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U.S. Capital Markets

The Global Capital Markets Tontine

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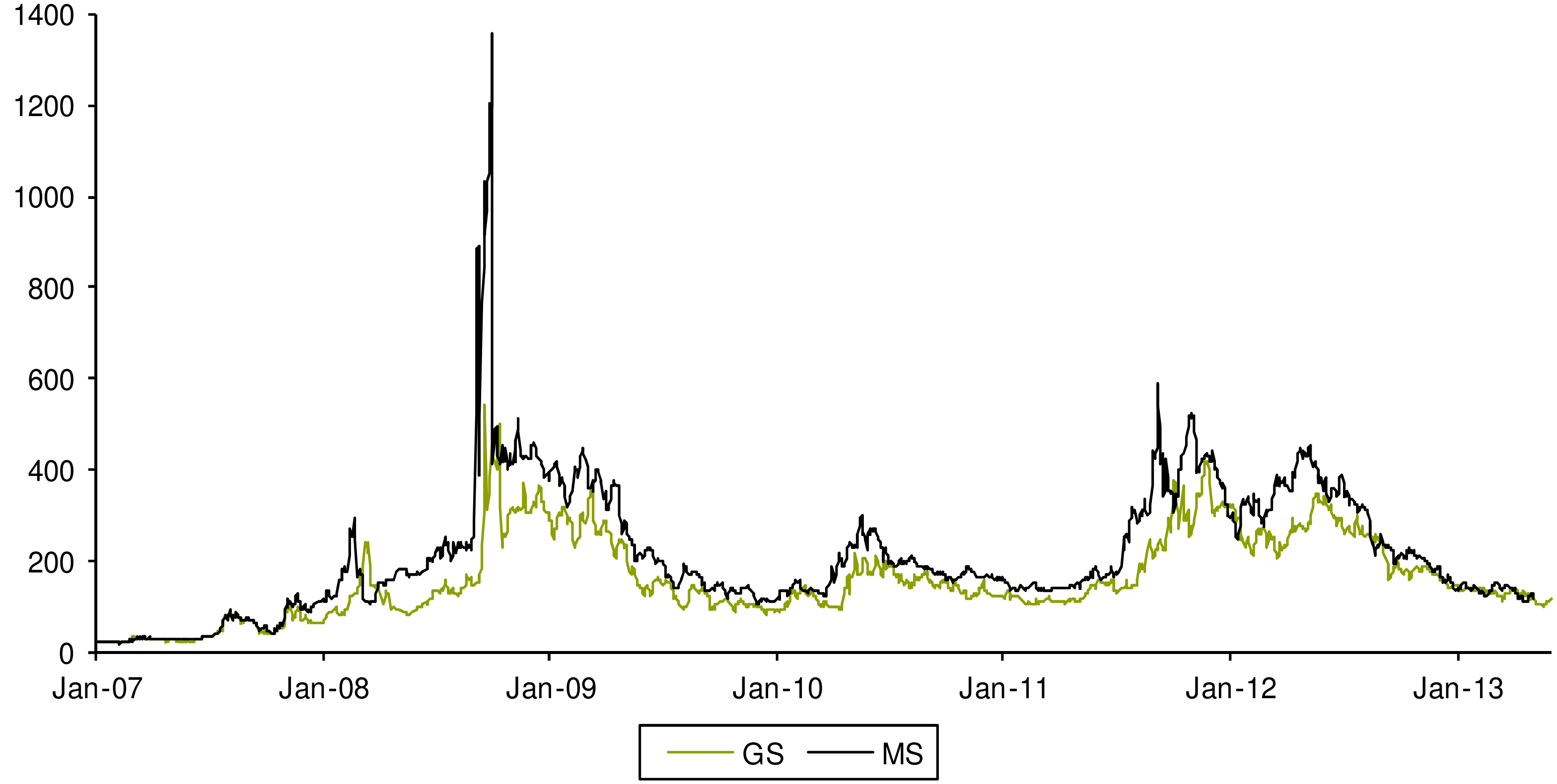
See Disclosure Appendix of this report for important Disclosures and Analyst Certifications

U.S. Capital Markets Coverage

	Rating	Target Price	6/3/2013 Price	EPS 2012	EPS 2013E	EPS 2014E	P/E 2012	P/E 2013E	P/E 2014E	Dividends	BV/Share	P/BV
MS	O	$29.00	$25.65	$1.61	$2.20	$2.53	15.9x	11.7x	10.1x	0.8%	31.21	0.8x
GS	O	170.00	163.56	14.16	16.10	16.70	11.6x	10.2x	9.8x	1.2%	148.41	1.1x
SCHW	O	23.00	19.68	0.70	0.74	0.92	28.1x	26.6x	21.4x	1.2%	6.96	2.8x
AMTD	M	20.00	23.20	1.11	1.11	1.27	20.9x	20.9x	18.3x	1.5%	8.02	2.9x
LPLA	M	35.00	37.17	2.01	2.30	2.58	18.5x	16.2x	14.4x	1.5%	11.19	3.3x
S&P 500			1,640.42	102.57	109.95	122.06	16.0x	14.9x	13.4x	2.1%		

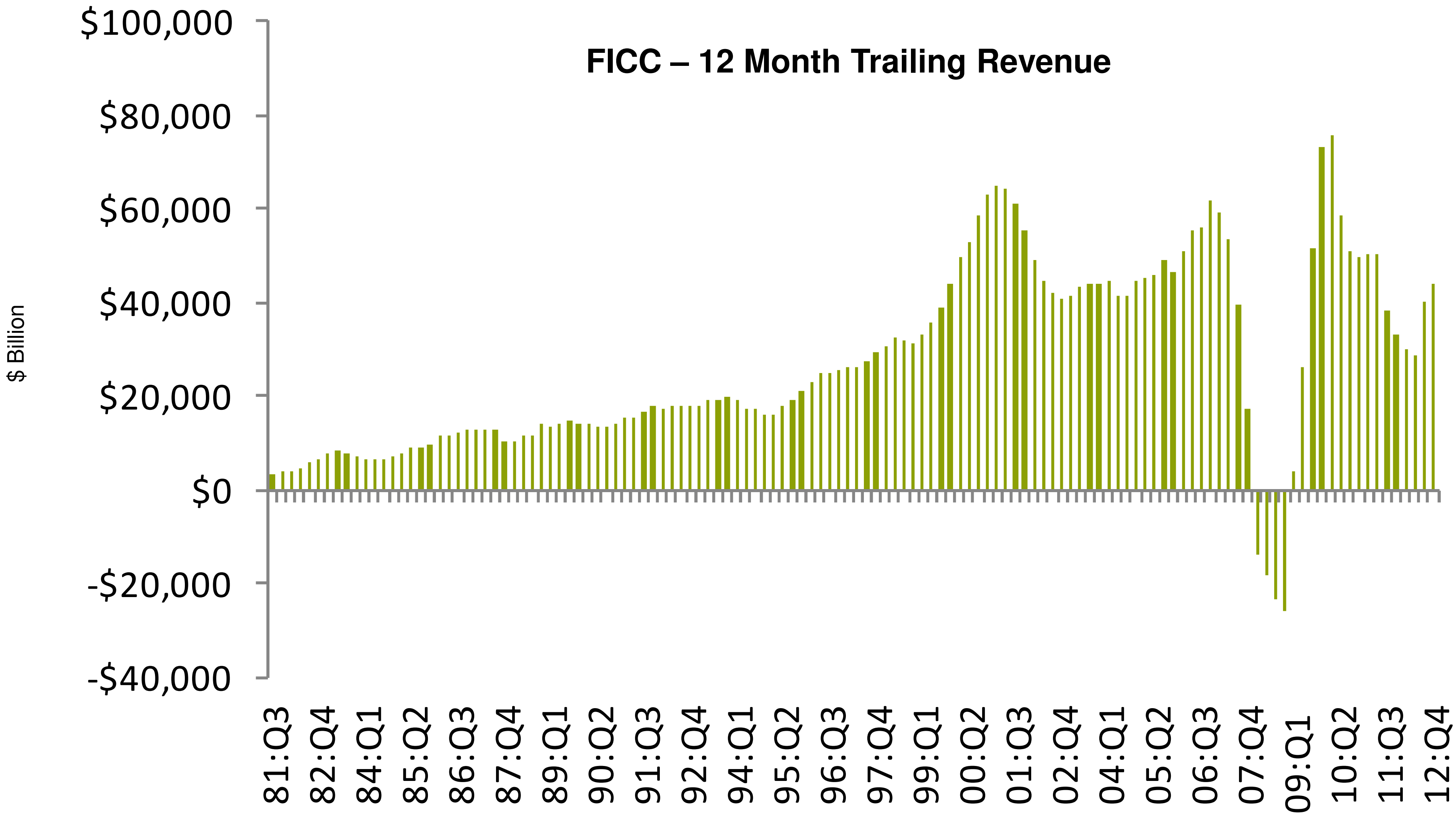
Sources: Bloomberg, Capital IQ, Bernstein estimates

CDS Spreads – A Return to Normality



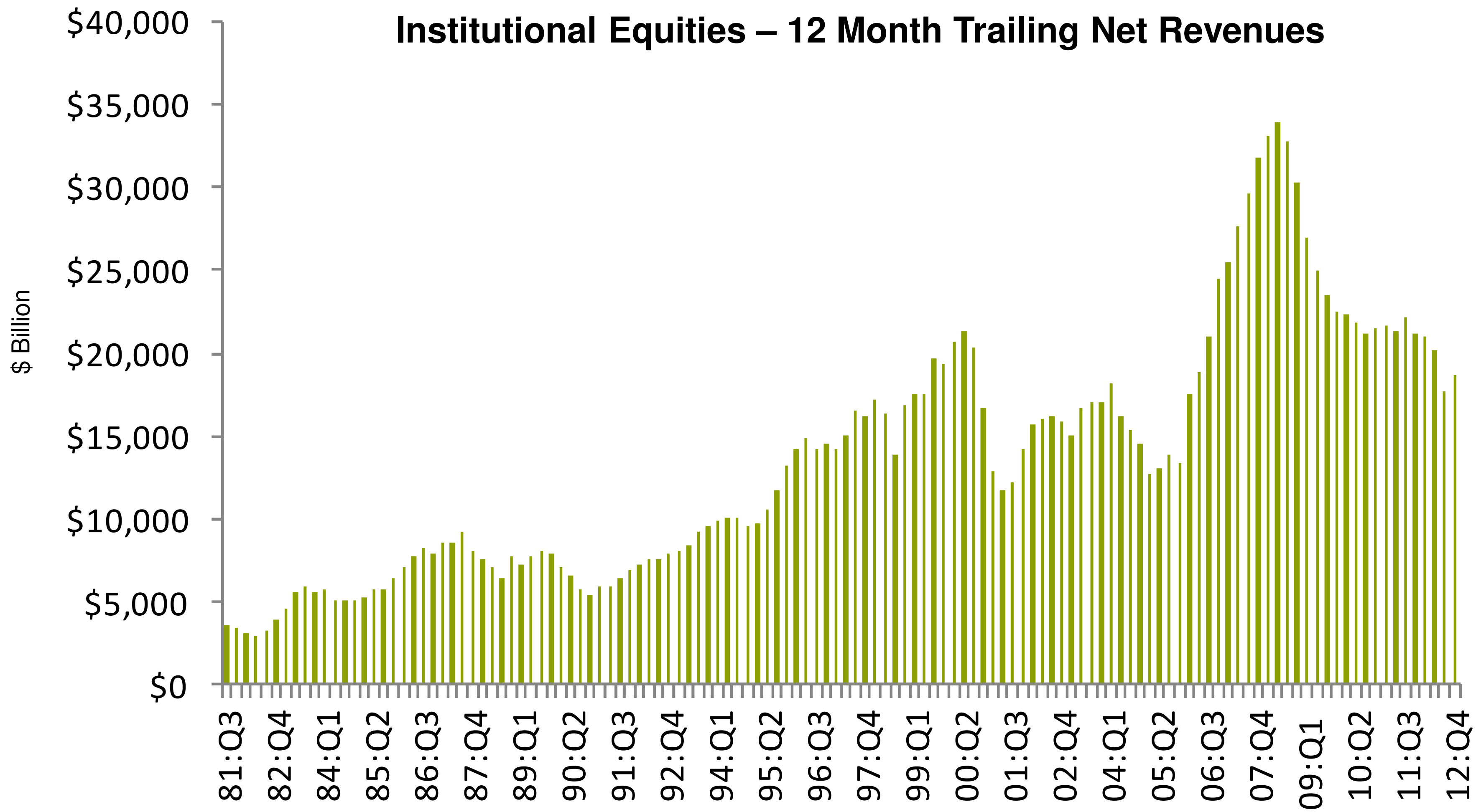
Sources: Bloomberg, Bernstein Analysis

FICC Trading Revenue



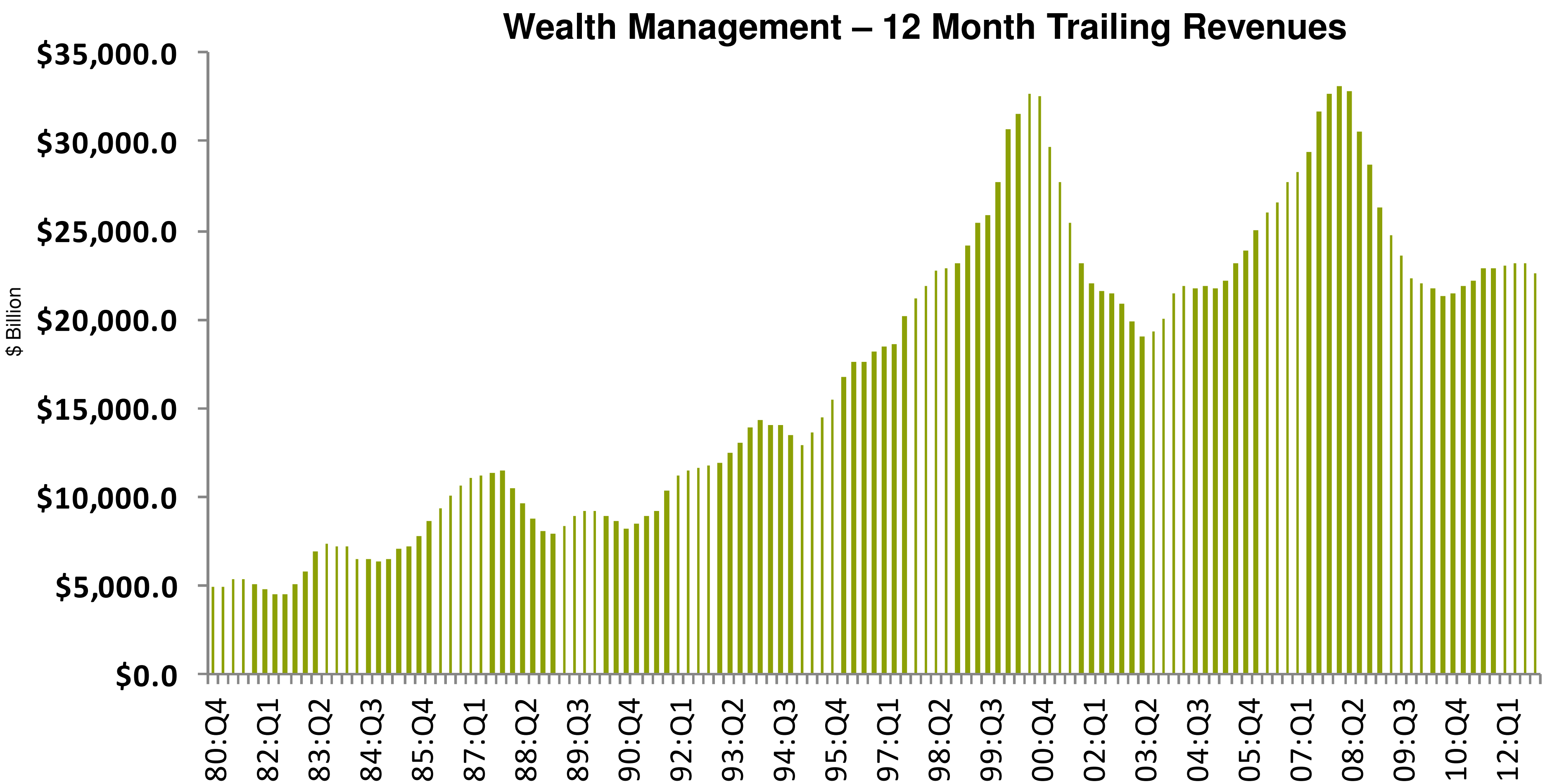
Source: SIFMA Database, Company Disclosure, Bernstein analysis

Institutional Equities Trading Revenue



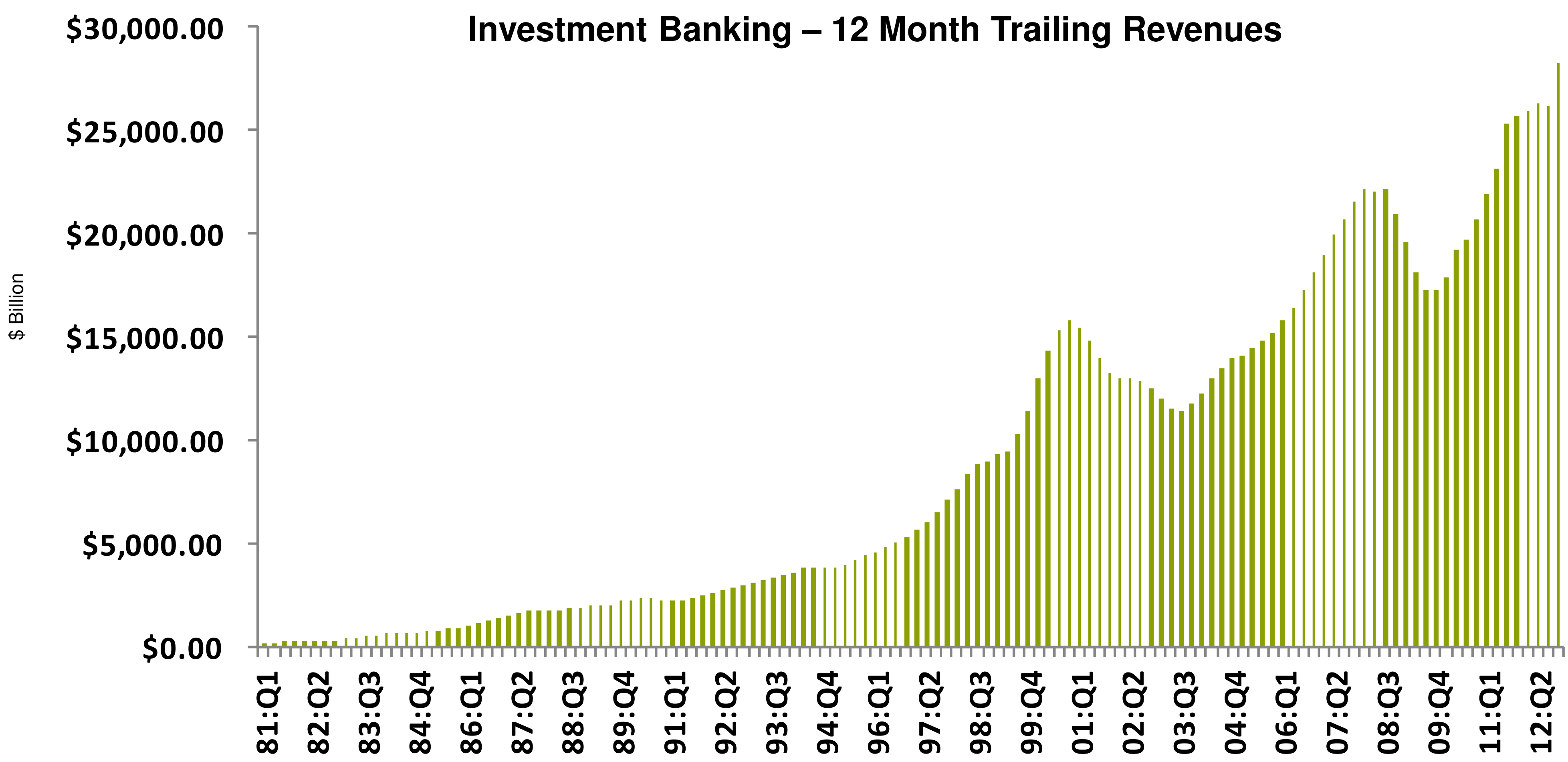
Source: SIFMA Database, Company Disclosure, Bernstein analysis

Wealth Management



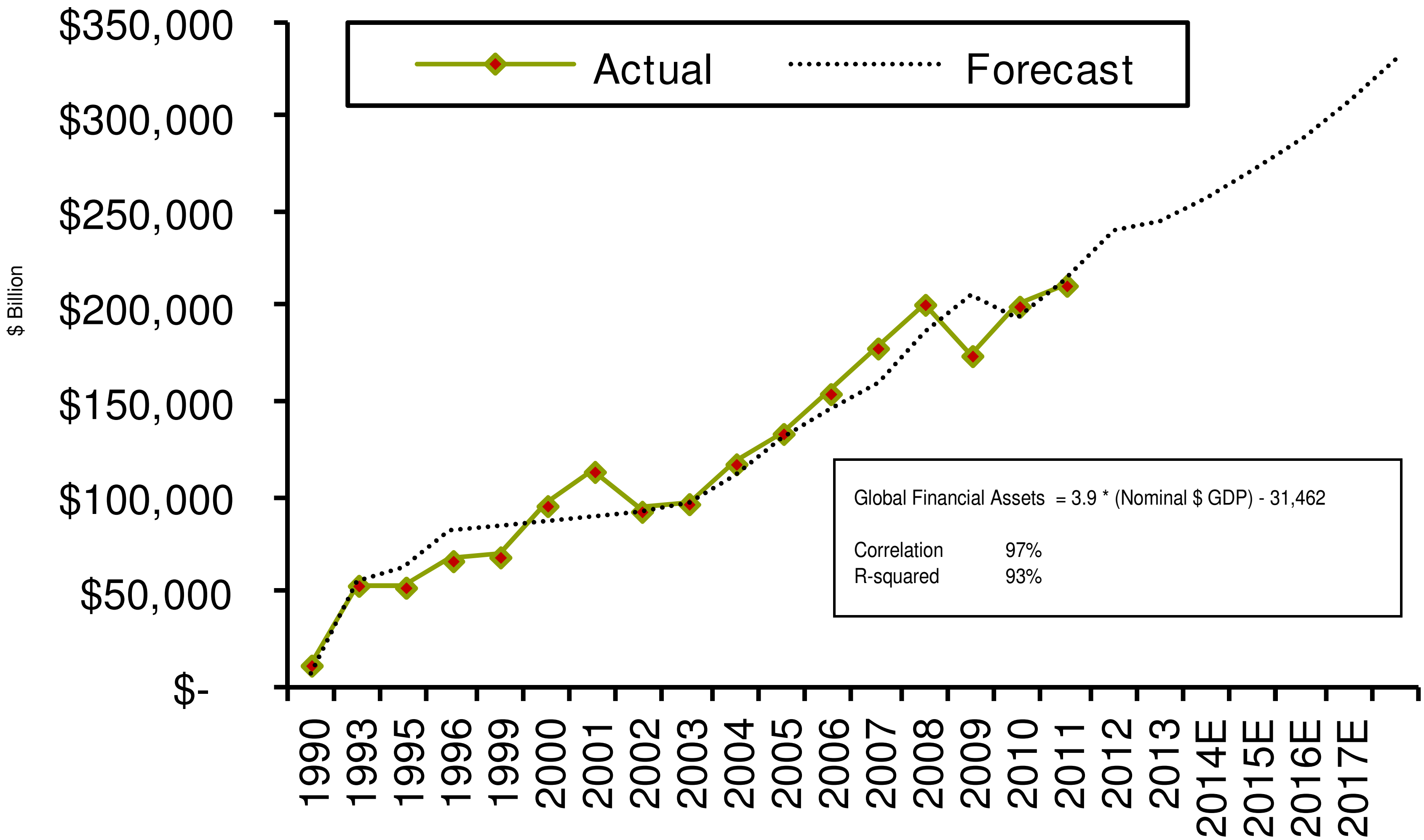
Source: SIFMA Database, Company Disclosure and Bernstein

Investment Banking Revenues



Source: SIFMA Database, Company Disclosure and Bernstein

Global Financial Assets - 6%-7% Annual Growth

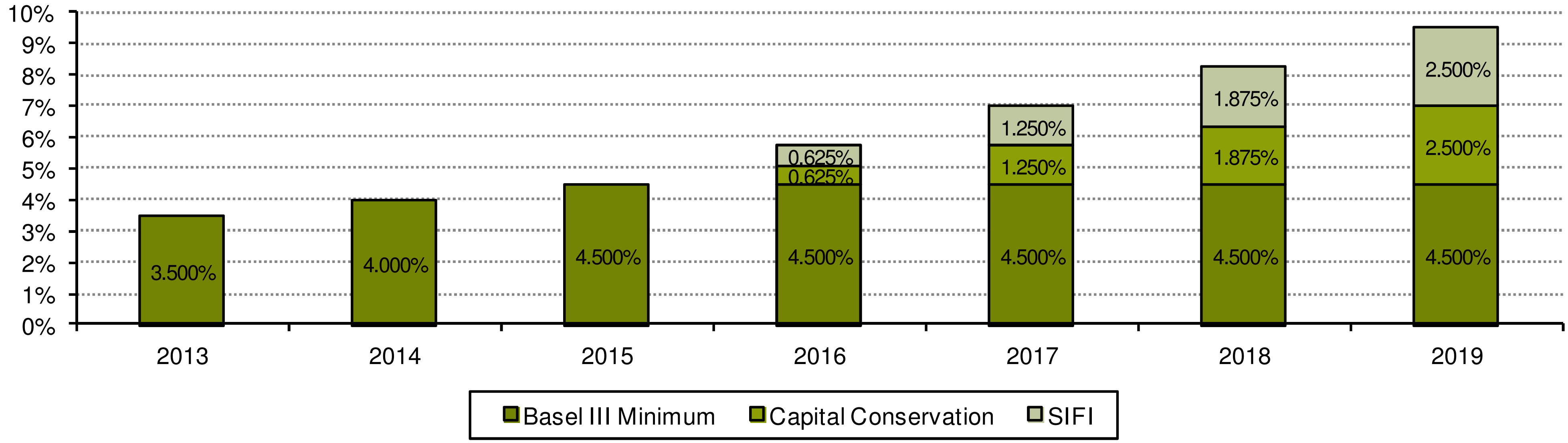


Source: McKinsey Global Research Inst. Data, IMF Data and Bernstein analysis

The Effects of the Crisis on the Banks

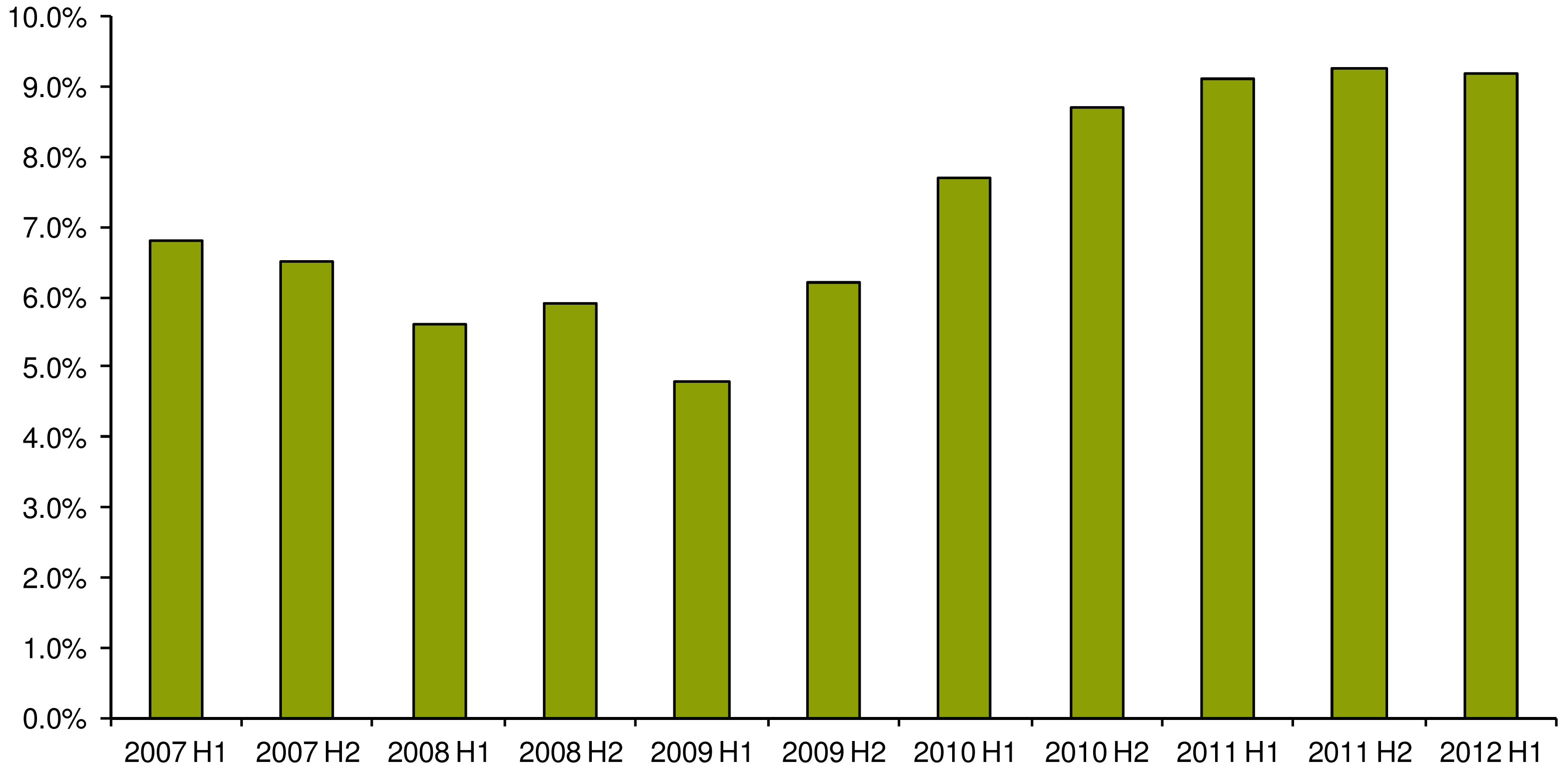
- Capital Increases
- Funding/Liquidity Improvement
- Trading/Risk Limitations
- OTC Derivatives Legislation
- Compensation Policy Changes
- Industry Reputation and Brand Equity
- Decline of Influence Among Large Banks
- Confidence in Regulators
- Credit Ratings Decline
- Litigation Overhang

The Rising Capital Targets of Basel III



Source: Bank for International Settlements, Bernstein Analysis

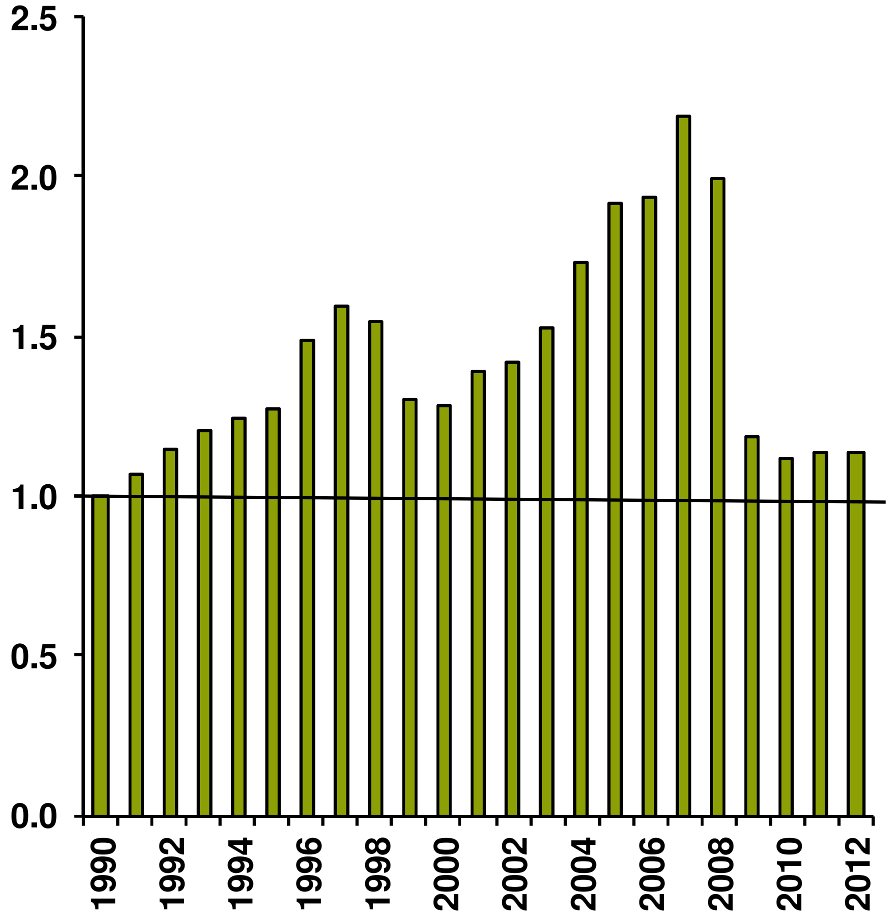
Tier 1 Common Ratio of US Large Capitalization Banks



Sources: SNL, Company disclosures, Bernstein analysis

Leverage Decline Reduces Trading ROE

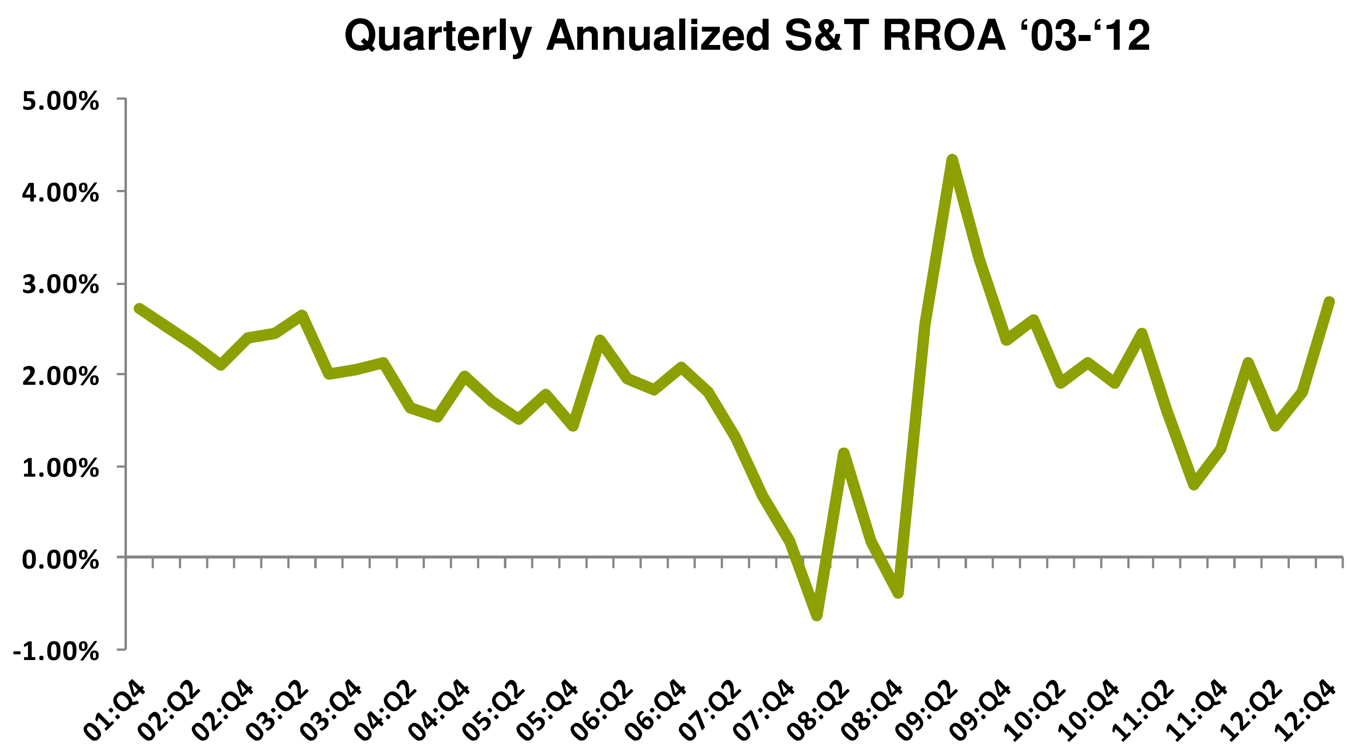
Indexed Capital Markets Leverage 1990=1.0



- Higher RWA capital charges, lower leverage limits, and more matched funding negatively impacts the ability to achieve returns over cost of capital.

Source: Company Disclosure, SIA Database, Bernstein Analysis

Trading Revenue Return on Net Assets (RRONA)



- Quarterly S&T RRONA — Mean = 2.27% σ = 1.22%
- Quarterly RRONA Ex-Crisis — Mean = 2.67% σ = 0.65%

Source: SIFMA, Company Disclosure and Bernstein . Note all returns are annualized

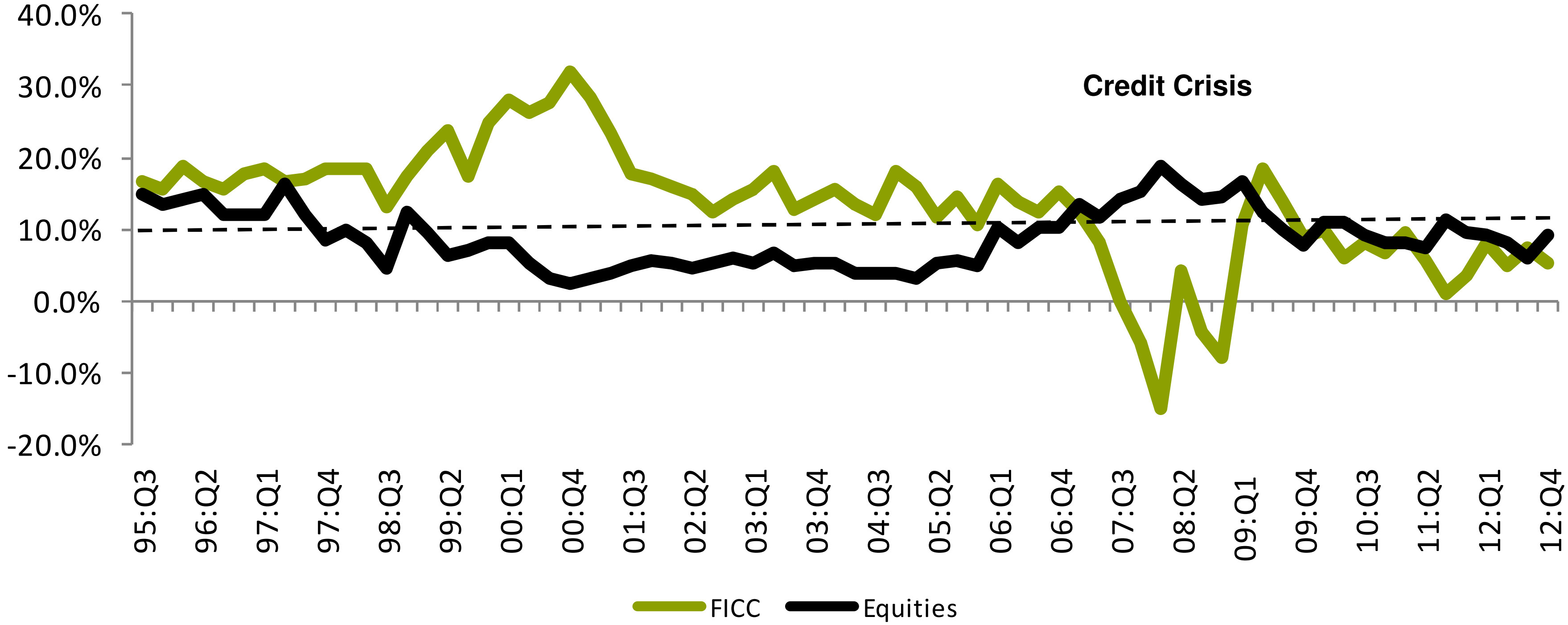
Return on Equity – Yesterday and Today

Current Trading Economics, 50% Comp. Ratio

		RRONA			
		1.0%	**2.0%**	**3.0%**	**4.0%**
Leverage	**30x**	4.6%	9.1%	13.7%	18.2%
	25x	3.8%	7.6%	11.4%	15.2%
	20x	3.0%	6.1%	9.1%	12.1%
	15x	2.3%	4.4%	6.8%	9.1%
	10x	1.5%	3.0%	4.6%	6.1%

Source: Bernstein SIFMA and Company disclosure

Sales and Trading ROE



Source: Company Disclosure, SIA Database, Bernstein Analysis

Fixed Income Challenges

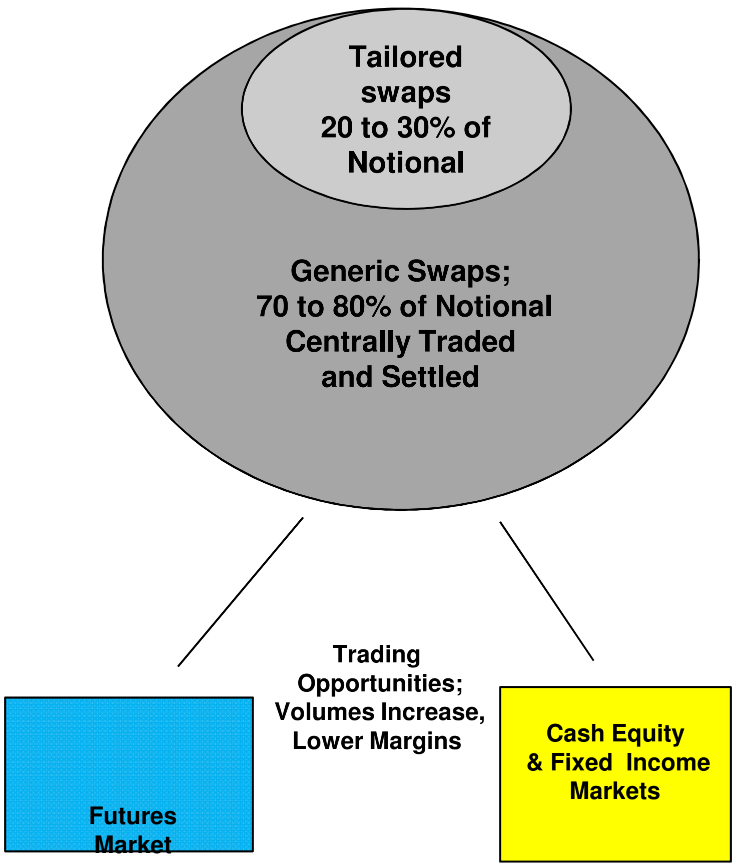
- Proprietary trading prohibited; market making revenues reduced by ≈20%
- Fixed income derivative central trading and settlement
- Leverage down
- Risk constrained by regulators
- Carry costs rise due to liquidity/funding changes
- Lower credit ratings

Institutional Equity Challenges

- Proprietary trading banned; statistical arbitrage, risk arbitrage.
- Limitation on block positioning
- Prime brokerage – changed business model means lower returns.
- OTC Equity derivatives move to central trading and clearing.
- Reliance on allocated ECM revenues to beat cost of equity.

OTC Derivatives

OTC Derivatives Market



Source: Bernstein Analysis

- OTC Derivatives make up approximately 15% of fixed income net revenue and generate 20% of institutional equity net revenue
- Expect 70% of derivatives notional amounts to trade and clear on a SEF/CCP; this portion of the derivatives market generates 50% of total derivatives earnings
- Highly tailored bespoke derivatives will remain bilateral, albeit with higher capital charges – and these generate 50% of current earnings
- Derivatives pricing will fall and margins will contract in a 'new' electronic market; PTM falls from ≈35% to ≈23% for originators. Over time new products from futures exchanges disintermediate volumes.

FICC Margins

- FICC bears the brunt of the new capital charges. RWAs related to FICC will increase >50% due to its credit and balance sheet intensity.
  - Investment grade credit, commodities, securitized products, emerging market, high yield, loan syndication and structured products are adversely effected.
  - Foreign exchange trading and government trading are less impacted by regulation.
  - Approximately 50% of fixed income revenues will be significantly impacted by either the increase in regulatory capital or the limitation on leverage.

Fixed Income Average Pre Tax Margins

	Cash	Proprietary Trading	OTC Derivatives	Avg. PTM
Current	23.0%	24.0%	35.0%	24.9%
Post Dodd Frank	23.0%	-	23.0%	23.0%

Sources: Bernstein analysis

Institutional Equity Margins

Inst. Equities Average Pre Tax Margins

	Cash	Proprietary Trading	OTC Derivatives	Avg. PTM
Current	6.3%	24.0%	35.0%	12.4%
Post Dodd Frank	6.3%	-	23.0%	9.1%

- RWA in equities are expected to increase ~30% on average under Basel III; leverage limitations will negatively impact the ROE of prime brokerage.
- Higher return on equity businesses such as proprietary trading (~24% PTM) and OTC derivatives (35% PTM) are prohibited or constrained by new regulation.
- Equities margins will decline by ~25%, increasing the reliance of the business on ECM shared revenues to achieve acceptable returns.

Source: Bernstein SIFMA and Company Disclosure

Return on Equity - Post Dodd Frank (Volcker and OTC Derivatives)

Pro Forma for Post Dodd Frank Margin Changes

		RRONA			
		1.0%	**2.0%**	**3.0%**	**4.0%**
	30x	4.1%	8.2%	12.2%	16.3%
	25x	3.4%	6.8%	10.2%	13.6%
Leverage	**20x**	2.7%	5.4%	8.2%	10.9%
	15x	2.0%	3.9%	6.1%	8.2%
	10x	1.4%	2.7%	4.1%	5.4%

Source: Bernstein SIFMA and Company disclosure

Trading Reality: Smaller Positions , Lower Compensation, Slower Growth

Business Mix & Risk Mgmt.

Comp. Policy, Competitive Pressure & & Taxes

Financial Policy & Ratings Targets

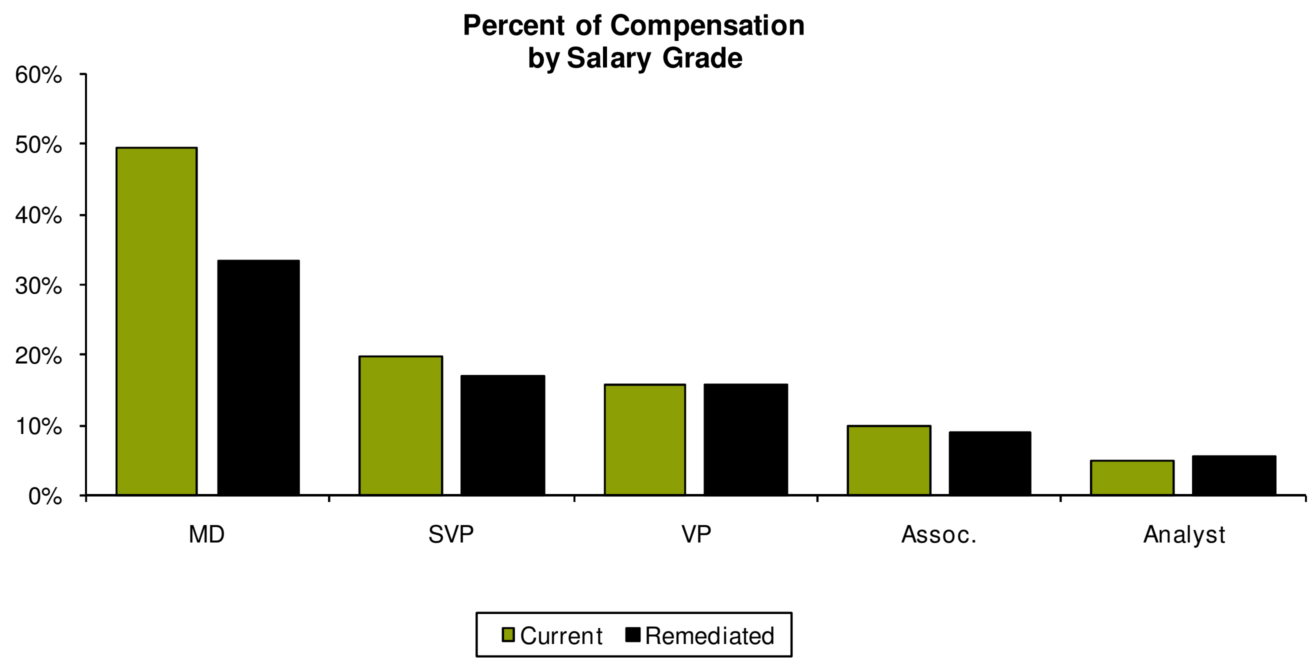
ROE = RROA x 1 - (Comp % + NC Exp % + Tax %) x Asset / Eq.

Source: Bernstein Analysis

Compensation

- Wall Street is (1) cutting compensation, (2) reengineering the business, (3) limiting capital in trading books and (4) pushing for higher commissions in equities and wider bid offer spreads in fixed income.

- Compensation: Bernstein expects the average compensation of an MD in Sales and Trading to drop by 20% and the percent of MDs in a trading operation to decline from 15% of staff to 10%. SVP compensation will decline by 15%. This will reduce the compensation ratio to ~40%.



Source: Bernstein Analysis

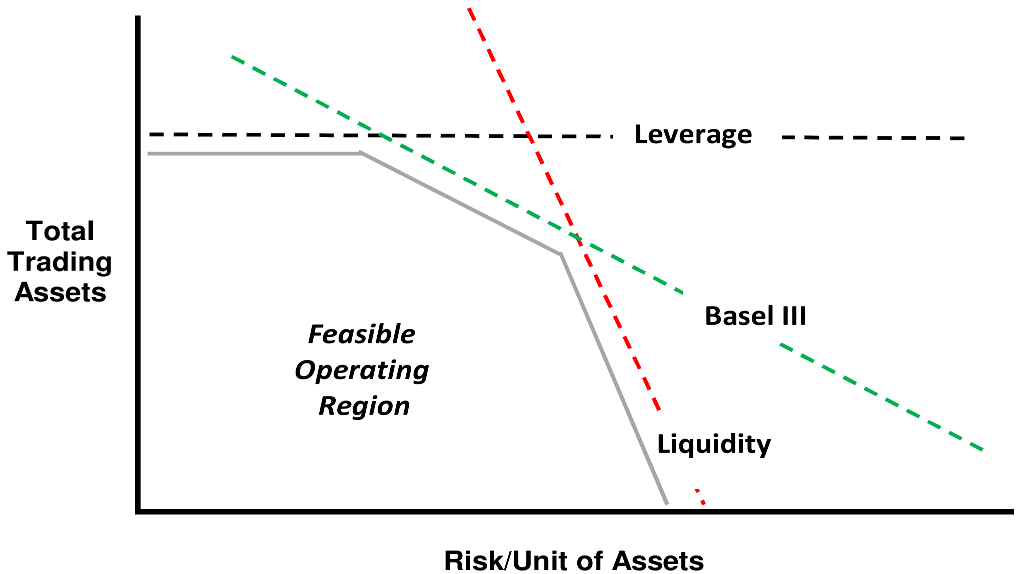
ROE Versus Leverage - Post Margin Improvement

Pro Forma for Reducing Compensation Ratio to 40%

		RRONA			
		1.0%	**2.0%**	**3.0%**	**4.0%**
Leverage	**30x**	6.0%	12.1%	18.1%	24.2%
	25x	5.0%	10.1%	15.1%	20.1%
	20x	4.0%	8.1%	12.1%	16.1%
	15x	3.0%	5.8%	9.1%	12.1%
	10x	2.0%	4.0%	6.0%	8.1%

Source: Bernstein SIFMA and Company disclosure

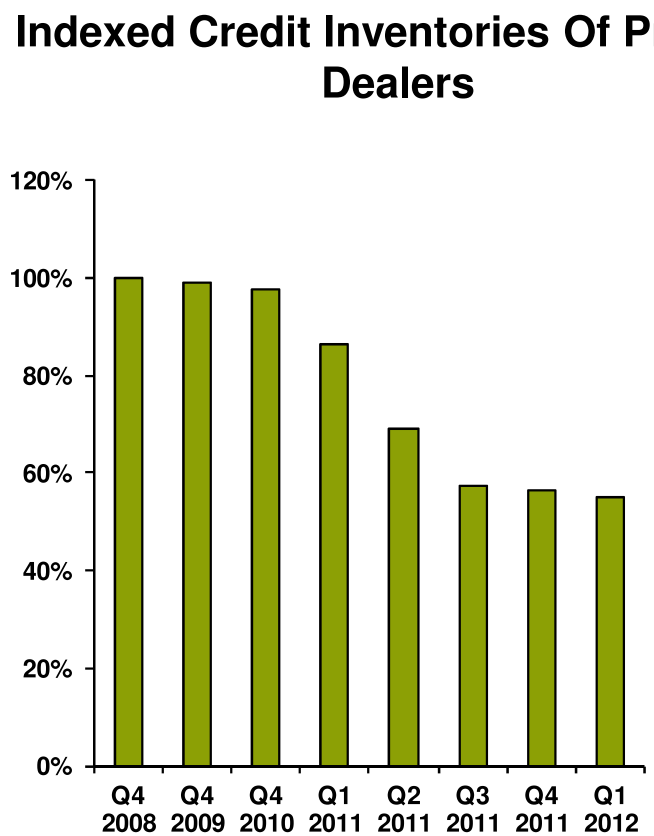
Trading Book Optimization – A Linear Programming Problem



Source: Bernstein Analysis

- Low return businesses will have inventories constrained; inventory turnover discipline will be enforced and aged inventory tightly monitored
- Linkages between businesses will be identified to ensure that balance sheet is used to maximize customer flow or support profitable trading strategies
- Capital allocation models will be established that use operation research techniques to drive improved capital allocation

High RWA Credit Inventories Decline



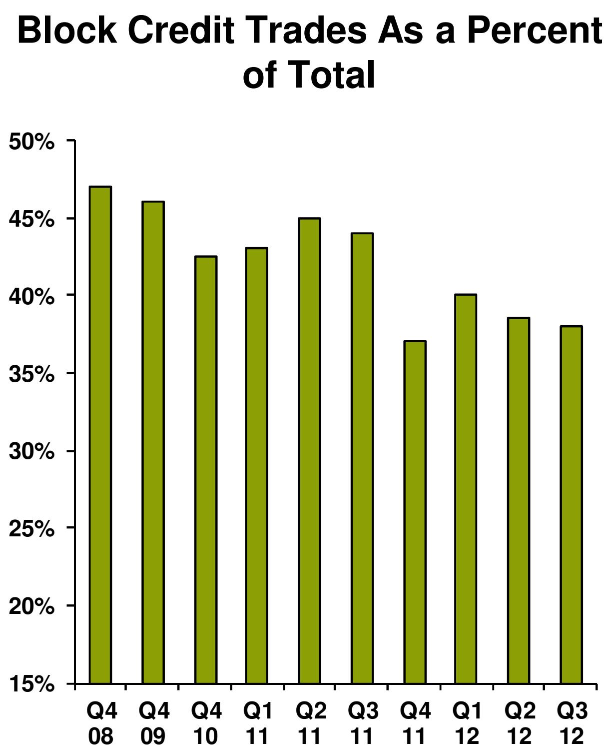
- Since market conditions normalized in 2009, market making inventories of high RWA assets have been reduced

- Proprietary trading desks have been closed and flow trading reduced; all risk taking has been limited – including market making

Source: FRB NY and Bernstein Analysis

Lower Inventories Mean Fewer Large Trades

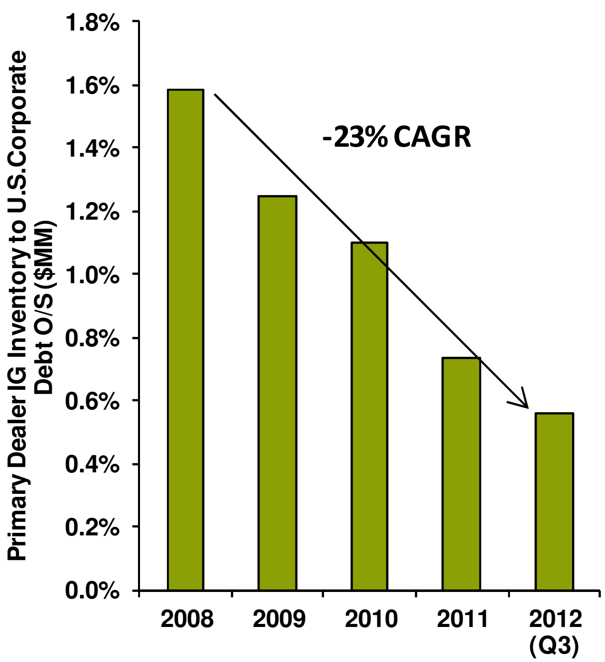
- As inventories are reduced and desks limit risk taking, fixed income volumes and the proportion of block trades have declined



Source: Trace, SIFMA, Marketaxess Investor Relations and Bernstein

Lower Inventories Mean Lower Liquidity

Credit Inventories of Primary Dealers to Market Value of Corporate Bonds



- Electronic agency trading in fixed income is growing, but it is still in the early stages of market penetration. A true electronic model requires absolute liquidity and a fungible product. In many areas of the bond market this does not exist.

- A buoyant credit market and demand from risk averse retail investors have masked the changing liquidity conditions brought about by the Street capital remediation.

- When market conditions reverse there may be no liquidity "safety net" for sellers, no bond swaps and a liquidity-driven repricing of credit products.

Source: FRB NY, Bloomberg and Bernstein Analysis

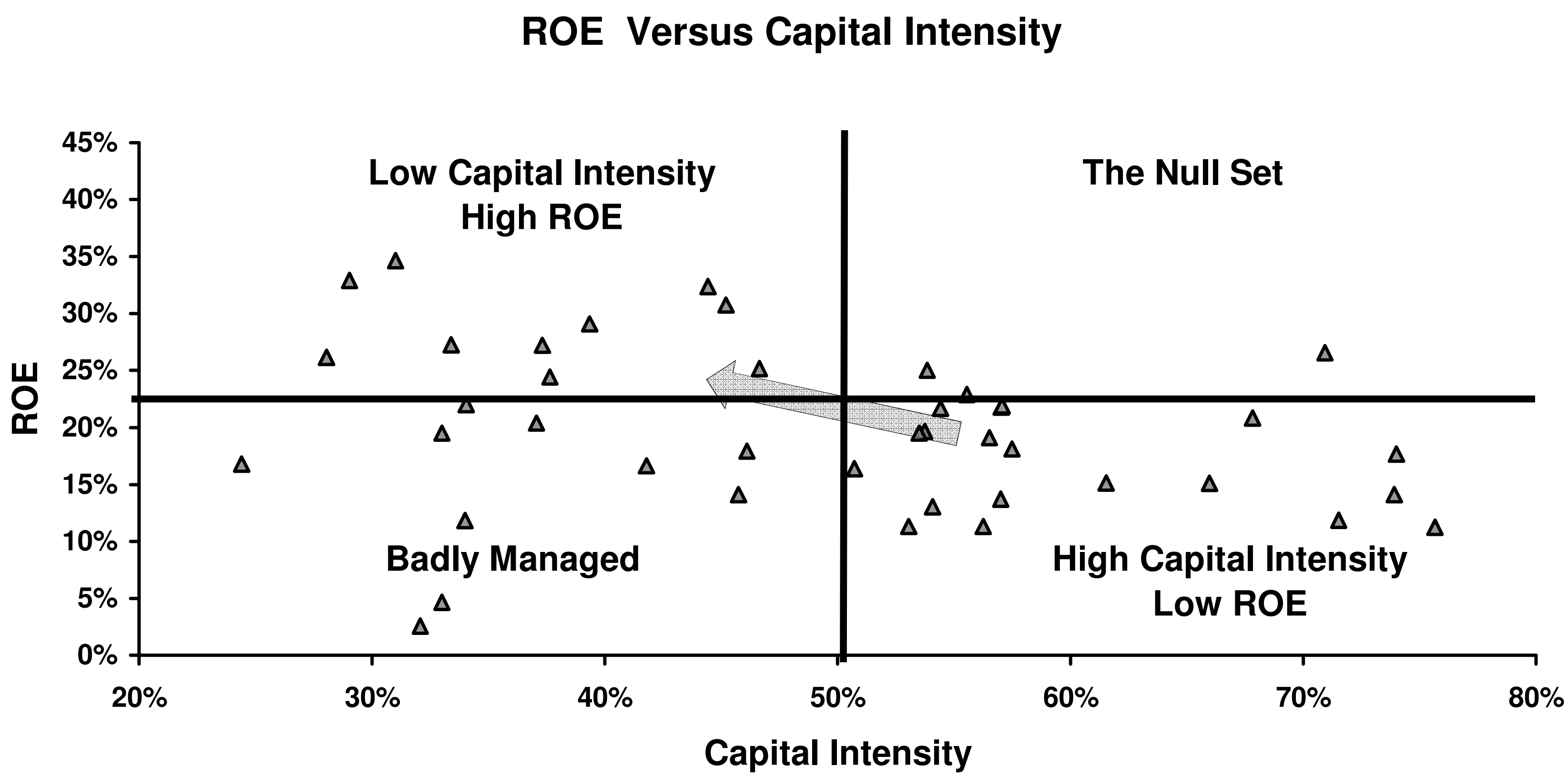
ROE Versus Leverage - Post Capital Remediation

Post Dodd Frank, Pro Forma for 25% Capital Reduction

		RRONA			
		1.0%	**2.0%**	**3.0%**	**4.0%**
	30x	8.0%	16.1%	24.2%	32.2%
	25x	6.7%	13.4%	20.1%	26.8%
Leverage	**20x**	5.4%	10.7%	16.1%	21.5%
	15x	4.0%	7.7%	12.1%	16.1%
	10x	2.7%	5.4%	8.0%	10.7%

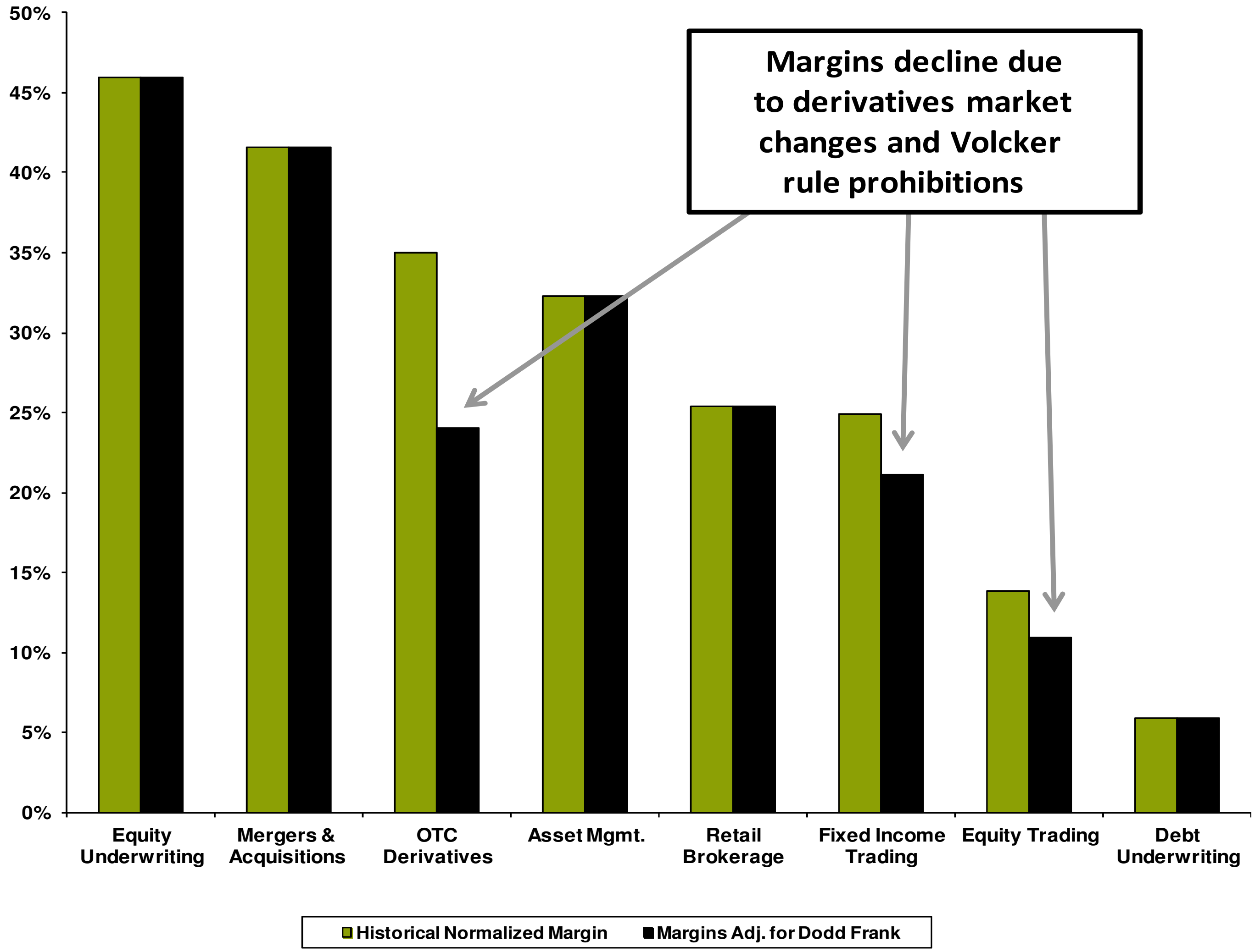
Source: Bernstein SIFMA and Company disclosure

Regulation Changes Business Mix



Source; Companies Disclosures, FactSet and Bernstein Analysis

Margin Change from Regulation: FICC Equities and Derivatives



Source: Bernstein Analysis, SIFMA and Company Disclosure

The Businesses Are Linked

Fixed Income

Capital intense, employs 50% of capital, risk taking business model. 24.9% PTM

- Low Margin

- Repo/Money Mkts.

- Preferred/MTN

- Governments

- High Margin

- Flow Trading

- Structured Prod.

Institutional Equities

Employs 20% of capital, 12.4% PTM, 30% loss ratio on trade execution, limited risk.

- Low Margin

- Margin Loans

- Equity Execution

- High Margin

- Equity Derivatives

- Synthetic Sec.

Investment Banking

Low capital intensity, relationship oriented, infrequent high margin client transactions.

- Low Margin

- Debt Capital Mkts.

- Lending

- High Margin

- M&A Advisory

- Equity Capital Mkts.

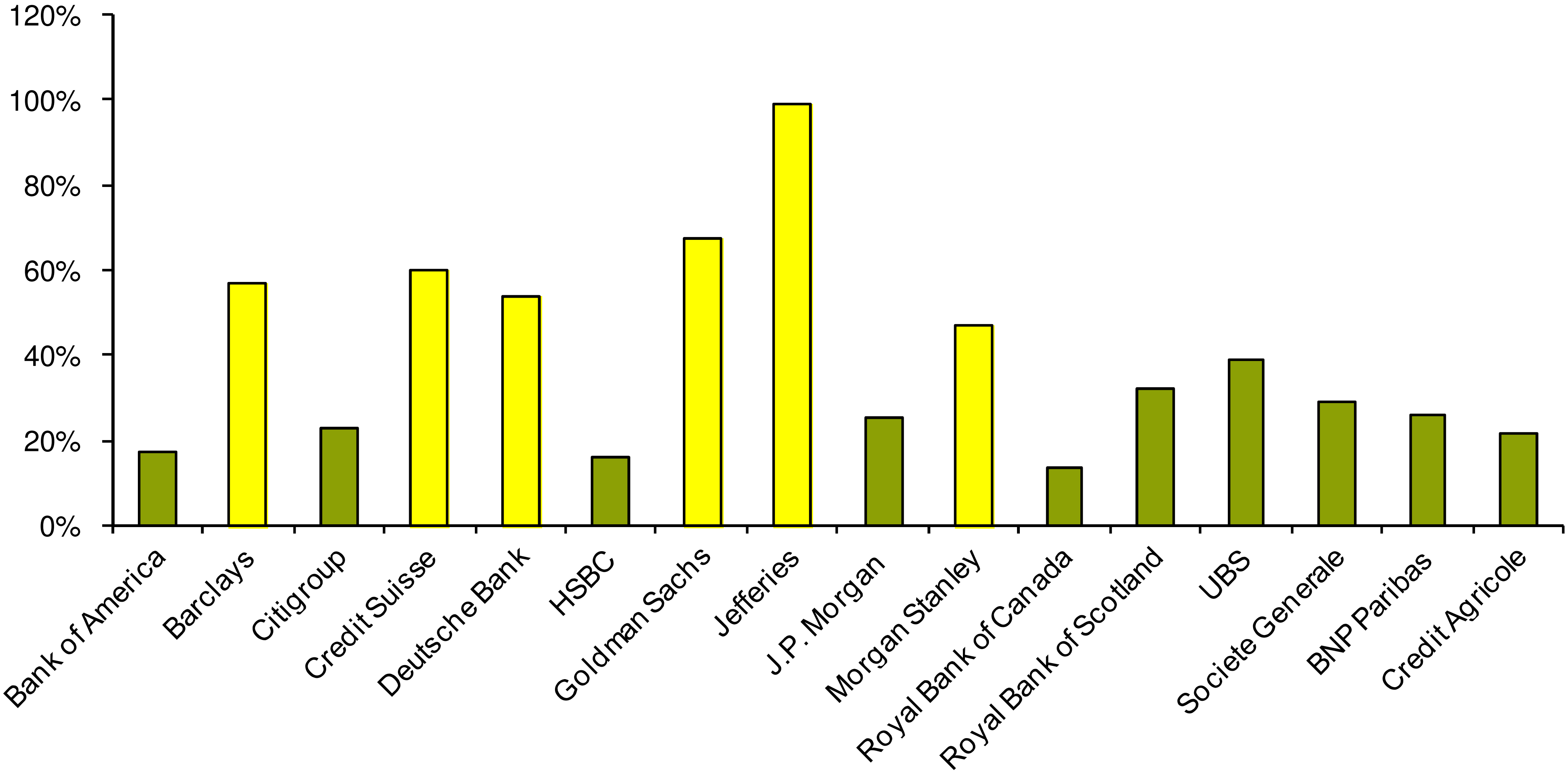
Source; Bernstein Research

Clients Demand Full Service Offerings

Institutional Investor	Hedge Funds	Financial Sponsors	Industrial Corporations
■ Low Margin	■ Low Margin	■ Low Margin	■ Low Margin
- Equity Execution	- Margin Loans	- Debt Capital Mkts.	- Debt Capital Mkts.
- Repo/Money Mkts.	- Equity Execution	- Lending	- CP/Money Mkts.
- Research	■ High Margin	■ High Margin	■ High Margin
■ High Margin	- Equity Derivatives	- M&A Advisory linked to lending	- M&A Advisory
- Equity Derivatives	- Equity Capital Mkts.	- Equity Capital Mkts.	- OTC Derivatives linked to DCM issuance
- Equity Capital Mkts.	- Sec. Lending		

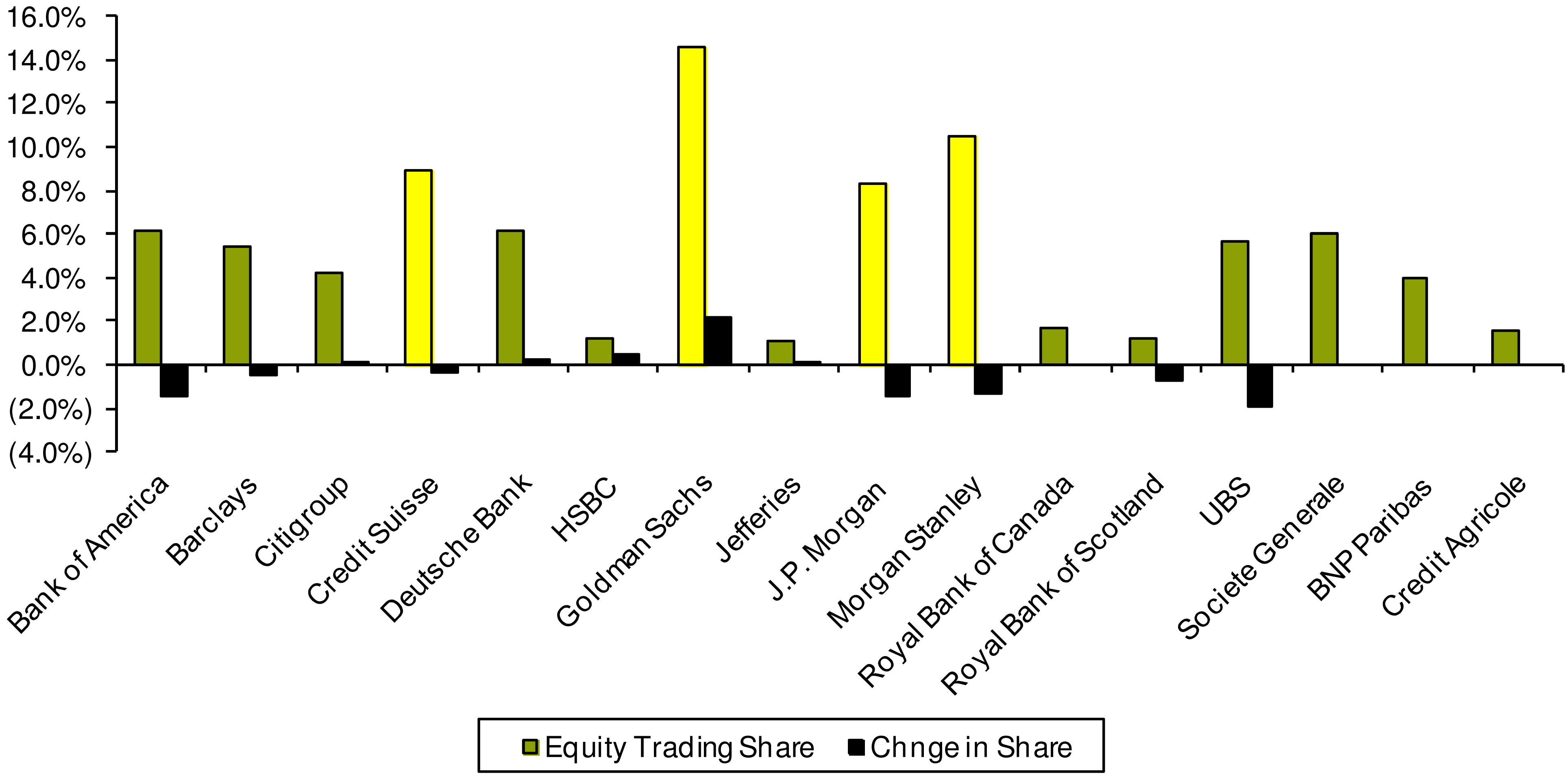
Source; Bernstein Research

Percent of TTM Revenue From Capital Markets (2012)



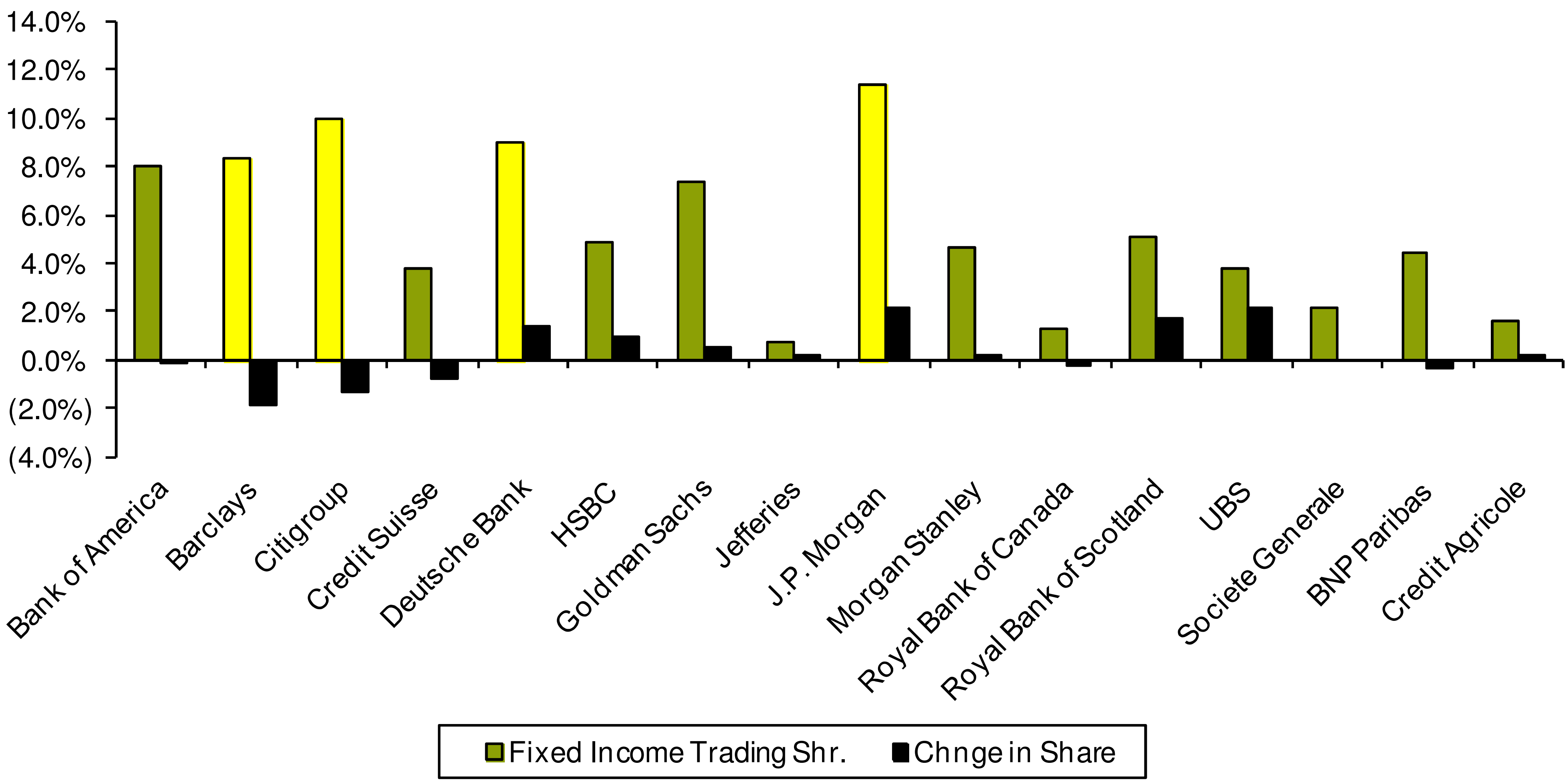
Source: Company Disclosure, Dealogic, Bloomberg

Global Equity Trading Market Share (2009-2012)



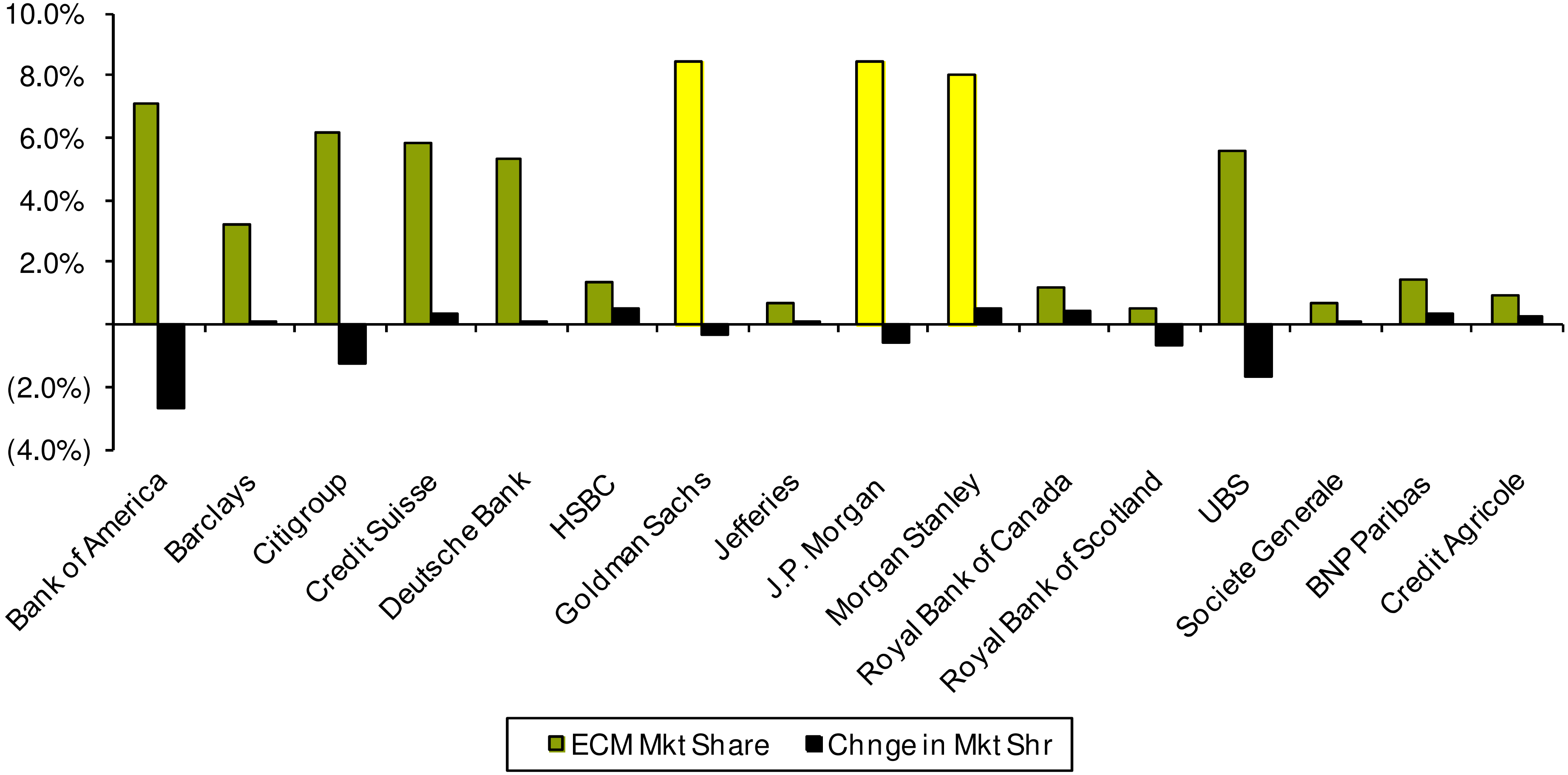
Source: Company Disclosure, Dealogic, Bloomberg

Global Fixed Income Trading Market Share (2009-2012)



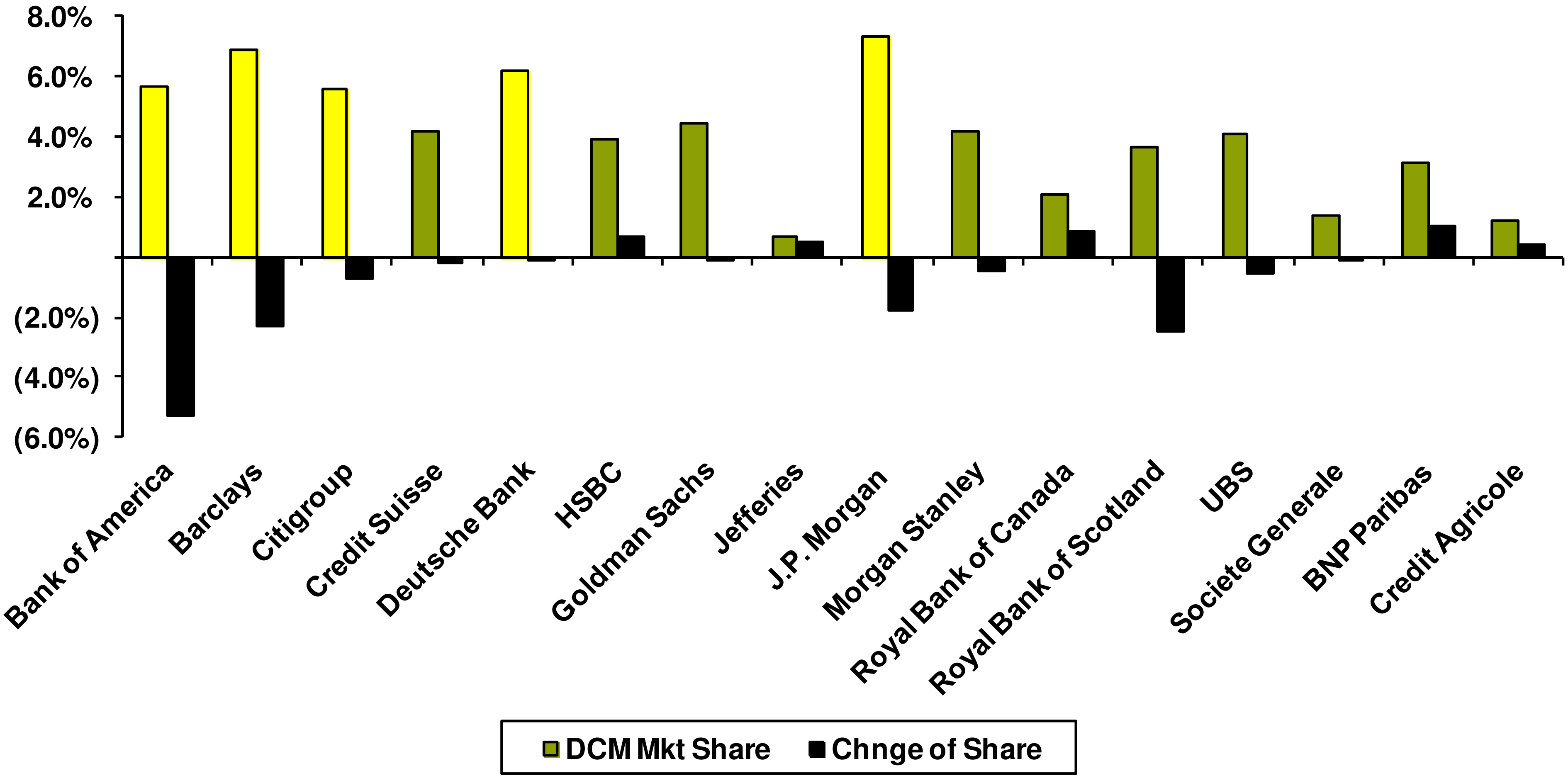
Source: Company Disclosure, Dealogic, Bloomberg

Global Equity Capital Markets Market Share (2009-2012)



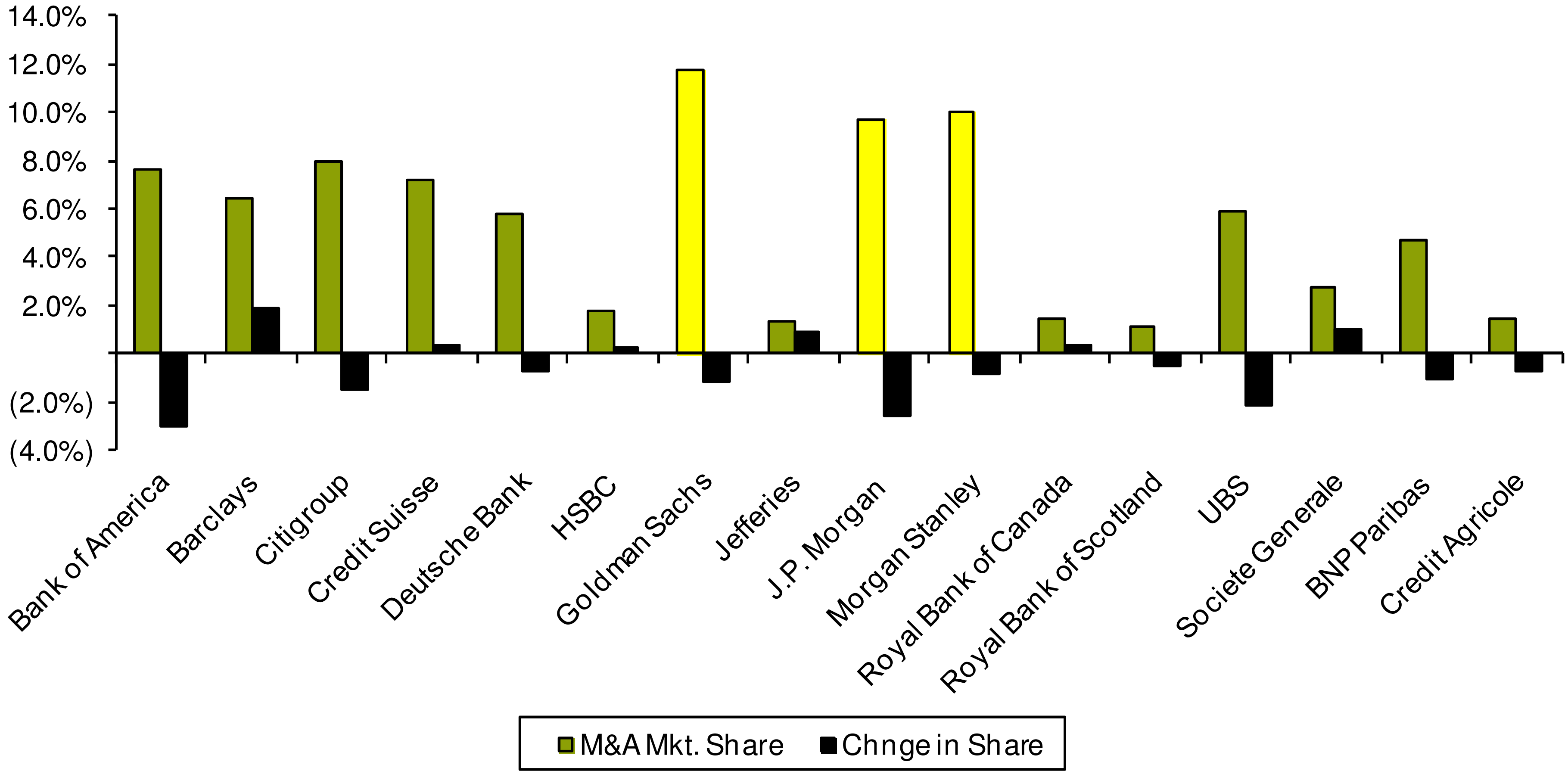
Source: Company Disclosure, Dealogic, Bloomberg

Global Debt Capital Markets Market Share (2009-2012)



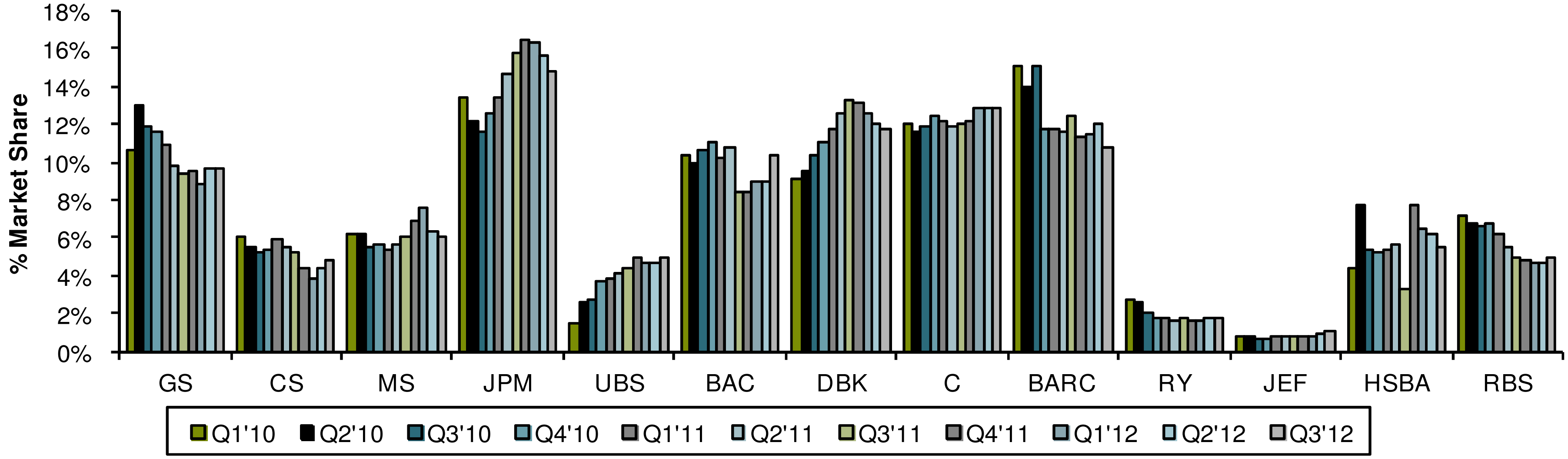
Source: Company Disclosure, Dealogic, Bloomberg

Global Mergers & Acquisitions Advisory Market Share (2009-2012)



Source: Company Disclosure, Dealogic, Bloomberg

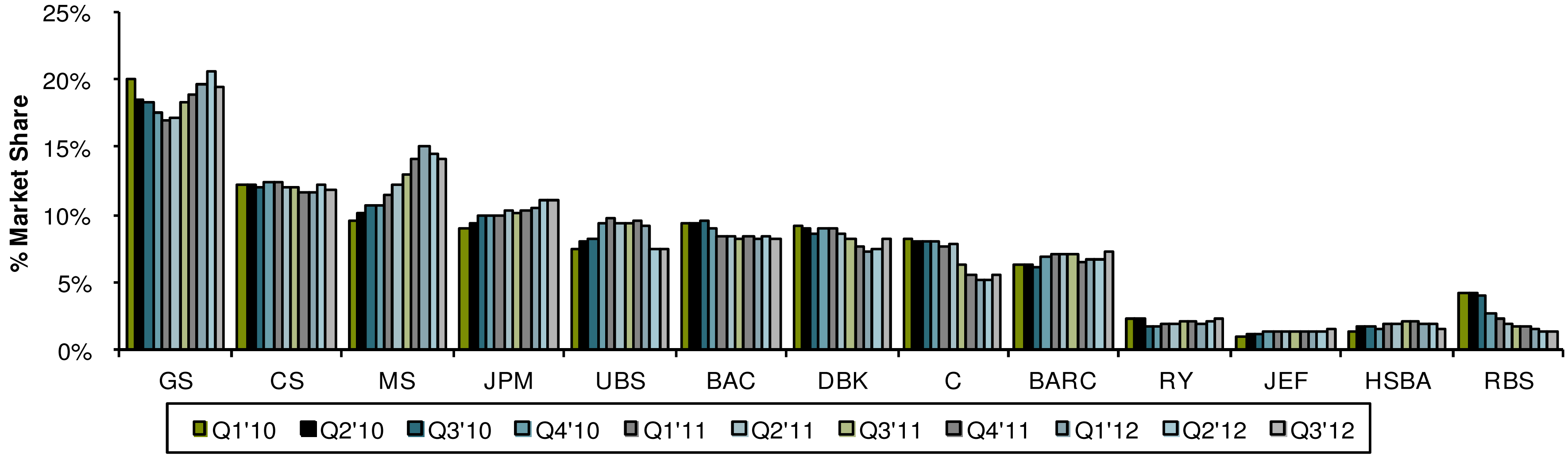
Global FICC: Market Share Shifts



- **Other.** Fixed income trading is dominated by a handful of banks: J.P. Morgan, Citi, Deutsche Bank, Barclays, Bank of America/Merrill Lynch and Goldman Sachs. Among the largest players, J.P. Morgan and Deutsche Bank have grown market share over the past several years, while Bank of America/Merrill Lynch, Barclays and Goldman Sachs appear to have ceded share, and Citi has remained relatively stable.

Source: Bloomberg, Coalition , corporate reports, Bernstein analysis

Global Institutional Equities: Market Share Shifts



- **Other.** Goldman Sachs remains the undisputed leader in equity trading, with nearly 20% of total revenues. Morgan Stanley is a far second, with ~13% share having recovered much of its previously lost prime brokerage share. J.P. Morgan and HSBC have also taken share. Firms that have shrunk include Bank of America/Merrill Lynch, Citi, UBS and RBS.

Source: Bloomberg, Coalition , corporate reports, Bernstein analysis

Global DCM: Largest Post-Crisis Market Share Shifts

Winners	Change
BNP Paribas	0.9%
RBC Capital Markets	0.8%
HSBC	0.7%
Mizuho	0.5%
Credit Agricole CIB	0.3%

Losers	Change
Bank of America Merrill Lynch	-5.3%
RBS	-2.5%
Barclays	-2.3%
JPMorgan	-1.7%
Citi	-0.7%

- **Other.** In North American DCM, B of A's decision to significantly shrink its business stands out as the biggest change; B of A and Merrill's combined market shares averaged 17.5% before the Crisis, and only 9.8% since then. Meanwhile, RBC has picked up roughly 2%, followed by BNP Paribas (1.8%) and Jefferies & Co. (1.1%). In Europe, RBS lost the most share (-4%) in Europe, as the bank continues to restructure its operations. Commerzbank, Nomura, Barclays, Citi, BAML and Morgan Stanley each gave up 1-2% share. In Asia, Morgan Stanley became significantly more active, as its partnership with Mitsubishi UFJ has opened many new. Meanwhile, the largest Japanese banks, Daiwa, Mizuho and Nomura, all ceded 3-4% market share.

Source: Dealogic, Bernstein analysis *Change represents the difference between average market share 2009-2012 vs. 2005-2008.

Global ECM: Largest Post-Crisis Market Share Shifts

Winners	Change
Morgan Stanley	0.5%
HSBC	0.5%
Wells Fargo Securities	0.5%
RBC Capital Markets	0.4%
Credit Suisse	0.4%

Losers	Change
Bank of America Merrill Lynch	-2.7%
UBS	-1.7%
Citi	-1.2%
JPMorgan	-0.6%
Nomura	-0.5%

- **Other.** In North American IPOs, the largest share gains since the crisis were recorded by Morgan Stanley (5.8%), Deutsche Bank (4.1%), Goldman Sachs (3.1%), Credit Suisse (2.1%), and JPMorgan (1.5%). In European equity deals, HSBC (2.9%), Credit Suisse (2.6%) and Goldman Sachs (1.8%) notched the largest share gains since the crisis. In Asian IPOs, the largest share gains since the crisis were recorded by Daiwa Securities, (3.2%), CITIC (1.8%), Mizuho (1.4%), and CIMB Group (1.4%).

Source: Dealogic, Bernstein analysis *Change represents the difference between average market share 2009-2012 vs. 2005-2008.

Global M&A Advisory: Largest Post-Crisis Market Share Shifts

Winners	Change
Barclays	1.9%
Evercore Partners Inc	0.8%
Lazard	0.5%
RBC Capital Markets	0.4%
Credit Suisse	0.4%

Losers	Change
Bank of America Merrill Lynch	-3.0%
JPMorgan	-2.5%
UBS	-2.2%
Citi	-1.5%
Nomura	-1.2%

- **Other.** In North America, the U.S. M&A boutiques notched impressive share gains, led by Evercore Partners (3.3%), Jefferies (2.2%) and Greenhill (1.2%). In the EU, Goldman held its own, but JPMorgan and Morgan Stanley were among the largest market share losers. Smaller investment banks picked up the gains, led by Lazard (3.1% gain, 10th ranked by post-crisis European market share), Credit Suisse (2.5%, 6th ranked), and Deutsche Bank (2.4%, 9th ranked). In Asia, nearly all global investment banks lost share. The largest gain was notched by Mizuho (7.1% gain, 7th ranked by post-crisis Asian market share), followed by Credit Suisse (2.5%, 8th ranked), and Deutsche Bank (2.4%, 12th ranked). .

Source: Dealogic, Bernstein analysis *Change represents the difference between average market share 2009-2012 vs. 2005-2008.

Expect a Prolonged Period of Changing Business Economics

- **High margin capital markets business mix.** Banks having higher-margin business mixes will be able generates superior returns during periods of underperformance in trading. Goldman Sachs and Morgan Stanley have the greatest mix of high-margin banking businesses as a percentage of total capital markets revenues.

- **Diversified revenue sources.** Banks with revenue sources outside of capital markets should be able to sustain a prolonged period of adjustments. Among the global leaders, JPMorgan, Citigroup, HSBC and RBC have capital markets units that represent 25% or less of total revenue. Goldman Sachs, Credit Suisse and Barclays are most reliant on capital markets activities, with nearly 60% of revenue generated capital markets

- **Trading market share.** Historically, firms with top three market shares in trading have been able to capture a disproportionate amount of trade flow from institutional clients. J.P. Morgan, Citigroup, Barclays and Deutsche Bank have the largest market shares in global fixed income. Goldman, Morgan Stanley are largest in equities.

- **Geographic strength and distribution capability.** Banks with strong global positioning will continue to profit from the growth of the emerging markets by capturing new issue. Goldman Sachs and Morgan Stanley the strongest global franchises. Deutsche, Barclays and JP Morgan have powerful global fixed income franchises. Citigroup and HSBC maintain credible fixed income franchises in Asia

Source; Bernstein Research

Winners and Losers

Winners

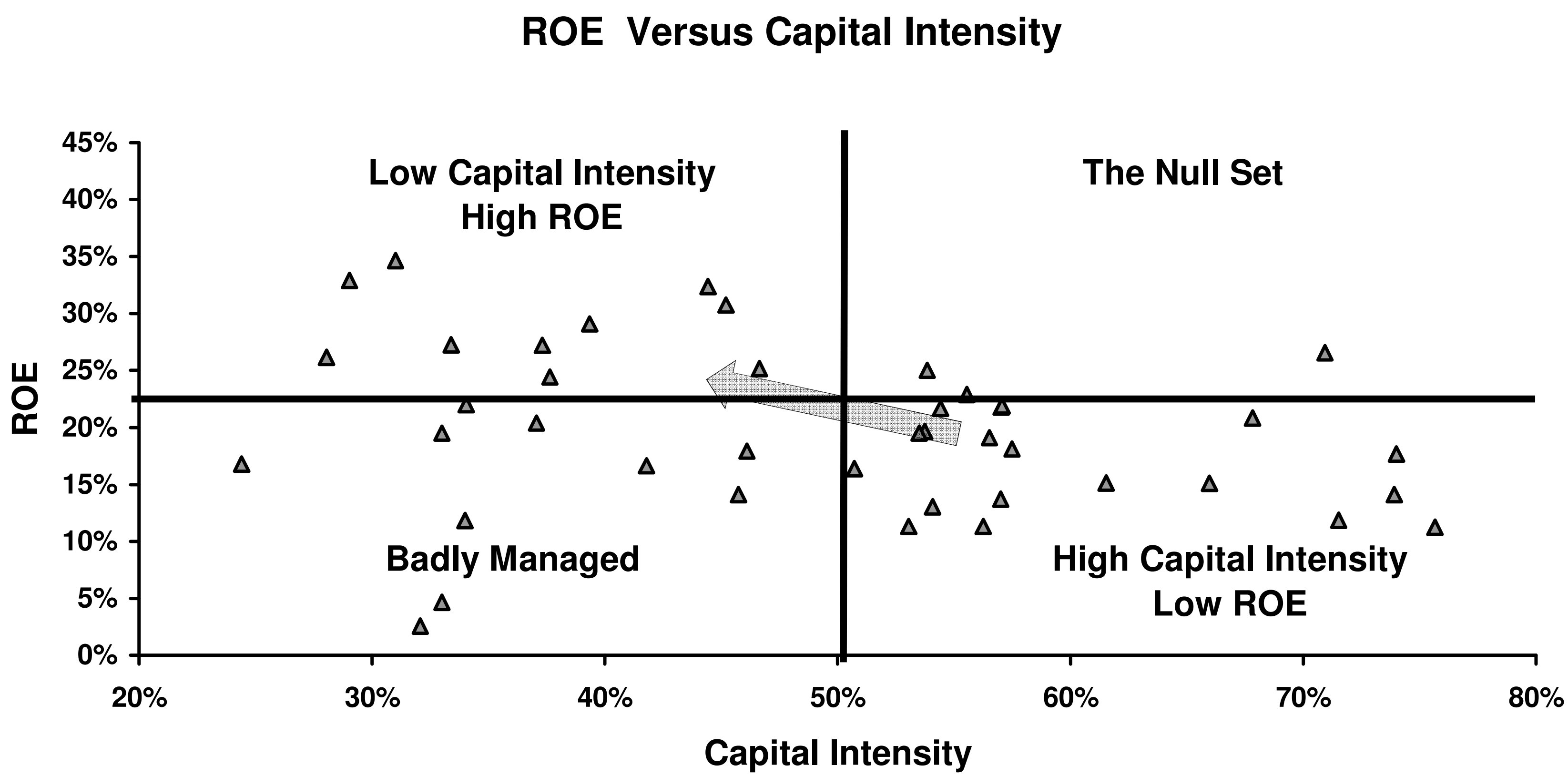
- Non-bank broker dealers – Regulatory arbitrage, share gains in all cash businesses.
- Exchanges/CCPs – Clearing fee growth, disintermediation of OTC derivatives by listed products.
- Trust banks – Collateral management, collateral transformation services.
- Netting systems/ATNs – Capital lite business model captures 40% of credit trading volumes.
- Insurance – Return of private placements.

Losers

- Capital market banks – Lower ROEs, lower EVA, slower revenue growth and loss of market share.
- Asset managers and investors – More costly execution, less liquidity results in lower returns.
- Issuers – Permanently wider credit spreads, reduced flexibility in new issuance.

Source; Bernstein Research

Regulation Changes Business Mix



Source; Originally produced by Morgan Stanley Group (1987), data from Companies Disclosures, FactSet and Bernstein Analysis

Disclosure Appendix

U.S. Capital Markets: Exchanges

	Rating	Target Price	6/5/2013 Price	EPS 2012	EPS 2013E	EPS 2014E	P/E 2012	P/E 2013	P/E 2014	TTM Perf Abs.	TTM Perf Rel.	Dividends	Yield	Market Cap ($Bn)
CME	O	70.00	$69.27	$2.85	$3.16	$3.59	24.3x	21.9x	19.3x	30.9%	8.4%	$1.83	2.6%	23.1
ICE	M	150.00	$164.84	$7.54	$8.35	$9.35	21.9x	19.7x	17.6x	30.9%	8.5%	$0.00	0.0%	12.0

Sources: Bloomberg, Capital IQ, Bernstein estimates

Valuation Methodology

Major Brokerages

Bernstein has found that the major brokerage firms' common stocks trade on a price-to-tangible book basis. Bernstein believes that the tangible book value of a securities firm is a "hard number" for these companies reflecting the industry's mark-to-market accounting discipline and the relatively rapid turnover of brokerage firm balance-sheets. By comparison, forecasting the highly cyclical earnings is problematic and therefore price-to-earnings valuation ratios are not accurate or stable.

The price targets are based upon a valuation model that takes into account Return on Equity (ROE) versus Ke (the CAPM-based cost of equity), credit rating and a variable that differentiates between the 1999-2000 internet bubble period and all other periods of history.

Discount Brokerages

Bernstein value Schwab and Ameritrade on a price-to-earnings (P/E) basis. We apply a target relative price-to-earnings ratio (based on Next-Twelve-Months [NTM] EPS) to each firm. This target is calculated as SCHW and AMTD's average monthly forward P/E (using NTM estimated EPS) relative to the S&P 500 since 1995 (excluding the TMT years of 12/98-12/00).

Bernstein values LPL on a price-to-earnings (P/E) basis. We apply a target price-to-earnings ratio (based on Next-Twelve-Months [NTM] EPS) to LPL. This target utilizes SCHW's historical monthly P/E (next twelve months) as a benchmark.

Exchanges

Despite being quasi-monopolies with substantial barriers to entry to new competition, in recent periods the futures exchanges have not achieved the growth needed to support the growth equity P/E multiples investors had previously ascribed to them. Additionally, valuations have been under pressure from a number of environmental factors, including a sluggish economic backdrop, regulatory uncertainty, and the prospect of challenges from emerging competitors. These factors point to greater uncertainty in the visibility in EPS and EPS growth, and as a result investors have re-rated the stocks and are currently paying a lower multiple per unit of earnings growth than has been the case historically. This phenomenon is supported by a downward shift in the slope of our valuation regression, beginning in early 2008. The target price regression models are specified with estimated 12-month forward P/E growth and estimated 12-month forward price-to-earnings multiples, using consensus estimates for both parameters.

Risks

Major Brokerages

As investors learned from the Lehman Brothers Holdings and the Drexel Burnham Lambert bankruptcies, the most significant risk to any major broker-dealer is a loss of confidence in its name, especially in the credit markets. Despite their conversion to a bank holding company, the major broker-dealers still rely upon the ability to roll over their debt at reasonable interest rates in order to fund their balance sheets at gross leverage ratios of 13X to 15X. The inability to meet debt obligations will result in the failure of a broker-dealer. In order to prevent a liquidity issue, a broker-dealer can sell assets to raise cash, but in the illiquid markets of a 'tail event' this may be impossible.

Counter-parties tend to limit exposure to firms whose credit ratings face downgrades and are perceived as being in risk. So, in a crisis of confidence, while a firm may avert a liquidity event, the firm's brand name and ongoing business will also come under threat. A prolonged loss of confidence in a firm's name would significantly reduce the ability of its stock to achieve our share price target. Other key risks include rising net charge-off rates, rising asset impairment write-downs, lowered ability to generate tax benefits, and the potential for increasing government regulation and taxation of financial institutions which may constrict asset and leverage levels.

There also exists a long term challenge facing Goldman Sachs and Morgan Stanley; this is the uncertainty of new regulations. The Bank of England, the Swiss Central Bank, the Federal Reserve, the FDIC, the OCC, the CFTC, the SEC, both U.S. Houses of Congress and the Basel Committee have proposed new regulations and laws that will raise capital charges, limit balance sheets, increase liquidity, prohibit or limit some businesses and constrain risk taking. These new rules generally will negatively impact MS' and GS' fixed income, equities and commodity trading business and constrain private equity. The more severe the regulations the lower the ROE and the slower the revenue growth rate of the affected businesses.

Discount Brokerages

The first major risk to **LPLA** relates to equity market conditions. Investors should note that retail activity is best correlated with market indices (particularly the NASDAQ index) lagged one month to one quarter along with market volatility. A significant decline in the equity market will likely slow a retail rebound. The second major risk to LPLA relates to strategy. LPL's revenue growth rests on its ability to attract new advisors. Should the growth in advisors face a prolonged period lackluster growth or outright decline, the firm will find it difficult to hit earnings growth targets and will likely result in a decline in share price.

The major risks to **Schwab** include a prolonged sharp decline in the U.S. economy and equity market indices. Investors should note that retail activity is best correlated with market indices (particularly the NASDAQ index) and economic indicators. A significant decline will likely slow a retail rebound and force continual money market fee waivers.

The major risks to **Ameritrade** include a prolonged sharp decline in the U.S. economy and equity market indices. Investors should note that retail activity is best correlated with market indices (particularly the NASDAQ index) and economic indicators. A significant decline will likely slow a retail rebound and force continual money market fee waivers.

Exchanges

One of the more significant risks regarding our earnings estimates, target prices and recommendations on the exchanges is the uncertainty of futures volumes going forward. Over the past several quarters, the traditional regression-based statistical models that we have used in the past to forecast future volumes have broken down. We believe the recent decoupling from traditional growth drivers is due to the highly volatile market environment, coupled with the accelerated deleveraging we saw in the marketplace over the past 18 months. It is unclear when future volume growth will once again be determined by the more-traditional growth drivers that we highlighted in these models.

The risk to the exchanges achieving our 12-month share price target is an unanticipated drastic slowdown in futures volume growth relative to our forecasts. The domestic futures exchanges have very high levels of operating leverage. With derivative volumes growing in the mid-20% range annually over the past decade, these exchanges have benefited from this high operating leverage in which 75-90¢ of operating profit was earned for each incremental $1 of revenue generated. As a result, operating profit margins have improved from the mid-teens five years ago to over 60% today. Nonetheless, in a slower (or even declining) volume growth market, this operating leverage can very negatively impact earnings growth for both of these firms.

Another serious concern is tighter regulation in the domestic futures market. We see risk that the combined regulatory cooperative of the CFTC and SEC could eventually push for the disintermediation of the futures exchanges' clearing businesses. This would effectively eliminate an important barrier of entry to the domestic futures business. Meanwhile, the passage of the Dodd-Frank Act has set the stage for regulatory overhaul, but the ultimate shape of rules remains highly uncertain.

Disclosure Appendix

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Outperform: Stock will outpace the market index by more than 15 pp in the year ahead.

Market-Perform: Stock will perform in line with the market index to within +/-15 pp in the year ahead.

Underperform: Stock will trail the performance of the market index by more than 15 pp in the year ahead.

Not Rated: The stock Rating, Target Price and estimates (if any) have been suspended temporarily.

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12-Month Rating History as of 06/05/2013

Ticker	Rating Changes	
AMTD	M (IC) 08/12/09	
CME	O (RC) 01/10/11	
GS	O (RC) 06/04/09	
ICE	M (RC) 12/21/12	O (IC) 06/19/07
LPLA	M (IC) 12/28/10	
MS	O (RC) 08/09/07	
SCHW	O (RC) 03/04/13	M (RC) 02/02/09

Rating Guide: O - Outperform, M - Market-Perform, U - Underperform, N - Not Rated

Rating Actions: IC - Initiated Coverage, DC - Dropped Coverage, RC - Rating Change

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