Citi Research
Equities

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Diversified Banks
Western Europe

FICC Tail Wags The Dog

The Great Financial Moderation And Triggers For FICC

- **FICC Tail** — Wholesale bank valuations are largely being driven by their FICC dependence. Markets remain deeply sceptical of the FICC business model — revenue outlook, profitability, market positioning, as well as litigation risks.
- **FICC Revenue Pool Fades** — In 2013, the global FICC revenue pool declined by 13% to US$107bn. Recently, various management teams have indicated a weak start to FICC, with double-digit declines. This clearly raises risks to our broadly stable 2014 FICC revenue pool assumptions; in *Tough Start to 2014, Earnings Risk?* (21-Feb-14) we estimated up to c7-8% EPS hit for a 10% FICC decline.
- **More Cyclical Than Structural** — Although scant consolation near-term, we argue recent FICC weakness has been more *cyclical* than structural. Several US banks indicated no material impact from derivatives clearing and final Volcker rules. As highlighted in *The Regulatory "Tunnel" Getting Longer, but a Bit Brighter* (04-Mar-13), we estimated rising headwinds of c6-7% over 2014-15 from shift to SEF trading followed by un-cleared derivatives rules (from 2015). Thus, we estimate that some two-thirds of FICC regulatory impact is already 'baked-in'.
- **The Great Financial Moderation; Trend is Macro's Friend** — The low rates, low volatility environment continues to weigh significantly on Global Macro (Rates & FX) — c45-50% of FICC revenue pool — partly offset by a more resilient performance in Credit. This impacts Barclays and Deutsche Bank more than Credit Suisse given the latter's bias to Credit, EM and Securitisation. FICC would benefit from trend with moderate volatility – likely into an environment of diverging monetary paths in 2015 taking the 'normalised' FICC revenue closer to US$120bn vs. reported cUS$100bn.
- **Industry Returns Match Cost of Capital** — In 2013, the industry delivered a c12.5% RoE, modestly up from c12% in 2012 (based on 10% of B3 RWAs). A harsher view including Non-Core, which is being progressively wound-down, suggests c10% underlying sector RoE, with FICC-biased franchises lagging.
- **Non-Core Wind-Down to Up Returns** — Decommissioning non-core operations, would serve to improve European sector returns by c2-4ppt to 12-14% & taking CS, Deutsche Bank and UBS materially higher compared to implied valuations significantly below book. However, execution is key. In the absence of market & market share recovery, BNP Paribas and Barclays may require further restructuring.
- **Equities Bias for Now, FICC into 2015** — We continue to prefer more equity-biased franchises and recently added SocGen to our Focus list while UBS also remains well-placed. With Equities comparably-sized to FICC, we think CS remains best-positioned to achieve 'escape velocity' from the FICC trap. Swiss banks should also benefit from improving net margins in their Wealth Management franchises with additional gearing to higher USD interest rate curves. By contrast, the fortunes of Barclays and Deutsche Bank are tied to rising volatility and trends in the Global Macro space; we see material upside, albeit more likely at the turn of 2015.

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The Great Financial Moderation

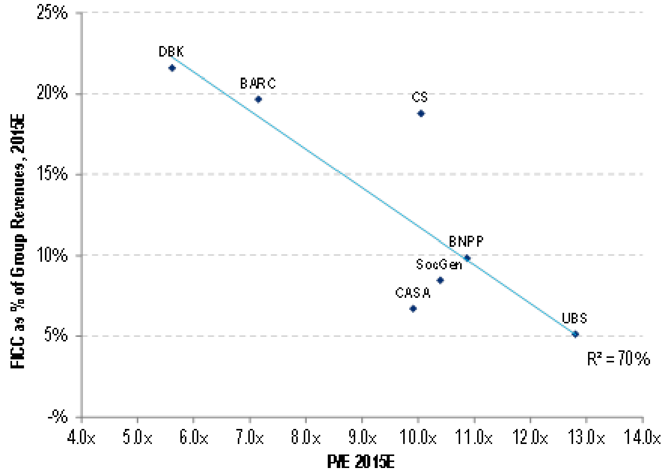
Wholesale banks exhibit strong correlation in valuation with FICC dependence

More than ever, wholesale bank valuations are being driven by concerns over the FICC business. After all, forward PE multiples demonstrate strong correlation with Group revenue dependence on the FICC business (c70%), as shown in Figure 1. We attribute this to a combination of *structural* and *cyclica*l concerns on the outlook for both profitability and growth of the FICC business:

- **Structural issues** include the impact of regulation, notably Basel 3, OTC derivatives reform and Volcker (refer to *Sizing Up "The Elephant in the Room"*, 01-Jun-12).
- **Cyclical concerns** with the global FICC revenue pool declining by c13% in 2013 and recent management guidance of a weak start to 2014, discussed next, in what we consider the Great Financial Moderation.

The combination of Fed QE and lack of trend has served to significantly depress volatility and customer activity in the Global Macro franchises, namely Rates & FX, which represent c45-50% of FICC revenue.

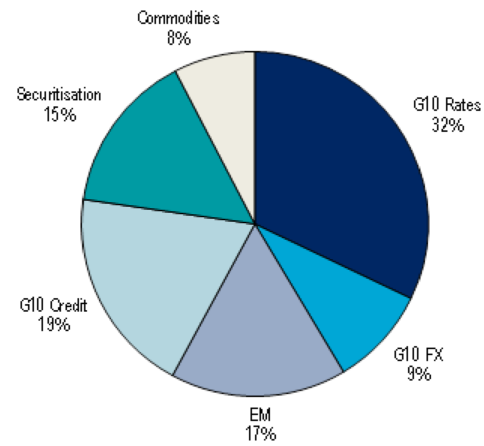
Figure 1. Wholesale Bank Valuations are Correlated with FICC Dependence



Source: Citi Research

Note: 2015E P/E multiples; 2015E FICC revenues as a % of Group revenue

Figure 2. FICC Revenue Breakdown, 2013



Source: Coalition, Citi Research

Note: EM revenues split 45% FX, 30% Rates, 15% Credit, 10% Commodities

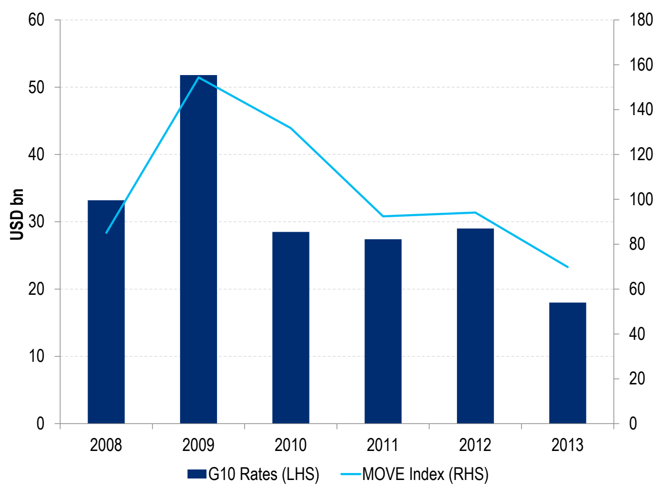
Global Macro Impacted By Low Volatility

FX and Rates volumes significantly impacted by low volatility

Both FX and Rates demonstrate a significant correlation with volatility (see Figure 3 and Figure 4), which has continued to decline as steady policy action and geopolitical uncertainty have weighed.

Although Credit has remained somewhat more resilient — supported by tightening spreads — this remains a smaller part of the overall FICC revenue pool at c25-30%. In the near-term, Securitisation may have seen its peak as the opportunity around legacy structured credit product declines while the private securitisation markets have yet to fully take-off.

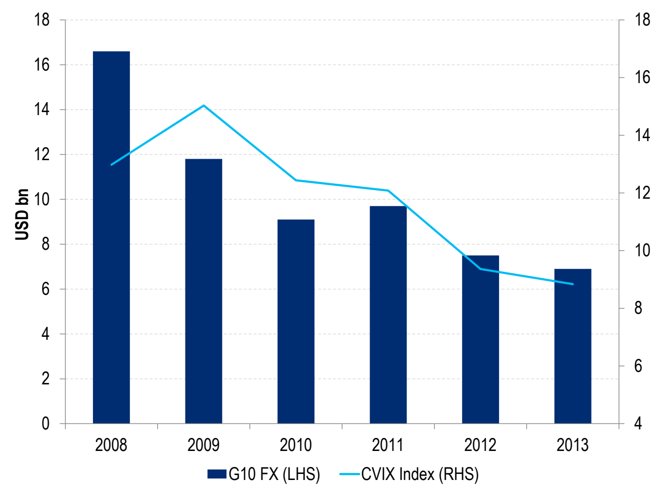
Figure 3. Rates Revenues Highly Correlated with Volatility[1]



Source: Coalition, Bloomberg, Citi Research

Note: 1. Based on MOVE index; 2. R^2 = 65%

Figure 4. Forex Revenues Correlated with FX Volatility[1]



Source: Coalition, Bloomberg, Citi Research

Note: 1. Based on CVIX index; 2. R^2 = 47%

The Regulatory Tunnel is Long, But Manageable

Two-thirds of FICC regulatory impact 'baked-in, although further 6-7% 'hit' to come

In *The Regulatory "Tunnel" Getting Longer, but a Bit Brighter* (04-Mar-13), we estimated a cumulative impact of c6-7% based on rising headwinds over 2014-15 from the shift to SEF (swap execution facilities) trading followed by un-cleared derivatives rules (from 2015). This is consistent with JPMorgan's recent guidance of a c6% impact on FICC sales & trading revenues from upcoming derivatives regulation (see Figure 5 and Figure 6).

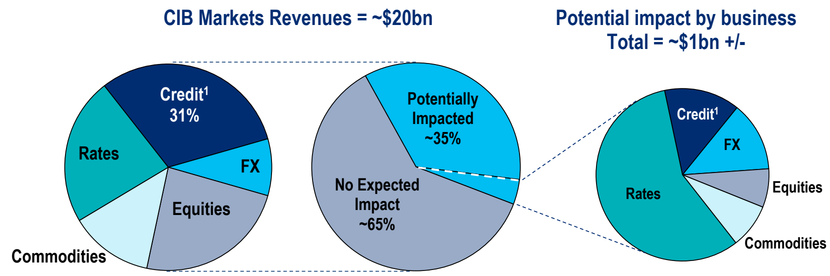
Most banks have largely adapted to Basel 3 requirements, while the impact from derivatives clearing & post-trade transparency has been relatively limited. US banks also indicated a relatively limited impact from the final Volcker rules, as noted in Handover Continues; Regulation Eases (29-Jan-14).

Figure 5. Global Derivatives Regulatory Timeline

Management Commentary		Expected Timing by Region		
Regulation	**Comment**	**US**	**Europe**	**Asia**
Post-trade transparency	Live in US for CFTC Products Impact limited to date but difficult to isolate and quantify	In Progress	2016	2016+
Clearing	Live in US for CFTC Products, with no significant impact Credit sensitive corporates exempt	In Progress	2014+	In progress - Japan only
SEF trading	Went live February 2014 in US for Rates – too early to observe impact	2014	End 2016	2016+
Initial margin on un-cleared swaps	Additional funding cost for initial margin expected to be significant, but phase-in over a long period	2015+	2015+	2015+

Source: JPMorgan Chase & Co

Figure 6. JPM – CIB Markets business: Potential impact from market structure regulations



Source: JPMorgan Chase; Note: 1. Credit includes Securitised Products

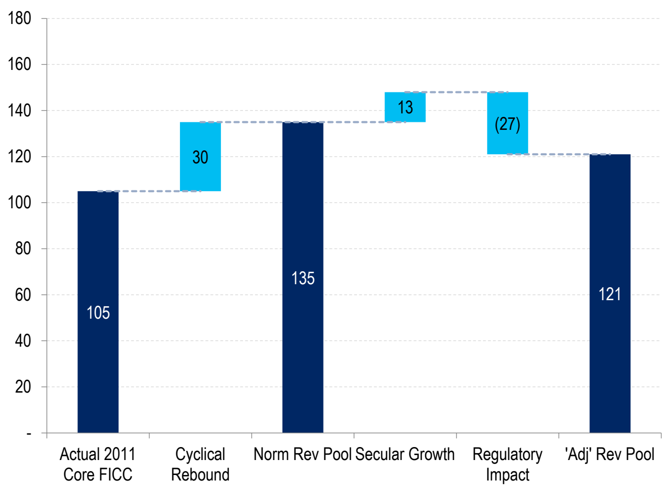
National subsidiarisation remains a key risk to efficiently running one of the few globalised parts of the financial services industry. Most notably, the recently-announced US FBO rules allayed worst fears around timing with application of leverage requirements not until Jan 1, 2018 and clarification on funding: "*The foreign proposal would not have imposed a cap on cross-border intragroup flows*". This removes another layer of regulatory uncertainty and should afford the likes of Barclays and Deutsche Bank the time to further optimise their US operations.

What are the Catalysts for FICC?

We estimate a normalised FICC revenue pool of c.$120bn, consistent with our previous estimates

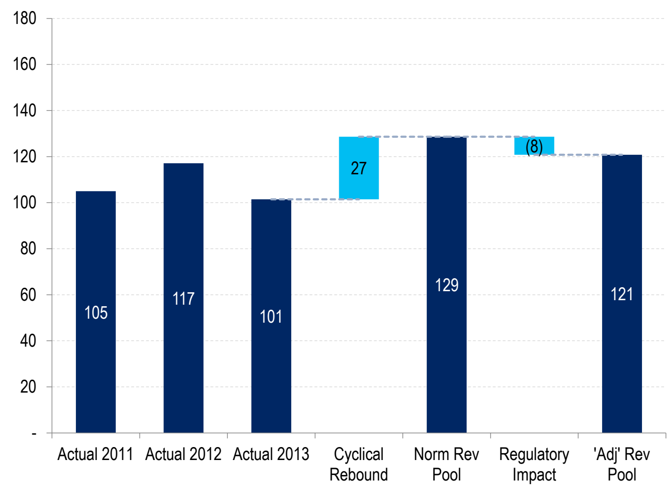
We continue to forecast a 'normalised' FICC revenue pool of c.US$120bn, or almost 20% above 2013 levels. This remains consistent with our view from *Sizing Up "The Elephant in the Room"*, 01-Jun-12, except that we estimate some two-thirds of regulatory headwinds are behind us. Cyclical factors continue to weigh, which we expect to rebound, over time, offset by the further regulatory impact of OTC derivatives reform.

Figure 7. Citi Estimates Of Adjusted Global FICC Revenue Pool As At 01-Jun-12…



Source: Citi Research Estimates: *Sizing Up "The Elephant in the Room"*, 01-Jun-12

Figure 8. …We Still View Adjusted Global FICC Revenue Pool At $121bn



Source: Company Reports, Citi Research Estimates

Trend is Macro's Friend

Trend is your friend in Global Macro

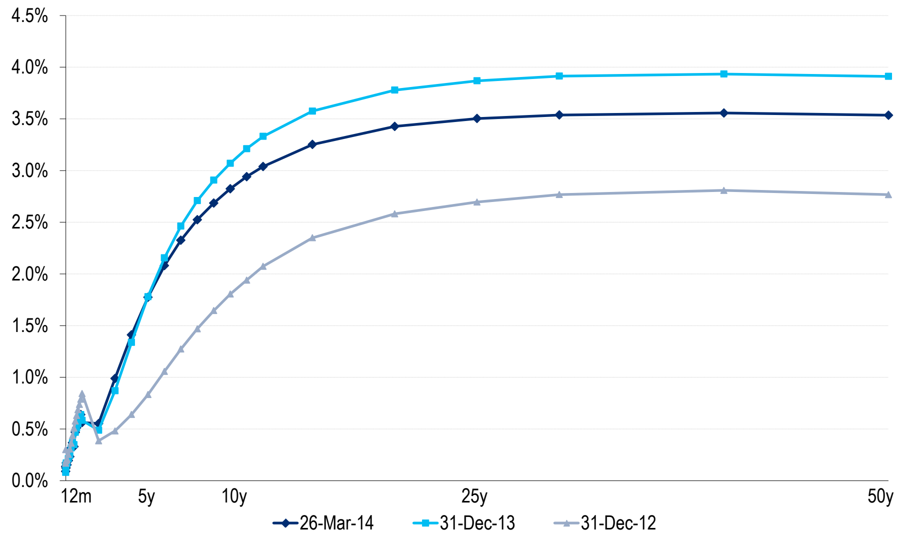
"*Trending markets with moderate levels of volatility generally positive for trading volume*" – JPM Investor Day (25-Feb-14).

Global Macro products tend to be price agnostic and supported by moderate volatility, i.e. 'trend is your friend'. However, the endgame of Fed tapering, which implies a substitution effect in the private markets as well as a resurgence of better economic data, could eventually rekindle Global Macro activity.

From a 1% growth rate, our economists have pencilled in 3.5% GDP growth in 2Q14 (>3% to 2016E) and an aggressive +300k on payrolls. In other words, we are looking for a divergence in central bank actions across the major economic blocs. The contra to such a trend would be, of course, if such a move were accompanied by an extreme increase in volatility, i.e. a shock increase in the UST yield curve.

The past 15 months have seen a significant increase in the US yield curve, with the long end of the curve rising by c.1%. This includes YTD performance that has seen a rise in the short end of the curve (10bps for 2-4 year).

Figure 9. US Yield Curve Has Fallen YTD, Although Recent Fed Comments Have Boosted The Short End Of The Curve



Source: Bloomberg, Citi Research

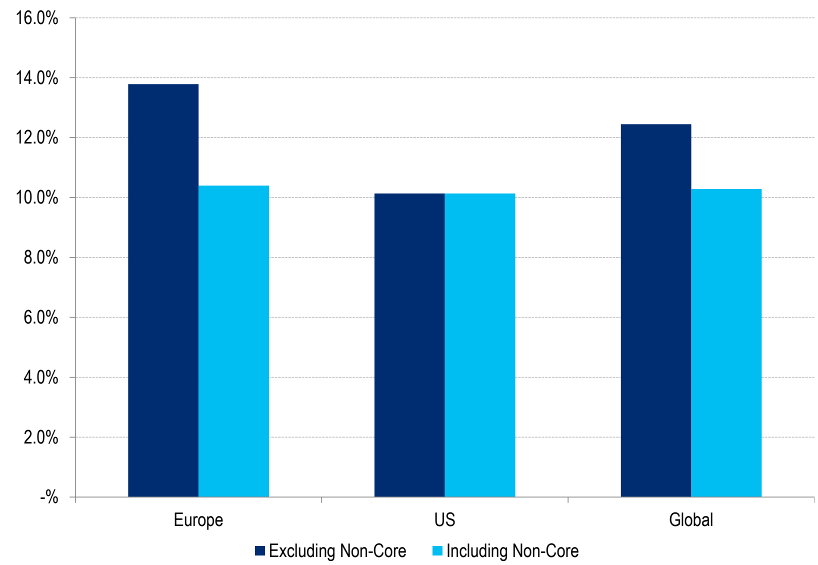
By contrast, the Credit and Securitisation business tends to be more directional, i.e. supported by tightening credit spreads. Although arguably the best is behind us, we see the ‘search for yield’ as continuing to be a supportive driver, for now.

Focus on Returns

Including Non-Core, IB industry generated 10% RoE with FICC-biased players lagging

On a headline basis (excl. non-core operations), the global IB industry generated a 2013 RoE of 12.4%, improving from 11.4% in 2012. European banks delivered returns of almost 14%, significantly ahead of US banks (c10%). A harsher view that accounts for the non-core operations of Barclays, CS, Deutsche Bank and UBS would reduce both the European and Global IB returns to c.10%.

Figure 10. IB RoEs By Geographic Region – Including & Excluding Non-Core (2013)

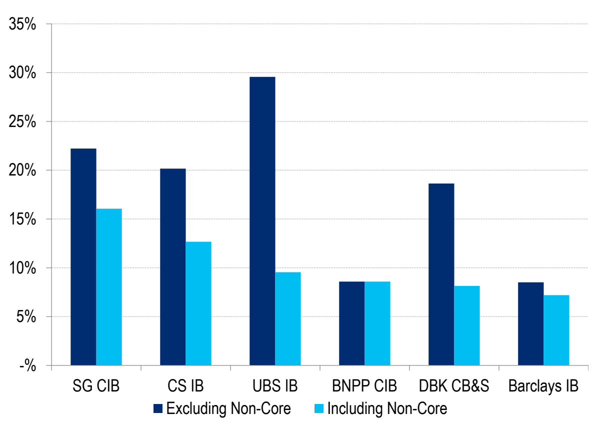


Source: Company Research

Not All Banks Are Equal

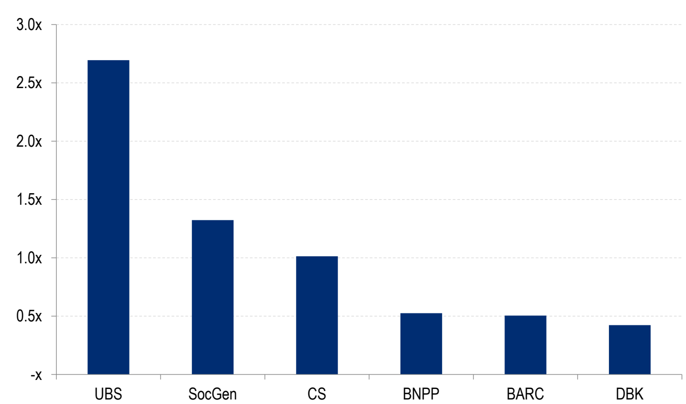
On a headline basis, European IB divisions reported 2013 B3 RoE of 9-30%, led by UBS (see Figure 11). Adjusting for underlying non-core earnings 'drag', returns ranged from 7-16% led by the more Equities-biased SocGen, CS and UBS franchises. By contrast, the more FICC-biased businesses of Barclays, Deutsche Bank and BNP Paribas lagged with returns of c7-9%.

Figure 11. Comparative IB RoEs – Incl. & Excl. Non-Core (2013)



Source: Company Reports, Citi Research Estimates
Note: Non-core excludes restructuring and litigation charges

Figure 12. Comparative EQ vs FICC Revenue Mix (2013)



Source: Company Reports, Citi Research Estimate
Note: Based on 2013 underlying EQ revenues as a % of underlying FICC revenues.

Kicking The Tyres on FICC

A further 10% FICC decline would reduce IB returns from 10% to 9%

Given continued weakness, we stress-test returns for a potential 10% decline in the FICC revenue pool. At the sector level, this would reduce returns from 10% to 9%, assuming a relatively limited comp-to-revenue ratio offset of 10%. Not surprisingly, banks with a greater bias to FICC are more impacted, with Barclays and Deutsche Bank returns declining to c6%. While CS' RoE declines the most (>2%), its bias to Credit, EM and Securitisation could suggest greater FICC revenue resilience.

Figure 13. European IB Sector RoE – 2013 Vs. Stressed (10% FICC Decline)

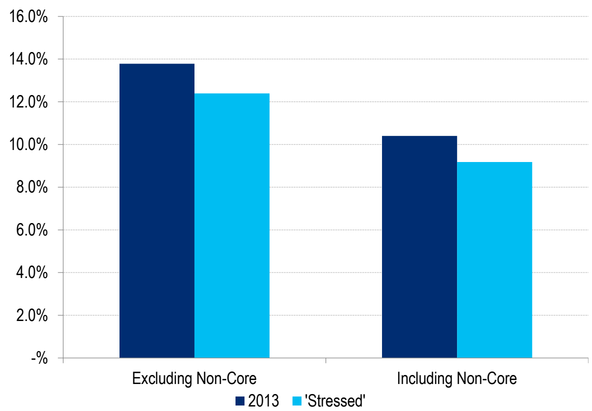
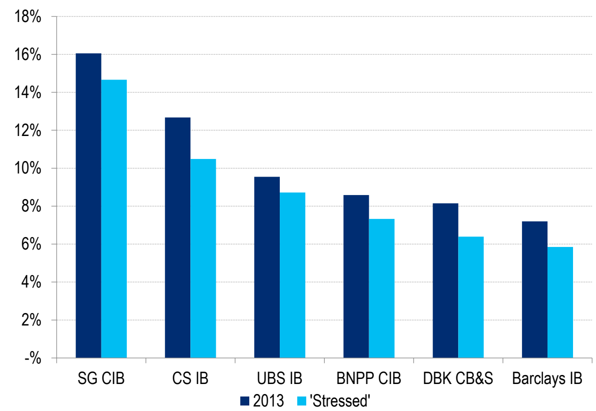


Figure 14. European IBs RoE – 2013 Vs. Stressed (10% FICC Decline)



Source: Company Reports, Citi Research Estimates

Note: 'Stressed' scenario involves a 10% decline in FICC revenues, partially offset by a decline in compensation that is equivalent to one-tenth of the revenue loss. Non-core excludes restructuring and litigation charges

Non-Core Deleveraging To Materially Raise Returns

Decommissioning Non-Core would raise sector returns by 2-4ppt

Although near-term returns remain depressed, de-commissioning the non-core divisions should serve to materially enhance sector returns to c12-14%. The most notable return improvement should come from UBS (to 26%), followed by Deutsche Bank (to 19%) and CS (to 17%). By contrast, in the absence of market tailwinds or regaining lost FICC market share, the likes of BNP Paribas and Barclays may need to take further action to improve returns (from c9%).

Figure 15. European IB Sector RoE – 2013 Vs. Non-Core Wind Down

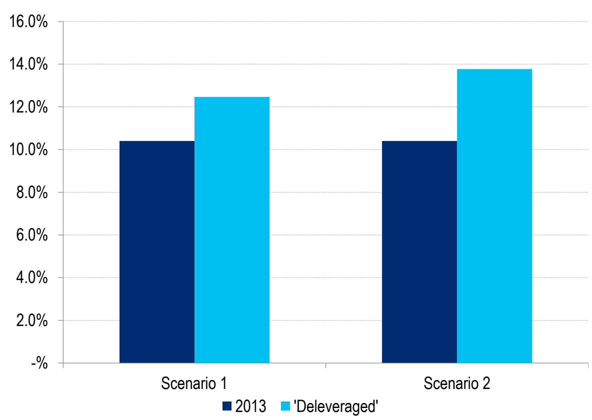
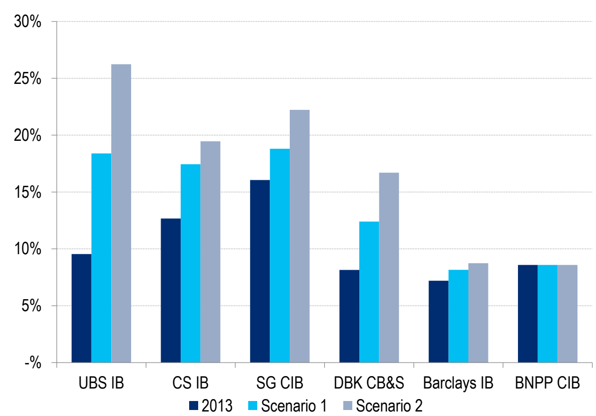


Figure 16. Comparative IB Returns – Impact of Non-Core Wind-down



Source: Company Reports, Citi Research Estimates

Note: 1. Scenario 1 assumes 67% reduction of 2013 non-core operating drag; Scenario 2 assumes 25% of residual non-core costs are incorporated into core expense base. Non-core excludes restructuring and litigation charges

We assume two separate scenarios for the operational drag from the non-core division:

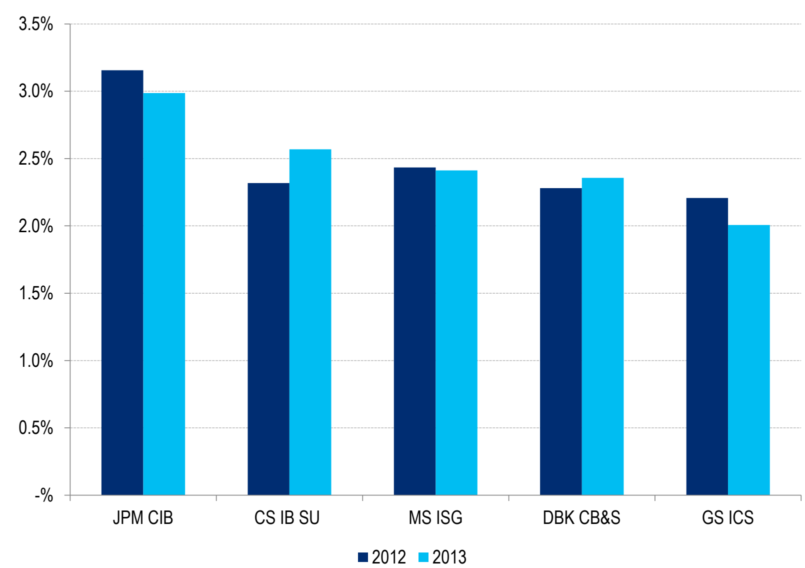
- **Reduction in Non-Core Losses (Scenario 1):** We assume a two-thirds reduction in the 2013 operating drag, excluding litigation and restructuring costs;

- **Reduction in Non-Core Expenses (Scenario 2):** We assume that there are residual 'stranded' costs equating to c25% of the 2013 non-core cost base, excluding litigation and restructuring costs.

Productivity on Assets More Equal Than Franchise Efficiency

Given that investment banking is amongst the most globalised of segments in the financial services industry, perhaps it is no surprise that the productivity or revenue on assets are typically in a tight range of c2-2.5% (JPM also includes Investor Services). Differences in profitability can be attributed more to efficiency — both cost (scale) and capital (product mix).

Figure 17. Comparative IB Productivity: Revenue on Assets (2012-2013)



Source: Company Reports, Citi Research
Note: Based on US GAAP or equivalent assets

Based on US GAAP assets (not available for all European banks), CS and DBK (strategic IB units) have broadly peer group average revenue-on-assets and margins, with higher returns being supported by higher leverage/lower risk-weights. Thus, on a peer group average or 'normalised' basis of leverage, both CS and DBK strategic units show industry average returns of 13-14%.

We expect the Basel agenda in 2014 to increasingly focus on risk-weighting. Although this could potentially drive up risk-weightings of European franchises — via use of more onerous model choices (e.g. VaR input horizon, migration/correlation assumptions) — we believe that differences in business models, as well as the 'super-equivalent' approach of certain regulators (e.g. US), are more significant drivers of differences in risk-weighting. Refer to *Wholesale Banks & The RWA Debate*, 31-Jan-13.

Profitability and Valuation of Investment Bank Divisions

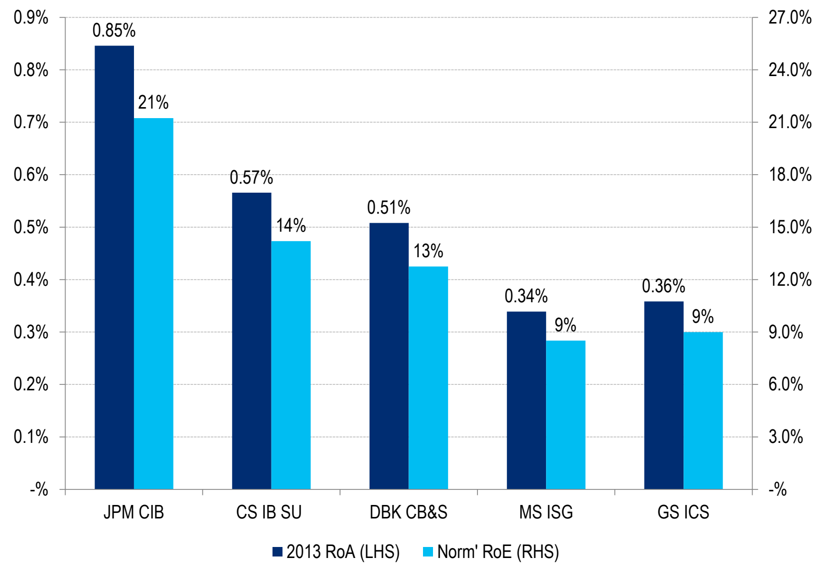
Figure 18. European IB Division DuPont Analysis – RoA and RoE breakdown (2012-2013)

	Revenue on Assets (%) (1)		Post-tax Margin (%) (2)		RoA (%) (1) * (2) = (3)		Assets / 10% RWA		RoE (%) = (3) * (4)	RoE (%) = (3) * (5)
							(4)	(5)		
	2012	2013	2012	2013	2012	2013	2013	'Norm'	2013	'Norm'
JPM CIB	3.2%	3.0%	26.6%	28.3%	**0.84%**	**0.85%**	19	25	**16%**	**21%**
CS IB SU	2.3%	2.6%	21.5%	22.0%	**0.50%**	**0.57%**	36	25	**20%**	**14%**
MS ISG	2.4%	2.4%	14.5%	14.0%	**0.35%**	**0.34%**	18	25	**6%**	**9%**
DBK CB&S	2.3%	2.4%	21.1%	21.6%	**0.48%**	**0.51%**	37	25	**19%**	**13%**
GS ICS	2.2%	2.0%	22.1%	17.9%	**0.49%**	**0.36%**	17	25	**6%**	**9%**
Average	**2.4%**	**2.5%**	**22.4%**	**21.1%**	**0.55%**	**0.54%**	**25**	**25**	**11%**	**11%**

Source: Company Reports, Citi Research

Note: 1) Based on US GAAP or equivalent assets; 2) 'Norm' RoE based on sector simple average leverage ratio(assets / equity)

Figure 19. European IBs – 2013 RoA vs. 'Normalised' RoE



Source: Company Reports, Citi Research Estimates

Figure 20. Implied Valuations of European IB Divisions

Figures in USD (bn)	Mkt Cap	Non-IB Valuation	Other Capital (+/-)	Implied IB Valuation	10% IB B3 RWA	Implied IB P/BV
Barclays	62.0	52.6	12.2	**(2.8)**	30.8	**(0.1x)**
Credit Suisse	54.6	41.1	0.5	**12.9**	15.5	**0.8x**
Deutsche Bank	45.3	45.9	(9.0)	**8.4**	21.2	**0.4x**
UBS	76.4	71.5	2.6	**2.3**	6.9	**0.3x**
Total	**238.2**	**211.1**	**6.3**	**20.8**	**74.6**	**0.3x**

Source: Citi Research

Note: 1. Non-IB valuation based on Citi sum-of-the-parts valuation analysis of non-investment bank divisions; 2. Other capital refers to a) NPV of dividends to 2016 for Barclays; b) capital surplus vs. a 11.5% and 13.0% CET1 capital ratio in 2014 for CS and UBS respectively; and c) capital deficit vs. 4.0% leverage ratio in 2014 for Deutsche Bank

To The Winners, The Spoils

Radical FICCx

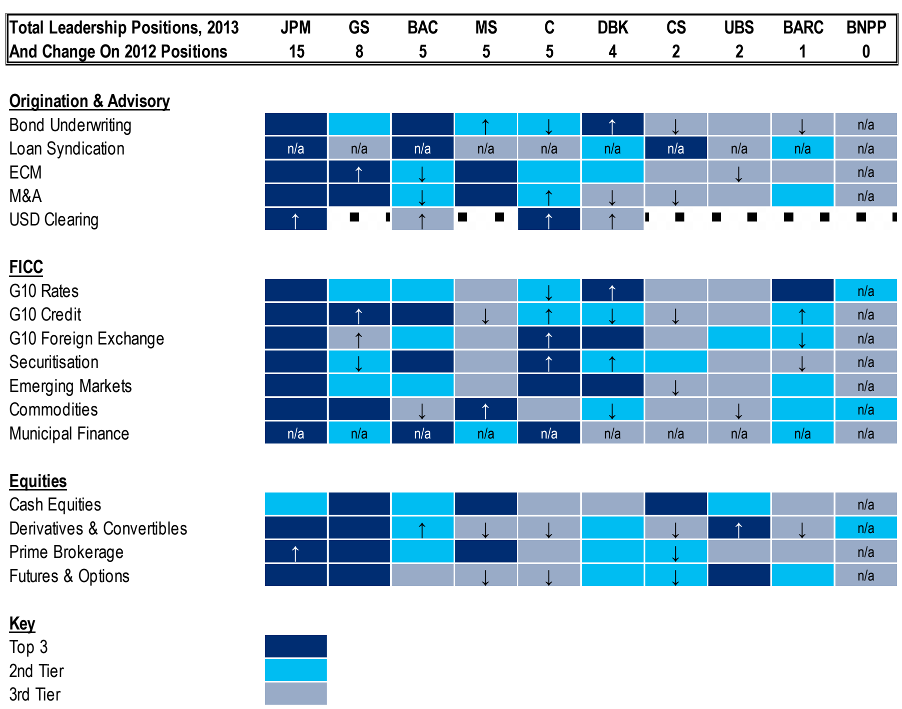
Since pre-crisis levels, top 5 FICC markets shares have increased by 7ppt and by 3ppt in EQ. This trend of consolidation — which was led by UBS — has been driven by the pressure on returns from both regulation (Basel 3, OTC derivatives reform, Volcker) as well as cyclical pressures. We expect these trends to continue, notably with RBS drawing back to its 'roots' in the UK.

Winners & Losers

Based on JPMorgan analysis of leadership positions — disclosed at its 2013-14 Investor Days:

- **US banks** have generally gained market share over their US peers, with the notable exception of Morgan Stanley
- **Swiss banks** have lost share as they have 'narrowed' their focus in the FICC space
- **Deutsche Bank** has held its own with market share losses driven more by geographic mix (ie greater bias to Europe & Asia) than intrinsic. By contrast, Barclays may have lost some positioning in areas such as FX and securitisation, partly offset by stronger credit.

Figure 21. Wholesale Banks – Investment Banking Product Strength Matrix (2013)



Source: Company Reports (JP Morgan 2014 Investor Day, CIB Presentation), Citi Research Estimates

Note: 1. Arrows indicate change in position on 2012. 2. BNPP is a new entry so no comparison on 2012. 3. Loan syndication and Municipal Finance are new disclosures so no comparison on 2012.

Figure 22. Wholesale Banks – Estimated Change In Investment Banking Leadership Positions (2012-2013)

2012	Top 3	2nd Tier	3rd Tier	Weighted	2013	Top 3	2nd Tier	3rd Tier	Weighted	YoY Δ (%)
JP Morgan	28%	4%	-%	18.1%	JP Morgan	31%	2%	-%	19.3%	1.2%
Goldman Sachs	18%	10%	3%	14.2%	Goldman Sachs	18%	11%	3%	14.3%	0.2%
Citi	8%	12%	14%	9.7%	Citi	9%	11%	10%	9.7%	(0.0%)
Bank of America	10%	14%	7%	11.1%	Bank of America	11%	18%	3%	12.3%	1.2%
Deutsche Bank	10%	14%	7%	11.1%	Deutsche Bank	9%	18%	5%	11.2%	0.0%
Barclays	5%	14%	14%	8.7%	Barclays	2%	18%	10%	7.7%	(1.1%)
Morgan Stanley	10%	8%	17%	10.3%	Morgan Stanley	11%	4%	13%	9.3%	(1.0%)
Credit Suisse	8%	12%	14%	9.7%	Credit Suisse	4%	7%	17%	6.3%	(3.3%)
UBS	3%	10%	24%	7.0%	UBS	4%	4%	18%	5.8%	(1.2%)
Nomura	-%	-%	-%	-%	Nomura	-%	-%	-%	-%	-%
BNP Paribas	-%	-%	-%	-%	BNP Paribas	-%	7%	20%	4.0%	-%
Total	100%	100%	100%	100.0%	Total	100%	100%	100%	100.0%	-%

Source: Company Reports (JP Morgan 2014 Investor Day, CIB Presentation), Citi Research Estimates

Note: assumes weightings that Top 3 is twice 2nd Tier, which in turn is three times 3rd Tier

Competitive Advantages of the Future

Looking ahead, we believe that the new sources of competitive advantage will prevail (discussed in *Sizing Up "The Elephant in the Room"*, 01-Jun-12):

- **Electronic execution & technology leadership**, especially in the context of shifting to SEF trading;
- **Clearing & collateral management** as an opportunity for banks to deepen and consolidate client relationships and increase trading/execution share, similar to prime brokerage;
- **Franchise presence — depth & mix over breadth:** Given the increasing balance sheet constraints, fewer banks will be able to deploy the breadth and depth of franchise footprint, compared to pre-crisis levels. As witnessed at UBS, franchise depth and business mix considerations will increasingly gain, at the expense of breadth;
- **Emerging markets strength:** Although EM faces tough cyclical headwinds, the medium- to long-term opportunity remains significant on the back of significantly lower financial penetration; and
- **Corporate connectivity** especially in the context of certain parts of the institutional markets — notably leveraged investors — under pressure from balance sheet constraints (including B3 leverage). Thus, we expect greater focus on wallet share from traditional corporate customer, with banks increasingly leveraging such relationships via cash management, corporate banking and transaction banking franchise. In Europe, disintermediation remains a powerful secular trend.

Key Restructuring Highlights:

- **Barclays:** Exit Quadrant B3 RWAs of £79bn (end-2012) have been reduced to £42bn with a further targeted reduction to £36bn by end-2015. This includes pre-B3 rates business as well as corporate/monoline derivatives.
- **CS:** Rates-related RWA reduction from US$16bn to US$9bn and leverage exposure from US$141bn to US$81bn. This includes a reduction in capital-intensive structured rates activity as part of the business model migration to simplified, primarily cleared products. This follows an earlier scaling back of CS's ambitions in FX and Commodities.

- **Deutsche Bank** recently announced that it is significantly scaling back its commodities business including exiting the dedicated trading desks for energy, agriculture, base metals and dry bulk. The business will now focus on financial derivatives and precious metals to be integrated into Deutsche Bank's Fixed Income and Currencies platform.
- **UBS:** FICC-related RWA reduction from SFr110bn to SFr30bn, funded assets reduction from SFr330bn to SFr70bn as well as a SFr300bn reduction in the derivatives book — focused on the Credit and Rates business.
- **RBS:** Reduction in Wholesale from 20% of Group RWAs to 15% in steady state. This is based on £50bn reduction in B3 RWAs to £45bn in steady state with targeted revenues of £2bn vs 2013 level of £3.3bn. RBS also recently announced the disposal of its structured retail investor products and equity derivatives businesses to BNP Paribas.

Figure 23. FICC Market Shares – By Underlying Revenue, 2006-2013

	2006	2007	1H08	2009	2010	2011	2012	2013	2013 vs. 2006
JP Morgan	8.8%	8.5%	7.2%	9.4%	10.2%	12.8%	11.6%	13.3%	451 bps
Deutsche Bank	8.3%	9.7%	11.8%	8.5%	10.5%	11.8%	10.5%	9.6%	133 bps
Bank of America	10.0%	10.0%	8.8%	9.1%	9.8%	8.3%	9.6%	9.5%	-54 bps
Goldman Sachs	9.6%	11.5%	12.3%	13.9%	10.5%	8.5%	9.0%	9.0%	-61 bps
Barclays	10.3%	14.7%	15.0%	11.1%	10.2%	9.7%	10.0%	8.9%	-136 bps
Credit Suisse	5.6%	5.4%	4.1%	5.2%	5.1%	4.6%	5.8%	5.7%	12 bps
HSBC	3.6%	3.2%	4.8%	4.7%	4.7%	4.7%	5.0%	5.7%	208 bps
RBS	10.9%	9.7%	5.4%	7.4%	6.4%	5.9%	6.0%	5.3%	-562 bps
BNP Paribas	2.8%	3.5%	3.6%	6.2%	5.6%	6.3%	5.1%	4.8%	204 bps
Morgan Stanley	6.8%	6.7%	5.9%	4.8%	5.7%	6.3%	5.1%	4.2%	-260 bps
Nomura	3.5%	2.6%	2.7%	1.5%	2.2%	3.2%	3.9%	4.2%	67 bps
Societe Generale	2.1%	1.9%	2.9%	2.9%	2.5%	2.7%	3.1%	3.0%	94 bps
Credit Agricole	2.3%	2.0%	1.5%	1.8%	1.7%	1.8%	1.8%	1.8%	-48 bps
UBS	4.8%	2.4%	1.6%	1.5%	3.7%	2.5%	1.7%	1.7%	-308 bps
US	**45.9%**	**44.8%**	**46.5%**	**49.2%**	**47.5%**	**46.9%**	**47.1%**	**49.3%**	**336 bps**
Europe	**50.6%**	**52.6%**	**50.8%**	**49.3%**	**50.3%**	**49.9%**	**49.0%**	**46.6%**	**-403 bps**
Top 5	**47.4%**	**47.9%**	**52.3%**	**52.9%**	**52.3%**	**52.4%**	**52.5%**	**54.6%**	**729 bps**
Rest	**52.6%**	**52.1%**	**47.7%**	**47.1%**	**47.7%**	**47.6%**	**47.5%**	**45.4%**	**-729 bps**

Source: Company Reports, Citi Research

Note: JPM adjusted for tax equivalent adjustment component; JPM, BoA, Barclays & Nomura pro-forma for acquisitions of Bear Sterns, Merrill Lynch & Lehman Bros respectively

Figure 24. Equities Sales & Trading Market Shares – By Underlying Revenue, 2006-2013

	2006	2007	1H08	2009	2010	2011	2012	2013	2013 vs. 2006
Goldman Sachs	15.9%	16.2%	16.7%	18.0%	14.6%	15.8%	16.9%	13.5%	-237 bps
Morgan Stanley	9.4%	10.0%	13.1%	7.9%	8.9%	12.1%	12.5%	12.5%	310 bps
Credit Suisse	7.0%	7.6%	8.3%	10.3%	10.3%	9.3%	9.8%	9.9%	292 bps
JP Morgan	8.0%	6.7%	4.0%	7.2%	8.3%	8.8%	9.5%	9.0%	102 bps
UBS	9.3%	8.3%	8.8%	6.8%	7.6%	8.5%	6.9%	8.1%	-122 bps
Bank of America	10.0%	9.9%	10.2%	7.3%	7.5%	7.2%	7.0%	8.0%	-207 bps
Barclays	5.6%	5.5%	5.8%	5.0%	5.7%	5.7%	7.4%	7.9%	228 bps
Deutsche Bank	7.5%	7.3%	6.0%	6.1%	7.4%	6.1%	6.3%	6.8%	-68 bps
Societe Generale	5.7%	5.3%	5.1%	6.9%	5.9%	5.8%	5.2%	6.2%	53 bps
Nomura	3.8%	5.1%	3.6%	4.8%	4.9%	4.7%	4.5%	4.9%	109 bps
BNP Paribas	4.5%	4.4%	4.1%	4.1%	5.4%	5.6%	4.5%	4.5%	3 bps
HSBC	1.2%	1.2%	1.9%	1.0%	1.4%	1.9%	1.5%	2.1%	85 bps
Credit Agricole	3.7%	3.7%	3.0%	3.2%	3.6%	3.8%	2.7%	1.0%	-267 bps
RBS	2.7%	2.7%	2.8%	3.4%	1.9%	-%	-%	-%	-270 bps
US	**49.1%**	**48.9%**	**50.7%**	**48.5%**	**45.9%**	**48.6%**	**51.2%**	**48.6%**	**-43 bps**
Europe	**47.1%**	**46.1%**	**45.7%**	**46.7%**	**49.2%**	**46.7%**	**44.3%**	**46.5%**	**-67 bps**
Top 5	**49.5%**	**48.9%**	**50.9%**	**50.2%**	**49.7%**	**54.4%**	**55.6%**	**52.9%**	**345 bps**
Rest	**50.5%**	**51.1%**	**49.1%**	**49.8%**	**50.3%**	**45.6%**	**44.4%**	**47.1%**	**-345 bps**

Source: Company Reports, Citi Research

Note: JPM, BoA, Barclays & Nomura pro-forma for acquisitions of Bear Sterns, Merrill Lynch & Lehman Bros respectively

Figure 25. Primary Market Shares – By Underlying Revenue, 2006-2013

Pro Forma	2006	2007	1H08	2009	2010	2011	2012	2013	2013 vs. 2006
Bank of America	15%	14%	16%	14%	14%	15%	15%	15%	89 bps
JP Morgan	15%	15%	14%	18%	16%	16%	15%	15%	18 bps
Goldman Sachs	13%	14%	14%	12%	12%	12%	13%	14%	192 bps
Morgan Stanley	9%	10%	9%	11%	11%	12%	11%	11%	112 bps
Deutsche Bank	8%	9%	8%	8%	8%	8%	9%	9%	75 bps
Credit Suisse	10%	8%	7%	7%	10%	9%	9%	9%	-95 bps
Barclays	4%	4%	7%	8%	9%	9%	9%	8%	408 bps
UBS	10%	11%	9%	8%	7%	7%	7%	6%	-371 bps
Nomura	5%	4%	5%	3%	3%	3%	3%	3%	-216 bps
US	**63%**	**63%**	**64%**	**66%**	**63%**	**64%**	**64%**	**65%**	**197 bps**
Europe	**32%**	**32%**	**31%**	**31%**	**34%**	**34%**	**34%**	**32%**	**18 bps**
Top 5	**63%**	**63%**	**64%**	**66%**	**63%**	**64%**	**64%**	**65%**	**197 bps**
Rest	**37%**	**37%**	**36%**	**34%**	**37%**	**36%**	**36%**	**35%**	**-197 bps**

Source: Company Reports, Citi Research

Note: JPM, BoA, Barclays & Nomura pro-forma for acquisitions of Bear Sterns, Merrill Lynch & Lehman Bros respectively

Comparative Valuation Metrics

Figure 26. Wholesale Banks – Valuation Metrics

Company	Rec	RIC	Ccy	Share Price			P/E		P/B	P/tB	RoE	RoE	DY	Performance (Absolute)				M Cap
				Now	Target	+/-%	2014E	2015E	2014E	2014E	2014E	2015E	2014E	YTD	1m	3m	12m	$bn
Nomura	Buy	8604.T	JPY	662	1,000	+51%	11.7x	**12.7x**	1.0x	1.0x	8%	8%	2.6%	-18%	-4%	-18%	+15%	24
RBS	Sell-H	RBS.L	GBP	3.08	2.70	-12%	16.0x	**11.9x**	0.7x	0.9x	4%	6%	0.0%	-9%	-6%	-9%	+12%	58
Morgan Stanley	Neutral	MS.N	USD	30.9	35.0	+13%	12.9x	**11.2x**	0.9x	1.1x	7%	8%	1.3%	-1%	+0%	-1%	+41%	61
Bank of America	Buy	BAC.N	USD	17.0	19.0	+12%	15.4x	**10.3x**	0.8x	1.1x	5%	7%	0.9%	+9%	+3%	+9%	+39%	179
HSBC	Neutral	HSBA.L	GBP	6.10	6.85	+12%	11.3x	**10.3x**	1.0x	1.2x	9%	10%	4.8%	-8%	-3%	-8%	-13%	191
UBS	Buy	UBSN.VX	CHF	18.2	22.0	+21%	12.7x	**9.8x**	1.4x	1.6x	11%	13%	2.7%	+8%	-3%	+8%	+25%	79
JPMorgan	Buy	JPM.N	USD	60.0	72.0	+20%	10.5x	**9.7x**	1.1x	1.3x	10%	11%	2.7%	+3%	+6%	+3%	+27%	227
Goldman Sachs	Neutral	GS.N	USD	162.3	195.0	+20%	10.8x	**9.7x**	1.0x	1.1x	10%	10%	1.4%	-8%	-2%	-8%	+10%	73
BNP Paribas	Buy	BNPP.PA	EUR	56.1	71.0	+27%	10.7x	**8.6x**	0.8x	1.0x	8%	9%	4.2%	-1%	-6%	-1%	+40%	96
Credit Suisse	Buy	CSGN.VX	CHF	28.5	34.0	+19%	10.3x	**8.1x**	1.0x	1.2x	10%	12%	2.6%	+5%	+3%	+5%	+17%	51
Credit Ag	Buy	CAGR.PA	EUR	11.5	15.0	+31%	9.3x	**7.7x**	0.7x	1.1x	7%	9%	3.8%	+23%	-1%	+23%	+78%	39
Soc Gen	Buy	SOGN.PA	EUR	44.7	59.0	+32%	10.3x	**7.7x**	0.7x	0.9x	7%	9%	3.9%	+6%	-8%	+6%	+75%	49
Barclays	Buy	BARC.L	GBP	2.32	3.45	+48%	7.0x	**5.9x**	0.6x	0.7x	9%	10%	5.4%	-15%	-8%	-15%	-14%	63
Deutsche Bank	Buy	DBKGn.DE	EUR	32.4	45.0	+39%	5.6x	**4.7x**	0.6x	0.7x	10%	12%	2.3%	-7%	-8%	-7%	+6%	45
Large-Caps							**11.7x**	**9.6x**	**0.9x**	**1.2x**	**8%**	**10%**	**2.8%**	**+0%**	**-1%**	**+0%**	**+23%**	**1192**

Note: Prices as at 28 March, 2014
Source: dataCentral, Citi Research

Appendix A-1

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