer group, JPMorgan "has the highest Tier 1 ratio." The Tier One Ratio, as of September 30, 2008, of 8.9% would increase to 10.9% with the inclusion of the \$25 billion investment by the U.S. government.<sup>12</sup>

In terms of asset quality, "JPMorgan has already taken a \$30 bil. purchase accounting adjustment on a \$176 bil. loan portfolio and has credit reserves of roughly \$10 bil"; these actions should limit the credit provision costs in 2009. In addition, analysts have noted that "JPMorgan appears to be carrying some of the most conservative marks on its loans."

However, JPMorgan's major credit risk is its "residential mortgage book" that "contributed most of the 26% rise in non-performing assets on JPMorgan's loans (excluding Washington Mutual's portfolio)." With the inclusion of Washington Mutual's nonperforming loans, JPMorgan's nonperforming loan balance of \$6.7 billion as of September 30, 2008 would double.

#### **Off-Balance Sheet Arrangements**

JPMorgan has several types of off-balance sheet arrangements, including arrangements with SPEs and issuance of lending-related financial instruments (e.g., commitments and guarantees). For certain liquidity commitments to SPEs, JPMorgan is required to provide funding if the short-term credit rating of JPMorgan Bank, N.A., is downgraded

<sup>&</sup>lt;sup>6</sup>Bove, R. (2008, Dec. 8). J.P. Morgan Chase (JPM): New Deposits and Government Stimulus. *Ladenburg Thalmann & Co. Inc. Equity Research*.

<sup>&</sup>lt;sup>7</sup>Moody's Investors Service Global Credit Research. (2008, Nov. 3). Liquidity Risk Assessment.

<sup>&</sup>lt;sup>8</sup>Jones, S. (2008, Oct. 31). Credit Opinion: JPMorgan Chase & Co. *Moody's Investors Service*.

<sup>&</sup>lt;sup>9</sup>Azarchs, T. (2008, Oct. 16). Summary: JPMorgan Chase & Co. Standard & Poor's Rating Services.

<sup>&</sup>lt;sup>10</sup>Azarchs, T. (2008, Dec. 19). JPMorgan Chase & Co. Unsecured Cut To 'A+'; JPMorgan Chase Bank N.A. Downgraded To 'AA-'. *Standard & Poor's Ratings Services*.

<sup>&</sup>lt;sup>11</sup>Whitney, M. (2008, Oct. 16). JP Morgan Chase & Company: JPM 3Q08 Earnings. *Oppenheimer & Co. Equity Research*.

<sup>&</sup>lt;sup>12</sup>Jones, S. (2008, Oct. 31). Credit Opinion: JPMorgan Chase & Co. *Moody's Investors Service*.

<sup>&</sup>lt;sup>13</sup>Trone, D. (2008, Oct. 6). 3Q Preview: Write-downs Greater than Expected. *Fox-Pitt Kelton Cochran Caronia Waller Equity Research*.

below specific levels, primarily "P-1", "A-1" and "F1" for Moody's, S&P, and Fitch Ratings, respectively. The amount of these liquidity commitments is \$65.0 billion and \$94.0 billion at September 30, 2008, and December 31, 2007, respectively.

### Off-Balance Sheet Lending-Related Financial Instruments and Guarantees

alance Sheet Arrangements		
	12/31/2007	9/30/2008
Consumer		
Credit Card	714,800	784,90
Home Equity Lending-related Commitments	74,200	97,10
Wholesale		
Other Unfunded Commitments to Extend Credit <sup>1,2,3,4</sup>	250,954	248,07
Asset Purchase Agreements <sup>5</sup>	90,105	59,47
Standby Letters of Credit and Guarantees <sup>2,6,7</sup>	100,222	94,00
Other Letters of Credit <sup>2</sup>	5,371	6,26
Total Lending-related	1,235,652	1,289,82
Other Guarantees		
Securities Lending Guarantees <sup>8</sup>	385,758	270,18
Derivatives Qualifying as Guarantees <sup>9</sup>	85,262	102,81
Auction Rate Securities <sup>10</sup>	3,000	3,00
Residual Value Guarantees <sup>11</sup>	670	67
Loans Sold with Recourse <sup>12</sup>	557	15,70

- 1.) Included unused advised lines of credit totaling \$34.2 billion at September 30, 2008, and \$38.4 billion at December 31, 2007, which are not legally binding. Per regulatory filings with the Federal Reserve, unused advised lines are not
- 2.) Represents contractual amount net of risk participations totaling \$29.2 billion and \$28.3 billion at September 30, 2008, and December 31, 2007, respectively.
- 3.) Excluded unfunded commitments to third-party private equity funds of \$931 million and \$881 million at September 30, 2008, and December 31, 2007, respectively, and for other equity investments of \$865 million and \$903 million at September 30, 2008, and December 31, 2007, respectively.
- 4.) Included in other unfunded commitments to extend credit are commitments to investment and noninvestment grade counterparties in connection with leveraged acquisitions of \$5.9 billion and \$8.2 billion at September 30, 2008, and December 31, 2007, respectively.
- 5.) Largely represents asset purchase agreements to administered multi-seller, asset-backed commercial paper conduits. It also includes \$221 million and \$1.1 billion of asset purchase agreements to other third-party entities at September 30, 2008, and December 31, 2007, respectively.
- 6.) Held collateral relating to \$19.0 billion and \$15.8 billion of these arrangements at September 30, 2008, and December 31, 2007, respectively.
- 7.) Included unused commitments to issue standby letters of credit of \$40.9 billion and \$50.7 billion at September 30, 2008, and December 31, 2007, respectively.
- 8.) Collateral held in support of securities lending indemnification agreements was \$275.0 billion at September 30, 2008, and \$390.5 billion at December 31, 2007, respectively. Securities lending collateral is comprised primarily of cash, Organisation for Economic Co-operation and Development government securities, and U.S. agency securities.
- 9.) Represents notional amounts of derivatives qualifying as guarantees.
- 10.) Offered to purchase an estimated \$3.0 billion in auction rate securities ("ARS") from certain customers. The estimated difference between the aggregate purchase price and market value of the ARS is approximately \$375 million on a pretax basis. This cost was recognized in the third quarter of 2008.
- 11.) Succeeded to an operating lease for the building located at 383 Madison Avenue in NYC. There was no expected shortfall and the maximum residual value guarantee was approximately \$670 million.
- 12.) The Company provides servicing for mortgages and certain commercial lending products related to the WaMu transaction on both a recourse and nonrecourse basis.

Source: JPMorgan Chase Form 10-Q for the Quarterly Period Ended September 30, 2008.



#### C. Financial Overview

## Historical Financial Performance Summary Income Statement

	FY2005	FY2006	FY2007	LTM 9/30/2008
Net Interest Income	\$19,831	\$21,242	\$26,406	\$32,170
Non-Interest Revenue	34,229	38,756	40,523	31,540
Gain/Loss on Sale of Securities	473	817	4,443	1,532
Nonrecurring Revenue		1,184	-	2,168
Total Revenue	\$54,533	\$61,999	\$71,372	\$67,410
Provision for Loan Losses	\$3,483	\$3,270	\$6,864	\$16,208
Total Non-Interest Expenses	\$35,549	\$38,835	\$41,530	\$43,424
Income Before Taxes	\$12,215	\$19,886	\$22,805	\$8,237
Net Income	\$8,483	\$14,444	\$15,365	\$7,874

Source: SNL Financial.

Net interest income rose from the first nine months of 2007 to the first nine months of 2008 due to higher trading-related Net interest income; higher wholesale and consumer loan balances and growth in liability and deposit balances; wider spreads on credit card balances and deposit balances in RFS and AM; and a wider net interest spread in Corporate. These benefits were partially offset by a spread compression on deposit and liability products in Commercial Banking. JPMorgan's total average interest earning assets, as of September 30, 2008, were \$1.4 trillion, up 10.7% from September 30, 2007.

The decrease in non-interest revenue was the result of net markdowns on mortgage-related positions and leveraged lending funded and unfunded commitments, losses on preferred securities of Fannie Mae and Freddie Mac, and losses on private equity investments. Also contributing to the decline in total non-interest revenue was lower investment banking fees as well as JPMorgan's share of Bear Stearns' losses from April 8, 2008 to May 30, 2008.

During the first nine months of 2008, gains on sale of securities decreased due to the repositioning of Corporate's investment securities portfolio.

As a result, total revenue was \$50.0 billion, down \$4.0 billion, or 7.3%, from the prior year's period. The decrease was due to a decline in non-interest revenue of \$9.0 billion, or 28.8%, from the prior year period, which was partially offset by an increase in net interest income of \$5.8 billion, or 30.0%.

The provision for loan losses in the first nine months of 2008 rose significantly when compared to the prior-year period due to increases in both the consumer and wholesale provisions for loan losses. Affecting both the consumer and wholesale provisions was a \$2.0 billion charge to conform Washington Mutual's loan loss allowance. The increase in the wholesale provision for credit losses was driven by the weakening credit environment and loan growth. The wholesale provision for credit losses also included the transfer of funded and unfunded leverage lending

commitments to retained loans from held-for-sale. The increase in the consumer provision for credit losses reflected higher estimated losses for the home equity, subprime mortgage, prime mortgage, and credit card loan portfolios.

For the first nine months of 2008, total non-interest expense was \$32.7 billion, up \$1.9 billion, or 6.2%, from the prior year. The increase in the period was driven by higher compensation expense and additional operating costs relating to the Bear Stearns merger, partially offset by lower performance-based incentives.

Net income for the first nine months of 2008 was \$4.9 billion, or \$1.32 per share, compared with net income of \$12.4 billion, or \$3.52 per share, for the first nine months of 2007. Net income has been negatively impacted by increased credit costs; however, "the level of credit costs for JPMorgan has been comparatively less than most of its universal banking peers. <sup>14</sup> Return on average equity for the period was 6.2%, compared with 14.0% in the prior year period.

## Historical Financial Performance **Profitability Ratios**

Profitability Ratios				
	FY2005	FY2006	FY2007	9/30/2008 <sup>(1)</sup>
Profitability				
Net Interest Margin	2.19%	2.16%	2.39%	2.63%
Return on Average Assets	0.72%	1.10%	1.06%	0.48%
Return on Average Equity	8.02%	13.04%	12.94%	6.17%
Non-Interest Income / Revenue	63.32%	64.60%	60.55%	49.51%

<sup>&</sup>lt;sup>(1)</sup>Profitability performance ratios reflect LTM figures as of 9/30/08. Source: SNL Financial.

Despite the deteriorating market conditions, "JPMorgan has fared somewhat better than peers...reporting positive earnings in each quarter." Analysts predict continued growth in consumer loan losses, but it is not expected that these loan losses will "produce bottom-losses." 15

Moody's view is JPMorgan's recent profitability performance "has improved markedly and is no longer inferior to its major-bank peers in the U.S. (Citigroup, BofA, Wachovia, and Wells Fargo)," but this performance has been "negated by marks taken since 3007 and also by the heightened loan-loss provisions."16

Sources:

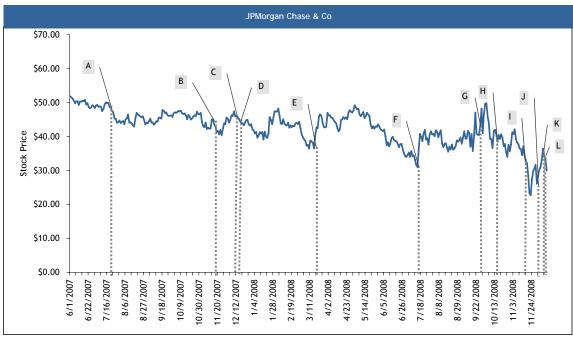
<sup>&</sup>lt;sup>14</sup>Jones, S. (2008, Oct. 31). Credit Opinion: JPMorgan Chase & Co. *Moody's Investors Service*.

<sup>&</sup>lt;sup>15</sup>Azarchs, T. (2008, Oct. 16). Summary: JPMorgan Chase & Co. Standard & Poor's Rating Services.

<sup>&</sup>lt;sup>16</sup> Jones, S. (2008, Oct. 31) Credit Opinion: JPMorgan Chase & Co. *Moody's Investors Service*.

### D. Stock Price Performance and Valuation Multiples

# Stock Performance June 1, 2007 through December 12, 2008



Source: SNL Financial.

- A.) July 18, 2007: JPMorgan Chase & Co. announced that it has repurchased \$1.9 billion of common stock, representing 36.7 million shares purchased at an average price of \$51.13 per share. Source: Reuters.
- B.) November 14, 2007: JPMorgan Chase & Co. reported that it sold \$1.5 billion in corporate debt to raise capital after a series of recent large write-downs on mortgage investments. Source: Reuters.
- C.) December 11, 2007: JPMorgan Chase & Co. was downgraded by Keefe Bruyette & Woods from "Outperform" to "Market Perform." Source: Reuters.
- D.) December 17, 2007: JPMorgan Chase & Co. was downgraded by Citigroup from a "Buy" to a "Hold." Source: Reuters.
- E.) March 16, 2008: JPMorgan Chase & Co. announced it is acquiring the Bear Stearns Companies Inc. for approximately \$2 per share. Source: Reuters.
- F.) July 15, 2008: JPMorgan Chase & Co. announced today that it has completed the merger of Bear Stearns Preferred Stock into JPMorgan Preferred Stock. *Source: Reuters*.
- G.) September 25, 2008: JP Morgan Chase & Co. acquired the banking operations of Washington Mutual Bank from the Federal Deposit Insurance Company. Source: JPMorgan Chase Form 10-Q for the Quarterly Period Ended September 30, 2008.
- H.) October 14, 2008: Treasury will buy \$25 billion in preferred stock from J.P. Morgan. The agreement with the Treasury imposes restrictions on dividend and stock repurchases. *Source: MarketWatch.*
- I.) November 17, 2008: JPMorgan Chase & Co. announced it will cut more than 3,000 jobs in the coming year. Source: HartfordBusiness.com.
- J.) December 1, 2008: JPMorgan Chase & Co. to eliminate 9,200 jobs at Washington Mutual. The firm expects to cut 4,000 jobs by the end of January with the rest by the end of 2009. Source: Reuters.
- K.) December 8, 2008: Ladenburg Thalmann upgraded JPMorgan Chase & Co.'s rating to a "Buy" from a "Neutral." Source: CNBC.
- L.) December 9, 2008: JP Morgan Chase & Co. declared a quarterly dividend of 38 cents per share on the outstanding shares of the common stock and quarterly dividend to the outstanding shares of 6.15% Cumulative Preferred Stock Series E of \$3.075 per share; 5.72% Cumulative Preferred Stock, Series F of \$2.86 per share; and 5.49% Cumulative Preferred Stock, Series G of \$2.745 per share. JPMorgan Chase continues to target a dividend payout ratio of approximately 30-40% of net income. Source: JPMorgan Chase & Co. press release.

# JPMorgan Chase & Co.

# Historical Financial Performance Valuation Multiples

	FY2005	FY2006	FY2007	9/30/2008	10/14/2008
Price / Book Equity	1.29x	1.44x	1.19x	1.26x	1.10x
Price / Tangible Book Equity	2.36x	2.52x	1.98x	1.98x	1.73x
Price / Earnings	16.7x	12.0x	10.0x	21.3x	19.6x
Dividend Yield	3.4%	2.8%	3.5%	3.3%	3.7%

Source: SNL Financial.

#### E. Outlook

As of December 12, 2008, 15 analysts were covering JPMorgan, and all 15 were publishing recommendations. The consensus recommendation was a "Hold" rating, with seven analysts, or 46.7%, of the current coverage universe, recommending investors "Hold" the stock, six analysts were carrying a "Buy/Hold" Rating, and two analysts were carrying a "Buy" rating. This is a slight improvement compared to the analyst recommendations for JPMorgan three months earlier, at which time, six analysts were carrying a "Buy/Hold" rating, one analyst was carrying a "Buy" rating, and nine analysts, or 56.3%, of the total, were carrying a "Hold" recommendation.

# Wall Street Analyst Recommendations December 12, 2008

Date	12/12/	/2008	1 Month Prior	3 Months Prior	Cha	ange
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months
Buy	2	13%	1	1	+1	+1
Buy/Hold	6	40%	6	6	0	0
Hold	7	47%	8	9	-1	-2
Weak Hold	0	0%	0	0	0	0
Sell	0	0%	0	0	0	0
No Opinion	0	0%	0	0	0	0

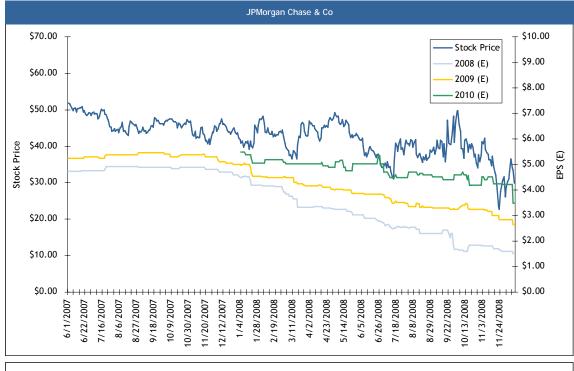
Source: Standard & Poor's Stock Report (2008, Dec.12).

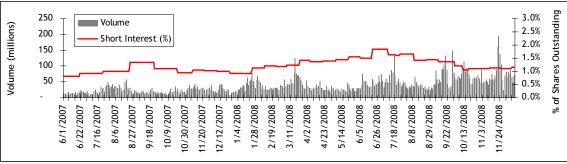
# Percentage of Total Analyst Recommendations December 12, 2008



Source: Standard & Poor's Stock Report. (2008, Dec. 12).

Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008





Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the average estimate for JPMorgan's expected 2009 EPS declined 49.6% from an average estimated EPS of \$5.26 to an average estimated EPS of \$2.65 per share for the fiscal year ending December 31, 2009. This decline in the EPS estimates highlights the negative shift in the near-term outlook for JPMorgan.

An overview of some of the recent commentary written by the various equity analysts that cover JPMorgan is provided below.

# Ladenburg, December 8, 2008<sup>17</sup>

- Ladenburg lowered earnings estimates for fourth quarter 2008 due to several reasons including heightened concerns over widening spreads and additional writedowns. At the same time, however, Ladenburg increased the rating from a "Neutral" to a "Buy" and raised the 2009 and 2010 EPS estimates.
- Ladenburg stated that concerns for the remainder of the year are related to "severance costs associated with the acquisition of the assets of legacy Washington Mutual. Plus, the company will be recording much higher dividend costs associated with the \$25 billion increase in capital received from the United States Treasury."
- However, Ladenburg has a more positive outlook for 2009 as "the Washington Mutual acquisition should contribute meaningfully to earnings." Ladenburg added that due to actions taken by the Bush administration, "it appears that the spreads now penalizing earnings will shift and allow for some mark ups in asset values."

# FPK, November 13, 2008<sup>18</sup>

- FPK lowered its fiscal fourth-quarter 2008 EPS estimate from \$0.65 to \$0.25.
- FPK stated that this EPS estimate cut reflects "(a) writedowns (-\$0.17); (b) additional reserve build (-\$0.15); (c) lower gain on Paymentech sale as disclosed in 10Q (-\$0.05); and (d) higher private equity losses (-\$0.03)."
- Although FPK is cautious of the IB and CB lines of business and the Company's high exposure to all areas of consumer credit, FPK views "JPMorgan as an outperformer for those that want/need to have exposure in financials" due to its "strong capital buffer and fortuitous fire-sale acquisitions of Bear Stearns and Washington Mutual."

# Oppenheimer, October 16, 2008<sup>19</sup>

- Oppenheimer report discussed increasing its 2008 EPS estimates for JPMorgan based on higher than expected EPS earnings in Q3.
- However, Oppenheimer's 2009 EPS estimate remained unchanged based upon "greater expectations for home equity losses" with respect to Retail Financial Services.
- Oppenheimer also cites how JPMorgan can be hurt on many fronts; specifically, JPMorgan "faces increased funding costs due to prime/LIBOR compression, as it could cost the company \$100M [million]/month in the card services business." In addition, Oppenheimer "acknowledged that continued lower earnings were a reasonable expectation" for its Investment Banking business.

<sup>&</sup>lt;sup>17</sup>Bove, R. (2008, Dec. 8). J.P. Morgan Chase (JPM): New Deposits and Government Stimulus. *Ladenburg Thalmann & Co. Inc. Equity Research*.

<sup>&</sup>lt;sup>18</sup>Trone, D. (2008, Nov. 13). CEO Lowers Outlook Further on Still Weakening Consumer. *Fox-Pitt Kelton Cochran Caronia Waller Equity Research*.

<sup>&</sup>lt;sup>19</sup>Whitney, M. (2008, Oct. 16). JPM Chase & Company: JPM 3Q08 Earnings. *Oppenheimer & Co. Equity Research*.

Credit Default Swaps
June 1, 2007 through December 12, 2008



A.) October 14, 2008: Treasury will buy \$25 billion in preferred stock from J.P. Morgan. The money will come from the \$700 billion that Congress allocated for the Trouble Asset Relief Program (TARP) Source: MarketWatch.

Sources: Capital IQ, Bloomberg.

CDSs are used to hedge against losses or to speculate on the ability of a company to repay their debt. The spread on a CDS rises as investor confidence deteriorates. A basis point ("bps") on a credit-default swap contract protecting \$10 million of debt from default for five years is equivalent to \$1,000 a year.

As demonstrated in the figure above, the spread on JP Morgan's five year credit-default swaps has increased 131.97 bps from 14.85 bps at June 1, 2007 to 146.82 bps at December 12, 2008. During this time frame, JPMorgan's five year CDS spread reached as high as 196.34 bps on September 17, 2008. The overall increase indicates heightened concern that JPMorgan will default on its debt. JP Morgan commented on these credit spreads in its third quarter 2008 10-Q stating that, "the market's view of [JPMorgan]'s credit quality is reflected in credit spreads observed in the credit default swap market. These credit spreads are affected by a number of factors such as the performance of the assets [JPMorgan] holds. Consequently, significant deterioration in the value of sizable exposures held by [JPMorgan], are likely to result in wider credit default swap spreads."

### JPMorgan Chase & Co.

### Credit Ratings December 19, 2008

Credit Ratings							
	Senior Debt	Commercial Paper	Outlook				
Fitch Ratings	AA-	F1+	Stable				
Moody's Investor Service	Aa2	P-1	Negative				
Standard & Poor's	A+	A-1	Negative				

Sources: Bloomberg, JPMorgan Chase Form 10-Q for the Quarterly Period Ended September 30, 2008.

S&P, December 19, 2008<sup>20</sup>

On December 19, 2008, S&P lowered its senior unsecured debt ratings on JPMorgan & Co. to 'A+' from 'AA-'. S&P also lowered JPMorgan's commercial paper rating to 'A-1' from 'A-1+' with a negative outlook. The rating actions reflect S&P's "negative view of the level of risk associated with the range of activities pursued by major financial institutions." S&P also notes that JPMorgan's "very large exposure to consumer lending, including mortgages and credit cards, will lead to mounting loan losses and the need to add to reserves." As a result, S&P believes these economic conditions will depress JPMorgan's earnings over the next few years.

Moody's, October 16, 2008<sup>21</sup>

Moody's announced that it will not change its negative outlook on JPMorgan as it does not foresee a quick resolution to the current economic conditions. However, Moody's believes "characteristics that support JPMorgan's high ratings, nevertheless, remain in place." Among these are, "a very broad franchise, prudent liquidity profile and strong capital." In addition, Moody's notes that JPMorgan will maintain a strong capital position as a result of the \$25 billion capital infusion by the government. However, Moody's rates the senior debt Aa2 based on the outlook that "JPMorgan's earnings remain deflated because of poor market conditions."

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<sup>&</sup>lt;sup>20</sup>Azarchs, T. (2008, Dec. 19) JPMorgan Chase & Co. Unsecured Cut To 'A+'; JPMorgan Chase Bank N.A. Downgraded To 'AA-'. *Standard & Poor's Rating Services*.

<sup>&</sup>lt;sup>21</sup>Jones, S. (2008, Oct. 16). Moody's comments on JPMorgan Chase's 3Q08 results. *Moody's Investors Service*.



# Appendix F. Company Overview

**Morgan Stanley** 

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM MORGAN STANLEY'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED NOVEMBER 30, 2007, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED AUGUST 31, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

### A. Business Overview

Morgan Stanley is a diversified financial services firm that provides products and services to a large group of clients and customers, including corporations, governments, financial institutions and individuals. Morgan Stanley is publicly traded on the NYSE under the ticker symbol MS. Morgan Stanley is headquartered in New York, New York, and maintained 46,383 worldwide employees as of August 31, 2008.

On June 30, 2007, Morgan Stanley completed the spin-off of Discover Financial Services ("DFS"). Subsequently, the results of DFS are not included in the financials reported throughout this section.

Morgan Stanley segments its business into three primary service lines: Institutional Securities, Global Wealth Management Group, and Asset Management.

### **Institutional Securities**

Morgan Stanley's Institutional Securities division is sub-divided into three primary segments:

- Investment Banking: Morgan Stanley provides capital raising services, such as public offerings and private placements of debt, equity and other securities; financial advisory services, such as mergers and acquisitions, divestitures, corporate defense strategies, joint ventures, privatizations, recapitalizations, spin-offs, corporate restructurings, shareholder relations, tender offers, exchange offers and leveraged buyouts; and corporate lending.
- Sales and Trading Activities: Morgan Stanley conducts sales, trading, financing and market-making activities on securities and futures exchanges and in over-the-counter markets around the world. In addition, Morgan Stanley provides financing services, including prime brokerage, principal securities lending to clients, institutional lenders and other broker-dealers.
- Other Activities: Morgan Stanley calculates and distributes benchmark indices and risk management analytics; conducts global research covering equity and fixed income, the U.S. and global economies, financial markets, portfolio strategy, technical market analyses, individual companies, and industry developments; and publishes reports on ABS and the markets in which such securities are traded. In addition, Morgan Stanley makes investments that represent business facilitation or principal investing activities.

### **Global Wealth Management**

Morgan Stanley's Global Wealth Management segment provides brokerage and investment advisory services covering various investment alternatives, financial and wealth planning services, annuity and other insurance products, credit and other lending products, cash management services, retirement services, and trust and fiduciary services. Morgan Stanley's Global Wealth Management group serves individual investors and small-to-medium size businesses and institutions with an emphasis on ultra high net worth, high net worth and affluent investors. To this base of customers, Morgan Stanley offers a comprehensive array of financial solutions, including Morgan Stanley's products and services, and products and services from third party providers, such as insurance companies and mutual fund families.

### Asset Management

Morgan Stanley provides Asset Management services to institutional investors, including pension plans, corporations, private funds, non-profit organizations, foundations, endowments, governmental agencies, insurance companies and banks, and retail clients through proprietary and third-party retail distribution channels, intermediaries and Morgan Stanley's institutional distribution channel. Morgan Stanley offers clients investments in equity, fixed income, alternative investments (including hedge funds and fund of funds), and merchant banking (which includes real estate, private equity and infrastructure).

### Revenue<sup>1</sup> By Business Line



<sup>&</sup>lt;sup>1</sup> Excludes \$238 million and \$143 million of unallocated intercompany eliminations for fiscal year 2007 and year to date August 31, 2008, respectively. Source: SEC filings.

### B. Balance Sheet Composition

### Historical Financial Summary Balance Sheet

(\$ in millions)				
	FY2005	FY2006	FY2007	8/31/2008
Total Investments	\$165,312	\$253,010	\$248,487	\$234,419
Total Assets	898,835	1,121,192	1,045,409	987,403
Risk-Weighted Assets	NA	NA	NA	\$296,587
Assets Under Management	563,000	645,000	775,000	729,000
Total Debt	\$402,393	\$487,192	\$415,731	\$362,007
Bank Deposits	\$18,663	\$28,343	\$31,179	\$36,774
Preferred Equity	\$0	\$1,100	\$1,100	\$1,100
Tangible Equity	26,682	31,921	27,198	31,769
Total Equity	29,182	35,364	31,269	35,765

Source: SNL Financial.

In response to the market disruptions in September 2008, Morgan Stanley implemented certain actions to further support its liquidity position. These actions included, but were not limited to, the hypothecation of previously unencumbered collateral, selective reduction in certain funding and balance sheet intensive businesses, selective asset reduction through sales, and pledging collateral to federal government-sponsored lending programs. As a result of these actions, Morgan Stanley has significantly reduced its Total Assets and Total Debt (down approximately 6% and 13%, respectively, year over year), while increasing its capital base (up approximately 14% year over year).

Morgan Stanley seeks to maintain target liquidity reserves to cover funding needs and liquidity targets. Morgan Stanley's total liquidity reserve levels subsequent to August 31, 2008 declined, but remained at levels well in excess of those observed on average for 2007. As of August 31, 2008, management of Morgan Stanley believed that Morgan Stanley's total liquidity reserve levels, access to expanded sources of funding and liquidity resulting from the Federal Reserve's policies, newly acquired status as a financial holding company, and continued focus on reducing total assets and leverage will be sufficient to meet ongoing business requirements. The table below summarizes Morgan Stanley's liquidity reserves split between the global parent and its bank subsidiary and non-bank subsidiaries.

### **Liquidity Reserves**

(\$ in billions)

		Average Balance		
		For the Three Months	For the Nine Months	
Liquidity Reserve	At August 31, 2008	Ended August 31, 2008	Ended August 31, 2008	
Parent <sup>(1)</sup>	\$77	\$81	\$75	
Bank Subsidiaries	35	31	26	
Non-Bank Subsidiaries	67	63	43	
Total	\$179	\$175	\$144	

<sup>(1)</sup> Parent company liquidity reserve consists of overnight cash deposits and unencumbered U.S. and European government bonds, and other high-quality collateral.

Source: SEC filings.

# Assets and Liabilities Measured at Fair Value on Recurring Basis August 31, 2008

(\$ in millions)

	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs	Counterparty and Cash	Balance as of
	(Level One <sup>1</sup> )	(Level Two <sup>2</sup> )	(Level Three <sup>3</sup> )	Collateral Netting	8/31/08
Assets:					
Cash and Securities Deposited With Clearing Organizations or Segregated					
Under Federal and Other Regulations or Requirements	\$21,775	\$-	\$-	\$-	\$21,775
Financial Instruments Owned:					
U.S. Government and Agency Securities	10,785	17,816	354	-	28,955
Other Sovereign Government Obligations	28,629	7,382	25	-	36,036
Corporate and Other Debt	133	85,774	32,979	-	118,886
Corporate Equities	75,928	4,403	980	-	81,311
Derivative and Other Contracts	3,112	128,011	31,454	(74,997)	87,580
Investments	654	1,840	12,305	-	14,799
Physical Commodities		3,988	-		3,988
Total Financial Instruments Owned	\$119,241	\$249,214	\$78,097	(\$74,997)	\$371,555
Securities Received as Collateral	15,737	3,496	2	-	19,235
Intangible Assets	\$-	\$-	\$278	\$-	\$278
Liabilities:					
Commercial Paper and Other Short-Term Borrowings	\$-	3,858	\$-	\$-	3,858
Financial Instruments Sold, Not Yet Purchased:					
U.S. Government and Agency Securities	8,805	1,414	-	-	10,219
Other Sovereign Government Obligations	13,058	4,709	-	-	17,767
Corporate and Other Debt	67	10,125	1,202	-	11,394
Corporate Equities	40,548	1,619	13	-	42,180
Derivative and Other Contracts(1)	5,022	103,280	16,302	(56,203)	68,401
Physical Commodities		464	-	-	464
Total Financial Instruments Sold, Not Yet Purchased	\$67,500	\$121,611	\$17,517	(\$56,203)	\$150,425
Obligation to Return Securities Received as Collateral	15,737	3,496	2	-	19,235
Other Secured Financings	-	19,695	3,025	-	22,720
Long-Term Borrowings	\$-	\$37,472	\$5,642	\$-	\$43,114

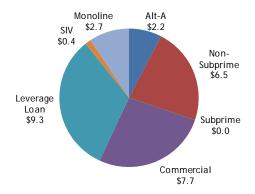
- <sup>1</sup> Level One Assets use unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- <sup>2</sup> Level Two Assets use quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly.
- <sup>3</sup> Level Three Assets use prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

Source: SEC filings.

Between the fiscal year ending November 30, 2007 and the third quarter ending August 31, 2008, Morgan Stanley increased its Level One assets from \$115 billion to \$119 billion. Morgan Stanley's Level Three Assets also increased through the quarter, to approximately \$78 billion. The increase in Level Three Assets was primarily a result of increases in corporate and other debt derivatives.

## Net Exposure to Residential Real Estate, Commercial Real Estate, and Leveraged Loans as of August 31, 2008

(\$ in billions)



Source: SEC filings.

As of August 31, 2008, Morgan Stanley had total exposure to residential real estate, commercial real estate, leveraged loans, SIVs and monoline insurers of \$28.8 billion, representing an 11.7% decrease from the previous quarter and 57.0% decrease from the fiscal year ending November 30, 2007. In addition, as of August 31, 2008, Morgan Stanley had effectively no net exposure to subprime residential real estate.

While Morgan Stanley does not sponsor or serve as asset manager to any unconsolidated SIVs, Morgan Stanley does serve as investment advisor to certain unconsolidated money market funds that have investments in securities issued by SIVs. As a result, Morgan Stanley has purchased and amortized cost associated with securities issued by SIVs. During the quarter and nine month period ending August 31, 2008, Morgan Stanley recorded losses of \$10 million and \$283 million, respectively, on these securities. Morgan Stanley continues to have investments in securities issued by SIVs, with an aggregate face value of approximately \$400 million as of August 31, 2008, compared to \$8.2 billion as of November 30, 2007.

Monolines provide credit enhancement to capital market transactions. Morgan Stanley's direct exposure to the monolines is limited to bonds that are insured by the monolines and as counterparties to derivative contracts. Morgan Stanley's aggregate exposure to the monolines at August 31, 2008 was \$2.7 billion.

### Financial Assets Securitized and Retained Interests August 31, 2008

(\$ in millions)

	QSPE	Retained
	Assets	Interests
Residential Mortgage Loans	\$70,710	\$874
Commercial Mortgage Loans	113,888	556
U.S. Agency Collateralized Mortgage Obligations	29,623	674
Other	3,751	-
Total	\$217,972	\$2,104

Source: SEC filings.

Morgan Stanley typically utilizes VIEs in its securitization activities related to commercial and residential mortgage loans, U.S. agency collateralized mortgage obligations, corporate bonds and loans, municipal bonds and other types of financial assets. Morgan Stanley does not consolidate certain securitization vehicles, commonly known as QSPEs, if they meet certain criteria based upon their allowed holdings and the types of sales they may engage in. The previous table presents the total assets (unpaid principal amount) of, and retained interests in, QSPEs to which Morgan Stanley, acting as principal, has transferred assets and received sales treatment.

## Key Fair Value Economic Assumptions & Sensitivity August 31, 2008

(\$ in millions)

			U.S. Agency
	Residential	Commercial	Collateralized
	Mortgage Loans	Mortgage Loans	Mortgage Obligations
Investment Grade Retained Interests	\$780	\$435	\$674
Non-Investment Grade Retained Interests	94	121	-
Total Retained Interests (carrying amount/fair value)	\$874	\$556	\$674
Weighted Average Life (in months)	58	31	65
Range	4.0 - 230	3.0 - 111	4.0 - 270
Weighted Average Discount Rate (per annum)	14.54%	13.24%	6.58%
Range	5.84 - 107.32%	3.00 - 37.17%	0.25 - 51.85%
Impact on Fair Value of 10% Adverse Change	(\$27.0)	(\$12.0)	(\$16.0)
Impact on Fair Value of 20% Adverse Change	(\$52.0)	(\$24.0)	(\$31.0)
Weighted Average Credit Losses <sup>(1),(2)</sup>	4.33%	10.77%	0.00%
Range	0.00 - 33.61%	0.00 - 33.90%	0.00 - 0.00%
Impact on Fair Value of 10% Adverse Change	(\$10.0)	(\$7.0)	\$-
Impact on Fair Value of 20% Adverse Change	(\$17.0)	(\$14.0)	\$-
Weighted Average Prepayment Speed Assumption ("PSA") <sup>(3)</sup>	796	-	267
Range	0 - 1,038 PSA	-	139 - 529 PSA
Impact on Fair Value of 10% Adverse Change (4)	(\$12.0)	\$-	(\$4.0)
Impact on Fair Value of 20% Adverse Change <sup>(4)</sup>	(\$23.0)	\$-	(\$8.0)

<sup>(1)</sup> Residential mortgage loans credit loss rate stated in terms of cumulative loss rate. Commercial mortgage loans credit loss rate stated in terms of annualized loss rate.

Source: SEC filings.

The previous table sets forth the current weighted average key economic assumptions used in measuring the fair value of Morgan Stanley's retained interests in residential mortgage loans, commercial mortgage loans, and U.S. Attorney Collateralized Mortgage Obligations. The table also illustrates the sensitivity of this fair value to immediate adverse changes of 10% and 20% in those assumptions. During the nine month period ending August 31, 2008 and 2007, Morgan Stanley received proceeds from new securitization transactions of \$7.0 billion and \$55.9 billion, respectively, and cash flows from retained interests in securitization transactions of \$2.2 billion and \$4.1 billion, respectively.

<sup>(2)</sup> Credit losses are computed only on positions for which expected credit loss is either a key assumption in the determination of fair value or is not reflected in the discount rate.

<sup>(3)</sup> Commercial mortgage loans typically contain provisions that either prohibit or economically penalize the borrower from prepaying the loan for a specified period of time.

<sup>(4)</sup> Amounts for residential mortgage loans exclude positive valuation effects from immediate 10% and 20% changes.

### Variable Interest Entities

Morgan Stanley's interests in VIEs include debt and equity interests, commitments, guarantees, and derivative instruments. The table below presents information about Morgan Stanley's total assets and maximum exposure to losses associated with VIEs as of August 31, 2008 which Morgan Stanley consolidates in its financial results.

### Maximum Exposure to Loss in Consolidated VIEs

(\$ in millions)

	VIE Assets That	At August 31, 2008 Maximum Exposure to Loss in Consolidated VIEs				
	the Company	Debt and	Commitments			
	Consolidates	Equity Interests	Derivatives	and Guarantees	Total	
Mortgage and Asset-Backed Securitizations	\$5,218	\$1,517	\$6	\$-	\$1,523	
Municipal Bond Trusts	997	14	-	983	997	
Credit and Real Estate	4,713	2,927	2,167	-	5,094	
Commodities Financing	1,075	-	157	-	157	
Other Structured Transactions	16,023	13,629		9	13,638	
Total	\$28,026	\$18,087	\$2,330	\$992	\$21,409	

Source: SEC filings.

The following table presents information about Morgan Stanley's total assets and maximum exposure to losses associated with non-consolidated VIEs as of August 31, 2008 in which Morgan Stanley had significant variable interests.

### Maximum Exposure to Loss in Non-Consolidated VIEs

(\$ in millions)

	VIE Assets That	At August 31, 2008 Maximum Exposure to Loss in Non-consolidated VIEs				
	the Company Does	Debt and	Commitments			
	Consolidate	Equity Interests	Derivatives	and Guarantees	Total	
Mortgage and Asset-Backed Securitizations	\$5,335	\$73	\$53	\$-	\$126	
Municipal Bond Trusts	407	262	-	89	351	
Credit and Real Estate	8,255	4,284	711	-	4,995	
Other Structured Transactions	13,741	2,269	-	495	2,764	
Total	\$27,738	\$6,888	\$764	\$584	\$8,236	

Source: SEC filings.

Morgan Stanley may retain servicing rights to certain mortgage loans that are sold through its securitization activities. These transactions create an asset referred to as Mortgage Servicing Rights, which totaled approximately \$278 million as of August 31, 2008 and are included within intangible assets in the consolidated statements of financial condition.

### Historical Financial Performance Balance Sheet Ratios

Balance Sheet Ratios				
	FY2005	FY2006	FY2007	8/31/2008
Balance Sheet				
Total Risk-Weighted Assets <sup>(1)</sup>	NA	NA	NA	\$296,587
Market Risk Assets as a Percentage of Total	NA	NA	NA	34%
Credit Risk Assets as a Percentage of Total	NA	NA	NA	49%
Operational Risk Assets as a Percentage of Total	NA	NA	NA	17%
Risk Based Capital Ratio <sup>(2)</sup>	NA	NA	NA	12.70%
Gross Leverage Ratio <sup>(3)</sup>	30.80%	31.70%	33.43%	27.60%
Debt / Equity	13.79%	13.78%	13.30%	10.12%
Tier One Ratio <sup>(4)</sup>	NA	NA	NA	12.70%
Total Level Three Assets	NA	NA	\$73,652	\$78,097
Total Level Three Assets as a % of Total Assets	NA	NA	7.0%	7.9%

Source: SNL Financial.

### <u>Definitions:</u>

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

At August 31, 2008, Morgan Stanley was regulated by the SEC as a CSE. On September 21, 2008, Morgan Stanley became a bank holding company. As a bank holding company, Morgan Stanley will be regulated by the Federal Reserve Board under the U.S. Bank Holding Company Act of 1956 and by the State of Utah Department of Financial Institutions. Subsequently, on September 26, 2008, the SEC announced that it was ending the CSE program. Morgan Stanley is now subject to Federal Reserve Board regulations and policies which will require compliance with minimum capital adequacy standards on a consolidated basis, may limit the amount of dividends Morgan Stanley can distribute to shareholders, and will subject Morgan Stanley to Federal Reserve Board scrutiny of its leverage ratio. As of August 31, 2008, Morgan Stanley was in compliance with all regulations and standards.

<sup>(1)</sup> Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

<sup>&</sup>lt;sup>(2)</sup> Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators generally consider a Risk Based Capital Ratio of 10% or above as well capitalized.

<sup>(3)</sup> Gross Leverage Ratio equals Total Assets divided by Total Shareholders' Equity.

<sup>&</sup>lt;sup>(4)</sup> Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Tier One Ratio of 4%. Federal bank regulators generally consider a Tier One Ratio of 6% or above as well capitalized.

As of August 31, 2008, Morgan Stanley maintained one of the highest levels of Tier One Capital in the industry. At that time, Morgan Stanley maintained an unadjusted Tier One Capital Ratio of 12.7%, compared to 11.6% for Goldman and approximately 8.9% for JP Morgan. In addition, pro forma for the investments from MUFG and the U.S. Government, Morgan Stanley's Tier One Capital ratio was 19.1%. Morgan Stanley has significantly decreased its debt load in recent periods, reducing its gross leverage to 27.6% from 29.9% at the end of the second quarter 2008. As a result of these actions in combination with Morgan Stanley's access to additional federal funds, "and availability of FDIC-guaranteed new debt, both liquidity and capital are no longer significant areas of contention [for Morgan Stanley]."

<sup>&</sup>lt;sup>1</sup> Sipkin, D. (2008, Dec. 8). Morgan Stanley: Fundamentally Sound And L-T Looking Like End Game Survivor. *Wachovia Capital Markets, LLC. Equity Research*.

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> Ibid

### C. Financial Overview

### Historical Financial Performance Summary Income Statement

Income Statement Summary (\$ in millions)				
	FY2005	FY2006	FY2007	LTM 8/31/2008
Total Revenue	\$23,214	\$29,799	\$27,979	\$22,478
Total Expense, Excluding Interest Expense	\$17,209	\$20,736	\$24,585	\$22,627
Income Before Taxes	\$6,005	\$9,063	\$3,394	(\$149)
Net Income	\$4,939	\$7,472	\$3,209	\$414

Source: SNL Financial.

Morgan Stanley's total revenue for the LTM period ending August 29, 2008 was \$22.4 billion, representing a 38% decline over the same LTM period a year earlier. The decrease in revenue is reflective of difficult market conditions. During the period, Morgan Stanley experienced sharp declines in its Institutional Securities and Asset Management businesses, while experiencing an overall increase in its Global Wealth Management business.

- Institutional Securities: Institutional Securities experienced a significant decline from previous periods. Primary causes of the strong decline included lower investment banking revenue, reflecting large industry-wide declines in mergers and acquisitions activities and fixed income and equity underwriting transactions; and lower sales and trading revenue resulting from dislocations in the credit markets.
- Global Wealth Management: Global Wealth Management revenues increased in the LTM period, primarily as a result of strength in Morgan Stanley's retail brokerage division.
- Asset Management: The Asset Management group's performance was down over previous periods as a result of investment losses resulting from writedowns on Morgan Stanley's residential and commercial sectors and lower fees as a direct result of lower assets under management, reflecting market depreciation and net outflows.

### Historical Financial Performance Profitability Ratios

Profitability Ratios				
	FY2005	FY2006	FY2007	8/31/2008
Profitability				
Return on Average Assets	0.60%	0.73%	0.27%	0.04%
Return on Average Equity	17.33%	23.23%	8.83%	1.22%

Source: SNL Financial.

In combination with its reduction in total leverage, Morgan Stanley has also pursued initiatives to expand its stable base of assets, such as with the expansion of its retail banking services (see the Historical Balance Sheet Summary). As a result, Morgan Stanley has experienced a decrease in overall profitability. As of August 31, 2008, Morgan Stanley's return on equity was down to 1.22% from 8.83% at the end of fiscal year 2007.

### D. Stock Price Performance and Valuation Multiples

### Stock Price Performance June 1, 2007 through December 12, 2008



### Notable Company Events

- A.) November-8-2007: MS revealed it suffered \$3.7 billion in losses from U.S. subprime mortgage exposure. Source: BBC.
- B.) May-6-2008: MS started cutting about 1,500 positions to trim expenses amid further market turmoil. Source: Capital IO.
- C.) June-2-2008: Standard & Poor's lowered the credit rating of Morgan Stanley on continued negative outlook. Source: Bloomberg.
- D.) July-23-2008: The NYC Attorney's Office filed two lawsuits against more than 30 financial institutions and bond insurers, alleging they engaged in fraud involving municipal investments. MS is named as a defendant in one lawsuit. Source: Capital IQ.
- E.) August-14-2008: The New York Attorney General announced that an agreement has been reached with Morgan Stanley to settle allegations that they made misrepresentations in their marketing and sales of Auction Rate Securities. Source: Capital IQ.
- F.) September-16-2008: Morgan Stanley announced earnings results for nine months ending August 31, 2008 with net income of \$4,002 million compared with \$6,797 million over the same period last year and declared its standard \$0.27 quarterly dividend per common share, payable on October 31, 2008. Source: Business Wire.
- G.) September-21-2008: Morgan Stanley switched status to become a bank holding company, allowing it to take deposits and have equal access to emergency funding from the central bank. Source: Belfast Telegraph.
- H.) September-29-2008: MS announced a private placement of common shares and convertible preferred shares by Mitsubishi UFJ Financial Group Inc. for \$9 billion, or approximately 9.9% of non-diluted common shares. Source: SEC fillings.
- I.) October-7-2008: MS and four other banks were named as targets of the Fannie Mae Preferred Stock 'Series T' class action lawsuit, filed in September, which alleges they put forth statements that were false and misleading. Source: Market Wire. October-9-2008: Morgan Stanley announced that it is the target of a class action lawsuit related to its involvement as an underwriter of a preferred share offering for Lehman Bros. earlier this year. Source: Market Watch.
- J.) October-13-2008: MS's private placement with Mitsubishi UFJ Financial Group Inc. officially closes. Source: SEC fillings.
- K.) October-26-2008: MS announced a private placement of 10 million shares of series D fixed rate cumulative perpetual preferred stock to be purchased by the U.S Department of Treasury for \$10 billion pursuant to the Troubled Asset Relief Program. Source: SEC filings.
- L.) November-12-2008: Morgan Stanley outlined plans to cut 10% of its staff. Source: The Street.com.

### **Historical Valuation Multiples**

Valuation Multiples					
	FY2005	FY2006	FY2007	8/31/2008	10/14/2008
Price / Book Equity	2.03x	2.33x	1.85x	1.31x	0.70x
Price / Tangible Book Equity	2.22x	2.59x	2.13x	1.48x	0.79x
Price / LTM Earnings	12.3x	10.8x	17.7x	NM	NM
Dividend Yield	1.9%	1.4%	2.1%	2.7%	4.9%
	11770		2.170	2.770	11770

Source: SNL Financial.

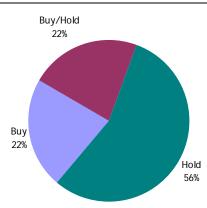
### E. Outlook

As of December 12, 2008, 18 analysts were covering Morgan Stanley and all 18 were publishing recommendations. The consensus recommendation for Morgan Stanley was a "Hold" rating, with 10 analysts, or 56% of the current coverage universe, recommending that investors "Hold" Morgan Stanley stock, four analysts were carrying a "Buy/Hold" Rating and four analysts were carrying a "Buy" rating. This is a slight improvement compared to the analyst recommendations for Morgan Stanley three months earlier, at which point, of the 19 analysts that were covering Morgan Stanley, two analysts were carrying a "Buy" rating, five analysts were carrying a "Buy/Hold" rating, and 12 analysts, or 63% of the total, were carrying a "Hold" recommendation.

## Wall Street Analyst Recommendations December 12, 2008

Wall Street Analyst Morgan Stanley (NY	Recommendations /SE: MS)						
Date	12/12	12/12/2008		1 Month Prior 3 Months Prior		Change	
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months	
Buy	4	22%	4	2	0	+2	
Buy/Hold	4	22%	4	5	0	-1	
Hold	10	56%	10	12	0	-2	
Weak Hold	0	0%	0	0	0	0	
Sell	0	0%	0	0	0	0	
No Opinion	0	0%	0	0	0	0	
Total	18	100%	18	19		·	

### Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008.

### **Equity Analyst Outlook and Investor Sentiment**

### June 1, 2007 through December 12, 2008



Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the average estimate for Morgan Stanley's expected fiscal year 2009 ("FY09") EPS declined 68% from a FY09 EPS estimate of \$8.9 at June 1, 2007 to a FY09 EPS estimate of \$2.87 at December 12, 2008. This decline in FY09 consensus EPS estimate highlights the shift in the nearterm outlook for Morgan Stanley. An overview of some of the recent commentary supplied by equity analysts that cover Morgan Stanley is provided below.

### Wachovia, December 3, 20084

 Wachovia reiterated its "Outperform" rating on Morgan Stanley stating that they "believe that Morgan Stanley is still looking fundamentally sound and relatively better positioned versus peers. With the MUFG investment and government intervention, access to Fed window, and availability of FDIC-guaranteed new

<sup>&</sup>lt;sup>4</sup>Sipkin, D. (2008, Dec. 8). Morgan Stanley: Fundamentally Sound And L-T Looking Like End Game Survivor. *Wachovia Capital Markets, LLC. Equity Research*.

- debt issuance, both liquidity and capital are no longer significant areas of contention, in our view."
- In support of the Outperform rating, Wachovia noted (1) that Morgan Stanley's Tier 1 Capital is amongst the highest in the industry; (2) the strength of the Company's Global Wealth Management business; (3) a respectable showing on the various league tables; and (4) the expectation that strength in Morgan Stanley's commodities business will help offset some of the weakness in a challenging fourth quarter.

### Deutsche Bank, November 6, 2008<sup>5</sup>

- Deutsche Bank outlined key takeaways based upon a meeting with the CFO of Morgan Stanley, Colm Kelleher.
- A combination of \$19 billion in new capital recently invested in Morgan Stanley (from MUFG and the Treasury), the Company's recent shift to a bank holding company, and a narrowing of collateralized debt securities spreads has given Deutsche Bank comfort that Morgan Stanley will survive.
- Deutsche Bank highlighted positive changes impacting Morgan Stanley, including a relatively strong Tier 1 ratio providing support for potential acquisitions, a reduction in balance sheet assets, a decline in compensation, a weakening competitive environment, and better pricing.
- Reiterating a "Hold" rating for Morgan Stanley, Deutsche Bank indicated that the "hope is that Morgan Stanley will have a more stable business" after a period of transition; recognizing that after this transition the Company will likely achieve slower growth rates and lower returns on equity compared to historical performance given the changes that are taking place at Morgan Stanley.

### Oppenheimer, September 8, 2008<sup>6</sup>

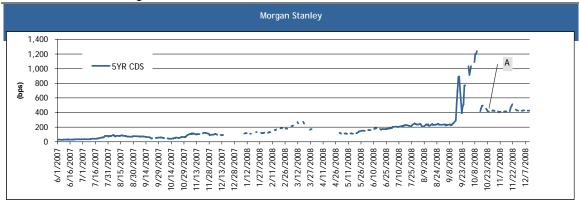
- Oppenheimer lowered its fiscal year 2008 and fiscal year 2009 earnings per share estimates for Morgan Stanley.
- As an explanation for the lowered estimates, Oppenheimer highlighted customer volumes, overall weak global equity markets, and weak advisory and underwriting revenues.
- Oppenheimer reiterated a "Perform" rating for Morgan Stanley indicating that they "believe the company, along with its peers, will face a challenging earnings environment for the next several quarters as capital markets activity remains anemic and market conditions challenging."

<sup>&</sup>lt;sup>5</sup>Mayo, M. (2008, Nov. 6). Morgan Stanley: Meeting with CFO. *Deutsche Bank Securities Inc.*<sup>6</sup>Whitney, M. (2008, Sept. 8). Morgan Stanley: Cutting Our Full-Year 2008 and 2009 EPS Estimates. *Oppenheimer & Co Inc. Equity Research*.



### **Credit Default Swaps**

June 1, 2007 through December 12, 2008



A.) October 26, 2008: Morgan Stanley announced a private placement of 10,000,000 shares of series D fixed rate cumulative perpetual preferred stock which will be purchased by the United States Department of Treasury for \$10 billion. The securities will be issued pursuant to the troubled asset relief capital purchase program. Source: SEC fillings

Sources: Capital IQ, Bloomberg.

CDSs are used to hedge against losses or to speculate on the ability of a company to repay their debt. The spread on a CDS rises as investor confidence deteriorates. A basis point ("bps") on a credit-default swap contract protecting \$10 million of debt from default for five years is equivalent to \$1,000 a year.

As demonstrated in the figure above, the spread on Morgan Stanley's five year credit-default swaps increased 405.07 bps from 29.33 bps at June 1, 2007 to 434.41 bps at December 12, 2008. During this time, five year credit default swaps for Morgan Stanley peaked on October 10, 2008 at 1,240.00 bps suggesting severe concern over the risk that Morgan Stanley would default on its debt. Around October 10, 2008, there were public concerns and uncertainties centered on Morgan Stanley's deal to raise \$9 billion from MUFG. Five year CDS spreads for Morgan Stanley declined 824.30 bps from October 10, 2008 to October 14, 2008, one day after Morgan Stanley finalized the deal with MUFG<sup>7</sup>. Since mid October 2008, five year CDS spreads for Morgan Stanley have averaged 433.36 bps.

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<sup>&</sup>lt;sup>7</sup> Story, Louise. (2008, Oct. 13) Morgan's Stock Surges as a Deal With Mitsubishi Is Completed. *The New York Times*. Retrieved from http://www.nytimes.com.

### Credit Ratings December 17, 2008

Credit Ratings			
	Short-term Debt	Long-term Debt	Rating Outlook
Fitch Ratings	F1	Α	Stable
Moody's Investor Service	P-1	A2	Negative
Standard & Poor's	A-1	Α	Negative

Source: Morgan Stanley, Investor Relations.

### Moody's, December 17, 20088

On December 17, 2008, Moody's cut Morgan Stanley's senior debt rating, excluding FDIC-guaranteed debt, from A1 to A2 following the release of Morgan Stanley's fourth quarter and fiscal year 2008 results. As an explanation for the reduction, Moody's cited the Company's exposure to the credit crisis, and weak fourth quarter and full year results. Moody's indicated that its outlook for Morgan Stanley is negative based upon the expectation that there will be an extended downturn in capital markets activity. Moody's also highlighted that it considers Morgan Stanley "a systemically important institution" and that Morgan Stanley's ratings benefit from Moody's assumption of a high likelihood of external support from the U.S. government.

### S&P, December 19, 2008<sup>9,10</sup>

On December 19, 2008, S&P cut the ratings on 11 banks in the U.S. and Europe by either one or two notches. S&P lowered its counterparty credit rating on Morgan Stanley to A from A+. S&P stated that "the rating actions reflect our more negative view of the significant pressure on large, complex financial institutions' future performance due to increasing industry risk and the deepening economic slowdown." In commenting on Morgan Stanley, S&P indicated that they "don't consider Morgan Stanley's large fourth-quarter loss as indicative of Morgan Stanley's ongoing profit potential; however, the timing and extent of earnings recovery are currently highly uncertain." S&P also formalized a process for taking government intervention into consideration when rating banks. S&P will now provide an issuer credit rating for select banks that are viewed as highly important to the stability of the banking sector in the U.S. or Europe, which will demonstrate that the bank would receive support from the government to maintain stability in the sector, thus making it more creditworthy.

<sup>8</sup>Aubin, D. (2008, Dec. 17). Moody's cuts Morgan Stanley's rating one notch to A2. *Thompson Reuters*. Retrieved from http://www.reuters.com.

<sup>9</sup>"S&P cuts ratings on 11 US and European banks". Associated Press, *Business Week* 19 Dec 2008. Retrieved from http://www.businessweek.com.

<sup>10</sup>Sprinzen, S. (2008, Dec. 19). Research Update: Morgan Stanley Rating Lowered To 'A/A-1' From 'A+/A-1+'; Outlook Neg. *Standard & Poor's RatingsDirect*.



# Appendix G. Company Overview

The PNC Financial Services Group

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM THE PNC FINANCIAL SERVICES GROUP'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2007, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

### A. Business Overview

PNC is one of the largest diversified financial services companies in the United States based on assets, with businesses engaged in retail banking, corporate and institutional banking, asset management and global fund processing services. PNC provides many of its products and services nationally and others in its primary geographic markets located in Pennsylvania, New Jersey, Washington, DC, Maryland, Virginia, Ohio, Kentucky and Delaware. PNC also provides certain global fund processing services internationally. At December 31, 2007, PNC's consolidated total assets, deposits and shareholders' equity were \$138.9 billion, \$82.7 billion and \$14.9 billion, respectively. PNC Financial Services Group, Inc. is publicly traded on the NYSE under the ticker symbol PNC.

PNC was incorporated under the laws of the Commonwealth of Pennsylvania in 1983 with the consolidation of Pittsburgh National Corporation and Provident National Corporation. Since 1983, PNC has diversified its geographical presence, business mix and product capabilities through internal growth, strategic bank and non-bank acquisitions and equity investments, and the formation of various non-banking subsidiaries.

On October 24, 2008, PNC announced it had reached an agreement to acquire NCC and the transaction closed on December 31, 2008. Consequently, discussion of PNC, its lines of business, and its financial performance, does not reflect the NCC acquisition. However, discussion of the outlook for PNC does incorporate analysts' assessments of the NCC acquisition.

PNC and its subsidiaries provide banking services, asset management, and global fund processing products and services. From a structural standpoint, PNC is organized into four lines of business: Retail Banking, Corporate and Institutional Banking, BlackRock, Inc., and Global Investment Servicing.

### Retail Banking

Retail Banking provides deposit, lending, brokerage, trust, investment management, and cash management services to approximately 2.9 million consumer and small business customers within PNC's primary geographic markets. Retail Banking customers are serviced through PNC's branch network (consisting of approximately 1,100 locations), a call center located in Pittsburgh and the Internet. The branch network is located primarily in Pennsylvania, New Jersey, Washington, DC, Maryland, Virginia, Ohio, Kentucky and Delaware. Brokerage services are provided through PNC Investments, LLC. On March 31, 2008, PNC completed the divestiture of Hilliard Lyons, a full-service brokerage and financial services provider. Retail Banking also serves as investment manager and trustee for employee benefit plans and charitable and endowment assets, and provides nondiscretionary defined contribution plan

services. These services are provided to individuals and corporations within PNC's primary geographic markets.

### **Corporate & Institutional Banking**

Corporate & Institutional Banking provides lending, treasury management, and capital markets-related products and services to mid-sized corporations, government entities, and selectively to large corporations. Lending products include secured and unsecured loans, letters of credit and equipment leases. Treasury management services include cash and investment management, receivables management, disbursement services, funds transfer services, information reporting, and global trade services. Capital markets-related products and services include foreign exchange, derivatives, loan syndications, mergers and acquisitions advisory and related services to middle-market companies, securities underwriting, and securities sales and trading. PNC also provides commercial loan servicing, real estate advisory and technology solutions for the commercial real estate finance industry. Corporate & Institutional Banking provides products and services generally within PNC's primary geographic markets, though certain products and services are provided nationally.

### BlackRock, Inc.

BlackRock, Inc. ("BlackRock") is one of the largest publicly traded investment management firms in the United States with \$1.357 trillion of assets under management at December 31, 2007. BlackRock manages assets on behalf of institutional and individual investors worldwide through a variety of fixed income, cash management, equity, balanced, and alternative investment separate accounts and funds. In addition, BlackRock provides risk management, investment system outsourcing and financial advisory services globally to institutional investors. At December 31, 2007, PNC's ownership interest in BlackRock was approximately 33.5%. According to PNC management, PNC views its investment in BlackRock as a "strategic asset and a component of [PNC's] diversified earnings stream."

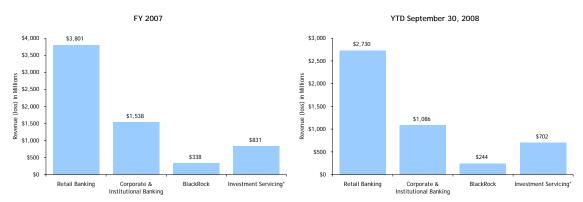
### **Global Investment Servicing**

Global Investment Servicing ("Investment Servicing"), formerly PFPC, is a leading full service provider of processing, technology and business solutions for the global investment industry. Securities services include custody, securities lending, and accounting and administration for funds registered under the 1940 Act and alternative investments. Investor services include transfer agency, managed accounts, subaccounting, and distribution. Investment Servicing serviced \$2.5 trillion in total fund assets and 72 million shareholder accounts as of December 31, 2007, both domestically and internationally.

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<sup>&</sup>lt;sup>1</sup> PNC Form 10-K for the Fiscal Year Ended December 31, 2007.

### Revenue by Line of Business



\*Investment Servicing represents the sum of servicing revenue and non-operating income (expense) less debt financing costs.

Sources: PNC 2007 Annual Report, PNC Form 10-Q for the Quarterly Period Ended September 30, 2008.

### B. Balance Sheet Composition

### **Summary Balance Sheet**

	FY2005	FY2006	FY2007	9/30/2008
Loans	\$50,954	\$51,911	\$71,416	\$76,053
Earning Assets - Average	74,443	79,139	99,648	114,244
Earning Assets - End of Year	75,951	81,478	111,152	114,390
Risk-Weighted Assets	76,673	85,539	115,132	119,011
Total Assets	91,954	101,820	138,920	145,610
Deposits	\$60,275	\$66,301	\$82,696	\$84,984
Tangible Equity	\$4,441	\$7,222	\$6,004	\$5,003
Total Equity	8,563	10,788	14,854	14,218

Source: SNL Financial.

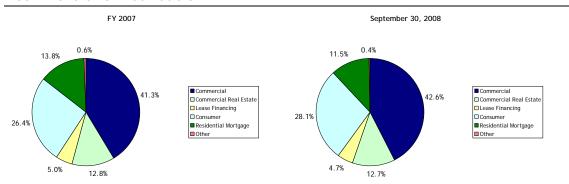
During the first nine months of 2008, PNC's loans increased in all major loan categories. Management attributes this growth to changing capital markets and a decision by PNC to retain its student loans, noting that during 2008, the secondary markets for education loans were impacted by liquidity issues similar to those for other asset classes. Whereas PNC had previously packaged its education loans for resale, starting in 2008 these loans were retained on the balance sheet. Management commented that PNC did not sell education loans during the second or third quarters of 2008 and does not anticipate sales of these transferred loans in the foreseeable future.

To fund its asset growth, PNC remains focused on growing its retail deposit base. Growing core checking deposits as a lower-cost funding source and as the cornerstone product to build customer relationships is currently the primary objective of PNC's deposit strategy. Furthermore, core checking accounts are critical to PNC's strategy of expanding its payments business.

To allow for asset growth in excess of deposit growth, PNC borrows additional funds. Total borrowed funds increased \$1.2 billion, or 4%, at September 30, 2008, compared with the prior year end primarily due to the increase of \$3.4 billion in Federal Home Loan Bank borrowings, partially offset by reductions in federal funds purchased, bank notes and senior debt, and repurchase agreements.

### Loan Portfolio

### Loan Portfolio Distribution

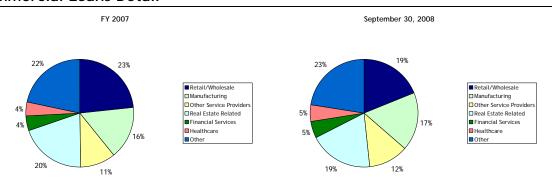


<sup>\*</sup>Tables do not include unearned income of \$-990 million (2007) and \$-910 million (September 30, 2008).

Sources: PNC 2007 Annual Report, PNC Form 10-Q for the Quarterly Period Ended September 30, 2008.

The change in PNC's overall loan portfolio distribution is attributable to a range of factors. However, the consumer portion of PNC's portfolio experienced the single largest change from year-end 2007 to September 30, 2008. The increase in consumer loans was a direct result of liquidity issues in the secondary market for education loans and PNC's decision to hold these loans on its balance sheet.

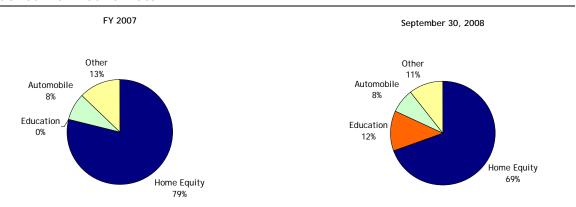
### **Commercial Loans Detail**



Sources: PNC 2007 Annual Report, PNC Form 10-Q for the Quarterly Period Ended September 30, 2008.

Management notes that during 2008 the commercial loan portfolios experienced areas of softness driven by credit migration of portfolios primarily in Maryland, Virginia, and New Jersey related to residential real estate development and related sectors. Notwithstanding difficulties in the real estate sector, PNC reported that as of December 31, 2007, no specific industry concentration exceeded 5% of total commercial loans outstanding and unfunded commitments.

### **Consumer Loans Detail**



Sources: PNC 2007 Annual Report, PNC Form 10-Q for the Quarterly Period Ended September 30, 2008.

As previously discussed, the transfer of education loans from loans held-for-sale to PNC's balance sheet was the largest change in PNC's consumer loans in 2008. As of September 30, 2008, PNC's largest position in consumer loans was in home equity loans. This nearly \$15 billion portfolio is comprised of 39% first-lien positions, 93% of the portfolio is in PNC's footprint, and PNC's strategy did not involve targeting the subprime market.

### Historical Financial Performance Balance Sheet Ratios

	FY2005	FY2006	FY2007	9/30/2008
	112003	112000	112007	7/30/2000
Balance Sheet				
Loans / Deposits	81.46%	75.57%	82.61%	88.47
Tangible Equity / Tangible Assets	5.06%	7.35%	4.62%	3.679
Leverage Ratio <sup>(1)</sup>	7.21%	9.34%	6.20%	7.20
Tier One Ratio <sup>(2)</sup>	8.30%	10.43%	6.79%	8.209
Risk Based Capital Ratio <sup>(3)</sup>	12.10%	13.51%	10.25%	11.909
Asset Quality				
Reserve for Loan Losses / Gross Loans	1.16%	1.07%	1.15%	1.379
Reserve for Loan Losses / Non-Performing Assets	275.93%	327.49%	159.62%	115.219
Net Charge-Offs / Average Loans	0.06%	0.27%	0.31%	0.569
Loan Loss Provision / Net Charge-Offs	70.00%	88.57%	157.50%	172.299

Source: SNL Financial.

### Definitions:

<sup>(1)</sup>Leverage Ratio is calculated as Tier One Capital divided by tangible assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Liquidity Ratio of 4%. Federal bank regulators generally consider a Liquidity Ratio of 5% or above as well capitalized.

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

<sup>(2)</sup>Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Tier One Ratio of 4%. Federal bank regulators generally consider a Tier One Ratio of 6% or above as well capitalized.

<sup>(3)</sup>Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators generally consider a Risk Based Capital Ratio of 10% or above as well capitalized.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

Analysts have commented recently on PNC's "strong capital base," and add that "[d]espite a challenging credit environment, capital ratios remained well above regulatory requirements. PNC maintained a strong liquidity position and continued to be well capitalized, with a Tier One risk-based capital ratio of 8.2%."

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<sup>&</sup>lt;sup>2</sup> (2008, Dec. 9). PNC Financial Svcs Group Inc. TheStreet.Com Ratings.

<sup>&</sup>lt;sup>3</sup> (2008, Dec. 9). PNC Financial Svcs Group Inc. TheStreet.Com Ratings.

PNC's asset quality remained strong despite a challenging credit environment. As of the third quarter 2008, the provision for credit losses increased almost three-fold from a year ago. However, other analysts point to continued weakness in the \$1.8 billion residential development portfolio (11% net charge-off ratio) and suggest that "weakness seems more widespread across the entire portfolio compared to previous quarters."

In light of PNC's acquisition of NCC, "if PNC is able to remove NCC's liquidating portfolio and keep the rest of the balance sheet flat for the next three years, its regulatory capital ratios (tier 1 of 8% and risked based of 11%) would still remain in a normalized range." Additionally, "the elimination of NCC as a competitor is likely to lower deposit costs and it will increase PNC's presence in the markets."

"PNC has performed better than many of its peers in reference to the actual loan losses in its portfolios," according to RBC Capital. In terms of asset quality, specifically the loan loss reserve coverage ratio, analysts "find the current reserve level acceptable," but expect "to see growth in reserves in the coming quarters to not only account for potential losses, but also to appease regulators who will likely require higher reserves for the foreseeable future."

### **Variable Interest Entities**

PNC also engages in activities with VIEs. PNC reports these activities either on a consolidated basis or unconsolidated basis, depending on whether or not PNC is deemed to be the primary beneficiary of the entity.

PNC's sole consolidated VIE relates to PNC's equity investments in various limited partnerships that sponsor affordable housing projects utilizing the LIHTC under Section 42 of the Internal Revenue Code. PNC's primary unconsolidated VIE is in Market Street Funding LLC ("Market Street"). Market Street is a multi-seller, asset-backed commercial paper conduit that is owned by an independent third party. According to PNC, Market Street's activities primarily involve purchasing assets or making loans secured by interests in pools of receivables from U.S. corporations that desire access to the commercial paper market.

PNC and its subsidiaries interact with Market Street on a number of levels. In the ordinary course of business during the first nine months of 2008, PNC Capital Markets, acting as placement agent for Market Street, held a maximum daily position in Market Street commercial paper of \$75 million with an average of \$16 million. PNC Bank, National Association ("PNC Bank, N.A.") purchased overnight maturities of Market Street commercial paper on two days during September 2008 in the amounts of \$197 million and \$531 million due to illiquidity in the commercial paper market.

<sup>&</sup>lt;sup>4</sup> Mayo, M. (2008, Oct. 16). PNC Financial Services Group: 3Q08 Results Fall Short on Charges and Revenues. *Deutsche Bank*.

<sup>&</sup>lt;sup>5</sup> Savastano, A. (2008, Oct. 27). PNC Financial: PNC/NCC Deal Analysis - Improving LT Growth Rate. *Fox-Pitt Kelton Cochran Caronia Waller*.

<sup>&</sup>lt;sup>6</sup> Bove, R. (2008, Dec. 2). PNC Financial: The Credibility Issue. *Ladenburg Thalmann & Co. Inc.* 

<sup>&</sup>lt;sup>7</sup> Cassidy, G. (2008, Oct. 16). PNC Financial Services Group: One Time Charges Distort the Third Quarter's Results. *RBC Capital Markets*.

In addition to the purchase by PNC and its subsidiaries of Market Street commercial paper, PNC Bank, N.A. provides certain administrative services, the program-level credit enhancement and 99% of liquidity facilities to Market Street in exchange for fees negotiated based on market rates. PNC may face a funding obligation under the \$7.3 billion of liquidity facilities for events such as commercial paper market disruptions, borrower bankruptcies, collateral deficiencies or covenant violations. However, PNC's credit risk under the liquidity facilities is secondary to the risk of first loss provided by the borrower or another third-party in the form of deal-specific or credit-specific enhancement. PNC would be required to fund \$1.7 billion of the liquidity facilities if the underlying assets are in default. However, Ambac, a monoline insurer, provides a surety bond equal to 75% of the program-level enhancement which will repay PNC in the event of a liquidity facility draw.

### C. Financial Overview

### Historical Financial Performance Summary Income Statement

	FY2005	FY2006	FY2007	LTM 9/30/2008
Net Interest Income	\$2,154	\$2,245	\$2,915	\$3,624
Non-interest Revenue	4,108	4,371	3,824	3,327
Gain/Loss on Sale of Securities	55	(100)	97	(22)
Nonrecurring Revenue	10	2,056	(131)	212
Total Revenue	\$6,327	\$8,572	\$6,705	\$7,141
Provision for Loan Losses	\$21	\$124	\$315	\$715
Total Non-interest Expenses	\$4,285	\$4,352	\$4,112	\$4,397
Income Before Taxes	\$1,962	\$4,005	\$2,094	\$1,914
Net Income	\$1,325	\$2,595	\$1,467	\$1,308

Source: SNL Financial.

PNC's net interest income increased 33% in the first nine months of 2008 when compared with the first nine months of 2007. Net interest income was favorably impacted by the \$18.5 billion, or 20%, increase in average interest-earning assets and a decrease in funding costs. PNC's non-interest revenue declined over this same period, and was adversely affected by investment losses, trading losses, and valuation losses on commercial mortgages held for sale, among other factors. Notwithstanding these factors, non-interest income from fund servicing and asset management for the first nine months of 2008 compared favorably with results from the comparable period in 2007.

In PNC's review of segment performance, management notes that Retail Banking's 38% decline in earnings for the first nine months of 2008 over the prior year was primarily driven by increases in the provision for credit losses and higher non-interest expenses. In the Corporate & Institutional Banking segment, increases in the provision for credit losses and non-interest expenses were offset by higher net interest income. Earnings for this segment were impacted by pretax valuation losses of \$238 million on commercial mortgage loans held for sale. The BlackRock segment produced earnings of \$185 million for the first nine months of 2008 compared with \$176 million for the first nine months of 2007. BlackRock's operating income decreased in the third quarter of 2008 largely as a result of market declines and massive disruption in the U.S. money markets. Earnings for PNC's Investment Servicing business were relatively flat year-over-year. Management notes that while servicing revenue growth was realized through new business, organic growth, and the completion of two acquisitions in December 2007, increased costs related to this growth and the acquisitions largely offset the increases in both comparisons.

### Historical Financial Performance Profitability Ratios

Profitability Ratios				
	FY2005	FY2006	FY2007	9/30/2008 <sup>1</sup>
Profitability				
Net Interest Margin	3.00%	2.92%	3.00%	3.27%
Return on Average Assets	1.50%	2.73%	1.19%	0.93%
Return on Average Equity	16.58%	27.96%	10.53%	9.00%
Non-interest Income / Revenue	65.60%	66.07%	56.74%	47.86%

<sup>&</sup>lt;sup>1</sup> Profitability performance ratios reflect LTM figures as of 9/30/08.

Source: SNL Financial.

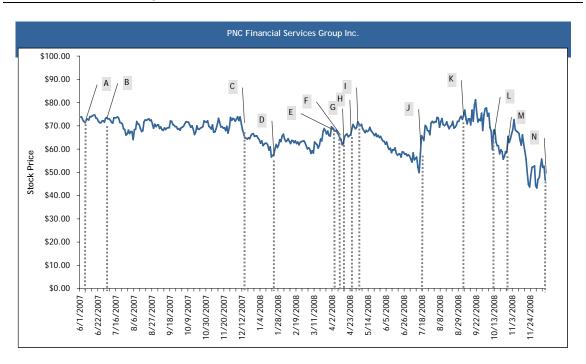
PNC's expansion of net interest margin was attributed to an increase in average interest-earning assets and a decrease in funding costs. Although several factors influenced funding costs, PNC noted in its most recent quarterly filing that the rate paid on interest-bearing deposits is the single largest component. This rate generally declined during 2008. However, an analyst covering PNC commented that PNC's net interest margin "has been under pressure due to asset yields declining faster than interest-bearing liabilities (due in large part to deposit pricing competition, in our opinion) and a mix shift in funding liabilities."

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<sup>&</sup>lt;sup>8</sup> Cassidy, G. (2008, Oct. 16). PNC Financial Services Group: One Time Charges Distort Third Quarter's Results. *RBC Capital Markets*.

### D. Stock Price Performance and Valuation Multiples

# Stock Price Performance June 1, 2007 through December 12, 2008



### Notable Company Events

- A.) Jun-03-2007: PNC Financial Services Group Inc., \$ 0.63, cash dividend. Source: Capital IQ, Financial Times.
- B.) Jul-02-2007: PNC Financial Services Group, Inc. completes ARCS Commercial Mortgage acquisition. Source: Yahoo! Finance.
- C.) Dec-12-2007: PNC Financial Services Group Inc. expects fourth-quarter 2007 earnings to decline due to weakening housing and mortgage markets. Source: Capital IQ, Standard & Poor's Rating Services, The Associated Press.
- D.) Jan-17-2008: PNC Financial Services Group, Inc. issues FY 2008 revenue outlook above analysts' estimates-conference call. Source:

  Capital IO. PR Newswire.
- E.) Apr-04-2008: PNC Financial Services Group Inc. completed the acquisition of Sterling Financial Corp. (NasdaqNM:SLFI). Source: Capital IQ.
- F.) Apr-10-2008: PNC Financial Services Group Inc., \$ 0.66, cash dividend. Source: Capital IQ, Financial Times.
- G.) Apr-15-2008: PNC Financial Services Group to cut up to 400 jobs at newly acquired Sterling Financial Corp. Source: Capital IQ.
- H.) Apr-17-2008: PNC Financial Services Group, Inc. raises FY 2008 revenue outlook-conference call. Source: Yahoo! Finance.
- I.) Apr-28-2008: PNC Financial Services Group Inc. to settle check 21 patent infringement suit with DataTreasury. Source: Capital IQ, Credit Union Journal.
- J.) Jul-17-2008: PNC Financial Services Group Inc. reports earnings results for the Second Quarter and Six Months Ended June 30, 2008.
  Source: Capital IQ. PR Newswire.
- K.) Sep-04-2008: M&T Securities Inc. acquired Peremel & Co. from PNC Financial Services Group Inc. Source: Capital IQ.
- L.) Oct-08-2008: PNC Financial Services Group Inc., \$ 0.66, cash dividend. Source: Capital IQ, Financial Times.
- M.) Oct-24-2008: PNC Financial Services Group Inc. signed a definitive agreement to acquire National City Corporation for approximately \$5.7 billion on October 24, 2008. Source: Capital IQ, Standard & Poor's Rating Services.
- N.) Dec-11-2008: The U.S. Department of Justice asked PNC Financial Services Group Inc. to sell 61 National City Corp. branches in western Pennsylvania so as to avoid anti-trust issues with regard to its acquisition of National City. Source: Capital IQ.



# Historical Financial Performance Valuation Multiples

Valuation Multiples					
	FY2005	FY2006	FY2007	9/30/2008	10/24/2008
Price / Book Equity	2.12x	2.01x	1.51x	1.89x	1.49x
Price / Tangible Book Equity	4.09x	3.01x	3.73x	5.78x	4.55x
Price / Earnings	13.6x	8.5x	15.1x	19.8x	15.4x
Dividend Yield	3.2%	3.0%	3.8%	3.5%	4.5%

Source: SNL Financial.

### E. Outlook

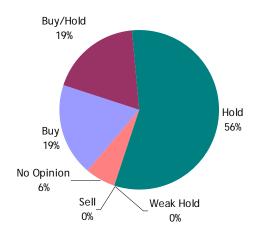
As of December 12, 2008, 16 analysts were covering PNC and all except one were publishing recommendations. The consensus recommendation for PNC was a "Hold" rating, with nine analysts, or 56% of the current coverage universe, recommending that investors "Hold" PNC stock, three analysts were carrying a "Buy" Rating, three analysts were carrying a "Buy/Hold" rating and one analyst did not publish a rating. This is a modest improvement compared to the analyst recommendations for PNC three months earlier, at which point two analysts were carrying a "Buy" rating, three analysts were carrying a "Buy/Hold" rating, and 10 analysts, or 66% of the total, were carrying a "Hold" recommendation.

# Wall Street Analyst Recommendations December 12, 2008

Wall Street Analyst R PNC Financial Service							
Date	12/12/2008		1 Month Prior	3 Months Prior	Cha	Change	
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months	
Buy	3	19%	3	2	0	+1	
Buy/Hold	3	19%	2	3	+1	0	
Hold	9	56%	10	10	-1	-1	
Weak Hold	0	0%	0	0	0	0	
Sell	0	0%	0	0	0	0	
No Opinion	1	6%	1	0	0	+1	
Total	16	100%	16	15			

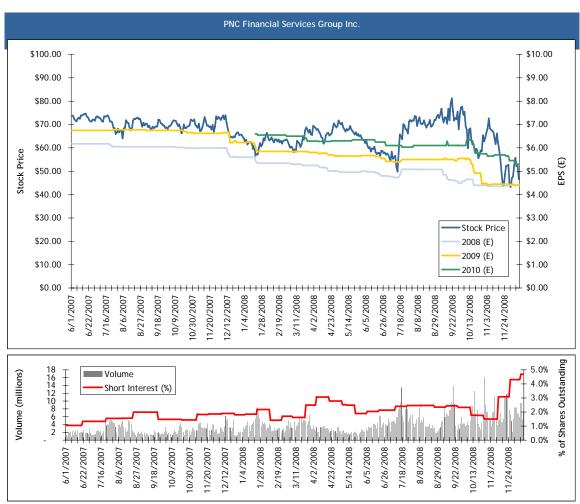
Source: Standard & Poor's Stock Report, December 12, 2008.

### Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008.

Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008



Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the average estimate for PNC's expected 2009 EPS declined 34.5% from an average estimated EPS of \$6.75 to an average estimated EPS of \$4.42 per share for the fiscal year ending December 31, 2009. This decline in EPS estimates highlights the shift in the near-term outlook for PNC. An overview of some of the recent commentary supplied by equity analysts that cover PNC is provided below.

### Boenning, December 3, 20089

Boenning notes "Shares of PNC appear oversold on concerns of general economic conditions compounded with [PNC's] new exposure to the economically challenged areas of northern Ohio and Michigan... PNC's acquisition of NCC, brings [PNC] directly into markets that have significant exposure to the auto industry; these areas have been weak economically for some time."

<sup>&</sup>lt;sup>9</sup> Schultheis, M. (2008, Dec. 3). PNC Financial Services Group, Inc.: Shares of PNC Appear Oversold Offering a Good Entry Point for Investors. *Boenning & Scattergood, Inc.* 

## The PNC Financial Services Group

Boenning believes there are three major investment risks that could affect PNC in 2009. First, [PNC's] credit metrics are trending "in the wrong direction," continued economic trouble on a national scale could push PNC's loan loss provision above \$2.5 billion for 2009. Second, the acquisition of NCC, PNC's largest ever, poses integration risks that could deter from efficient operation. Third, a slowdown in worldwide economic markets could negatively affect the revenue contribution of BlackRock.

### Channel Trend, November 21, 2008<sup>10</sup>

Channel Trend comments on PNC's 2009 growth strategy, noting "In April, as an inorganic strategy to drive growth, PNC Financial completed the acquisition of Pittsburgh's Sterling Financial Corp., in a cash and stock deal worth \$565 million. The takeover added 57 branches and over 87,000 customers to the lender's operations." According to PNC, acquiring new customers is its most important growth strategy; the ability to cross-sell its products to new and existing customers is also a vital component of this strategy.

#### FPK, October 27, 2008<sup>11</sup>

• FPK comments on the acquisition of NCC: "Financially, this deal makes sense based on the attractive pricing, tax deductibility of the fair value adjustments on the loans, and the expected expense savings. Strategically, the deal is attractive as it extends PNC's footprint, more than doubles its deposit base, and provides opportunities to change NCC's business mix to have a more balanced spread and fee revenue mix. In our view, the changing of the revenue mix will help drive earnings for years to come."

#### RBC Capital, October 24, 2008<sup>12</sup>

- RBC Capital views the NCC acquisition as "an extremely attractive transaction for PNC given the large deposit base and the ability to efficiently writedown problem loans." Despite the fact that the deal is expected to be 15% dilutive to earnings in the first year, according to RBC Capital, the approval of the \$7.7 billion TARP investment makes the NCC deal a "tremendous opportunity for PNC and will be viewed as a coup over the long-term."
- In regards to PNC's future, RBC Capital notes "PNC avoided much of the residential housing credit deterioration, but in recent quarters, nonperforming assets in the commercial real estate, commercial and industrial, and construction loan portfolios have begun to expand, which we believe will be a drag on earnings in 2009."

<sup>&</sup>lt;sup>12</sup> Cassidy, G. (2008, Oct. 24). PNC Financial Services Group: A New National Player Emerges. *RBC Capital Markets*.



<sup>&</sup>lt;sup>10</sup> (2008, Nov. 21). PNC Financial Services Group, Inc. Best Independent Research LLC. *Channel Trend, A BIR Research Provider Report.* 

<sup>&</sup>lt;sup>11</sup> Savastano, A. (2008, Oct. 27). PNC Financial: PNC/NCC Deal Analysis-Improving LT Growth Rate. *Fox-Pitt Kelton Cochran Caronia Waller*.

## The PNC Financial Services Group

#### Credit Ratings December 12, 2008

Senior Debt	Commercial Paper	Outlook
A+	F1	Stable
A1	NA	Negative
A+	NA	Watch Negative
	A+ A1	A+ F1 A1 NA

Sources: Capital IQ, Bloomberg.

## Fitch Ratings, October 24, 2008<sup>13</sup>

After PNC's announcement of its plans to acquire NCC, Fitch ratings affirmed PNC's ratings including its Issuer Default Ratings (IDRs) at 'A+/F1'. Fitch ratings commented "While NCC has been weakened by the credit crisis, PNC has maintained relatively solid performance. The transaction expands PNC's footprint into several Midwestern states contiguous to its existing footprint, and also adds a presence in Florida." In addition "Although PNC is not immune from the asset quality pressures facing the banking industry, PNC has fared better than many of its peers. While every merger has integration risks, PNC's track record with previous acquisitions has been solid."

#### S&P, October 24, 2008<sup>14</sup>

On the other hand, S&P "holds a negative outlook on long-term ratings for PNC Financial Services Group Inc., citing [PNC's] \$5.6 billion, all-stock buyout of NCC." S&P notes "The CreditWatch negative action on PNC reflects the size of this transaction, which comes amid the current credit crisis, and an external operating environment that presents significant challenges for banks' financial performances."

<sup>&</sup>lt;sup>13</sup> (2008, Oct. 24). Fitch: PNC Financial/National City Transaction Positive for NCC's Ratings; PNC Affirmed. *MarketWatch.com*.

<sup>&</sup>lt;sup>14</sup> (2008, Oct. 24). S&P gives PNC Financial Services negative outlook. *International Business Times*.



# Appendix H. Company Overview

U.S. Bancorp

## U.S. Bancorp

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM U.S. BANCORP'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2008, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

#### A. Business Overview

USB is a multi-state financial services holding company headquartered in Minneapolis, Minnesota. USB was incorporated in Delaware in 1929 and operates as a financial holding company and a bank holding company under the Bank Holding Company Act of 1956. USB provides a full range of financial services, including lending and depository services, cash management, foreign exchange, and trust and investment management services. It also engages in credit card services, merchant and ATM processing, mortgage banking, insurance, brokerage, and leasing. USB is publicly traded on the NYSE under the ticker symbol USB.

USB's banking subsidiaries are engaged in the general banking business, principally in domestic markets. The subsidiaries range in size from \$39 million to \$139 billion in deposits and provide a wide range of products and services to individuals, businesses, institutional organizations, governmental entities, and other financial institutions. Commercial and consumer lending services are principally offered to customers within USB's domestic markets, to domestic customers with foreign operations and within certain niche national venues. Lending services include traditional credit products as well as credit card services, financing and import/export trade, asset-backed lending, agricultural finance and other products. Leasing products are offered through bank leasing subsidiaries. Depository services include checking accounts, savings accounts and time certificate contracts. Ancillary services such as foreign exchange, treasury management and receivable lock-box collection are provided to corporate customers. USB's bank and trust subsidiaries provide a full range of asset management and fiduciary services for individuals, estates, foundations, business corporations and charitable organizations.

USB's non-banking subsidiaries primarily offer investment and insurance products within USB's markets and mutual fund processing services to a broad range of mutual funds.

Banking and investment services are provided through a network of 2,518 banking offices principally operating in 24 states in the Midwest and West. USB operates a network of 4,867 branded ATMs and provides 24-hour, seven day a week telephone customer service. Mortgage banking services are provided through banking offices and loan production offices throughout USB's markets.

Consumer lending products may be originated through banking offices, indirect correspondents, brokers or other lending sources, as well as a consumer finance division. USB is also one of the largest providers of Visa corporate and purchasing card services and corporate trust services in the United States. A wholly-owned subsidiary, NOVA Information Systems, Inc. ("NOVA"), provides merchant processing services directly to merchants and through a network of banking affiliations. Affiliates of NOVA

## U.S. Bancorp

provide similar merchant services in Canada and segments of Europe. These foreign operations are not significant to USB.

USB and its subsidiaries are engaged in banking services and non-banking services. However, from a structural standpoint, USB is organized into five lines of business: Wholesale Banking, Consumer Banking, Wealth Management and Securities Services, Payment Services, and Treasury and Corporate Support.

## Wholesale Banking

Wholesale Banking offers lending, equipment finance and small-ticket leasing, depository, treasury management, capital markets, foreign exchange, international trade services and other financial services to middle market, large corporate, commercial real estate, and public sector clients.

#### Consumer Banking

Consumer Banking delivers products and services through banking offices, telephone servicing and sales, online services, direct mail and ATMs. It encompasses community banking, metropolitan banking, in-store banking, small business banking, consumer lending, mortgage banking, consumer finance, workplace banking, student banking and 24-hour banking.

#### Wealth Management & Securities Services

Wealth Management & Securities Services provides trust, private banking, financial advisory, investment management, retail brokerage services, insurance, custody and mutual fund servicing through five businesses: Wealth Management, Corporate Trust, FAF Advisors, Institutional Trust, and Custody and Fund Services.

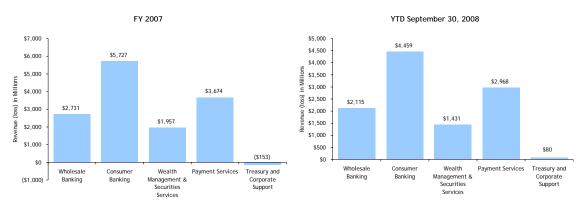
#### **Payment Services**

Payment Services includes consumer and business credit cards, stored-value cards, debit cards, corporate and purchasing card services, consumer lines of credit, ATM processing and merchant processing. It is highly inter-related with banking products and services of the other lines of business and relies on access to the bank subsidiary's settlement network, lower cost funding available to USB, cross-selling opportunities and operating efficiencies.

#### **Treasury and Corporate Support**

Treasury and Corporate Support includes: USB's investment portfolios; funding; capital management and asset securitization activities; interest rate risk management; and the net effect of transfer pricing related to average balances and the residual aggregate of those expenses associated with corporate activities that are managed on a consolidated basis.

### Revenue by Line of Business



Sources: USB 2007 Annual Report, USB Form 10-Q for the Quarterly Period Ended September 30, 2008.

#### B. Balance Sheet Composition

#### **Summary Balance Sheet**

Balance Sheet Overview (\$ in millions)				
	FY2005	FY2006	FY2007	9/30/2008
Loans	\$137,451	\$144,831	\$156,588	\$170,212
Earning Assets - Average	178,393	186,210	194,657	208,596
Earning Assets - End of Year	179,955	187,394	202,640	213,471
Risk-Weighted Assets	184,353	194,659	212,592	222,574
Total Assets	209,465	219,232	237,615	247,055
Deposits	\$124,709	\$124,882	\$131,445	\$139,504
Tangible Equity	\$11,450	\$11,859	\$11,818	\$12,367
Total Equity	20,086	21,197	21,046	21,675

Source: SNL Financial.

During the first nine months of 2008, USB's loans increased in all major loan categories. Management attributes this growth primarily to changing capital markets and a decision by USB to acquire and retain more student loans. More specifically, the increase in commercial loans was driven by new and existing business customers utilizing bank credit facilities, rather than the capital markets, to fund business growth and liquidity requirements, as well as growth in corporate payment card balances. USB's commercial real estate loan portfolio was positively impacted by limited borrower access to the capital markets.

During the first nine months of 2008, USB grew its earning assets, reflecting expansion of its loan portfolio, offset by a decline in the value of investment securities. Management attributed the decline in value to securities impairments realized by USB "and unrealized losses on the available-for-sale portfolio due to changes in interest rates and liquidity premiums given current market conditions." 1

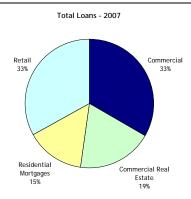
USB's deposit growth in 2008 was primarily the result of increases in interest checking accounts, non-interest checking accounts, non-interest-bearing deposits, money market savings accounts and time deposits greater than \$100,000, partially offset by a decrease in time certificates of deposit less than \$100,000. Interest checking account balances increased primarily because of higher broker-dealer balances. Non-interest-bearing deposits increased because of higher trust demand deposit balances.

To fund asset growth in excess of deposit growth, USB utilizes both short-term and long-term borrowings. From December 31, 2007, through September 30, 2008, USB's short-term debt increased, while its long-term debt decreased. The decrease in long-term borrowings reflected asset/liability management decisions to fund balance sheet growth with other funding sources.

<sup>&</sup>lt;sup>1</sup> USB Form 10-Q for the Quarterly Period Ended September 30, 2008.

#### Loan Portfolio

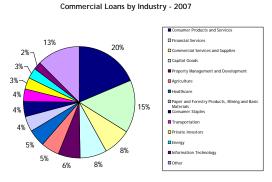
#### Loan Portfolio Distribution



Source: USB 2007 Annual Report.

USB's loan portfolio distribution has experienced a shift over the past several years. Within the retail portion of USB's portfolio, credit card lending has increased steadily (from 5.1% of the total portfolio in 2003 to 7.1% of the total portfolio in 2007). Concurrently, retail lending has declined (from 5.2% of the total portfolio in 2003 to 3.9% of the total portfolio in 2007). Commercial real estate represented 23.0% of the total portfolio in 2003; in 2007 it represented 19.0%. The most dramatic shift, however, occurred in residential mortgages, which increased from 6.3% of USB's total loan portfolio in 2003 to 11.1% of USB's total loan portfolio in 2007.

## Commercial Loans by Industry

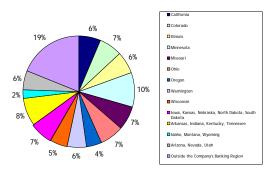


Source: USB 2007 Annual Report.

USB has made a concerted effort to expand its commercial lending business. In its 2007 annual report, USB states that it made certain personnel investments and organizational changes to better emphasize corporate banking, with an enhanced focus on relationship banking. As a result of these business initiatives and changing economic conditions, USB experienced growth in commercial loans driven by new customer relationships, utilization of lines of credit, and growth in commercial leasing and corporate payment card balances.

## Residential Mortgages by Geography

Residential Mortgages by Geography - 2007



Source: USB 2007 Annual Report.

The growth in the residential mortgages portion of USB's loan portfolio was principally the result of an increase in consumer finance originations. And as for the credit profile of these borrowers, USB states in its 2007 annual report that the majority of loans retained in the portfolio represented originations to customers with better than sub-prime credit risk ratings.

Much of the growth was fueled by the consumer finance distribution channel. However, USB acknowledges that this growth was offset somewhat by lower balances from traditional branch and mortgage banking channels.

#### Historical Financial Performance Balance Sheet Ratios

	FY2005	FY2006	FY2007	9/30/2008
Balance Sheet				
Loans / Deposits	109.42%	114.99%	117.03%	121.76%
Tangible Equity / Tangible Assets	5.70%	5.65%	5.17%	5.209
Leverage Ratio <sup>(1)</sup>	7.57%	8.16%	7.93%	7.989
Tier One Ratio <sup>(2)</sup>	8.22%	8.75%	8.25%	8.489
Risk Based Capital Ratio <sup>(3)</sup>	12.51%	12.58%	12.19%	12.319
Asset Quality				
Reserve for Loan Losses / Gross Loans	1.46%	1.38%	1.30%	1.60%
Reserve for Loan Losses / Non-Performing Assets	316.93%	344.46%	298.26%	185.469
Net Charge-Offs / Average Loans	0.51%	0.38%	0.52%	0.879
Loan Loss Provision / Net Charge-Offs	97.23%	100.00%	100.00%	145.479

Source: SNL Financial.

#### **Definitions:**

<sup>(1)</sup>Leverage Ratio is calculated as Tier One Capital divided by tangible assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Liquidity Ratio of 4%. Federal bank regulators generally consider a Liquidity Ratio of 5% or above as well capitalized.

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

<sup>(2)</sup>Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Tier One Ratio of 4%. Federal bank regulators generally consider a Tier One Ratio of 6% or above as well capitalized.

<sup>(3)</sup>Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators generally consider a Risk Based Capital Ratio of 10% or above as well capitalized.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

USB's balance sheet has been a source of strength, as "USB can be viewed as a safe haven relative to many peers, and as a result [USB's] deposit growth has accelerated." In addition, because of its balance sheet, some analysts "believe USB"

<sup>&</sup>lt;sup>2</sup> Marquardt, A. (2008, Nov. 3). U.S. Bancorp: Approved for \$6.6b TARP Capital Infusion. *Fox-Pitt Kelton Cochran Caronia Waller*.



## U.S. Bancorp

will have greater flexibility and will likely have more opportunity than most in deploying capital via acquisitions and/or loan growth." 3

In terms of asset quality, USB is frequently described by analysts as "stronger than peers." USB's non-performing assets through Q3 2008 increased from Q2 2008 levels "in line with expectations... primarily due to deterioration in the residential real estate markets and related industries." Net charge-offs have increased in 2008, and are expected "to increase modestly in coming quarters as the credit cycle becomes more challenging... [and] due to continued stress in the homebuilding industry."

Despite moderate increases in non-performing assets, analysts point out "that the absolute levels are low and returns and capital remain extremely strong. Specifically, [as of Q3 2008] the tier 1 ratio was 8.5%, the core return on assets was approximately 1.45% and the core return on equity was approximately 17%. We believe the strong dividend yield, high capital levels and the favorable environment for gaining market share support our Outperform rating." <sup>7</sup>

As of early December 2008, analysts indicated that USB was "still benefiting from flight to quality, driving growth in both deposits and loans, especially commercial related loans with much better spreads and improved terms." 8

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<sup>&</sup>lt;sup>3</sup> Marquardt, A. (2008, Nov. 3). U.S. Bancorp: Approved for \$6.6b TARP Capital Infusion. *Fox-Pitt Kelton Cochran Caronia Waller*.

<sup>&</sup>lt;sup>4</sup> Arfstrom, J. (2008, Oct. 21). U.S. Bancorp: Q3 EPS Mixed: Strong Loan and Margin Performance, Higher Credit Costs. *RBC Capital Markets*.

<sup>&</sup>lt;sup>5</sup> Arfstrom, J. (2008, Oct. 21). U.S. Bancorp: Q3 EPS Mixed: Strong Loan and Margin Performance, Higher Credit Costs. *RBC Capital Markets*.

<sup>&</sup>lt;sup>6</sup> Arfstrom, J. (2008, Oct. 21). U.S. Bancorp: Q3 EPS Mixed: Strong Loan and Margin Performance, Higher Credit Costs. *RBC Capital Markets*.

<sup>&</sup>lt;sup>7</sup> Arfstrom, J. (2008, Oct. 21). U.S. Bancorp: Q3 EPS Mixed: Strong Loan and Margin Performance, Higher Credit Costs. *RBC Capital Markets*.

<sup>&</sup>lt;sup>8</sup> Juneja, V. (2008, Dec. 5). U.S. Bancorp: Waiting for A Big One. *J.P. Morgan North America Equity Research*.

#### **Off-Balance Sheet Arrangements**

USB also sponsors an off-balance sheet conduit, a QSPE. USB transferred to this QSPE high-grade investment securities, funded by the issuance of commercial paper. Pursuant to Financial Accounting Standards Board Interpretation 46R, USB does not consolidate this structure in its financial statements.

The conduit held assets with a reported fair value of \$0.9 billion as of September 30, 2008 (as compared to \$1.2 billion as of December 31, 2007). According to USB, these assets consist primarily of private label asset-backed securities, which are insurance "wrapped" by mono-line insurance companies, and government agency mortgage-backed securities and collateralized mortgage obligations.

USB provides a liquidity facility to the conduit. According to USB's 2007 Annual Report, utilization of the liquidity facility would be triggered if the conduit is unable to, or does not, issue commercial paper to fund its assets. A liability for the estimate of the potential risk of loss for USB as the liquidity facility provider is recorded on the balance sheet in other liabilities.

In March 2008, the conduit ceased issuing commercial paper and began to draw upon a USB-provided liquidity facility to replace outstanding commercial paper as it matured. The draws upon the liquidity facility resulted in the conduit becoming a non-qualifying special purpose entity. However, USB is not the primary beneficiary and, therefore, does not consolidate the conduit. At September 30, 2008, the amount advanced to the conduit under the liquidity facility was \$0.9 billion, which is recorded on USB's balance sheet in commercial loans. Over time, proceeds from the conduit's securities will be used to repay draws on the liquidity facility. USB believes there is sufficient collateral and insurance to repay all liquidity draws.

USB "expects impairments of about \$200 to \$300 million related to its SIV exposure (est. \$1.6 billion portfolio by year-end)... however, estimated impairment charges in Q4 2008 are expected to have a minimal impact on Tier 1 ratio." 9

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<sup>&</sup>lt;sup>9</sup> Hagerman, T. (2008, Dec. 12). U.S. Bancorp: Early Warning on Tough '09; Lowering Estimates. *Credit Suisse*.

## U.S. Bancorp

#### C. Financial Overview

## Historical Financial Performance Summary Income Statement

Income Statement Summary (\$ in millions)				
	FY2005	FY2006	FY2007	LTM 9/30/2008
Net Interest Income	\$7,055	\$6,741	\$6,689	\$7,352
Non-interest Revenue	6,151	6,832	7,281	7,388
Gain/Loss on Sale of Securities	(106)	14	15	(721)
Nonrecurring Revenue	-	-	-	492
Total Revenue	\$13,100	\$13,587	\$13,985	\$14,511
Provision for Loan Losses	\$666	\$544	\$792	\$2,054
Total Non-interest Expenses	\$5,832	\$6,180	\$6,656	\$7,207
Income Before Taxes	\$6,571	\$6,863	\$6,207	\$5,035
Net Income	\$4,489	\$4,751	\$4,324	\$3,558

Source: SNL Financial.

In its 2007 Annual Report, USB notes that its focus on organic growth, geographic expansion, and product offerings has created a well diversified business, generating strong fee-based revenues that represented over 50% of total net revenue in 2007. USB also benefitted from its ability to generate fee-based revenue in 2008. However, USB was adversely affected by investment losses and credit losses, particularly during the third quarter of 2008.

According to USB management, USB's fundamental business performance continues to be strong despite the challenging financial markets, which impacted the third quarter of 2008 results. Included in the third quarter of 2008 results were \$411 million of securities losses, which included valuation impairment charges on structured investment securities, perpetual preferred stock (including the stock of GSEs) and certain non-agency, mortgage-backed securities. In addition, USB recorded other market valuation losses related to the bankruptcy of an investment banking firm and continued to build the allowance for credit losses by recording \$250 million of provision for credit losses expense in excess of net charge-offs.

Supporting management's assertion that the fundamental business performance remains strong, net interest income for Q3 2008 increased 16.7% from Q3 2007. Non-interest income, however, fell 24.8% over the same period, as strong growth in the majority of categories was offset by securities impairments, other market valuation losses and higher retail lease residual losses.

## Historical Financial Performance Profitability Ratios

FY2005	FY2006	FY2007	9/30/2008 <sup>1</sup>
3.97%	3.65%	3.47%	3.58%
2.21%	2.23%	1.93%	1.50%
22.50%	22.94%	20.59%	16.37%
46.58%	50.34%	52.12%	50.12%
	3.97% 2.21% 22.50%	3.97% 3.65% 2.21% 2.23% 22.50% 22.94%	3.97% 3.65% 3.47% 2.21% 2.23% 1.93% 22.50% 22.94% 20.59%

<sup>&</sup>lt;sup>1</sup> Profitability performance ratios reflect LTM figures as of 9/30/08.

Source: SNL Financial.

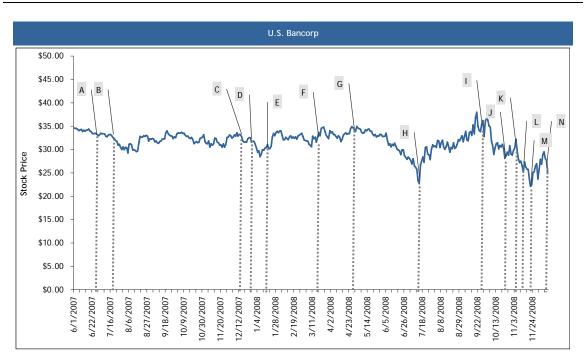
USB's expansion of net interest margin, Q2 2008 to Q3 2008 (4 bps) as well as year-over-year (21 bps), was attributed to "modest widening in credit spreads and the modest liability sensitive nature of the balance sheet. Management is guiding for a relatively stable margin going forward, assuming the current rate environment and yield curve, continued growth of higher spread products, stable to slight improvement in credit spreads and a normalization of liquidity in the overnight markets." 10

DUFF&PHELPS

<sup>&</sup>lt;sup>10</sup> Arfstrom, J. (2008, Oct. 21). U.S. Bancorp: Q3 EPS Mixed: Strong Loan and Margin Performance, Higher Credit Costs. *RBC Capital Markets*.

#### D. Stock Price Performance and Valuation Multiples

## Stock Price Performance June 1, 2007 to December 12, 2008



#### Notable Company Events

- A.) Jun-27-2007: U.S. Bancorp, \$ 0.40, cash dividend. Source: Capital IQ, Financial Times.
- B.) Jul-17-2007: U.S. Bancorp announces resignation of Michael Doyle as Chief Credit Officer; U.S. Bancorp reports earnings results for the Second Quarter and Six Months Ended June 30, 2007. Source: Capital IQ, The Associated Press.
- C.) Dec-14-2007: Jury orders U.S. Bancorp to pay \$17.6 Million in Ponzi Scheme. Source: Capital IQ, The Associated Press.
- D.) Dec-27-2007: U.S. Bancorp, \$ 0.425, cash dividend. Source: Capital IQ, Financial Times.
- E.) Jan-15-2008: U.S. Bancorp reports earnings results for the Fourth Quarter and Full Year Ended December 31, 2007. Source: Capital IQ, Business Wire.
- F.) Mar-18-2008: U.S. Bancorp primary exchange listing has changed to NYSE from OTCUS. Source: Capital IQ, Stock Exchange Website.
- G.) May-01-2008 to Jun-17-2008: U.S. Bancorp completed a series of fixed-income offerings totaling \$2.78 billion. Source: Capital IO.
- H.) Jul-15-2008: U.S. Bancorp announces earnings results for the Second Quarter and Six Months Ended June 30, 2008. Source: Capital IQ. Business Wire.
- I.) Sep-26-2008: U.S. Bancorp, \$ 0.425, cash dividend. Source: Capital IQ, Financial Times.
- J.) Oct-21-2008: U.S. Bancorp announces earnings results for the Nine Months Ended September 30, 2008. Source: Capital IQ, Business Wire.
- K.) Nov-03-2008: U.S. Bancorp to raise \$6.60 billion in funding from U.S. Department of The Treasury. Source: Google Finance, Dow Jones.
- L.) Nov-14-2008: U.S. Bancorp announced that it has received \$6.60 billion in funding from United States Department of The Treasury. Source: Capital IQ.
- M.) Nov-21-2008: U.S. Bancorp's U.S. bank acquires Downey Savings & Loan and PFF Bank & Trust through an FDIC facilitated transaction. Source: Google Finance, Reuters Key Development.
- N.) Dec-11-2008: U.S. Bancorp to report impairments on investments. Source: Capital IQ, St. Paul Pioneer Press.

## U.S. Bancorp

# Historical Financial Performance Valuation Multiples

Valuation Multiples					
	FY2005	FY2006	FY2007	9/30/2008	11/3/2008
Price / Book Equity	2.70x	3.16x	2.74x	3.13x	2.63x
Price / Tangible Book Equity	4.74x	5.88x	5.07x	5.82x	4.89x
Price / Earnings	12.4x	13.9x	13.1x	18.0x	15.1x
Dividend Yield	4.4%	4.4%	5.4%	4.7%	5.6%

Source: SNL Financial.

#### E. Outlook

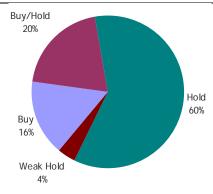
As of December 12, 2008, 25 analysts were covering USB and all 25 were publishing recommendations. The consensus recommendation for USB was a "Hold" rating, with 15 analysts, or 60% of the current coverage universe, recommending that investors "Hold" USB stock, five analysts were carrying a "Buy/Hold" Rating, four analysts were carrying a "Buy" rating and one analyst was carrying a "Weak Hold" rating. This is an improvement compared to the analyst recommendations for USB three months earlier, at which point 4 analysts were carrying a "Buy" rating, 2 analysts were carrying a "Buy/Hold" rating, 11 analysts, or 52% of the total, were carrying a "Hold" recommendation, two analysts were carrying a "Weak Hold" recommendation, and two analysts were carrying a "Sell" recommendation.

#### Wall Street Analyst Recommendations December 12, 2008

Wall Street Analyst Re U.S. Bancorp (NYSE: L						
Date	12/12/	/2008	1 Month Prior	3 Months Prior	Cha	ange
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months
Buy	4	16%	4	4	0	0
Buy/Hold	5	20%	2	2	+3	+3
Hold	15	60%	15	11	0	+4
Weak Hold	1	4%	1	2	0	-1
Sell	0	0%	0	2	0	-2
No Opinion	0	0%	0	0	0	0
Total	25	100%	22	21		

Source: Standard & Poor's Stock Report, December 12, 2008.

## Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008.

Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008



Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the average estimate for USB's expected 2009 EPS declined 36% from an average estimated EPS of \$3.05 to an average estimated EPS of \$1.95 per share for the fiscal year ending December 31, 2009. This decline in EPS estimates highlights the shift in the near-term outlook for USB. An overview of some of the recent commentary supplied by equity analysts that cover USB is provided below.

## TheStreet.com Ratings, December 8, 2008<sup>11</sup>

TheStreet.com maintained their "Hold" rating on USB from November 10<sup>th</sup> noting "[USB's] strengths can be seen in multiple areas, such as good cash flow from operations, expanding profit margins and notable return on equity. However, as a counter to these strengths, we also find weaknesses including a decline in the stock price during the past year, feeble growth in [USB's] earnings per share and deteriorating net income."

<sup>&</sup>lt;sup>11</sup> (2008, Dec. 8). U.S. Bancorp. *TheStreet.com Ratings, Inc.* 

• USB's earnings per share declined by 48.4% in Q3 2008 compared to Q3 2007. TheStreet.com expects that the coming year will see further declines. "During the past fiscal year, USB reported lower earnings of \$2.43 versus \$2.61 in the prior year. For the next year, the market is expecting a contraction of 19.3% in earnings (\$1.96 versus \$2.43)."

## RBC Capital, November 24, 2008<sup>12</sup>

- RBC Capital views USB's agreement with the FDIC (announced on November 21, 2008) to purchase the assets and liabilities of both Downey Savings & Loan and PFF Bank & Trust as "financially attractive", noting that these "[a]cquisitions meet all internal required IRR, DCF, and earning accretion with conservative assumptions while having no cash consideration and a minimal impact on capital."
- Overall, RBC Capital believes the acquisitions were strong positives for USB. "USB gains 208 branches in California and 5 branches in Arizona, making it the fourth-largest branch network in California with over 560 branches. The acquisitions have little branch overlap with existing UB locations and add 500,000 deposit and loan customers to its Western footprint." RBC Capital also noted the acquisitions add a valuable funding base and enhance overall franchise value.

#### Deutsche Bank, November 7, 2008<sup>13</sup>

- Deutsche Bank notes "USB can be viewed as a safe haven relative to many peers, and as a result, [USB's] deposit growth has accelerated from -0.7% in 3Q07 (year-over-year) to 12% in 3Q08. While some of this is attributable to volatile broker/dealer deposits (core growth is about 5-7%), USB added that there was not one day in October that it did not see good net retail deposit growth throughout the franchise."
- While deposit growth has been strong, Deutsche Bank notes that USB's credit quality remains under pressure due to the \$3.5 billion (2.1% of total loans) in residential construction, the \$3.8 billion (2.2% of total loans) in subprime consumer finance and home equity loans, as well as the increasing loss rates (0.58% in 2Q08 to 0.69% in 3Q08) on the \$5.1 billion in auto leasing.
- Deutsche Bank lowered earnings estimates by 15 cents for fiscal year 2009 and 2010 to \$2.05 and \$2.30, respectively. Deutsche Bank attributes these decreases to higher than expected credit losses and lower asset values.

## FPK, November 3, 2008<sup>14</sup>

"We view [the] TARP capital infusion as an incremental positive for USB...
because we believe USB will have greater flexibility and will likely have more
opportunity than most in deploying capital via acquisitions and/or loan growth."

<sup>&</sup>lt;sup>14</sup> Marquardt, A. (2008, Nov. 3). U.S. Bancorp: Approved for \$6.6 TARP Capital Infusion. *Fox-Pitt Kelton Cochran Caronia Waller*, *LLC*.



<sup>&</sup>lt;sup>12</sup> Arfstrom, J. (2008, Nov. 24). U.S. Bancorp: Acquisition of Two California Financial Institutions. *RBC Capital Markets*.

<sup>&</sup>lt;sup>13</sup> Mayo, M. (2008, Nov. 7). U.S. Bancorp: Nudging estimates lower. *Deutsche Bank*.

## U.S. Bancorp

## Credit Ratings December 12, 2008

Senior Debt	Commercial Paper	Outlook
AA-	F1+	Positive
Aa2	P-1	Stable
AA	A-1+	Stable
	Aa2	Aa2 P-1

Sources: Bloomberg, Investor Relations.

#### Fitch Ratings, November 24, 2008<sup>15</sup>

After USB's acquisition of two California-based financial institutions (Downey Savings & Loan and PFF Bank & Trust), Fitch ratings affirmed USB's Issuer Default Ratings (IDRs) at 'AA-/F1+'. According to Business Wire, "The maintenance of the Positive Outlook reflects Fitch's view that USB will continue to exceed its peers, although the current challenging environment presents considerable headwinds for a near term upgrade. Every merger has integration risks, however USB's track record with previous acquisitions has been solid and mitigates Fitch's concern."

## Moody's, September 25, 2008<sup>16</sup>

According to Moody's, "The ratings reflect USB's strong franchise value, which derives from its healthy direct banking business in the Midwest and Western United States. USB's earnings profile is supported by an efficient operating platform and good business line and geographic diversity. The solid earnings, and USB's healthy capital base and limited credit concentrations all provide rating support. Nonetheless, further near-term asset quality deterioration is expected and incorporated in the current ratings."

<sup>&</sup>lt;sup>15</sup> (2008, Nov. 24). Fitch Affirms U.S. Bancorp at 'AA-/F1+' on FDIC-Facilitated Acquisition; Outlook Positive. *Business Wire*.

<sup>&</sup>lt;sup>16</sup> (2008, Sep. 25). U.S. Bancorp. *Moody's Global Credit Research*.



# Appendix I. Company Overview

Wells Fargo & Company

EXCEPT AS OTHERWISE NOTED, ALL INFORMATION CONTAINED IN THIS SECTION WAS DERIVED FROM WELLS FARGO & COMPANY'S 2007 ANNUAL REPORT, FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2007, AND FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2008. THE FOLLOWING OVERVIEW REFLECTS EVENTS AND MARKET INFORMATION THROUGH DECEMBER 12, 2008.

#### A. Business Overview

Wells Fargo is a \$622 billion diversified financial services company providing banking, insurance, investments, mortgage banking and consumer finance through banking stores, the Internet and other distribution channels to consumers, businesses and institutions in all 50 states and in other countries. Wells Fargo is headquartered in San Francisco, California and employed approximately 159,800 active, full-time equivalent people as of December 31, 2007. Wells Fargo is publicly traded on the NYSE under the ticker symbol WFC. Wells Fargo was the fifth largest bank in the United States on the basis of assets and the third largest in market value of its common stock among its peers at September 30, 2008.

Wells Fargo is the product of the merger of Norwest Corporation and the former Wells Fargo & Company, completed on November 2, 1998. In October 2000, Wells Fargo acquired First Security Corporation, a \$23 billion bank holding company in a transaction valued at \$3 billion. Wells Fargo has historically been very acquisitive. In the fourth quarter 2007, it completed the acquisition of Greater Bay Bancorp, with \$7.4 billion in assets.

On October 3, 2008, Wells Fargo entered into a definitive agreement to acquire all outstanding shares of Wachovia in a stock-for-stock transaction. Wachovia, based in Charlotte, North Carolina, had total assets of \$764 billion at September 30, 2008, and is one of the nation's largest diversified financial services companies, providing a broad range of retail banking and brokerage, asset and wealth management, and corporate and investment banking products and services to customers through 3,300 financial centers in 21 states, as well as nationwide retail brokerage, mortgage lending and auto finance businesses. Under terms of the agreement, Wachovia shareholders will receive 0.1991 shares of Wells Fargo common stock in exchange for each share of Wachovia common stock. On December 31, 2008 the transaction was unanimously approved by the Boards of Directors of Wachovia and Wells Fargo.

Wells Fargo primarily conducts its operations through three business segments: Community Banking Group, Wholesale Banking Group and Wells Fargo Financial.

#### **Community Banking Group**

The Community Banking Group offers a complete line of diversified financial products and services to consumers and small businesses with annual sales up to \$20 million. Community Banking also offers investment management and other services to retail customers and high net worth individuals. These products and services include mutual funds, personal trust and agency assets, as well as loan products such as lines of credit, equity lines and loans, equipment and transportation loans, education loans, origination and purchase of residential mortgage loans, and the servicing of mortgage loans and credit cards. Other credit products and financial services available to small

## Wells Fargo & Company

businesses and their owners include receivables and inventory financing, equipment leases, real estate financing, Small Business Administration financing, venture capital financing, cash management, payroll services, retirement plans, Health Savings Accounts, and merchant payment processing. Consumer and business deposit products include checking accounts, savings deposits, market rate accounts, Individual Retirement Accounts (IRAs), time deposits and debit cards. Community Banking serves customers through a wide range of channels, which include traditional banking stores, in-store banking centers, business centers and ATMs. Online banking services include single sign-on to online banking, bill pay and brokerage, as well as online banking for small business. Community Banking accounted for 64.8% of Wells Fargo revenues in fiscal year 2007.

#### The Wholesale Banking Group

The Wholesale Banking Group serves businesses across the United States with annual sales generally in excess of \$10 million. Wholesale Banking provides a complete line of commercial, corporate and real estate banking products and services. These include: traditional commercial loans and lines of credit; letters of credit; asset-based lending; equipment leasing; mezzanine financing; high-yield debt; international trade facilities; foreign exchange services; treasury management; investment management; institutional fixed-income sales; interest rate, commodity and equity risk management; online/electronic products; insurance; corporate trust fiduciary and agency services; and investment banking services. Wholesale Banking manages and administers institutional investments, employee benefit trusts and mutual funds.

Wholesale Banking includes the majority ownership interest in the Wells Fargo HSBC Trade Bank, which provides trade financing, letters of credit and collection services and is sometimes supported by the Export-Import Bank of the United States. Wholesale Banking also supports the commercial real estate market with products and services such as: construction loans for commercial and residential development; land acquisition and development loans; secured and unsecured lines of credit; interim financing arrangements for completed structures; rehabilitation loans; affordable housing loans and letters of credit; permanent loans for securitization; commercial real estate loan servicing; and real estate and mortgage brokerage services. Wholesale Banking accounted for 21.2% of Wells Fargo revenues in fiscal year 2007.

#### Wells Fargo Financial

Wells Fargo Financial includes consumer finance and auto finance operations. Consumer finance operations make direct consumer and real estate loans to individuals and purchase sales finance contracts from retail merchants from offices throughout the United States, and in Canada and the Pacific Rim. Auto finance operations specialize in purchasing sales finance contracts directly from auto dealers and making loans secured by autos in the United States, Canada and Puerto Rico. Wells Fargo Financial also provides credit cards and lease and other commercial financing. Wells Fargo Financial accounted for 14.0% of Wells Fargo revenues in fiscal year 2007.

## Revenue by Line of Business



Sources: WFC 2007 Annual Report, WFC Form 10-Q for the Quarterly Period Ended September 30, 2008.

#### B. Balance Sheet Composition

#### **Summary Balance Sheet**

Wells Fargo remains one of the few banks in the U.S. that has consistently supplied credit to existing and new creditworthy customers throughout the current credit crisis. It has deemphasized indirect lending and has pared down higher risk tiers across its loan portfolio but continues to be an active lender at appropriate market terms to creditworthy borrowers.

Balance Sheet Overview				
(\$ in millions)				
	FY2005	FY2006	FY2007	9/30/2008
Loans	\$348,112	\$349,170	\$404,651	\$422,558
Earning Assets - Average	389,951	422,534	452,410	516,066
Earning Assets - End of Year	410,028	407,248	493,390	534,495
Risk-Weighted Assets	383,993	411,333	483, 421	525,686
Total Assets	481,741	481,996	575,442	622,361
Deposits	\$314,450	\$310,243	\$344,460	\$353,574
Tangible Equity	\$29,156	\$33,981	\$33,805	\$32,789
Total Equity	40,660	45,814	47,628	46,957

Source: SNL Financial.

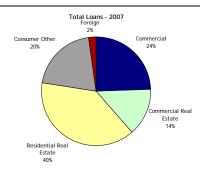
For the quarter ending September 30, 2008, Wells Fargo's average loans were up 15%, consisting of 27% growth in commercial loans and 9% growth in consumer loans. Deposits reached a record \$354 billion, marking an increase of 2.6% over deposits at fiscal year ended December 31, 2007. Inflows of checking and interest bearing deposits accelerated across all customer segments, contributing to the strong deposit inflows and increases in net new deposit accounts.

Wells Fargo's provision for credit losses totaled \$2.5 billion, including the \$500 million credit reserve build at quarter end. In addition to \$7.1 billion in cumulative net charge-offs, it has now added \$3.9 billion to its allowance for credit losses. While Wells Fargo's credit portfolios are not immune to the economic forces the industry is confronting, it believes its portfolios should perform better than the industry because it never offered most of the more problematic loan types and because it has been aggressively managing down the higher risk elements within each of its loan portfolios for over a year. 1

<sup>&</sup>lt;sup>1</sup> WFC Q3 Earnings Call Transcript.

#### Loan Portfolio

#### Loan Portfolio Distribution

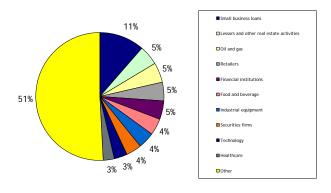


Sources: WFC 2007 Annual Report.

Wells Fargo's loan portfolio distribution has remained relatively constant over the past several years. While the overall loan portfolio has grown from \$213.1 billion in 2003 to \$344.8 billion in 2007, marking a 61.8% increase, the distribution between the key categories has remained relatively constant. Commercial loans have increased from \$51.7 billion to \$83.9 billion over the period, marking a 62.2% increase. However, as a percentage of the total loan portfolio, commercial loans remained unchanged, comprising 24.3% of the total portfolio. On a dollar basis, commercial real estate and residential real estate increased 46.9% and 52.0%, respectively, from 2003 to 2007. However, as a percentage of the total loan portfolio, each category accounted for about 150 basis points less of the total portfolio. Commercial real estate accounted for 14.4% of the portfolio and residential real estate accounted for 38.8% as of December 31, 2007. Consumer other, which includes credit cards and other revolving credit, increased its share of the total portfolio, making up 20.4% in 2007, versus 17.6% in 2003. Foreign loans also increased as a percentage of the total loan portfolio over the period, increasing to 2.1% in 2007, up from 1.0% in 2003.

#### Commercial Loans by Industry

Commercial Loans by Industry - 2007



Sources: WFC 2007 Annual Report.

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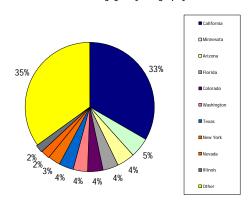
<sup>&</sup>lt;sup>2</sup> WFC Q3 Earnings Call Transcript.

## Wells Fargo & Company

Wells Fargo's commercial loan portfolio is widely diversified, with small business loans accounting for the greatest exposure at 11.4%, and real estate, oil and gas, retail and financial institutions accounting for 5.0% each. Wells Fargo lends into a highly diverse set of industries and through a diverse mix of customer relationships throughout Wells Fargo's target markets. Loan types and product offerings are carefully underwritten and monitored.

#### Residential Mortgages by Geography

Residential Mortgages by Geography - 2007



Source: WFC 2007 Annual Report.

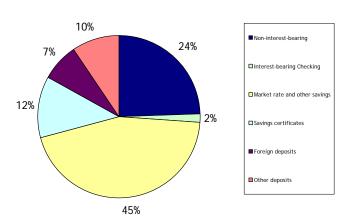
Residential real estate mortgages are one of Wells Fargo's core products. In 2007, 33.3% of the total residential mortgage portfolio originated in California. Aside from concentration in California, Wells Fargo is well diversified, with a presence in every state in the U.S. Wells Fargo does not make or purchase option ARM products or variable-rate mortgage products with fixed payment amounts, commonly referred to within the financial services industry as negative amortizing mortgage loans, as it believes these products rarely provide a benefit to customers. Wells Fargo has minimal ARM reset risk across its owned mortgage loan portfolios.

Wells Fargo performs quality control reviews for third party originated loans and actively manages or terminates sources that do not meet its credit standards. Specifically, during 2007 it stopped originating first and junior lien residential mortgages where credit performance had deteriorated beyond its expectations, especially recent vintages of high combined loan-to-value home equity loans sourced through third party channels.

Some of Wells Fargo's residential real estate mortgage loans include an interest-only feature as part of the loan terms. As of December 31, 2007, these loans were approximately 20% of total loans, compared with 19% at the end of 2006. Substantially all of these loans are considered to be prime or near prime.

#### **Total Deposits**

Total Deposits - 2007



Source: WFC 2007 Annual Report.

Average core deposits increased \$34.2 billion to \$303.1 billion in 2007 from \$268.9 billion in 2006. Average core deposits funded 58.2% and 55.3% of average total assets in 2007 and 2006, respectively. Total average interest-bearing deposits increased to \$239.2 billion in 2007 from \$223.8 billion in 2006, largely due to growth in market rate and other savings deposits, along with growth in foreign deposits, offset by a decline in other time deposits. Total average non-interest-bearing deposits declined to \$88.9 billion in 2007 from \$89.1 billion in 2006. Savings certificates increased on average to \$40.5 billion in 2007 from \$32.4 billion in 2006.

#### Historical Financial Performance Balance Sheet Ratios

	FY2005	FY2006	FY2007	9/30/2008
Balance Sheet				
Loans / Deposits	98.85%	102.86%	110.95%	116.26%
Tangible Equity / Tangible Assets	6.20%	7.23%	6.02%	5.39%
Leveverage Ratio <sup>(1)</sup>	6.99%	7.89%	6.83%	7.54%
Tier One Ratio <sup>(2)</sup>	8.28%	8.93%	7.59%	8.59%
Risk Based Capital Ratio <sup>(3)</sup>	11.64%	12.50%	10.68%	11.51%
Asset Quality				
Reserve for Loan Losses / Gross Loans	1.10%	1.07%	1.29%	1.83%
Reserve for Loan Losses / Non-Performing Assets	252.84%	179.75%	159.23%	138.10%
Net Charge-Offs / Average Loans	0.68%	0.64%	0.93%	1.50%
Loan Loss Provision / Net Charge-Offs	104.38%	97.78%	139.56%	162.43%

Source: SNL Financial.

#### Definitions:

<sup>(1)</sup>Leverage Ratio is calculated as Tier One Capital divided by tangible assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Liquidity Ratio of 4%. Federal bank regulators generally consider a Liquidity Ratio of 5% or above as well capitalized.

Tier One Capital is the sum of the core capital elements (capital stock, surplus, undivided profits, qualifying non-cumulative perpetual preferred stock and minority interest in the equity accounts of consolidated subsidiaries) less goodwill and other intangible assets. Tier One Capital does not include any gains or losses on available-for-sale securities.

<sup>(2)</sup>Tier One Ratio is calculated as Tier One Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum Tier One Ratio of 4%. Federal bank regulators generally consider a Tier One Ratio of 6% or above as well capitalized.

<sup>(3)</sup>Risk Based Capital Ratio is the sum of Tier One Capital and Tier Two Capital divided by Risk-Weighted Assets. To be adequately capitalized under federal bank regulatory agency definitions, a bank holding company is generally expected to meet a minimum risk based capital ratio of 8%. Federal bank regulators generally consider a Risk Based Capital Ratio of 10% or above as well capitalized.

Tier Two Capital is the sum of the allowance for loan and lease losses (limited to 1.25% of risk-weighted assets), perpetual preferred stock not qualifying as Tier One Capital, subordinated debt and intermediate term preferred stock. Tier Two Capital cannot exceed Tier One Capital.

Risk-Weighted Assets are calculated by assigning each asset and off-balance-sheet item to one of four broad risk categories. These categories are assigned risk weights of 0%, 20%, 50%, and 100%. Riskier assets are placed in the higher percentage categories.

Source: Federal Reserve Center for Online Learning, http://stlouisfed.org.

On November 10, 2008, Credit Suisse stated that, following Wells Fargo's \$11 billion stock issuance and the addition of \$25 billion through the TARP program, "[Wells Fargo] has substantially improved its balance sheet flexibility and potential earnings power to navigate a more severe economic downturn." The capital position is evidenced by a Tier One Capital Ratio of approximately 8.59%, as of September 30,

<sup>&</sup>lt;sup>3</sup> Hagerman, T. (2008, Nov. 10). Wells Fargo & Company: Capital Flexibility, Earnings Diversity; Upgrading to Outperform. *Credit Suisse*.



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2008, up approximately 100 basis points from the last fiscal year end, reflecting its high rate of internal capital generation and four successful non-dilutive capital raises in 2008 totaling \$6.5 billion. Tier One Capital plus the allowance for credit losses was 10% of average earning assets, up 52 basis points from the year end.

Wells Fargo significantly enhanced its liquidity with the acquisition of \$370 billion of core deposits through its October 2008 agreement to acquire Wachovia. It expects \$60 billion to be at risk of loss, and to mark two-thirds of credit losses at the close of the acquisition of Wachovia, with the remainder marked down over the next three years. In addition, it has raised \$12.6 billion in common stock, the largest non-IPO capital raise in U.S. history. It projects its year three (2011) Tier One Capital to exceed the targeted minimum of 8%, and plans to continue to be opportunistic about deploying and raising capital.<sup>4</sup>

In addition, Wells Fargo sees the acquisition of Wachovia as significantly improving its internal capital generation capabilities and the transaction will allow Wells Fargo to improve its risk profile. Through greater geographic diversification, upfront purchase accounting mark-downs and reduced corporate, commercial real estate and structured product exposure.<sup>5</sup>

Because Wells Fargo avoided offering many of the more problematic loan types, it currently has a loan portfolio that, while not immune to economic challenges, is generally more diverse and of better overall quality than many of its peers. Within its portfolio, write-offs have been largely concentrated in the consumer channel. Approximately 72% of Wells Fargo's net write-downs have been concentrated within mortgage loans, credit card loans and other revolving consumer credit, as noted earlier.

#### **Off-Balance Sheet Arrangements**

In the ordinary course of business, Wells Fargo engages in financial transactions that are not recorded on its balance sheet in amounts that are different than the full contract or notional amount of the transaction. These transactions are designed to (1) meet the financial needs of customers, (2) manage Wells Fargo's credit, market or liquidity risks, (3) diversify its funding sources, or (4) optimize capital, and are accounted for in accordance with U.S. GAAP.

Wells Fargo has largely avoided many of the industry issues associated with CDOs and SIVs. Wells Fargo typically has not engaged in creating or sponsoring SIVs to hold off-balance sheet assets and has not made a market in subprime securities.

Almost all of Wells Fargo's off-balance sheet arrangements result from securitizations. Based on market conditions, from time to time it may securitize home mortgage loans and other financial assets, including commercial mortgages. Wells Fargo normally structures loan securitizations as sales, in accordance with FAS 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities (a replacement of FASB Statement No. 125.) This involves the transfer of financial assets to certain QSPEs that Wells Fargo is not required to consolidate.

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<sup>&</sup>lt;sup>4</sup> Wells Fargo Investor Presentation. (2008, Dec. 10). Goldman Sachs U.S. Financial Services Conference.

<sup>&</sup>lt;sup>5</sup> Wells Fargo Investor Presentation. (2008, Dec. 10). Goldman Sachs U.S. Financial Services Conference.

## Wells Fargo & Company

At December 31, 2007, securitization arrangements sponsored by Wells Fargo consisted of \$224 billion in securitized loan receivables. At December 31, 2007, the retained servicing rights and other interests held related to these securitizations were \$10.8 billion, consisting of \$8.8 billion in securities, \$1.5 billion in servicing assets and \$413 million in other interests held. Related to its securitizations, Wells Fargo has committed to provide up to \$21 million in credit enhancements.

Wells Fargo has investments in certain special-purpose entities, generally created by other sponsoring organizations, where it holds variable interests greater than 20% but less than 50% (significant variable interests). These special-purpose entities were predominantly formed to invest in affordable housing and sustainable energy projects and to securitize corporate debt. These special-purpose entities had approximately \$5.8 billion in total assets at December 31, 2007, including \$960 million related to CDOs. Wells Fargo is not required to consolidate these entities. Its maximum exposure to loss as a result of its involvement with these unconsolidated variable interest entities was approximately \$2.0 billion at December 31, 2007.

#### C. Financial Overview

## Historical Financial Performance Summary Income Statement

(\$ in millions)				
	FY2005	FY2006	FY2007	LTM 9/30/2008
Net Interest Income	\$18,504	\$19,951	\$20,974	\$23,907
Non-interest Revenue	14,035	14,895	17,534	18,375
Gain/Loss on Sale of Securities	391	719	943	116
Nonrecurring Revenue		127	-	334
Total Revenue	\$32,930	\$35,692	\$39,451	\$42,732
Provision for Loan Losses	\$2,383	\$2,204	\$4,939	\$10,147
Total Non-interest Expenses	\$18,919	\$20,721	\$22,589	\$22,940
Income Before Taxes	\$11,548	\$12,650	\$11,627	\$9,720
Net Income	\$7,671	\$8,420	\$8,057	\$6,750

Source: SNL Financial.

Wells Fargo's core business performed well in 2007, achieving 10.5% annual top-line growth. Revenue for the year grew faster than total non-interest expenses, which grew 9.0% year over year. It took a \$4.9 billion provision for loan losses, marking a \$2.7 billion increase over fiscal year 2006. While the significant increase in loan loss provisions reduced net income after tax by approximately 18%, consolidated full year earnings per share declined only 4% to \$8.1 billion (or \$2.38 per share), a strong overall result given the capital market environment and higher credit costs.

Wells Fargo largely avoided or had negligible exposure to many of the problem areas that resulted in significant costs and writedowns at other large financial institutions. It continues to build a diversified franchise, achieving strong growth in both revenue and operating margins while generating industry-leading returns. It has maintained strong capital levels and strong liquidity.<sup>6</sup>

The current market challenges faced by other banks in the industry have created opportunities for Wells Fargo to grow its business. For the last LTM period through September 30, 2008, Wells Fargo generated revenue of \$42.7 billion. Total provision for loan losses for the LTM period was \$10.1 billion. Included in the quarterly results were one-time charges of \$646 million due to impairment charges on holdings of Fannie Mae, Freddie Mac, and Lehman. Despite the writedowns, Wells Fargo has generated net income of \$6.8 billion (or \$2.03 per share) in the LTM period.

Retail cross sell reached a record 5.7 products per customer on record product sales. Wells Fargo continues to see strong growth in most of its fee-based revenue sources including deposit and loan services, credit and debit cards, insurance and mortgage banking.

<sup>&</sup>lt;sup>6</sup> WFC Q3 Earnings Call Transcript.

## Wells Fargo & Company

Credit quality is likely to remain the principal earnings wild card, however the expected aggressive marks on Wachovia's loan portfolio at closing provides greater operating flexibility and potentially greater earnings accretion long-term. Wells Fargo has identified \$60 billion in losses on Wachovia's loan portfolio, \$39.2 billion of which are expected to be taken at close, with the remainder recognized through periodic charge-offs/reserves over the life of the portfolio.<sup>7</sup>

## Historical Financial Performance Profitability Ratios

Profitability Ratios				
	FY2005	FY2006	FY2007	9/30/2008 <sup>1</sup>
Profitability				
Net Interest Margin	4.85%	4.83%	4.74%	4.77%
Return on Average Assets	1.72%	1.73%	1.55%	1.15%
Return on Average Equity	19.59%	19.52%	17.12%	14.08%
Non-interest Income / Revenue	43.13%	42.75%	45.53%	43.46%

<sup>&</sup>lt;sup>1</sup>Profitability performance ratios reflect LTM figures as of 9/30/08.

Source: SNL Financial.

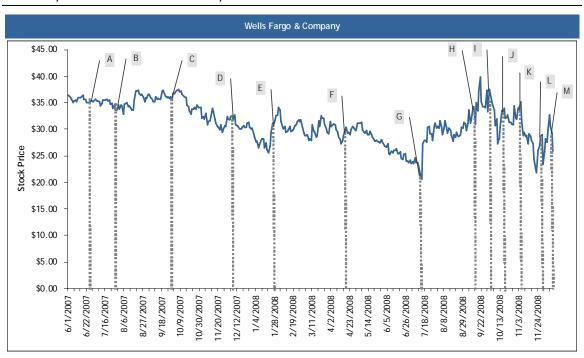
Wells Fargo's net interest margin increased slightly as of September 30, 2008 relative to the fiscal year ended 2007. Wells Fargo continues to benefit from significantly lower funding costs, from increased core deposit inflows, and from wider spreads on new assets. Returns on average assets and average equity continue to be strong, although the current economic environment has caused these returns to decrease over historical periods.

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<sup>&</sup>lt;sup>7</sup> Hagerman, T. (2008, Nov. 10). Wells Fargo & Company: Capital Flexibility, Earnings Diversity; Upgrading to Outperform. *Credit Suisse.* 

#### D. Stock Price Performance and Valuation Multiples

## Stock Price Performance June 1, 2007 - December 12, 2008



#### Notable Company Events

- A.) June 27, 2007: Wells Fargo names John Stumpf CEO. Source: SNL Financial, LC.
- B.) July 24, 2007: Wells Fargo announces a quarterly dividend of 31 cents per share on the outstanding shares of common stock, up nearly 11 percent from the previous dividend. Source: Wells Fargo & Company news release.
- C.) October 1, 2007: Wells Fargo completes merger with Greater Bay Bancorp. Source: SNL Financial, LC.
- D.) December 4, 2007: Wells Fargo sells \$3 billion in 10 year notes. Source: SNL Financial, LC.
- E.) January 28, 2008: Wells Fargo sells \$4.5 billion in global notes. Source: SNL Financial, LC.
- F.) April 20, 2008: Moody's assigns Aa1 rating to Wells Fargo senior debt. Source: SNL Financial, LC.
- G.) July 16, 2008: Wells Fargo earns \$1.75 billion in Q2, raises dividend 10% to 34 cents per share. Source: SNL Financial, LC.
- H.) September 15, 2008: Wells Fargo discloses \$249 million Lehman exposure. Source: SNL Financial, LC.
- I.) October 3, 2008: Wells Fargo to acquire Wachovia in \$15.1 billion deal. Source: SNL Financial, LC.
  October 3, 2008: Moody's places negative outlook on ratings of Wells Fargo. Source: SNL Financial, LC.
- J.) October 14, 2008: United States Treasury invests \$25 billion in Wells Fargo. Source: SNL Financial, LC.
- K.) November 6, 2008: Wells Fargo raises \$11.0 billion in equity offering. Source: SNL Financial, LC.
- L.) December 3, 2008: Wells Fargo raises \$6 billion in debt offering. Source: SNL Financial, LC.
- M.) December 12, 2008: Wells Fargo to take \$40 billion 4Q charge on Wachovia, says analyst. Source: SNL Financial, LC.

## Wells Fargo & Company

## Valuation Multiples

005				
000	FY2006	FY2007	9/30/2008	10/14/2008
2.59x	2.62x	2.09x	2.65x	2.37x
3.61x	3.53x	2.94x	3.80x	3.39x
14.0x	14.4x	12.7x	18.5x	16.4x
3.3%	3.2%	4.1%	3.6%	4.1%
	3.61x 14.0x	3.61x 3.53x 14.0x 14.4x	3.61x 3.53x 2.94x 14.0x 14.4x 12.7x	3.61x         3.53x         2.94x         3.80x           14.0x         14.4x         12.7x         18.5x

Source: SNL Financial.

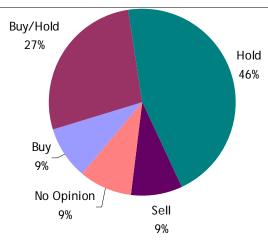
#### E. Outlook

As of December 12, 2008, 22 analysts were covering Wells Fargo and all 22 were publishing recommendations. The consensus recommendation for Wells Fargo was a "Hold" rating, with ten analysts, or 46% of the coverage universe, recommending that investors "Hold" Wells Fargo stock. Six analysts were carrying a "Buy/Hold" Rating. Two analysts were carrying a "Buy" rating, and two analysts were carrying a "Sell" rating. Two analysts had no opinion. This is an improvement for Wells Fargo from three months earlier, at which point three analysts were carrying a "Sell" rating, five analysts were carrying "Buy/Hold" ratings, two were carrying a "Buy" rating, ten analysts, or 43%, were carrying a "Hold" recommendation, and three carried a "Weak Hold" rating.

#### Wall Street Analyst Recommendations December 12, 2008

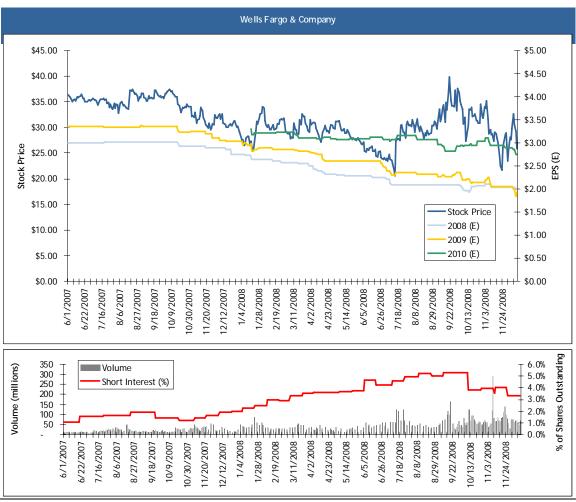
Date	12/12/2008		1 Month Prior	3 Months Prior	Change	
	# of Ratings	% of Total	# of Ratings	# of Ratings	1 Month	3 Months
Buy	2	9%	3	2	-1	0
Buy/Hold	6	27%	7	5	-1	+1
Hold	10	45%	8	10	+2	0
Weak Hold	0	0%	0	3	0	-3
Sell	2	9%	2	3	0	-1
No Opinion	2	9%	2	0	0	+2
Total	22	100%	22	23		

## Percentage of Total Recommendations December 12, 2008



Source: Standard & Poor's Stock Report, December 12, 2008.

Equity Analyst Outlook and Investor Sentiment June 1, 2007 through December 12, 2008



Sources: Capital IQ, Bloomberg.

From June 1, 2007 through December 12, 2008, the average estimate for Wells Fargo's expected 2009 EPS declined 42% from an average estimated EPS of \$3.35 to an average estimated EPS of \$1.93 per share for the fiscal year ending December 31, 2009. This decline in EPS estimates highlights the shift in the near-term outlook for Wells Fargo. An overview of some of the recent commentary supplied by equity analysts that cover Wells Fargo is provided below.

### Credit Suisse, November 10, 2008<sup>8</sup>

- Credit Suisse lowered earnings estimates for fourth quarter 2008 and fiscal year 2009 due to significant mark downs associated with the acquisition of Wachovia.
- In addition, general conservatism regarding the general credit outlook has lowered earnings expectations.

<sup>&</sup>lt;sup>8</sup> Hagerman, T. (2008, Nov. 10). Wells Fargo: Capital Flexibility, Earnings Diversity; Upgrading to Outperform. *Credit Suisse.* 

## Wells Fargo & Company

- Credit Suisse also noted that, in the long run, "earnings diversity" and new profit
  centers associated with the acquisition help to offset some of the higher credit
  costs to be expected.
- Credit Suisse identifies Wells Fargo's expanding market share as a tremendous asset looking beyond the immediate credit crisis.

### FPK, November 7, 20089

- FPK reiterated its "Outperform" rating, saying that it expects a successful acquisition of Wachovia and views Wells Fargo's handling of credit concerns in a positive light.
- The analyst is confident that Wells Fargo will build its capital base quickly, given core earnings potential, as well as the likely conservative estimates of dealrelated synergies.

## Oppenheimer, November 6, 2008<sup>10</sup>

- Oppenheimer left its fiscal fourth quarter 2008 EPS estimate unchanged at \$0.11 per share from its previous estimate on October 15.
- Oppenheimer's estimate for fiscal year 2009 EPS is 29% below the consensus \$2.10 due to concerns over Wells Fargo's level of detail on the marks it plans to take on its portfolio.

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<sup>&</sup>lt;sup>9</sup>Marquardt, A. (2008, Nov. 7). Wells Fargo: Raising PT Post Cap Raise and WB Deal; Reit Outperform. Fox-Pitt Kelton Cochran Caronia Waller.

<sup>&</sup>lt;sup>10</sup> Whitney, M. (2008, Nov. 6). Wells Fargo & Company: WFC Announces \$10B Common Stock Offering. *Oppenheimer*.

Credit Default Swaps
June 1, 2007 through December 12, 2008



A.) October 14, 2008: United States Treasury invests \$25 billion in Wells Fargo.

Sources: Capital IQ, Bloomberg.

CDSs are used to hedge against losses or to speculate on the ability of a company to repay their debt. The spread on a CDS rises as investor confidence deteriorates. A basis point ("bps") on a credit-default swap contract protecting \$10 million of debt from default for five years is equivalent to \$1,000 a year.

As demonstrated in the figure above, the spread on Wells Fargo's five year credit-default swaps has increased 635.92 bps from 11.25 bps at June 1, 2007 to 647.17 bps at December 12, 2008. This increase indicates heightened concern that Wells Fargo will default on its debt.

## Wells Fargo & Company

## Credit Ratings December 19, 2008

Credit Ratings			
	Senior Debt	Commercial Paper	Outlook
Fitch Ratings	AA	F1+	Stable
Fitch Ratings	AA	Γ1+	Stable
Moody's Investor Service	Aa1	P-1	Watch Neg.
Standard & Poor's	AA	A-1+	Watch Neg.

Source: SNL Financial.

### S&P, December 19, 2008

On December 19, 2008, S&P downgraded the ratings or lowered the outlooks of twelve U.S. and European financial institutions, including Wells Fargo. S&P commented that the downgrades reflect "the significant pressure" on the future performance of large financial institutions due to increasing risks within the banking industry. The agency said that "business-model issues" remain and the new ratings reflect the "long-term issues" to be expected from increased regulatory pressure to decrease leverage, reassess risk and restrict some business activities.<sup>11</sup>

## Moody's, October 16, 2008

On October 16, 2008, Moody's commented that Wells Fargo's third quarter results were better than expected, in light of its exposure to the worsening housing market and the earlier announcement that it was marking down its Fannie Mae, Freddie Mac and Lehman investments by \$646 million. Moody's did reiterate that Wells Fargo is on review for a possible downgrade due to its announced acquisition of Wachovia. 12

#### S&P, October 15, 2008

On October 15, 2008, S&P commented that Wells Fargo's third-quarter results were positive, considering the challenging operating environment and the higher credit losses from consumer loans. Wells Fargo has a sizable, low-cost core deposit base with a strong net interest margin of 4.79%, underscoring Wells Fargo's strong revenue base. Wells Fargo is benefiting from weak performance from regional competition. Consumer behavior, which is generating a flight to quality, benefits Wells Fargo for both its lending and deposit businesses. However, given the continued weakness in residential real estate markets and rising recessionary pressures, S&P expects consumer credit losses to remain elevated until the second half of 2009. S&P reiterated that Wells Fargo is on CreditWatch Negative, where it was placed on October 3, 2008, due to its pending acquisition of Wachovia. 13

<sup>11</sup> White, F. (2008, Dec. 19). S&P Lowers boom on 12 Big Banks. *SNL Financial LC*.

<sup>&</sup>lt;sup>12</sup> Jawaid, A. (2008, Oct. 16). Moody's: Wells Fargo's Q3 Results 'Better Than Expected'. *SNL Financial LC* 

<sup>&</sup>lt;sup>13</sup> Wagner, V. (2008, Oct. 15). Summary: Wells Fargo & Co. Standard & Poor's Rating Services.

# Appendix J

**Warrant Exercise Prices** 

Company: American International Group, Inc. (NYSE:AIG)			
TARP Investment Announcement Date: TARP Investment Funding Date:	11/10/2008 11/25/2008	<u>Stock Price</u> \$2.28 \$1.77	
Number of Warrants Exercise Price	53,798,766 \$2.50		

Company:	Bank of America Corporat	ion (NYSE:BAC)	
			Stock Price
TARP Investm	nent Announcement Date:	10/14/2008	\$26.53
TARP Investment Funding Date:		10/28/2008	\$23.02
Number of W	arrants	73,075,674	
Exercise Price	е	\$30.79	

No. of	Data	Closing	Trading
Days	<u>Date</u>	Stock Price	Volume
1	10/10/2008	\$20.87	213,075,500
2	10/9/2008	\$19.63	197,951,300
3	10/8/2008	\$22.10	322,756,500
4	10/7/2008	\$23.77	144,143,200
5	10/6/2008	\$32.22	82,460,160
6	10/3/2008	\$34.48	71,052,880
7	10/2/2008	\$36.37	60,499,180
8	10/1/2008	\$38.13	77,530,080
9	9/30/2008	\$35.00	79,246,940
10	9/29/2008	\$30.25	102,415,300
11	9/26/2008	\$36.70	71,964,310
12	9/25/2008	\$34.37	60,479,240
13	9/24/2008	\$33.07	46,298,810
14	9/23/2008	\$33.30	54,633,520
15	9/22/2008	\$34.15	64,641,500
16	9/19/2008	\$37.48	169,652,000
17	9/18/2008	\$30.58	225,157,700
18	9/17/2008	\$27.20	174,479,800
19	9/16/2008	\$29.55	174,575,600
20	9/15/2008	\$26.55	278,226,000
20 Day Avera	ge Stock Price	\$30.79	

Company: Citigroup, Inc. (NYSE:C)		
		Stock Price
TARP Investment Announcement Date:	10/14/2008	\$18.62
TARP Investment Funding Date:	10/28/2008	\$13.41
Number of Warrants	210,084,034	
Exercise Price	\$17.85	

No. of Days	Date	Closing Stock Price	Trading Volume
	-		
1	10/10/2008	\$14.11	260,983,200
2	10/9/2008	\$12.93	189,448,400
3	10/8/2008	\$14.40	156,127,400
4	10/7/2008	\$15.15	127,847,900
5	10/6/2008	\$17.41	159,251,000
6	10/3/2008	\$18.35	295,841,600
7	10/2/2008	\$22.50	108,783,200
8	10/1/2008	\$23.00	157,123,200
9	9/30/2008	\$20.51	113,244,500
10	9/29/2008	\$17.75	201,185,200
11	9/26/2008	\$20.15	112,486,000
12	9/25/2008	\$19.41	93,546,720
13	9/24/2008	\$18.96	87,458,250
14	9/23/2008	\$19.99	85,236,170
15	9/22/2008	\$20.01	117,721,400
16	9/19/2008	\$20.65	265,457,500
17	9/18/2008	\$16.65	342,239,100
18	9/17/2008	\$14.03	312,234,200
19	9/16/2008	\$15.75	257,367,400
20	9/15/2008	\$15.24	270,207,200
20 Day Avera	age Stock Price	\$17.85	

Company: Citigroup, Inc. (NYSE:C)		
		Stock Price
TARP Investment Announcement Date:	11/24/2008	\$5.95
TARP Investment Funding Date:	12/31/2008	\$6.71
Number of Warrants	188,501,414	
Exercise Price	\$10.61	

No. of Days	Date	Closing Stock Price	Trading Volume
1	11/21/2008	\$3.77	1,028,693,000
2	11/20/2008	\$4.71	724,372,900
3	11/19/2008	\$6.40	341,798,400
4	11/18/2008	\$8.36	212,776,300
5	11/17/2008	\$8.89	167,652,700
6	11/14/2008	\$9.52	281,570,000
7	11/13/2008	\$9.45	277,279,700
8	11/12/2008	\$9.64	160,915,900
9	11/11/2008	\$10.80	140,400,100
10	11/10/2008	\$10.00	90,597,440
11	11/7/2008	\$11.82	99,748,620
12	11/6/2008	\$11.52 \$11.52	152,977,700
13	11/5/2008	\$12.63	107,448,400
14	11/4/2008	\$14.68	80,233,010
15	11/3/2008	\$13.99	71,065,800
16	10/31/2008	\$13.65	91,994,220
17	10/30/2008	\$13.11	100,869,600
18	10/29/2008	\$12.91	130,565,000
19	10/28/2008	\$13.41	150,889,300
20	10/27/2008	\$11.73	122,127,600
20 Day Avera	ge Stock Price	\$10.61	

Company: Goldman Sachs Group Inc	. (NYSE:GS)	
TARP Investment Announcement Date: TARP Investment Funding Date:	10/14/2008 10/28/2008	<u>Stock Price</u> \$122.90 \$93.57
Number of Warrants Exercise Price	12,205,045 \$122.90	

No. of Days	Date	Closing Stock Price	Trading Volume
1	10/10/2008	\$88.80	71,348,030
2	10/9/2008	\$101.35	28,160,970
3	10/8/2008	\$113.00	18,228,090
4	10/7/2008	\$115.00	17,188,580
5	10/6/2008	\$124.00	21,370,630
6	10/3/2008	\$128.00	16,083,990
7	10/2/2008	\$131.54	10,897,070
8	10/1/2008	\$134.50	13,848,930
9	9/30/2008	\$128.00	13,133,790
10	9/29/2008	\$120.70	24,147,520
11	9/26/2008	\$137.99	15,809,460
12	9/25/2008	\$135.50	19,172,060
13	9/24/2008	\$133.00	46,624,020
14	9/23/2008	\$125.05	20,448,510
15	9/22/2008	\$120.78	21,938,670
16	9/19/2008	\$129.80	43,215,370
17	9/18/2008	\$108.00	114,590,600
18	9/17/2008	\$114.50	112,060,400
19	9/16/2008	\$133.01	48,296,380
20	9/15/2008	\$135.50	42,519,230
20 Day Avera	ige Stock Price	\$122.90	

Company: JPMorgan Chase & Co.	(NYSE:JPM)	
		Stock Price
TARP Investment Announcement Date	: 10/14/2008	\$40.71
TARP Investment Funding Date:	10/28/2008	\$37.60
Number of Warrants	88,401,697	
Exercise Price	\$42.42	

No. of Days	Date	Closing Stock Price	Trading Volume
1	10/10/2008	\$41.64	112 004 000
			112,986,900
2	10/9/2008	\$36.68	88,839,630
3	10/8/2008	\$39.30	75,707,800
4	10/7/2008	\$39.32	62,406,650
5	10/6/2008	\$44.00	63,084,020
6	10/3/2008	\$45.90	68,646,720
7	10/2/2008	\$49.85	53,953,240
8	10/1/2008	\$49.63	59,471,550
9	9/30/2008	\$46.70	67,003,180
10	9/29/2008	\$41.00	79,527,970
11	9/26/2008	\$48.24	148,081,400
12	9/25/2008	\$43.46	36,831,250
13	9/24/2008	\$40.50	27,195,350
14	9/23/2008	\$40.56	32,443,360
15	9/22/2008	\$40.80	44,934,160
16	9/19/2008	\$47.05	88,526,530
17	9/18/2008	\$40.30	132,982,000
18	9/17/2008	\$35.77	104,396,200
19	9/16/2008	\$40.74	90,368,130
20	9/15/2008	\$37.00	92,491,690
20 Day Avera	ge Stock Price	\$42.42	

Company:	Morgan Stanley (NYSE:MS)				
			Stock Price		
TARP Investr	nent Announcement Date:	10/14/2008	\$21.94		
TARP Investment Funding Date:		10/28/2008	\$15.20		
Number of W	/arrants	65,245,759			
Exercise Pric	е	\$22.99			

No. of Days	Date	Closing Stock Price	Trading Volume
1	10/10/2008	\$9.68	207,088,100
2	10/9/2008	\$12.45	102,932,600
3	10/8/2008	\$16.80	40,976,050
4	10/7/2008	\$17.65	90,516,780
5	10/6/2008	\$23.50	27,022,700
6	10/3/2008	\$23.92	30,168,800
7	10/2/2008	\$23.21	17,885,640
8	10/1/2008	\$24.42	36,159,360
9	9/30/2008	\$23.00	38,275,260
10	9/29/2008	\$20.99	53,602,260
11	9/26/2008	\$24.75	41,149,640
12	9/25/2008	\$27.10	34,234,330
13	9/24/2008	\$24.79	44,722,370
14	9/23/2008	\$28.00	35,359,620
15	9/22/2008	\$27.09	56,512,220
16	9/19/2008	\$27.21	121,010,300
17	9/18/2008	\$22.55	321,561,300
18	9/17/2008	\$21.75	329,786,000
19	9/16/2008	\$28.70	118,926,400
20	9/15/2008	\$32.19	67,708,770
20 Day Avera	ge Stock Price	\$22.99	

Company:	pany: PNC Financial Services Group Inc. (NYSE:PNC)							
			Stock Price					
TARP Investm	ent Announcement Date:	10/24/2008	\$63.04					
TARP Investm	ent Funding Date:	12/31/2008	\$49.00					
Number of Warrants		16,885,192						
Exercise Price		\$67.33						

No. of Days	Date	Closing Stock Price	Trading Volume
1	10/22/2008	\$55.62	4,487,860
2	10/21/2008	\$58.99	2,702,620
3	10/20/2008	\$59.66	3,380,170
4	10/17/2008	\$57.94	4,132,090
5	10/16/2008	\$61.40	7,650,740
6	10/15/2008	\$61.50	6,621,010
7	10/14/2008	\$63.04	12,541,760
8	10/13/2008	\$68.35	6,261,840
9	10/10/2008	\$68.00	8,589,310
10	10/9/2008	\$59.85	6,746,380
11	10/8/2008	\$67.75	4,939,910
12	10/7/2008	\$69.30	3,912,900
13	10/6/2008	\$75.40	4,826,600
14	10/3/2008	\$74.15	3,847,700
15	10/2/2008	\$77.68	3,643,450
16	10/1/2008	\$77.40	4,290,580
17	9/30/2008	\$74.70	4,191,770
18	9/29/2008	\$68.00	5,947,120
19	9/26/2008	\$75.50	4,200,360
20	9/25/2008	\$72.30	2,792,950
20 Day Avera	ge Stock Price	\$67.33	

Company:	US Bancorp (NYSE:USB)		
			Stock Price
TARP Investr	ment Announcement Date:	11/3/2008	\$30.30
TARP Investr	nent Funding Date:	11/14/2008	\$26.30
Number of W	/arrants	32,679,102	
Exercise Pric	e	\$30.29	

No. of Days	Date	Closing Stock Price	Trading Volume
1	10/31/2008	\$29.81	19,958,240
2	10/30/2008	\$28.80	16,887,790
3	10/29/2008	\$29.03	21,825,490
4	10/28/2008	\$30.82	20,483,380
5	10/27/2008	\$28.82	14,806,790
6	10/24/2008	\$29.45	22,253,740
7	10/23/2008	\$28.68	23,335,950
8	10/22/2008	\$28.11	20,893,630
9	10/21/2008	\$30.20	17,501,090
10	10/20/2008	\$31.12	14,203,080
11	10/17/2008	\$30.55	18,870,690
12	10/16/2008	\$30.87	20,996,400
13	10/15/2008	\$30.13	22,148,040
14	10/14/2008	\$31.46	30,832,820
15	10/13/2008	\$31.25	26,621,870
16	10/10/2008	\$30.36	43,112,410
17	10/9/2008	\$28.93	32,789,730
18	10/8/2008	\$30.83	22,012,440
19	10/7/2008	\$31.80	19,064,860
20	10/6/2008	\$34.80	18,238,980
20 Day Avera	ge Stock Price	\$30.29	

Company: Wells Fargo & Company (NYSE: WFC)							
			Stock Price				
TARP Investn	nent Announcement Date:	10/14/2008	\$33.52				
TARP Investn	nent Funding Date:	10/28/2008	\$34.46				
Number of W	'arrants	110,261,688					
Exercise Pric	e	\$34.01					

No. of Days	Date	Closing Stock Price	Trading Volume
1	10/10/2008	\$28.31	122,100,500
2	10/9/2008	\$27.25	122,828,400
3	10/8/2008	\$31.90	57,474,580
4	10/7/2008	\$30.60	45,285,410
5	10/6/2008	\$33.64	59,030,320
6	10/3/2008	\$34.56	81,081,500
7	10/2/2008	\$35.16	39,358,700
8	10/1/2008	\$36.70	47,803,640
9	9/30/2008	\$37.53	46,870,920
10	9/29/2008	\$33.25	67,567,070
11	9/26/2008	\$37.31	56,078,980
12	9/25/2008	\$34.12	38,564,070
13	9/24/2008	\$34.27	26,503,730
14	9/23/2008	\$34.17	32,750,000
15	9/22/2008	\$35.18	54,380,920
16	9/19/2008	\$39.80	96,581,260
17	9/18/2008	\$37.00	166,560,900
18	9/17/2008	\$33.43	98,504,440
19	9/16/2008	\$34.93	115,545,500
20	9/15/2008	\$31.00	100,858,500
20 Day Avera	age Stock Price	\$34.01	

# Appendix K

**Secondary Stock Offering Analysis** 

		Offe	ring Description		January 1, 2006 - December 31  Discount Information			
Date of Issue	Issuer	No. of Shares Offered	Offering Price Per Share	Offering Amount	Underwriting Fees	Closing Price Prior to Offering	Discount to Day Prior Price	Discount to Da Prior Price + Underwriting Fees
1/18/2006	Alpha Natural Resources Inc	12,316,110	\$21.03	\$259,007,793	\$1,841,000	\$21.45	-2.0%	-2.
1/19/2006	Placer Sierra Bancshares, CA	5,000,000	26.00	130,000,000	1,313,000 NA	26.00	0.0%	-1. -4.
1/20/2006	Endo Pharmaceuticals Holdings  Desarrolladora Homex	15,000,000 6,748,517	27.85 33.00	417,750,000 222,701,061	NA NA	29.12 34.71	-4.4% -4.9%	-4. -4.
1/24/2006	Strategic Hotel Capital Inc	18,027,513	20.00	360,550,260	NA NA	20.23	-1.1%	-1.
1/24/2006	Seagate Technology Inc	26,737,880	25.63	685,158,175	NA	26.39	-2.9%	-2.
1/25/2006	New York & Co Inc	7,000,000	18.50	129,500,000	1,288,000	18.57	-0.4%	-1.
1/26/2006	SeaBright Insurance HIdgs Inc	6,400,000	15.75	100,800,000	NA	16.30	-3.4%	-3.
1/28/2006	Focus Media Holding Ltd	6,787,829	43.50	295,270,562	NA	44.10	-1.4%	-1.
2/3/2006	Huron Consulting Group Inc Pioneer Drilling Co	6,300,000	27.00 20.89	170,100,000 223,562,795	1,956,000 NA	28.06 21.89	-3.8% -4.6%	-4
2/8/2006	Avnet Inc	15,700,000	24.00	376,800,000	NA NA	21.89	-4.6%	-4.
2/9/2006	Nasdaq Stock Market Inc	13,895,229	40.00	555,809,160	3,651,000	40.27	-0.7%	-1.
2/13/2006	Knoll Inc	11,600,000	18.40	213,440,000	2,088,000	18.40	0.0%	-1.
3/2/2006	Genworth Financial Inc	71,216,559	32.75	2,332,342,307	NA	33.00	-0.8%	-0
3/6/2006	UAP Holding Corp	9,322,858	20.98	195,593,561	NA	22.29	-5.9%	-5
3/7/2006	Wellcare Health Plans Inc	4,850,000	39.56	191,866,000	1,649,000	39.56	0.0%	-0.
3/7/2006	Weight Watchers Intl Inc	10,000,000	50.50	505,000,000	NA 1 700 000	51.53	-2.0%	-2
3/8/2006	Rackable Systems Inc	5,350,000 7,500,000	27.00 39.00	144,450,000 292,500,000	1,723,000 NA	27.55 40.67	-2.0% -4.1%	-3 -4
3/9/2006	Hexcel Corp	21,433,306	20.00	428,666,120	NA NA	20.26	-1.3%	-1
3/9/2006	Legg Mason Inc	9,000,000	125.00	1,125,000,000	NA	125.86	-0.7%	-0
3/10/2006	Alaska Commun Sys Grp Inc	9,548,879	11.00	105,037,669	NA	11.15	-1.3%	-1
3/13/2006	Las Vegas Sands Corp	55,000,000	50.25	2,763,750,000	6,900,000	51.25	-2.0%	-2
3/15/2006	Nalco Holding Co	15,000,000	17.21	258,150,000	NA	18.34	-6.2%	-6
3/16/2006	Ikanos Communications Inc	5,750,000	20.75	119,312,500	1,193,000	20.92	-0.8%	-1
3/20/2006	InfraSource Services Inc Senior Housing Properties Tr	13,000,000 7,710,738	17.50 17.60	227,500,000 135,708,989	2,616,000 NA	17.84 18.73	-1.9% -6.0%	-3 -6
3/21/2006	Hospitality Properties Trust	4,000,000	44.75	179,000,000	NA NA	45.24	-1.1%	-1
3/21/2006	Endo Pharmaceuticals Holdings	10,510,108	32.20	338,425,478	NA NA	33.28	-3.2%	-3
3/22/2006	China Medical Technologies Inc	5,000,000	25.50	127,500,000	NA	26.55	-4.0%	-4
3/23/2006	Time Warner Telecom Inc	19,400,000	14.62	283,628,000	NA	14.62	0.0%	0
3/24/2006	HealthExtras Inc	3,000,000	35.25	105,750,000	NA	36.70	-4.0%	-4
3/29/2006	Digital Realty Trust Inc	4,030,000	26.50	106,795,000	NA	26.90	-1.5%	-1
3/30/2006 4/5/2006	Saifun Semiconductors Ltd	3,820,148 6,087,000	30.25 34.50	115,559,477 210,001,500	1,546,000 NA	31.06 34.75	-2.6% -0.7%	-3 -0
4/10/2006	American Reprographics Co GameStop Corp	6,500,000	47.00	305,500,000	NA NA	48.66	-3.4%	-3
4/10/2006	AngloGold Ashanti Ltd	26,299,045	51.25	1,347,826,056	NA NA	51.34	-0.2%	-0
4/11/2006	RBC Bearings Inc	7,817,000	20.50	160,248,500	NA	20.70	-1.0%	-1
4/11/2006	Hercules Offshore Inc	8,000,000	36.00	288,000,000	2,981,000	36.37	-1.0%	-2
4/26/2006	Dexcom Inc	4,782,500	24.00	114,780,000	NA	24.87	-3.5%	-3
4/26/2006	Westlake Chemical Corp	5,500,000	31.25	171,875,000	1,203,000	31.25	0.0%	-0
4/27/2006	Dresser-Rand Group Inc	24,000,000	24.50	588,000,000	3,567,000	24.70	-0.8%	-1
5/4/2006 5/5/2006	NYSE Group Inc Sunstone Hotel Investors Inc	25,000,000 4,044,000	61.50 29.85	1,537,500,000 120,713,400	NA NA	62.87 30.25	-2.2% -1.3%	-2 -1
5/5/2006	PMC-Sierra Inc	18,108,609	11.55	209,154,434	NA NA	11.79	-2.0%	-2
5/8/2006	Greenhill & Co Inc	3,500,000	71.00	248,500,000	NA NA	71.42	-0.6%	-0
5/9/2006	Home Properties Inc	2,969,914	50.80	150,871,631	NA	52.18	-2.6%	-2
5/9/2006	Phillips-Van Heusen Corp	10,057,495	38.00	382,184,810	NA	39.80	-4.5%	-4
5/10/2006	Dynamic Materials Corp	5,153,897	35.00	180,386,395	NA	35.77	-2.2%	-2
5/10/2006	Williams Scotsman Int Inc Celanese Corp	8,687,646	26.25	228,050,708	NA NA	26.85 21.27	-2.2%	-2 -1
5/10/2006 5/10/2006	Carolina Group	35,000,000 15,000,000	21.05 50.40	736,750,000 756,000,000	NA NA	52.55	-1.0% -4.1%	-4
5/17/2006	Thomas Weisel Partners Group	5,350,000	22.00	117,700,000	NA NA	22.33	-1.5%	-1
5/17/2006	GFI Grp Inc	2,950,546	56.66	167,177,936	NA	56.66	0.0%	C
5/18/2006	Aaron Rents Inc	4,000,000	25.75	103,000,000	NA	26.10	-1.3%	-1
5/18/2006	Gartner Inc	9,500,000	14.75	140,125,000	NA	15.17	-2.8%	-2
5/18/2006	Redback Networks Inc	8,198,000	21.25	174,207,500	1,914,000	21.50	-1.2%	-2
5/18/2006	Chipotle Mexican Grill Inc	4,197,331	61.50	258,135,857	NA NA	62.69	-1.9%	'
5/23/2006 5/25/2006	SBA Communications Corp Global Cash Access Hldg Inc	9,171,000	21.13 15.75	193,783,230 163,800,000	NA NA	21.13 15.95	0.0% -1.3%	
5/25/2006	Under Armour Inc	7,263,165	34.00	246,947,610	2,272,000	34.18	-0.5%	-1
5/25/2006	Loews Corp	21,000,000	33.50	703,500,000	2,272,000 NA	33.64	-0.4%	-(
5/31/2006	US Airways Group Inc	3,050,000	45.20	137,860,000	NA NA	46.70	-3.2%	-:
6/22/2006	Horizon Offshore Inc	8,500,000	20.53	174,505,000	2,248,000	20.53	0.0%	-1
6/28/2006	Copa Holdings SA	6,562,500	21.75	142,734,375	1,785,000	22.03	-1.3%	-2
7/17/2006	IntercontinentalExchange Inc	8,000,000	56.00	448,000,000	NA	58.11	-3.6%	-3
7/19/2006	UniFirst Corp Brookdale Senior Living Inc	4,000,000 19,236,103	29.50 39.50	118,000,000 759,826,069	NA NA	30.89 39.80	-4.5%	-4

	ering Analysis					January 1, 2006 - December 31, 2008			
		Offering Description					Discount I	nformation	
Date of Issue	Issuer	No. of Shares Offered	Offering Price Per Share	Offering Amount	Underwriting Fees	Closing Price Prior to Offering	Discount to Day Prior Price	Discount to Day Prior Price + Underwriting Fees	
8/1/2006	Boyd Gaming Corp	11,842,504	33.75	399,684,510	NA	34.04	-0.9%	-0.99	
8/2/2006	Knoll Inc	9,200,000	17.66	162,472,000	NA	17.66	0.0%	0.09	
8/9/2006 8/9/2006	InfraSource Services Inc ON Semiconductor Corp	10,394,520 30,000,000	17.25 6.00	179,305,470 180,000,000	NA NA	17.36 5.93	-0.6% 1.2%	-0.69 1.29	
8/9/2006	IPC Holdings Ltd	13,397,000	27.00	361,719,000	3,716,000	27.00	0.0%	-1.09	
8/9/2006	NRG Energy Inc	16,852,481	48.41	815,828,605	NA NA	48.76	-0.7%	-0.79	
8/10/2006	Knot Inc	6,350,000	16.00	101,600,000	NA	16.37	-2.3%	-2.39	
8/15/2006	Carolina Group	15,000,000	58.75	881,250,000	6,117,000	60.57	-3.0%	-3.79	
8/16/2006	Crocs Inc	8,290,000	27.66	229,301,400	NA	27.66	0.0%	0.09	
8/17/2006	Permian Basin Royalty Trust	8,365,862	15.52	129,838,178	NA	15.52	0.0%	0.09	
8/23/2006 9/5/2006	NRG Energy Inc Pricelinecom Inc	8,422,729 8,900,000	49.55 31.43	417,346,222 279,727,000	4,046,000 NA	50.16 34.16	-1.2% -8.0%	-2.29 -8.09	
	Adams Respiratory Therapeutics	3,000,000	39.00	117,000,000	NA NA	40.42	-8.0%	-8.07	
9/14/2006	Charlotte Russe Holding Inc	5,000,000	26.25	131,250,000	1,359,000	27.44	-4.3%	-5.39	
9/18/2006	Asbury Automotive Group Inc	8,000,000	18.50	148,000,000	1,412,000	19.25	-3.9%	-4.89	
9/18/2006	WellPoint Inc	7,000,000	77.50	542,500,000	3,535,000	77.52	0.0%	-0.79	
9/19/2006	Focus Media Holding Ltd	2,459,345	57.00	140,182,665	NA	57.88	-1.5%	-1.59	
9/20/2006	Time Warner Telecom Inc	39,660,598	17.50	694,060,465	NA	17.97	-2.6%	-2.69	
9/21/2006	American Capital Strategies	3,000,000	37.33 16.99	111,990,000	NA NA	38.44 16.99	-2.9% 0.0%	-2.99	
9/28/2006	Chunghwa Telecom Co Ltd Cbeyond Inc	56,434,790 4,267,113	26.75	958,827,082 114,145,273	NA NA	26.95	-0.7%	-0.79	
10/3/2006	HealthSpring Inc	10,100,000	18.98	191,698,000	2,204,000	18.98	0.0%	-1.19	
10/4/2006	ITC Holdings Corp	11,250,000	31.91	358,987,500	NA	31.91	0.0%	0.09	
10/5/2006	DealerTrack Holdings Inc	10,000,000	23.76	237,600,000	NA	23.76	0.0%	0.09	
10/5/2006	NRG Energy Inc	10,600,000	47.22	500,532,000	3,623,000	44.93	5.1%	4.39	
10/24/2006	IHS Inc	8,400,000	33.50	281,400,000	NA	34.63	-3.3%	-3.39	
10/25/2006	NightHawk Radiology Holdings	5,500,000	18.50 25.50	101,750,000	NA 900,000	18.66	-0.9% -1.2%	-0.99	
10/30/2006	Lyondell Chemical Co Regal Entertainment Group	7,728,328	20.73	255,000,000 160,208,239	881,000	25.82 20.73	0.0%	-1.69 -0.59	
11/2/2006	UAP Holding Corp	9,322,857	22.50	209,764,283	NA	24.73	-9.0%	-9.09	
11/2/2006	Nalco Holding Co	20,000,000	19.55	391,000,000	NA	20.73	-5.7%	-5.79	
11/6/2006	MedCath Corp	4,500,000	25.00	112,500,000	NA	25.45	-1.8%	-1.89	
11/7/2006	Celanese Corp	30,000,000	20.10	603,000,000	NA	20.96	-4.1%	-4.19	
11/8/2006	Dresser-Rand Group Inc	15,000,000	23.08	346,200,000	3,196,000	23.26	-0.8%	-1.79	
11/8/2006	Jarden Corp Cogent Commun Group Inc	11,500,000 7,000,000	36.25 14.75	416,875,000 103,250,000	NA NA	36.59 15.09	-0.9% -2.3%	-0.99	
11/9/2006	Fidelity Natl Info Svcs Inc	5,546,600	41.30	229,074,580	NA NA	41.35	-2.3%	-2.37	
11/9/2006	NRG Energy Inc	4,216,871	54.57	230,114,650	NA NA	54.91	-0.6%	-0.69	
11/9/2006	RH Donnelley Corp	18,848,719	60.00	1,130,923,140	NA	63.21	-5.1%	-5.19	
11/13/2006	Hercules Offshore Inc	7,500,000	33.00	247,500,000	1,856,000	33.76	-2.3%	-3.09	
	Dreamworks Animation SKG Inc	11,580,964	26.53	307,242,975	NA	27.91	-4.9%	-4.99	
11/15/2006	Spansion Inc	35,000,000	13.75	481,250,000	3,786,000	14.00	-1.8%	-2.69	
11/16/2006	ANSYS Inc	3,350,356	48.13	161,235,883	NA NA	50.55 14.95	-4.8% 0.0%	-4.89	
11/16/2006	NorthStar Realty Finance Corp Allied Waste Industries Inc	16,000,000 33,000,000	14.95 12.75	239,200,000 420,750,000	NA NA	13.08	-2.5%	-2.59	
11/27/2006	Digital Realty Trust Inc	3,300,000	35.85	118,305,000	NA NA	36.55	-1.9%	-1.99	
11/29/2006	Schlumberger Ltd	4,182,074	67.50	282,289,995	NA	68.03	-0.8%	-0.89	
11/30/2006	Cohen & Steers Inc	3,500,000	36.50	127,750,000	NA	37.95	-3.8%	-3.89	
11/30/2006	Lazard Ltd	13,000,000	45.42	590,460,000	NA	45.42	0.0%	0.09	
12/4/2006	Pricelinecom Inc	3,824,812	39.00	149,167,668	NA NA	40.31	-3.2%	-3.29	
12/4/2006	Odyssey Re Holdings Corp Banco Santander Chile	9,000,000	34.60 46.00	311,400,000 524,606,908	NA NA	34.60 47.71	0.0% -3.6%	-3.69	
12/6/2006	Superior Well Services Inc	4,600,000	25.50	117,300,000	NA NA	25.59	-0.4%	-0.49	
12/6/2006	Volcano Corp	7,500,000	16.75	125,625,000	NA NA	17.50	-4.3%	-4.39	
12/7/2006	Iconix Brand Group Inc	12,065,000	18.75	226,218,750	NA	19.27	-2.7%	-2.79	
12/12/2006	Axis Capital Holdings Ltd	3,000,000	34.25	102,750,000	NA	34.60	-1.0%	-1.09	
12/14/2006	FEI Co	8,406,007	25.00	210,150,175	1,681,000	25.68	-2.6%	-3.49	
12/18/2006	Valero GP Holdings LLC	17,869,565	21.62	386,339,995	3,017,000	21.62	0.0%	-0.89	
1/10/2007	Eagle Bulk Shipping Inc	7,202,679 3,550,000	16.93 29.00	121,941,355 102,950,000	NA 1,066,000	18.79 29.00	-9.9% 0.0%	-9.99 -1.09	
	Syntel Inc Smart Modular Technologies Inc	14,000,000	12.50	175,000,000	1,066,000 NA	12.94	-3.4%	-3.49	
1/17/2007	SAVVIS Inc	7,625,110	39.00	297,379,290	NA NA	39.78	-2.0%	-2.09	
1/18/2007	InnerWorkings Inc	8,000,000	13.50	108,000,000	NA	13.85	-2.5%	-2.59	
1/25/2007	Kaiser Aluminum Corp	5,461,870	61.25	334,539,538	NA	62.57	-2.1%	-2.19	
1/25/2007	J Crew Group Inc	9,000,000	37.81	340,290,000	NA	37.81	0.0%	0.09	
1/25/2007	Focus Media Holding Ltd	6,655,700	79.50	529,128,150	3,183,000	80.25	-0.9%	-1.59	
	Mindray Modical Intl Ltd	9,827,220	24.50	240,766,890	2,406,000	25.12	-2.5%	-3.49	
1/31/2007 2/6/2007	Mindray Medical Intl Ltd ON Semiconductor Corp	45,000,000	9.38	422,100,000	NA	9.61	-2.4%	-2.49	

							anuary 1, 2006 - December 31, 2008		
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2/7/2007	ITC Holdings Corp	6,826,287	43.90	299,673,999	NA	44.47	-1.3%	-1.3	
2/8/2007	New Oriental Educ & Tech Grp	7,000,000	41.50	290,500,000	NA	40.80	1.7%	1.7	
2/14/2007	Genco Shipping & Trading Ltd	4,200,000	30.73	129,066,000	1,409,000	30.73	0.0%	-1.1	
2/22/2007	Dollar Financial Corp Riverbed Technology Inc	5,490,000 5,250,000	28.15 32.50	154,543,500 170,625,000	NA NA	29.35 33.29	-4.1% -2.4%	-4.1 -2.4	
2/22/2007	Aspen Insurance Holdings Ltd	7,927,288	26.70	211,658,590	NA NA	27.23	-2.4%	-2.4	
2/22/2007	Burger King Holdings Inc	21,000,000	22.00	462,000,000	NA NA	22.07	-0.3%	-0.3	
3/7/2007	FTD Group Inc	6,000,000	17.50	105,000,000	1,208,000	17.90	-2.2%	-3.4	
3/7/2007	Dresser-Rand Group Inc	11,596,981	27.34	317,061,461	NA	27.34	0.0%	0.0	
3/8/2007	Cabelas Inc	4,736,868	24.05	113,921,675	NA	24.78	-2.9%	-2.9	
3/8/2007	American Reprographics Co	5,666,195	32.25	182,734,789	1,786,000	32.67	-1.3%	-2.3	
3/13/2007	Bare Escentuals Inc Cogent Commun Group Inc	12,000,000 7,683,888	34.50 23.75	414,000,000 182,492,340	NA NA	35.40 23.85	-2.5% -0.4%	-2.5	
3/20/2007	NYMEX Holdings Inc	7,000,000	136.50	955,500,000	NA NA	136.70	-0.4%	-0.4	
3/22/2007	IHS Inc	3,751,391	43.25	162,247,661	NA NA	43.86	-1.4%	-1.4	
3/22/2007	AMIS Holdings Inc	17,000,000	10.75	182,750,000	2,063,000	11.00	-2.3%	-3.4	
3/27/2007	Houston Wire & Cable Co	6,500,000	25.00	162,500,000	NA	25.60	-2.3%	-2.3	
3/28/2007	Diana Shipping Inc	10,500,000	17.00	178,500,000	NA	18.06	-5.9%	-5.9	
3/29/2007	TeleTech Holdings Inc	5,000,000	36.50	182,500,000	NA	37.34	-2.2%	-2.2	
3/29/2007	NTELOS Holdings Corp	11,000,000	18.25	200,750,000	2,005,000	18.68	-2.3%	-3.3	
4/13/2007 4/17/2007	Enterprise Products Partners T-3 Energy Services Inc	13,500,000 5,112,500	31.25 24.00	421,875,000 122,700,000	NA NA	32.47 24.53	-3.8%	-3.8	
4/19/2007	ev3 Inc	8,750,000	19.00	166,250,000	NA NA	19.98	-4.9%	-4.9	
4/19/2007	Ultrapetrol(Bahamas)Ltd	11,000,000	19.00	209,000,000	NA NA	19.62	-3.2%	-3.2	
4/30/2007	Home Inns & Hotels Mgmt Inc	3,500,000	34.27	119,945,000	NA	34.27	0.0%	0.0	
5/7/2007	Kelly Services Inc	4,550,000	27.75	126,262,500	NA	28.22	-1.7%	-1.7	
5/7/2007	Allied Waste Industries Inc	32,764,897	13.50	442,326,110	NA	13.89	-2.8%	-2.8	
5/8/2007	ON Semiconductor Corp	49,184,272	11.05	543,486,206	NA	11.23	-1.6%	-1.6	
5/10/2007	Asbury Automotive Group Inc	3,922,187	27.00	105,899,049	196,000	27.97	-3.5%	-3.6	
5/10/2007 5/15/2007	Capella Education Co Celanese Corp	3,485,000 22,106,597	36.00 35.50	125,460,000 784,784,194	1,129,000 NA	36.61 36.36	-1.7% -2.4%	-2.6 -2.4	
5/17/2007	Evercore Partners Inc	4,200,000	29.50	123,900,000	1,496,000	30.35	-2.4%	-4.0	
5/17/2007	Taiwan Semiconductor Mnfr Co	240,000,000	10.68	2,563,200,000	NA NA	10.68	0.0%	0.0	
5/21/2007	Transdigm Group Inc	10,000,000	35.25	352,500,000	NA	35.50	-0.7%	-0.7	
5/21/2007	Dynegy Inc	96,891,014	9.70	939,842,836	NA	10.17	-4.6%	-4.6	
5/21/2007	Spirit AeroSystems Holdings	31,516,802	33.50	1,055,812,867	NA	33.94	-1.3%	-1.3	
5/23/2007	Allegiant Travel Co	3,950,000	31.75	125,412,500	1,317,000	31.93	-0.6%	-1.6	
5/23/2007 5/23/2007	AM Castle & Co Syntax-Brillian Corp	4,347,826 25,608,695	33.00 5.75	143,478,258 147,249,996	NA NA	34.08 6.20	-3.2% -7.3%	-3.2 -7.3	
5/23/2007	Dolby Laboratories Inc	7,000,000	32.00	224,000,000	2,176,000	33.25	-7.3%	-1.3	
5/29/2007	TRW Automotive Holdings Corp	11,000,000	40.50	445,500,000	NA NA	41.89	-3.3%	-3.3	
5/31/2007	Trina Solar Ltd	5,406,280	45.00	243,282,600	NA	48.02	-6.3%	-6.3	
6/4/2007	Tribune Co	20,351,954	31.50	641,086,551	NA	32.24	-2.3%	-2.3	
6/6/2007	Chart Industries Inc	12,612,513	21.25	268,015,901	NA	21.25	0.0%	0.0	
6/6/2007	Security Capital Assurance Ltd	9,680,022	31.00	300,080,682	NA	31.76	-2.4%	-2.4	
6/12/2007	Omniture Inc	8,175,000	18.15	148,376,250	NA NA	18.15	0.0%	0.0	
6/12/2007	Portland General Electric Co Hertz Global Holdings Inc	21,000,000 45,000,000	26.00 22.25	546,000,000 1,001,250,000	NA NA	26.65 22.45	-2.4% -0.9%	-2.4	
6/12/2007	CommVault Systems Inc	7,870,000	17.00	133,790,000	1,691,000	17.60	-0.9%	-0.9	
6/13/2007	Bare Escentuals Inc	8,000,000	36.50	292,000,000	1,168,000	37.18	-1.8%	-2.2	
6/20/2007	Altra Holdings Inc	11,000,000	16.40	180,400,000	2,018,000	16.77	-2.2%	-3.3	
6/27/2007	Aspen Insurance Holdings Ltd	7,927,293	28.10	222,756,933	NA	28.19	-0.3%	-0.3	
6/28/2007	Crown Castle International	36,389,617	35.83	1,303,839,977	NA	35.83	0.0%	0.0	
6/29/2007	EnerSys Inc	6,000,000	18.05	108,300,000	NA	19.15	-5.7%	-5.7	
7/19/2007	Morgans Hotel Group Co AerCap Holdings NV	12,210,840	22.50	274,743,900	2,373,000	22.75	-1.1%	-2.0	
7/31/2007 8/2/2007	AerCap Holdings NV Huntsman Corp	20,000,000 56,979,062	25.90 24.35	518,000,000 1,387,440,160	NA NA	27.65 25.45	-6.3% -4.3%	-6.3 -4.3	
8/6/2007	Dreamworks Animation SKG Inc	10,186,136	31.50	320,863,284	NA NA	32.97	-4.5%	-4.5	
8/9/2007	Ctrip.com International Ltd	13,290,000	38.00	505,020,000	4,040,000	40.32	-5.8%	-6.5	
8/9/2007	First Solar Inc	6,500,000	95.00	617,500,000	5,113,000	103.00	-7.8%	-8.5	
	Magellan Midstream Holdings LP	8,500,000	26.61	226,185,000	NA	28.30	-6.0%	-6.0	
9/17/2007	Heartland Payment Systems Inc	5,520,667	26.34	145,414,369	NA	26.34	0.0%	0.0	
9/19/2007	LKQ Corp	12,000,000	31.00	372,000,000	NA NA	32.71	-5.2%	-5.2	
9/20/2007	Qimonda AG	25,000,000	10.92	273,000,000	NA NA	10.99	-0.6%	-0.6	
10/3/2007	Solera Holdings Inc Aircastle Ltd	18,131,435 20,000,000	18.75 31.75	339,964,406 635,000,000	NA NA	18.92 31.75	-0.9% 0.0%	-0.9 0.0	
10/3/2007	Tomotherapy Inc	8,500,000	22.25	189,125,000	NA NA	23.26	-4.3%	-4.3	
10/10/2007	JA Solar Holdings Co Ltd	6,330,000	42.00	265,860,000	NA NA	42.93	-2.2%	-4.3	
	Obagi Medical Products Inc	6,300,000	20.00	126,000,000	NA	20.58	-2.8%	-2.8	

## **Secondary Stock Offering Analysis**

Offering Description								Discount Information	
Date of Issue	Issuer	No. of Shares Offered	Offering Price Per Share	Offering Amount	Underwriting Fees	Closing Price Prior to Offering	Discount to Day Prior Price	Discount to Da Prior Price + Underwriting Fees	
10/18/2007	DealerTrack Holdings Inc	4,500,000	46.40	208,800,000	NA	46.40	0.0%	0.0	
10/30/2007	Infinera Corp	10,000,000	22.00	220,000,000	NA	22.65	-2.9%	-2.9	
10/31/2007	Starent Networks Corp	8,000,000	24.00	192,000,000	NA	24.78	-3.1%	-3.	
11/1/2007	Syniverse Holdings Inc	20,000,000	15.50	310,000,000	NA	16.09	-3.7%	-3.	
11/6/2007	Insulet Corp	4,898,398	23.25	113,887,754	NA	23.50	-1.1%	-1.	
11/6/2007	Fresh Del Monte Produce Inc	10,000,000	28.97	289,700,000	NA	28.97	0.0%	0.	
11/6/2007	Focus Media Holding Ltd	13,720,873	64.75	888,426,527	1,105,000	65.10	-0.5%	-0.	
11/7/2007	Energy Transfer Equity LP	7,336,588	31.70	232,569,840	NA	31.70	0.0%	0.	
11/8/2007	Nasdaq Stock Market Inc	23,545,368	45.40	1,068,959,707	3,850,000	45.40	0.0%	-0.	
11/12/2007	Rockwood Holdings Inc	10,000,000	34.00	340,000,000	NA	34.04	-0.1%	-0.	
11/13/2007	EnerNOC Inc	2,500,000	43.00	107,500,000	NA	41.18	4.4%	4.	
11/13/2007	Burger King Holdings Inc	18,000,000	25.00	450,000,000	NA	26.20	-4.6%	-4.	
11/14/2007	Aegean Marine Petrol Net Inc	6,750,000	37.75	254,812,500	NA	38.23	-1.3%	-1.	
11/15/2007	Data Domain Inc	6,000,000	27.00	162,000,000	NA	27.30	-1.1%	-1.	
11/29/2007	EnerSys Inc	5,000,000	22.92	114,600,000	NA	23.20	-1.2%	-1.	
12/6/2007	Comverge Inc	4,000,000	29.00	116,000,000	NA	29.17	-0.6%	-0.	
12/11/2007	Yingli Green Energy Holding Co	5,600,000	31.00	173,600,000	NA	33.60	-7.7%	-7.	
12/13/2007	Concho Resources Inc	11,845,000	18.05	213,802,250	NA	18.19	-0.8%	-0.	
2/13/2008	American Public Education Inc	3,744,500	35.50	132,929,750	NA	36.17	-1.9%	-1.	
2/26/2008	EnerSys Inc	5,000,000	22.50	112,500,000	NA	23.46	-4.1%	-4	
4/28/2008	MSCI Barra	27,861,235	29.00	807,975,815	NA	30.17	-3.9%	-3	
4/30/2008	Rex Energy Corp	8,500,000	20.75	176,375,000	NA	21.70	-4.4%	-4	
5/5/2008	Burger King Holdings Inc	15,000,000	27.50	412,500,000	NA	28.46	-3.4%	-3	
5/15/2008	Copa Holdings SA	3,977,300	35.75	142,188,475	1,331,000	34.79	2.8%	1.	
5/21/2008	TBS International Ltd	3,400,000	51.00	173,400,000	NA	52.35	-2.6%	-2.	
5/21/2008	Genco Shipping & Trading Ltd	3,737,500	75.47	282,069,125	NA	75.47	0.0%	0	
5/22/2008	Polypore International Inc	7,500,000	24.00	180,000,000	NA	24.53	-2.2%	-2	
6/4/2008	Innophos Holdings Inc	4,000,000	27.50	110,000,000	NA	28.74	-4.3%	-4	
6/4/2008	Solera Holdings Inc	5,000,000	26.50	132,500,000	NA	28.01	-5.4%	-5	
6/5/2008	BGC Partners Inc	20,000,000	8.00	160,000,000	NA	8.08	-1.0%	-1	
6/11/2008	Rockwood Holdings Inc	10,000,000	38.90	389,000,000	3,249,000	42.14	-7.7%	-8	
6/23/2008	SuccessFactors Inc	8,828,691	11.80	104,178,554	1,157,000	11.80	0.0%	-1	
7/15/2008	MSCI Barra	23,000,000	32.00	736,000,000	5,320,000	32.16	-0.5%	-1	
7/24/2008	EnergySolutions Inc	35,000,000	19.00	665,000,000	NA	19.85	-4.3%	-4	
7/31/2008	CardioNet Inc	5,000,000	26.50	132,500,000	1,600,000	27.56	-3.8%	-5	
9/3/2008	Lazard Ltd	6,442,721	37.00	238,380,677	1,968,000	38.35	-3.5%	-4	
9/11/2008	Regency Energy Partners LP	7,100,000	21.00	149,100,000	NA	19.40	8.2%	8	
11/6/2008	Greenhill & Co Inc	3,500,000	56.00	196,000,000	1,268,000	57.39	-2.4%	-3.	
11/12/2008	Ecolab Inc	55,769,504	30.50	1,700,969,872	NA	30.62	-0.4%	-0.	
12/9/2008	American Public Education Inc	3,806,657	37.50	142,749,638	NA	38.01	-1.3%	-1	

Sources: Thomson SDC, SEC Filings

	All Transaction	ons
High	8.2%	8.2%
Low	-9.9%	-9.9%
Mean	-2.1%	-2.3%
Median	-1.9%	-2.2%

Transactions with Underwriting
Fees Disclosed

High Low Mean Median

	- COS BISOROSC	<u></u>
	5.1%	4.3%
	-7.8%	-8.5%
$\equiv$	-1.6%	-2.5%
	-1.3%	-2.2%

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## Secondary Stock Offering Analysis

	Offering Description						Discount Information		
Date of Issue	Issuer	No. of Shares Offered	Offering Price Per Share	Offering Amount	Underwriting Fees	Closing Price Prior to Offering	Discount to Day Prior Price	Discount to Day Prior Price + Underwriting Fees	
7/23/2007	Barclays plc	336,000,000	£7.20	£2,419,200,000	NA	£7.14	0.8%	0.89	
12/10/2007	MBIA, Inc.	16,129,032	\$31.00	\$500,000,000	NA	\$30.00	3.3%	3.39	
12/24/2007	Merrill Lynch & Co., Inc.	116,666,667	\$48.00	\$5,600,000,000	NA	\$55.54	-13.6%	-13.69	
1/14/2008	Canadian Imperial Bank of Commerce	18,642,804	CAD 67.05	CAD 1,250,000,000	NA	CAD 71.31	-6.0%	-6.09	
1/14/2008	Canadian Imperial Bank of Commerce	22,984,983	CAD 65.26	CAD 1,500,000,000	NA	CAD 71.31	-8.5%	-8.59	
2/7/2008	MBIA, Inc.	82,304,527	\$12.15	\$1,000,000,003	\$37,530,864	\$14.28	-14.9%	-18.19	
6/25/2008	Barclays plc	169,000,000	£2.96	£500,240,000	NA	£3.11	-4.7%	-4.79	
6/25/2008	Barclays plc	1,407,000,000	£2.82	£3,967,740,000	NA	£3.11	-9.3%	-9.39	
9/18/2008	Barclays plc	226,000,000	£3.10	£700,600,000	NA	£3.18	-2.4%	-2.49	
9/19/2008	Lloyds TSB Group plc	284,400,000	£2.70	£767,880,000	NA	£2.38	13.7%	13.79	
9/22/2008	Deutsche Bank AG	40,000,000	€ 55.00	€ 2,200,000,000	NA	€ 57.60	-4.5%	-4.59	
9/25/2008	The Goldman Sachs Group Inc.	40,650,407	\$123.00	\$5,000,000,061	\$137,804,880	\$125.05	-1.6%	-4.49	
10/7/2008	Bank of America Corp.	455,000,000	\$22.00	\$10,010,000,000	\$250,250,000	\$32.22	-31.7%	-33.49	
T1	CDQ CEQ E''					119-1	40.70	40.7	
ources: Thom	son SDC, SEC Filings					High	13.7%	13.7	
						Low	-31.7%	-33.4	
						Mean	-6.1%	-6.7	
						Median	-4.7%	-4.79	



## BERKSHIRE HATHAWAY INC.

# Appendix L-I

Berkshire Hathaway Inc. \$5 Billion Preferred Stock Investment in the Goldman Sachs Group, Inc.

### A. Transaction Background

After the markets closed on September 23, 2008, Goldman announced it had agreed to sell \$5.0 billion of perpetual preferred stock to Berkshire Hathaway in a private transaction. In addition, Berkshire Hathaway received a warrant to purchase 43.478 million common shares for \$5.0 billion, or \$115 per share (8% discount to the September 23, 2008 closing price of \$125.05). The transaction closed on October 1, 2008. The terms of the investment include the following:

- The perpetual preferred stock carries a 10% dividend and is callable at any time for a 10% premium.
- The warrants have a strike price of \$115 and are exercisable at any time over a five year term.

On the date of the announcement, the company also announced it was raising \$2.5 billion of common equity through a public offering (subsequently increased to \$5.0 billion). The transactions were announced two days after Goldman received approval from the Federal Reserve to become a bank holding company which, among other things, provides access to the Federal Reserve's emergency lending facilities.

### B. Summary Description of the Series G Cumulative Perpetual Preferred Stock

<u>Issuer</u>: The Goldman Sachs Group, Inc.

<u>Issue</u>: 50,000 shares of Series G Cumulative Perpetual Preferred

Stock for \$5.0 billion and a warrant to purchase 43,478,260 shares of Voting Common Stock for \$115 per share (\$5.0 billion); exercisable immediately (American-

style options).

Dividend: Cumulative cash dividends at a rate equal to 10% per

annum. Declared dividends payable quarterly, on each February 10, May 10, August 10, and November 10, and

commencing on November 10, 2008.

<u>Conversion Terms</u>: Not convertible.

Redemption: The company, at its option, subject to the approval of

the Board of Governors of the Federal Reserve System, may redeem, in whole at any time or in part from time to time, the shares of Series G at the time outstanding at a redemption price equal to the sum of (i) \$110,000 per share (a 10% premium) and (ii) the accrued and unpaid dividends, whether or not declared, to the redemption date, provided that the minimum number of shares of Series G redeemable at any time is the lesser of (i) 10,000 shares of Series G and (ii) the number of shares of Series G outstanding. The Series G is not subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series G have no right to require

redemption of any shares of Series G.

Ranking: Ranks on a parity with the company's other authorized

series of preferred stock including: Floating rate Non-Cumulative Preferred Stock, Series A; 6.20% Non-Cumulative Preferred Stock, Series B; Floating Rate Non-Cumulative Preferred Stock, Series C; Floating Rate Non-Cumulative Preferred Stock, Series D; Perpetual Non-Cumulative Preferred Stock, Series E; and Perpetual Non-Cumulative Preferred Stock, Series E;

Cumulative Preferred Stock, Series F.

Voting Rights: Class voting rights as to particular matters such as the

authorization of senior stock, amendments of Series G, share exchanges, reclassifications, mergers and

consolidations.

<u>Liquidation Rights</u>: In the event of liquidation, holders of Series G are

entitled to payment in full in an amount equal to the sum of (i) \$100,000 per share and (ii) the accrued and unpaid dividends, whether or not declared, to the date of payment. If in any distribution the assets of the company

or proceeds are not sufficient to pay the Liquidation Preferences in full to all holders of Series G and all holders of any stock of the company ranking equally, the amounts paid to the holders of Series G and to the holders of all such other stock will be paid pro rata in accordance with the respective aggregate Liquidation Preferences of the holders of Series G and the holders of such other stock.

Anti-Dilution:

The exercise price and the number of shares issuable on exercise of the warrant are subject to anti-dilution adjustments for stock splits, reclassifications, noncash distributions, extraordinary cash dividends, pro rata repurchases of common stock, business combination transactions, and certain issuances of common stock (or securities convertible into or exercisable for common stock) at a price (or having a conversion or exercise price) that is less than 95% of the market price of the common stock at the pricing of the securities issuance.

**Transfer Restrictions:** 

Subject to certain limited exceptions, the investor may not transfer the preferred stock or the warrant for a period of 5 years. The shares of common stock issuable upon exercise of the warrant may be transferred at any time, but only in public offerings and other public market sales, or in private transactions, that do not involve the transfer to any single purchaser or group of more than 3.5% of the outstanding common stock. Additionally, without Goldman's prior written consent, Berkshire Hathaway cannot engage in hedging transactions with respect to the preferred stock or warrants.

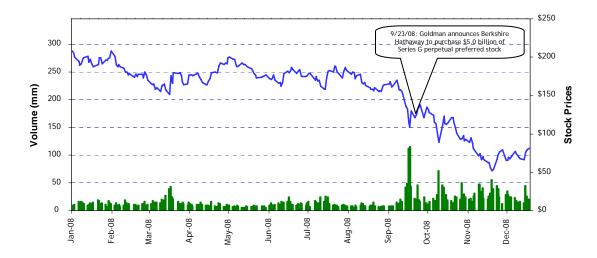
Registration:

Purchased securities and warrant shares have not been registered under the Securities Act or under any state securities laws, and they may not be offered or sold except pursuant to an effective registration statement or an available exemption from registration under the Securities Act.

#### C. Historical Stock Prices

On September 23, 2008, Goldman's 10-day weighted average stock price was \$123.60, which implies a price-to-tangible book value multiple of 1.31x. The closing share price and market capitalization on September 24, 2008, were \$133.00 per share and \$57.9 billion, respectively. The price-to-tangible book value multiple was 1.37x.

Trading History
January 1, 2008 to December 19, 2008



## D. Comparison to TARP Investment in Goldman

## Goldman Preferred Stock Terms Comparison - Berkshire Hathaway vs. U.S. Treasury (TARP)

	Berkshire Hathaway	TARP			
	Series G Preferred	Series H Preferred			
Issue	Perpetual Cumulative Preferred Stock	Perpetual Cumulative Preferred Stock			
Issue Amount	\$5.0 billion (\$100,000 per share)	\$10.0 billion (\$1,000 per share)			
Dividend	10% per annum	5% per annum until 5th anniversary of issuance date; 9% per annum thereafter			
Conversion Terms	No conversion rights	No conversion rights			
Redemption	Redeemable at any time by Goldman at 110% of face value plus any accrued and unpaid dividends	After 3 years, redeemable by Goldman at 100% of face value plus any accrued and unpaid dividends			
Ranking	Parity with other authorized series of preferred stock	Parity with other authorized series of preferred stock			
Liquidation Rights	\$100,000 per share or ratably in proportion to the full respective liquidating distributions	\$1,000 per share or ratably in proportion to the full respective liquidating distributions			
Voting Rights	No voting rights except as set forth in the Securities Purchase Agreement	No voting rights except as set forth in the Securities Purchase Agreement			
Transfer Restrictions	Subject to certain limited exceptions, investor may not transfer the preferred stock for a period of 5 years. Additionally, without Goldman's prior written consent, Berkshire Hathaway cannot engage in hedging transactions with respect to the Series G Preferred.	Permitted to transfer all or a portion of the purchased securities at any time			
Registration	Purchased securities have not been registered under the Securities Act or under any state securities laws, and they may not be offered or sold except pursuant to an effective registration statement or an available exemption from registration under the Securities Act	Company agrees to prepare and file with the SEC a Shelf Registration Statement covering all preferred shares and to use reasonable best efforts to keep such Shelf Registration Statement continuously effective and in compliance with the Securities Act and usable for resale of such preferred shares for a period from the date of its initial effectiveness until such time as there are no preferred shares remaining			

Source: Goldman Sachs Form 8-K dated September 29, 2008 and October 31, 2008



Goldman Warrant Terms Comparison	on - Berkshire Hathaway vs. U.S. Treasury (TARP)				
	Berkshire Hathaway Warrants	TARP Warrants			
Issue Amount	\$5.0 billion (100% of preferred investment)	\$1.5 billion (15% of preferred investment)			
Strike Price	\$115.00 per share; exercisable immediately (American-style options)	\$122.90 per share; exercisable immediately (American-style options)			
Term	5 years	10 years			
Anti-Dilution	Subject to adjustment for certain issuances of common stock at a price that is less than 95% of the market price of the common stock at the pricing of the securities issuance	Subject to adjustment for certain issuances of common stock at a price that is less than 90% of the market price of the common stock at the pricing of the securities issuance			
Redemption	No redemption provision	Following the redemption in whole or transfer to one or more unaffiliated parties of all of the preferred shares held by the investor, Goldman may repurchase, in whole or in part, at any time any other equity securities of the company purchased by the investor pursuant to the warrant and then held by the investor			
Transfer Restrictions	Subject to certain limited exceptions, investor may not transfer the warrant for a period of 5 years. The shares of common stock issuable upon exercise of the warrant may be transferred at any time, but only in public offerings and other public market sales, or in private transactions, that do not involve the transfer to any single purchaser or group of more than 3.5% of the outstanding common stock. Additionally, without Goldman's prior written consent, Berkshire Hathaway cannot engage in hedging transactions with respect to the Warrants.	Permitted to transfer all or a portion of the warrant shares at any time; provided that not more than one-half of the initial warrant shares are transferred in the aggregate until the earlier of (a) the date on which the company has received aggregate gross proceeds of not less than \$10 billion from one or more Qualified Equity Offerings and (b) December 31, 2009			
Registration	Warrant shares have not been registered under the Securities Act or under any state securities laws, and they may not be offered or sold except pursuant to an effective registration statement or an available exemption from registration under the Securities Act	Company agrees to prepare and file with the SEC a Shelf Registration Statement covering all warrant shares and any equity securities issued or issuable with respect to the warrant shares and to use reasonable best efforts to keep such Shelf Registration Statement continuously effective and in compliance with the Securities Act and usable for resale of such shares for a period from the date of its initial effectiveness until such time as there are no shares remaining			

Source: Goldman Sachs Form 8-K dated September 29, 2008 and October 31, 2008



### E. Valuation Analysis

We valued the Berkshire Hathaway investment in Goldman exactly as we valued the Treasury's TARP investment in Goldman. The valuation was performed as of September 24, 2008, the end of trading on the day after the transaction was announced.

## Series G Preferred Stock Valuation Summary

Yield-Based Discounted Cash Flow (DCF) Approach

- The Series G preferred stock's stated dividend is 10% per annum.
- We compared changes in the yields and spreads on Goldman's publicly traded senior unsecured debt securities and senior subordinated debt securities (September 24, 2008 vs. October 14, 2008) to select a range of option adjusted spreads (OAS) for the Series G preferred stock.
- Based on a range of OASs that we deemed appropriate, we calculated a range of OAYs of 10.40% to 11.15% to discount the contractual cash flows of the preferred stock to derive a value range of \$4.5 billion to \$4.8 billion.
- From this value we subtracted the value of the embedded call option associated with the Series G preferred stock, which ranged from \$187 million to \$265 million, to derive a value range of \$4.3 billion to \$4.5 billion for the Series G preferred stock, before application of an appropriate discount due to reduced marketability.

#### **Warrant Valuation Summary**

- For the warrant valuation, we utilized an options pricing approach implemented with a Monte Carlo simulation, which readily accommodates time-varying interest rates and volatilities. We used the same assumptions regarding time varying volatility and common stock dividend yields as we used in the TARP investment valuation.
- Summary of Assumptions:

Number of Warrants: 43,478,261 Stock Price: \$133.00 Exercise Price: \$115.00 Dividend Yield: 0.82% Term: 5 years

We concluded a value of \$2.2 billion for the warrants, before application of an appropriate discount due to reduced marketability.

#### Discount Due to Reduced Marketability

Generally, Berkshire Hathaway is restricted from transferring its investment in Goldman for five years, reducing the value of the investment. In addition to transfer

restrictions, Berkshire Hathaway is also restricted from hedging its investment in Goldman without Goldman's approval. This restriction essentially increases the discount for reduced marketability as it increases the holding period risk. Finally, the value of Berkshire Hathaway's warrant position is significantly greater than the Treasury's positions in the TARP warrants.

These factors lead us to conclude that the discounts due to reduced marketability applicable to the Series G preferred stock and warrants associated with the Berkshire Hathaway investment in Goldman should be higher than the discounts applicable to the TARP Goldman Preferred Stock and the TARP Goldman Warrants. Thus, we concluded a discount due to reduced marketability of 10% for the Series G preferred stock and 30% for the warrants.

#### Conclusion

The results, shown in the table below, suggest that the value of the Berkshire Hathaway investment was approximately 108% to 112% of the face value of the investment as of September 24, 2008. This is equivalent to a discount to market value of approximately 7% to 11%.

Berkshire Hathaway Investment in Goldman									
Valuation	Face	Series G Preferred Stock				Total Value of Series G Preferred Stock and Warrants After Discounts			
Date	Value		Low		High	Warrants	Low		High
9/24/2008	\$5.0	\$ Before Discount % Discount	\$4.3 10%	to	\$4.5 10%	\$2.2 30%	\$5.4	to	\$5.6
		\$ After Discount	\$3.9	to	\$4.1	\$1.5			

Notes: \$ in billions.

Morgan Stanley



# Appendix L-II

Mitsubishi UFJ Financial Group \$9 Billion Investment in Morgan Stanley

## Morgan Stanley/MUFG

### A. Transaction Background

On September 22, 2008, Morgan Stanley issued a press release announcing that it had entered into a letter of intent to pursue a strategic alliance with MUFG.

On September 29, 2008, MUFG and Morgan Stanley announced a definitive agreement under which MUFG would purchase \$9 billion of equity in Morgan Stanley, representing a 21% interest on a fully diluted basis. MUFG would acquire 9.9% of the common shares of Morgan Stanley at a price of \$25.25 per share for a total of \$3 billion, and purchase \$6 billion of perpetual non-cumulative convertible preferred stock with a 10% dividend and a conversion price of \$31.25 per share. The closing stock price for Morgan Stanley common stock was \$20.99.

On October 7, 2008, Morgan Stanley announced that it had received key regulatory clearances for the transaction.

On October 13, 2008, MUFG and Morgan Stanley completed their strategic and capital alliance. The terms of the agreement were revised from the original agreement announced on September 29, 2008. MUFG purchased approximately 7.8 million shares of perpetual non-cumulative convertible preferred stock for \$7.8 billion with a conversion price of \$25.25 per share. In addition, MUFG acquired approximately 1.2 million shares of perpetual non-cumulative non-convertible preferred stock for \$1.2 billion. The closing stock price for Morgan Stanley common stock was \$18.10. MUFG has the right to maintain the equivalent of a 20% fully diluted ownership interest in Morgan Stanley and has the right to receive a Morgan Stanley board seat provided that MUFG's fully diluted ownership interest remains above 10%.

The investment bolstered Morgan Stanley's capital position and provides an opportunity to accelerate their transition as a financial holding company. A steering committee is being established to maximize strategic benefits of the alliance. The strategic alliance will focus on corporate and investment banking activities.

## Morgan Stanley/MUFG

Dividend:

### B. Summary Description of the Series B Convertible Preferred Stock

<u>Issuer:</u> Morgan Stanley

<u>Issue</u>: 7,839,209 shares of Series B Preferred Stock, with a

liquidation preference of \$1,000 per share, for an aggregate purchase price of approximately \$7.8 billion.

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Non-cumulative cash dividends at a rate per annum equal to 10%. Declared dividends payable quarterly, in arrears, on each January 15, April 15, July 15, and October 15,

and commencing on January 15, 2009.

Conversion Terms: \$25.25 per share. After one year, if the price of Morgan

Stanley common shares (NYSE: MS) exceeds 150% of the conversion price for a period of 20 or more trading days out of 30, 50% of the convertible stock will be converted to common stock. After two years, subject to approval by shareholders, all remaining convertible stock will be

converted to common stock under the same terms.

Redemption: Not redeemable at any time.

Ranking: Ranks on parity with Morgan Stanley's other authorized

series of preferred stock and with each other class or series of preferred stock established after the date of

issuance of the Series B Preferred Stock.

<u>Voting Rights:</u> No voting rights, including the right to elect any director,

except as set forth below.

- Right to elect two directors upon certain nonpayment

events

 Other voting rights necessary for effecting or validating certain actions defined in the Securities

Purchase Agreement.

1) Amend or alter the provisions of Morgan Stanley's Certificate of Incorporation to authorize or

create, or increase the authorized amount of any senior ranking class or series of stock with respect

to dividends or distribution of assets;

 Amend, alter, or repeal the provisions of Morgan Stanley's Certificate of Incorporation to materially and adversely affect the rights, preferences,

privileges and voting powers of the Series B

Preferred Stock, taken as a whole; or

- 3) Consummate a binding share exchange or reclassification involving the Series B Preferred Stock or a merger or consolidation of Morgan Stanley, except if the Series B Preferred Stock remains outstanding or is converted or exchanged for preferred stock of the surviving or resulting entity or parent company and such rights, preferences, privileges and voting powers are not materially less favorable.
- Authorization of Certain Parity Stock. Consent to change the provisions of Morgan Stanley's Certificate of Incorporation or the Series B Preferred Stock Certificate of Designations, to authorize or create, or increase the authorized amount of, any shares of any class or series of stock of Morgan Stanley ranking pari passu with the Series B Preferred Stock with respect to the payment of dividends or distribution of assets.

Liquidation Rights:

Entitled to receive liquidating distributions in the amount of \$1,000 per share, plus an amount equal to any declared but unpaid dividends. In the event the assets of Morgan Stanley for distribution to shareholders upon any liquidation of Morgan Stanley are insufficient to pay in full, holders of Series B Preferred Stock and parity securities will share ratably in any distributions in proportion to the full respective liquidating distributions.

Make-Whole:

The provision becomes effective if a "person" or "group" becomes a "beneficial owner" of Morgan Stanley's common equity representing more than 50% of the voting power; or a merger or consolidation of Morgan Stanley's assets transaction is completed (each, a "make-whole acquisition"). In the event of a make-whole acquisition, each holder of the Series B has the option to convert its shares at the then applicable conversion rate. The number of make-whole shares will be determined by reference to the table in the Securities Purchase Agreement and is based on the effective date and the price per share of Morgan Stanley's common stock paid in such make-whole acquisition. If the stock price is in excess of \$100.00 per share, no make-whole shares will be issued upon conversion of the Series B Preferred Stock; and if the stock price is less than \$21.375 per share, no make-whole shares will be issued upon conversion of the Series B Preferred Stock.

Transfer Restrictions:

Prohibited from transferring prior to October 13, 2009. From October 13, 2009 until October 13, 2011, transfer can not exceed \$2.5 billion in aggregate value in any three-month period. After October 13, 2011, permitted

to transfer except if transferring securities to any person or group if such transfer would result in such person or group beneficially owning more than 5% of the Company's then-outstanding shares of common stock, without prior approval of the Board.

### Fundamental Change:

If a make-whole acquisition occurs or delisting occurs (each, a "fundamental change") and the fundamental change price is less than the conversion price, a holder may elect to convert each share of Series B Preferred Stock at an adjusted conversion price equal to the greater of (1) the fundamental change price and (2) \$12.625 (the "base price"). If the fundamental change price is less than the base price, holders of Series B Preferred Stock will receive a maximum of 79.2079 shares of Morgan Stanley's common stock per share of Series B Preferred Stock.

#### Anti-Dilution:

Anti-dilution adjustments apply if Morgan Stanley:

- Issues shares of common stock as a dividend or distribution on shares of common stock, or affects a share split or combination;
- Distributes to all or substantially all holders of the outstanding shares of common stock any rights or warrants permitting them to subscribe or purchase shares of common stock at a price per share less than the closing price of common stock on the trading day immediately preceding the record date of such distribution:
- Distributes to all or substantially all holders of common stock any class of capital stock of Morgan Stanley, evidences of its indebtedness, assets, property or rights or warrants to acquire Morgan Stanley's capital stock or other securities;
- Makes a regular, quarterly cash dividend or distribution to all or substantially all holders of common stock during any quarterly fiscal period that exceeds \$0.27 (current quarterly dividend per share) or pays any cash dividend or distribution that is not a regular, quarterly cash dividend or distribution to all or substantially all holders of common stock; or
- Makes a payment of cash or other consideration in respect of a tender offer or exchange offer for all or any portion of common stock, where such consideration exceeds the closing price of common stock on the trading day next succeeding the last date

## Morgan Stanley/MUFG

on which tenders or exchanges may be made pursuant to such offer.

Notwithstanding the above, no adjustment will be required unless the adjustment would result in a change in the then-applicable conversion rate of at least 1.00%.

## Morgan Stanley/MUFG

#### C. Summary Description of the Series C Non-Convertible Preferred Stock

<u>Issuer</u>: Morgan Stanley

<u>Issue</u>: 1,160,791 shares of Series C Preferred Stock, with a

liquidation preference of \$1,000 per share, for an aggregate purchase price of approximately \$1.2 billion.

Dividend: Non-cumulative cash dividends at a rate per annum equal

to 10%. Declared dividends payable quarterly, in arrears, on each January 15, April 15, July 15, and October 15,

and commencing on January 15, 2009.

Ranking: Ranks on parity with Morgan Stanley's other authorized

series of preferred stock and with each other class or series of preferred stock established after the date of

issuance of the Series B Preferred Stock.

Liquidation Rights: Entitled to receive liquidating distributions in the amount

of \$1,000 per share, plus an amount equal to any declared but unpaid dividends. In the event the assets of Morgan Stanley for distribution to shareholders upon any liquidation of Morgan Stanley are insufficient to pay in full, holders of Series B Preferred Stock and parity securities will share ratably in any distributions in proportion to the full respective liquidating distributions.

Voting Rights: No voting rights, including the right to elect any director,

except the right to elect two directors upon certain nonpayment events or necessary for effecting or validating certain actions defined in the Securities Purchase Agreement (similar to the Series B Preferred

Stock).

<u>Transfer Restrictions:</u> Prohibited from transferring prior to October 13, 2009.

From October 13, 2009 until October 13, 2011, transfer can not exceed \$2.5 billion in aggregate value in any three-month period. After October 13, 2011, permitted to transfer except if transferring securities to any person or group if such transfer would result in such person or group beneficially owning more than 5% of the Company's then-outstanding shares of common stock, without prior

approval of the Board.

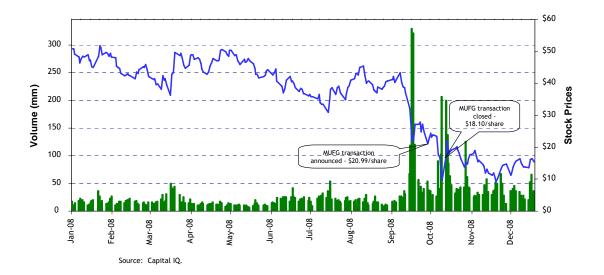
<u>Redemption</u>: After three years, Morgan Stanley has the right to redeem

the stock at 110% of its face value.

#### D. Historical Stock Prices

Prior to September 29, 2008, Morgan Stanley's 10-day weighted average stock price was \$24.67, which implies a price-to-tangible book value multiple of 0.85x. On the September 29, 2008 transaction announcement date, the closing stock price and market capitalization was \$20.99 per share and \$22.3 billion, respectively. The price-to-tangible book value multiple was 0.73x. The stock price and market capitalization, as of December 19, 2008 was \$15.45 per share and \$16.4 billion, respectively.

Trading History
January 1, 2008 to December 19, 2008



## **E.** Comparison to TARP Investment

	mparison - MUFJ Financial Group vs. U.S. Treasury (	TADD				
	Series B	Financial Group Series C	TARP Series D			
Issue	Perpetual Non-cumulative Convertible Preferred Stock	Perpetual Non-cumulative Preferred Stock	Fixed Rate Perpetual Cumulative Preferred Stock			
Issue Amount	\$7.8 billion	\$1.2 billion	\$10.0 billion			
Dividend	10% per annum	10% per annum	5% per annum until 5th anniversary of issuance date; 9% per annum thereafter			
Conversion Terms	\$25.25 per share; Mandatory after one year, if price of common shares exceeds 150% of the conversion price for a period of 20 or more trading days out of 30, 50% of the convertible stock will be converted to common stock. After two years, subject to approval by shareholders, all convertible stock will be converted to common stock under the same terms.	No conversion rights	No conversion rights			
Anti-Dilution	No adjustment unless change in conversion rate of at least 1%	Not Applicable	Not Applicable			
Redemption	Not Redeemable	After 3 years, redeemable by Morgan Stanley at 110% of face value plus accumulated but unpaid dividends	After 3 years, redeemable by Morgan Stanley at 100% of face value plus any accrued and unpaid dividends			
Ranking	Parity with other authorized series of preferred stock	Parity with other authorized series of preferred stock	Parity with other authorized series of preferred stock			
Liquidation Rights	\$1,000 per share or ratably in proportion to the full respective liquidating distributions	\$1,000 per share or ratably in proportion to the full respective liquidating distributions	\$1,000 per share or ratably in proportion to the full respective liquidating distributions			
Voting Rights	No voting rights except as set forth in the Securities Purchase Agreement	No voting rights except as set forth in the Securities Purchase Agreement (similar to Series B)	No voting rights except as set forth in the Securities Purchase Agreement (similar to Series B & C)			
Make-Whole	In the event of a make-whole acquisition (50% of voting power or a merger or consolidation of the Company's assets), each holder of the Series B has the option to convert its shares at the then applicable conversion rate.	Not Applicable	Not Applicable			
Fundamental Change (Make-whole acquisition or delisting)	A holder may elect to convert each share of Series B Preferred Stock at an adjusted conversion price equal to the greater of (1) the fundamental change price and (2) \$12.625 (the "base price"). If the fundamental change price is less than the base price, holders of Series B Preferred Stock will receive a maximum of 79.2079 shares of the Company's common stock per share of Series B Preferred Stock.	Not Applicable	If at any time the shares of common stock of the Company are no longer listed or admitted to trading on a national securities exchange (other than in connection with certain business combinations), the Treasury Department may cause the Company to exchange all or a portion of the Warrant for another economic interest of the Company with an equivalent fair market value.			
Transfer Restrictions	Prohibited from transferring prior to October 13, 2009. From October 13, 2009 until October 13, 2011, transfer can not exceed \$2.5 billion in aggregate value in any three-month period. After October 13, 2011, permitted to transfer except if transferring securities to any person or group if such transfer would result in such person or group beneficially owning more than \$% of the Company's then-outstanding shares of common stock, without prior approval of the Board.	Prohibited from transferring prior to October 13, 2009. From October 13, 2009 until October 13, 2011, transfer can not exceed \$2.5 billion in aggregate value in any three-month period. After October 13, 2011, permitted to transfer except if transferring securities to any person or group if such transfer would result in such person or group beneficially owning more than \$% of the Company's then-outstanding shares of common stock, without prior approval of the Board.	Permitted to transfer all or a portion of the purchased securities or warrant shares at any time; provided that not more than one-half of the initial warrant shares are transferred in the aggregate until the earlier of (a) the date on which the Company has received aggregate gross proceeds of not less than the purchase price from one or more qualified equity offerings and (b) December 31, 2009.			
Registration	Company agrees to grant five demand registrations (one of which may be a shelf registration) with respect to the common stock into which the Series B Preferred Stock may be converted. Such registration rights apply only to demands of at least \$500 million and are not available until after October 13, 2009.	Not Applicable	Company agrees to prepare and file with the SEC a Shelf Registration Statement covering all Registrable Securities and to use reasonable best efforts to keep such Shelf Registration Statement continuously effective and in compliance with the Securities Act and usable for resale of such Registrable Securities for a period from the date of its initial effectiveness until such time as there are no Registrable Securities remaining.			

Source: Morgan Stanley Form 8-K dated October 13, 2008 and October 26, 2008



## Morgan Stanley/MUFG

#### F. Valuation Analysis

#### Valuation Method

We valued the Series B Convertible Preferred Stock using Monte Carlo simulations to capture the terms of the conversion of the securities. For example, if the common stock price reaches 150% of the conversion price between years 1 and 2, the issuer will force the holder to exercise 50% of the convertible securities. If the common stock price reaches 150% of the conversion price after the 2<sup>nd</sup> year, the holder of securities is forced to exercise all of the outstanding convertible securities. To account for the perpetual nature of the security, we have assumed a very long maturity (50yrs). On the maturity date, the holder will decide to exercise the option to convert based on whether the cash-flow on conversion is greater than the face value of the preferred stock. The holder periodically receives coupon payments until the maturity date. The coupon payments stop once the preferred stock converts to common stock. We discount the various payoffs on future dates using the applicable discount rate to estimate the fair value of convertible security. The dividends are discounted at the required rates of return determined for the TARP Preferred Stock. The cash flows from the conversion into common stock are discounted at risk-free rate, consistent with option pricing methodology.

#### **Valuation Inputs**

To calculate the value of the securities, the key inputs and assumptions were:

Stock Price: \$18.10 Conversion Price: \$25.25 Time Horizon: 50 years

Dividend Rate: 10% per annum, paid quarterly

Volatility: Time varying volatility
Option Adjusted Yield: 13.27% to 14.27%

Risk-free Rate: Time varying risk free rate

We have assumed that dividends on the common stock are paid at the long-term historical dividend yield level (approximately 1.6%).

We concluded a value of \$8.0 billion to \$8.5 billion for the Series B preferred stock and \$830 million to \$877 million for the Series C preferred stock for a total value of \$8.8 billion to \$9.4 billion, in all cases before application of an appropriate discount due to reduced marketability.

#### Discount Due to Reduced Marketability

MUFG is restricted from transferring its securities in Morgan Stanley for one year, after which time MUFG may transfer up to \$2.5 billion in aggregate value in any three-month period. Additionally, Morgan Stanley will grant five demand registrations for the Series B preferred stock after one year. In our opinion, the more stringent transfer restrictions are offset by the higher dividend rate (relative to the TARP Morgan Stanley

## Morgan Stanley/MUFG

Preferred Stock), leading us to apply a 10% discount due to reduced marketability to both the Series B and Series C preferred stocks.

#### **Valuation Results**

The results, shown in the table below, suggest that the value of the MUFG investment was approximately 88% to 94% of the face value of the investment as of October 13, 2008.

MUFG Investment in Morgan Stanley											
Valuation Date	Face Value		Convertible Preferred Stock Low High			Series C Preferred Low High			Total I Low	Total Investment Low High	
10/13/2008	\$9.0	\$ Before Discount % Discount \$ After Discount	\$8.0 10% \$7.2	to	\$8.5 10% \$7.6	\$0.830 10% \$0.747	to	\$0.887 10% \$0.798	\$7.9	to \$8.4	

Notes: \$ in billions.



# **Appendix L-III**

Qatar Holding and Abu Dhabi £7.05 Billion Investment in Barclays plc

#### A. Transaction Background

On October 31, 2008, Barclays issued a press release announcing up to a £7.3 billion (\$11.8 billion) capital raising transaction from existing and new strategic and institutional investors. On the this date, Barclay's closing stock price and market capitalization was £1.789 per share and £14.6 billion (\$23.6 billion), respectively.

The transaction was approved by Barclay's shareholders on November 24, 2008 and resulted in the issuance of £3 billion of Callable Perpetual Reserve Capital Instruments ("RCIs"), 1,516,875,236 warrants with an exercise price of 197.775 pence per warrant, and the issuance of £4.05 billion of Mandatory Convertible Notes ("MCNs"), for a total investment amount of £7.05 billion.

The RCIs were issued to Qatar Holding and entities representing the beneficial interests of HH Sheik Mansour Bin Zayed Al Nahyan, a member of the Royal Family of Abu Dhabi ("Abu Dhabi"). The RCIs pay a coupon of 14.0% until June 2019 and 3-month LIBOR plus 13.4% thereafter. For capital adequacy purposes, the RCIs qualify as Tier 1 Capital. In conjunction with the issuance, Qatar Holding and Abu Dhabi received warrants to purchase 1,517 million Ordinary Shares with an exercise price of 197.775 pence per share, representing 18.1% of Barclays' current shares outstanding. The warrants are exercisable for a period of 5 years from date of issue.

Of the £4.05 billion MCN issuance, £2.8 billion was issued to Qatar Holding, Challenger and Abu Dhabi, and £1.25 billion was issued to existing institutional shareholders and other institutional investors by way of an accelerated non-underwritten bookbuild placing. The MCNs pay an annual coupon of 9.75% until conversion into Ordinary Shares, which will occur before June 30, 2009. Conversion will result in the issue of 2,805,396,799 new Ordinary Shares, representing 33.5% of Barclay's current shares outstanding. The conversion price is 153.276 pence, which represents a discount of 15.3% to the closing price on October 30, 2008.

On November 28, 2008, Barclays announced that it had issued all MCNs and RCIs on November 27, 2008.

#### B. Summary Terms of Reserve Capital Instruments and Related Warrants

<u>Issuer:</u> Barclays plc

<u>Issue</u>: £3,000,000,000 14.0% Perpetual Reserve Capital

Instruments.

Interest: The RCIs bear interest at a rate per annum equal to 14.0%

from the issue date to June 15, 2019. Thereafter, the RCIs bear interest at a rate per annum reset quarterly of 3-month LIBOR plus 13.4%. Interest payable annually in arrear on June 15 each year until 2019; thereafter, quarterly in arrear on March 15, June 15, September 15

and December 15.

Ranking: The rights and claims of the RCI Holders are subordinate

to the claims of Senior Creditors. No payment of principal or interest in respect of the RCIs shall be due and payable unless the Issuer is able to make such payment and still be solvent immediately thereafter. Each RCI Holder will rank pari passu with the holders of existing TONs, existing RCIs and the most senior class or classes of preference shares of Barclays then in issue and in priority to all other

shareholders of Barclays.

Rating: The RCIs have been assigned an A+ rating by Standard &

Poor's, an Aa3 rating by Moody's, and an AA- rating by

Fitch Ratings.

<u>Listing and Trading:</u> RCIs and related Warrants will trade on the London Stock

Exchange.

Interest Deferral: Barclays may elect to defer any payment on the RCIs.

Redemption: The RCIs are redeemable (at the option of Barclays) in

whole but not in part on June 15, 2019 or on each coupon

payment date thereafter.

Warrants: 1,516,875,236 warrants for one Ordinary Share per

warrant with an exercise price of 197.775 pence per warrant, subject to adjustment; exercisable immediately (American-style options). Issued on October 31, 2008 with an expiration date of October 31, 2013. The warrants represent 12.0% of the fully diluted share capital

assuming full conversion of warrants and MCNs.

Anti-Dilution Provisions: Original subscribers for the Warrants are entitled to a

reduction in the exercise price of warrants if Barclays issues further Ordinary Shares by the way of a rights issue between July 1, 2009 and June 30, 2011 and the price of an Ordinary Share at the time of the rights issue is less

than 197.775 pence. Such right is solely granted to the original subscriber, is not transferable and is not a term of the Warrants.

Anti-dilution adjustments apply if Barclays:

- A dividend is declared to be a capital distribution, extraordinary dividend, extraordinary distribution, special dividend or special distribution;
- Issues Ordinary Shares credited as fully paid to the Shareholders by way of capitalization of profits or reserves which do not constitute a dividend;
- Alters the nominal value of the Ordinary Shares as a result of consolidation, reclassification or subdivision;
- Ordinary Shares, Ordinary Share-Related Securities, rights to Ordinary Shares, or rights to Ordinary Share-Related Securities are offered or granted to shareholders at a price less than 95% of the market price on the first date the Ordinary Shares are traded ex-rights;
- No adjustment will be made for a Corporate Event (merger or sale of assets).

#### Transfer Restrictions:

Neither the RCIs, the Warrants, nor the Ordinary Shares for which the Warrants are exercisable have been, or will be, registered under the United States Securities Act of 1933. The RCIs, Warrants, and such Ordinary Shares may not be offered, sold, transferred or delivered in the United States absent registration or an applicable exemption from registration requirements. The Warrants must not at any time be exercised in the United States. Moreover, no action has been or will be taken in any jurisdiction that would, or is intended to, permit a public offering of the RCIs, Warrants, or the Ordinary Shares for which the Warrants are exercisable, in any country or jurisdiction where action for that purpose is required.

#### C. Summary Terms of Mandatory Convertible Notes

<u>Issuer</u>: Barclays plc

Issue: £4,050,000,000 9.75% Mandatorily Convertible Notes due

2009 convertible into Ordinary Shares in Barclays. Notes will be issued at 100% of principal amount in bearer form

in the denomination of £50,000.

<u>Conversion Price</u>: 153.276 pence

<u>Conversion Terms</u>: Each note is mandatorily and automatically converted

into shares based on the principal amount divided by the conversion price. The mandatory conversion date is June 30, 2009. The optional conversion period begins the next business day after issue and ends at the close of business on the fifth business day prior to the mandatory conversion date. Each holder has the option to convert at any time during the optional conversion period. The MCNs represent 22.1% of the fully diluted share capital

assuming full conversion of warrants and MCNs.

Interest: Notes bear interest at the rate of 9.75% per annum

payable quarterly in arrears on December 30, 2008, March 30, 2009, June 30, 2009 and September 30, 2009.

Ranking: Notes constitute direct, unconditional, unsubordinated

and unsecured obligations of the Issuer. Ranks at least equal with all present and future unsecured and

unsubordinated obligations.

Conversion Price

Adjustments: The conversion price is subject to adjustment if: (a)

Barclays issues any shares or other securities and rights for a subscription price which is less than the current conversion price; (b) Barclays distributes an extraordinary dividend; (c) in the event of the occurrence of certain dilutive events, including bonus issues, alterations to the nominal value or redenominations of the shares and rights

issues.

Listing and Trading: Notes will trade on the London Stock Exchange.

<u>Transfer Restrictions</u>: The Notes and the Shares have not been, and will not be,

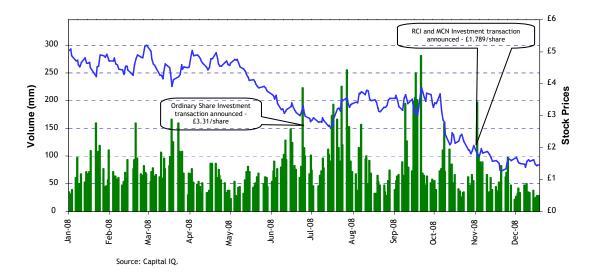
registered under the U.S. Securities Act of 1933 (the "Securities Act"). The Notes have been offered outside the United States in accordance with Regulation S under the Securities Act, and the Notes and the Shares may not be offered, sold or delivered within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements

of the Securities Act. The Notes must not at any time be converted in the United States. Moreover, no action has been or will be taken in any jurisdiction that would, or is intended to, permit a public offering of the Notes or the Shares in any country or jurisdiction where action for that purpose is required.

#### D. Historical Stock Prices

Prior to October 31, 2008, Barclays 10-day weighted average stock price was £2.06 which implies a price-to-tangible book value multiple of 0.90x. On the transaction announcement date, the closing stock price and market capitalization was £1.789 per share and £14.6 billion (\$23.6 billion), respectively. The price-to-tangible book value multiple was 0.78x. The stock price and market capitalization, as of December 18, 2008 was £1.40 per share and £11.4 billion (\$17.3 billion), respectively.

Trading History
January 1, 2008 to December 19, 2008



#### E. Valuation Analysis

#### **Reserve Capital Instruments and Warrants**

Given the relatively high coupon rate on the RCIs (14.0%), we treated them as ten-year securities. We assumed that they would be called after the expiration of their call-protection feature. We discounted the contractual dividend payments using an OAY of 10.50% to 11.50%.

The RCI-related warrants were valued in the same manner as the TARP Warrants; utilizing an options pricing approach implemented with a Monte Carlo simulation, which readily accommodates time-varying interest rates and volatilities.

Our estimated range of values for the RCIs and warrants as of October 31, 2008 was £4.7 billion to £4.9 billion, before application of appropriate discounts due to reduced marketability.

#### Mandatorily Convertible Notes

The MCNs pay a coupon of 9.75% and can be converted at any time after issuance. Since the MCNs are mandatorily convertible on June 30, 2009, early conversion is useful only if the holder expects the dividend yield to be above this rate. Given Barclay's current financial strength, we believe that the dividend stream received from conversion will not be able to offset the loss in coupon payments. Thus, the security is a combination of a cash flow stream of 9.75% and a forward delivery contract on Barclay's common stock.

Our value for the MCNs as of October 31, 2008 was £4.8 billion, before application of an appropriate discount due to reduced marketability.

#### Discount Due to Reduced Marketability

The ordinary shares underlying the warrants and the MCNs represent approximately 34% of Barclay's fully diluted current shares outstanding. Given the equity nature of the position in conjunction with the size of the block suggests a higher discount due to reduced marketability relative to the TARP Preferred Stocks and TARP Warrants, thus reducing the value of the investment. Additionally, while the securities will be listed on the London Stock Exchange, transferability is subject to various restrictions on a country by country basis. As such, the securities may not be offered, sold, transferred or delivered in such a country or jurisdiction absent registration or an applicable exemption from registration. This potentially increases the holding period. Thus, these factors lead us to conclude a discount due to reduced marketability of 5% for the RCIs and warrants and 15% for the MCNs.

### Conclusion

The results, shown in the table below, suggest that the value of the Qatar Holding and Abu Dhabi investment was approximately 122% to 125% of the face value of the investment as of October 31, 2008. This is equivalent to a discount of approximately 18% to 20%.

Qatar Holding and Abu Dhabi Investment in Barclays											
Valuation Date	Face Value		Reserve Capital Instruments Low High			Mandatory Convertible Notes	Warrants	Total Value of Investment After Discounts Low High			
10/31/2008	£7.05	\$ Before Discount		to	£3.6	£4.8	£1.3				
		% Discount	5%		5%	15%	5%	£8.6	to	£8.8	
		\$ After Discount	£3.3	to	£3.5	£4.1	£1.3	<u> </u>			

Notes: £ in billions.