Capital markets revenues and banks' valuations

- The variance of capital markets earnings is often said to (1) heighten the volatility of the share price and/or (2) depress the market valuation.
- For the banks included in this note, we find no evidence that the first assumption holds true …
- … but we do identify a strong correlation between the capital markets revenue dynamics and valuations: banks with (relatively) stable revenues are rewarded with higher valuations.

Scope and methodology

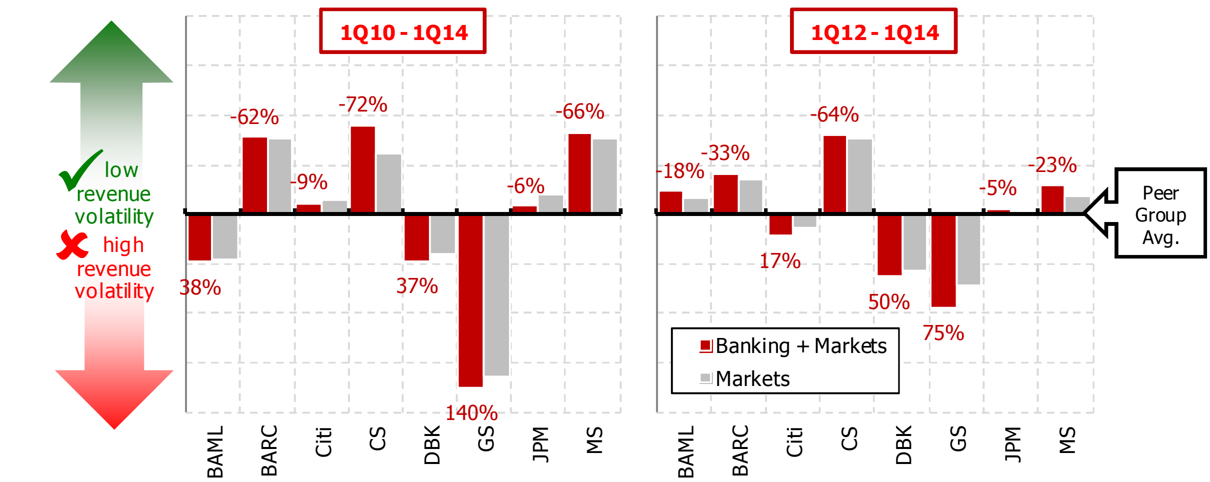
- The peer group comprises global banks whose capital markets/equivalent units contributed at least 50% of Group's pre-tax profits during FY12-13. The exceptions are Deutsche Bank and J.P.Morgan: their normalised capital markets profits are slightly below the 50% threshold, but we believe capital markets earnings (and/or related matters – for example, litigation) are the key driver of valuations. We also exclude Societe Generale, because the bank's market valuation is not, in our view, primarily driven by capital markets earnings as defined in this report.
- We excluded revenue from principal investments, as well as DVA/equivalent and revenues/losses not incurred in the regular course of business and collaboration revenue (which, in most cases, we view as aspirational, rather than actual and/or achievable); but we included relevant 'legacy' items. All financial data is fully reconciled against the published financial statements.
- We opted for variance, rather than standard deviation-based annualised volatility, because we were interested in the spread of values (revenue and share price/valuations) over a 4-year period. At any rate, the resulting bank-vs-bank comparisons are very similar in scale.

Capital markets revenue variance

The chart plots variance in the peer group's capital markets quarterly revenue since 1Q10; this is usually seen as the first 'normal' post-'Crunch' quarter. The results may come as a surprise: with the exception of Goldman Sachs, pure(r) investment banks have far more stable revenues than their universal peers.

In more recent times, since 1Q12, banking and markets revenue variance has decreased: especially at Bank of America Merrill Lynch, Goldman Sachs and Credit Suisse. However, Deutsche Bank's revenue variance has increased during this period to (almost) match that of Goldman Sachs.

Capital markets revenue variance (quarterly data, reverse scale, US$m)



Source: Tricumen analysis. Note: Banking: fees from DCM bonds and loans, ECM, M&A & Advisory. Markets: FX, rates, credit, commodities, securitisation, EQ cash, derivatives and converts. Dedicated prop trading revenue is included; principal investments are excluded. Tricumen product definitions apply throughout.

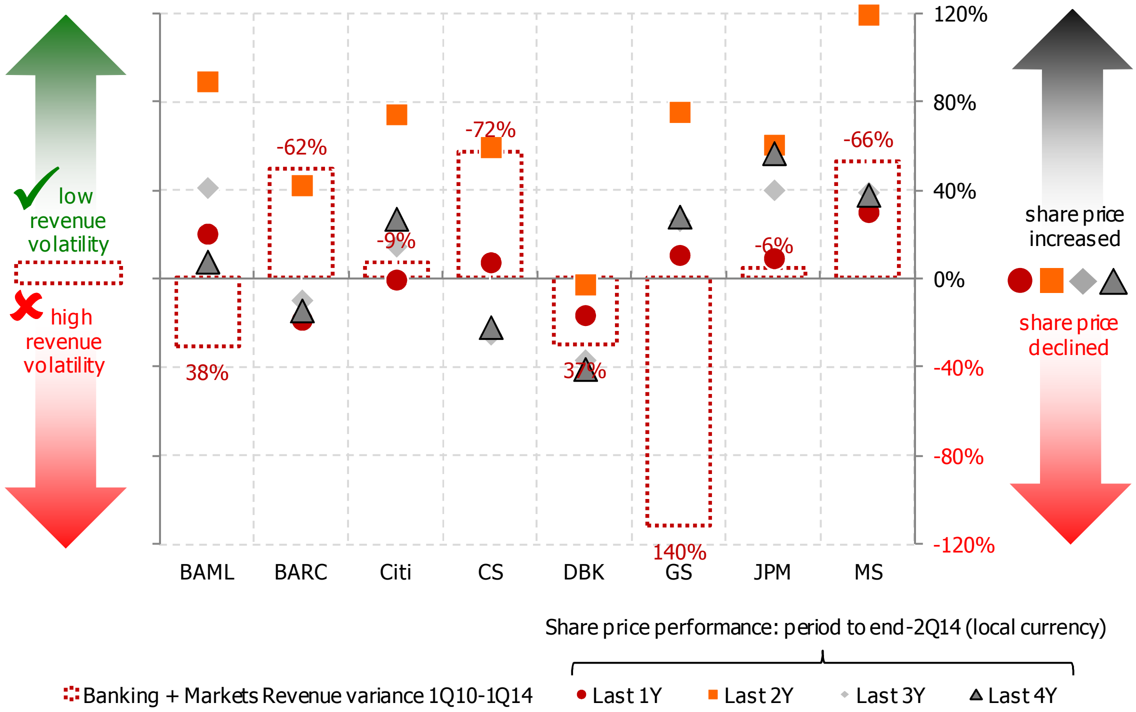
Revenue variance vs share price performance …

How correlated are capital markets revenues with share price performance? In two words – not much: investors reward *individual banks'* revenue[1]-generating ability.

Below, we compare capital markets revenue variance (left hand scale – same data as in the left-hand chart on the first page) against the movement in banks' period-end share prices for 1, 2, 3 and 4 years (right-hand scale) to the end of June-14. The data suggests that:

- There is no significant correlation between the two series of data. The share price of Goldman Sachs, the bank with the highest variance in capital markets revenue in this peer group, convincingly outperformed European banks with much more stable earnings. This may be a reflection of European banks' political and/or regulatory environment as much as (or more than) their financial performance; but Goldman Sachs' strong share price performance versus US peers also stands in contrast with its volatile revenue.
- Furthermore, there is no evidence that 'pure'(r) the investment banks, Goldman Sachs and Morgan Stanley (though the later benefited from its newfound focus on equities and money management), underperformed the more diversified Bank of America Merrill Lynch or Citigroup. Interestingly, even the marketwide concerns about the outlook for FICC revenues over the last 12 months (red dots) did not unduly trouble Goldman Sachs' share price: in fact, it did slightly better than Citigroup and J.P.Morgan, and was barely behind Bank of America Merrill Lynch.

Capital markets revenue variance (LHS, quarterly data 1Q10-1Q14, reverse scale, US$) **vs share price performance** (RHS)



Source: NASDAQ, FT.com, Tricumen revenue analysis.

[1] *We ran the same analysis against banks' capital markets profits (instead of revenue), excluding collaboration profits. The result was not meaningfully different, despite significant variation between individual banks' cost/income ratios. In our view, this shows that investors view revenue as the key driver of profits while cost management is, at best, a short-term play. This was the topic of our 27-Nov-13 note titled 'Profit Drivers'.*

… and share valuations

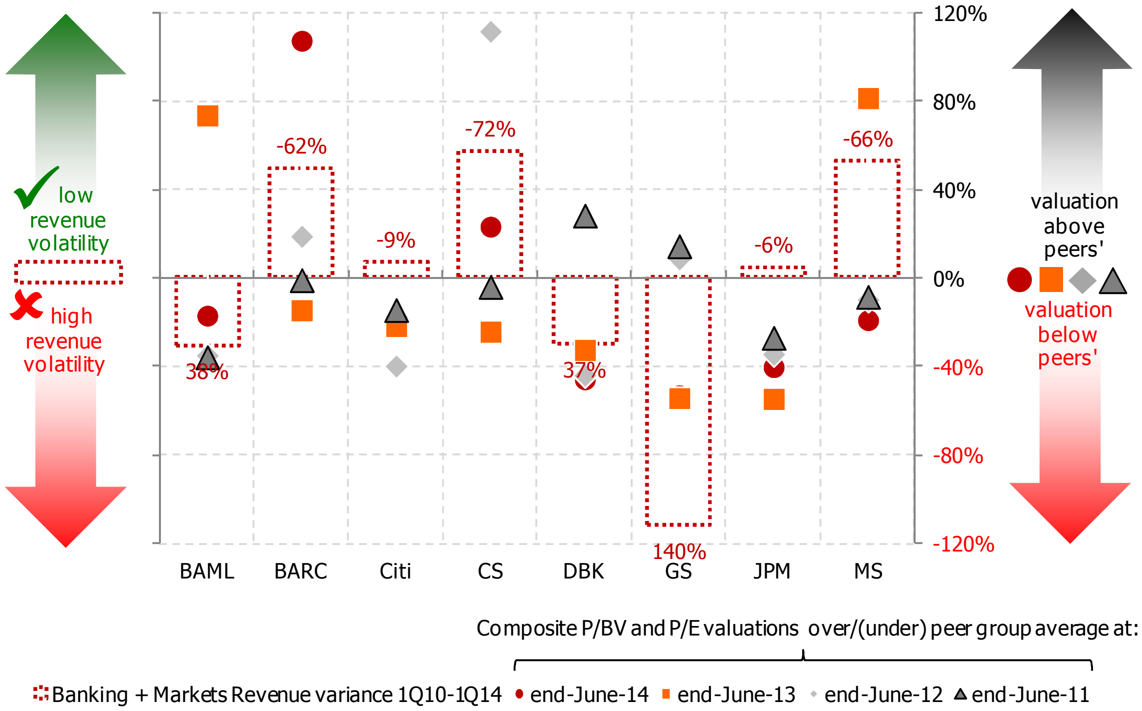
Looking at the market valuation of the banks in this report, two related patterns are evident:

- Capital markets earnings do seem to carry a significant valuation discount. At end-June-14 and end-June-13 (red dots and orange boxes), the composite P/BV and P/E valuations of Goldman Sachs and J.P.Morgan[2] were significantly below their three peers whose earnings are less dependent on a capital markets 'story' (Bank of America Merrill Lynch and Citigroup) and/or have made strategic changes to their group-wide franchises that investors approved of (Morgan Stanley).
- There is also a tangible link between revenue variance and market valuation. For example, Goldman Sachs' composite P/BV and P/E valuation in two most recent periods was more than 50% below the peer group average (J.P.Morgan is penalised on P/E measure, but had the highest P/BV at end-June-14); while Barclays and Credit Suisse are among the most highly valued stocks overall, especially in more recent periods. Other banks generally fall between these three banks, but the pattern is evident.

  Also, while the book value calculation does not lend itself readily to adjustments, revenues could be refined – and that would further emphasise the link between revenue variance and valuations. We view P/BV as the more reliable measure of relative value, and have therefore weighted the composite valuation in favour of it. This resulted in a composite valuation that favours US banks: in recent years, investors priced the book value of US banks more highly that that of European banks'. European banks, however, achieved consistently higher P/E valuations.

  Finally, some might disagree with our favouring P/BV over P/E, and not without reason. The latter could be refined by, for example, weighting capital markets revenue versus the revenue of the Group; and/or the mix of capital market revenue to take account of the exposure to 'slow' area of business (for example, FICC). This would, in our view, further highlight the relationship between revenue dynamics and valuations.

Capital markets revenue variance (LHS, quarterly data 1Q10-1Q14, reverse scale, US$) **vs composite P/BV and P/E valuations** (RHS, over/(under) peer group average)

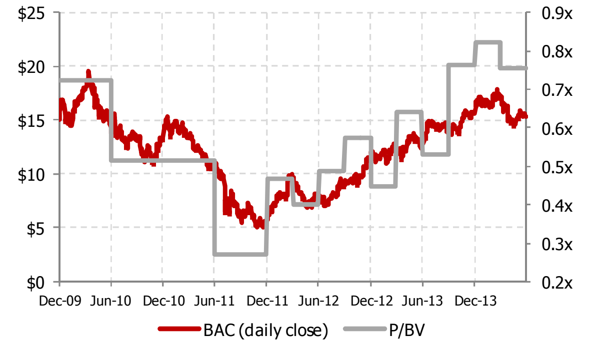


Source: NASDAQ, FT.com, Tricumen revenue, profit and book value analysis. Notes: (1) Our calculation of historical price/earnings (P/E) and price/book value (P/BV) ratios, is based on the Group published profit, book value and share count from the financial statements published prior to the valuation date shown. (2) P/E outliers falling outside the 3-standard deviation band for the peer group are excluded.

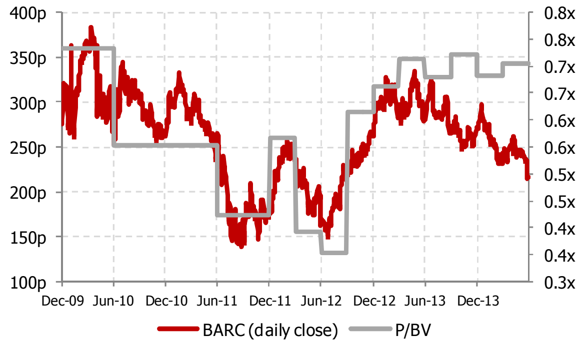
[2] *On P/BV measure alone, though, Goldman Sachs and J.P.Morgan were both comfortably ahead of their peers at end-June-14: J.P.Morgan 1.08x, Goldman Sachs 1.06x, Morgan Stanley 1.0x, Bank of America Merrill Lynch 0.75x, Citigroup 0.73x.*

Appendix 1 – Share price and P/BV

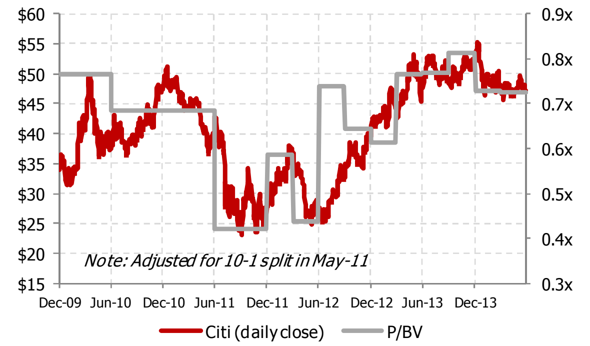
Bank of America Merrill Lynch



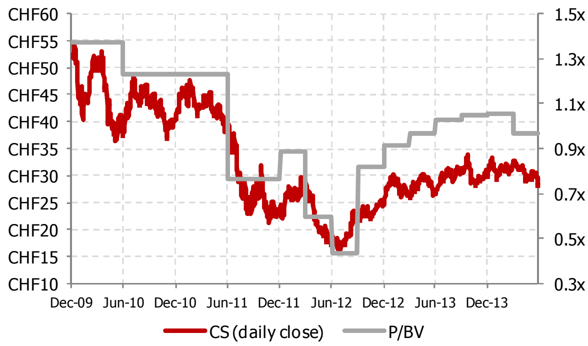
Barclays



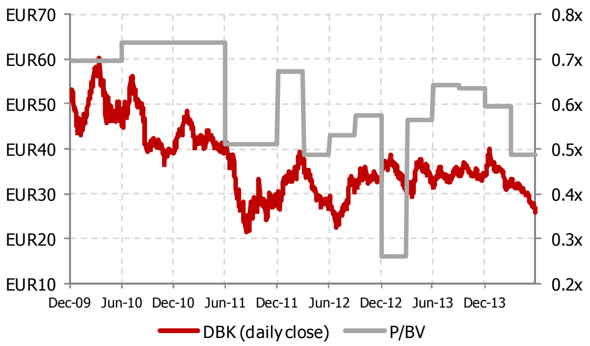
Citigroup



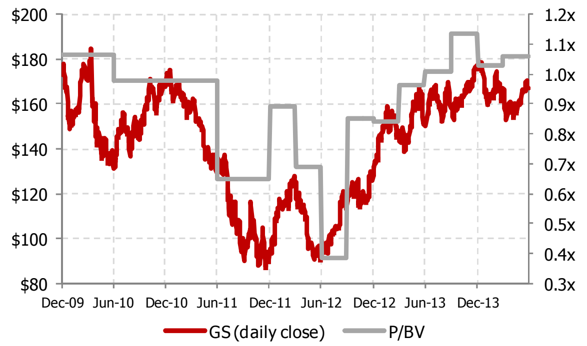
Credit Suisse



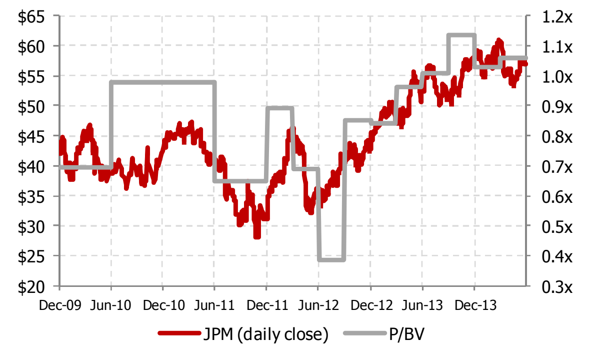
Deutsche Bank



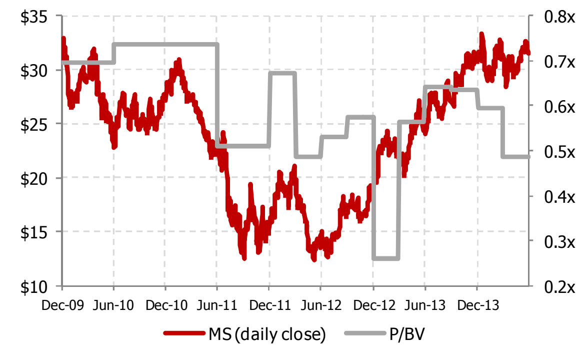
Goldman Sachs



J.P.Morgan



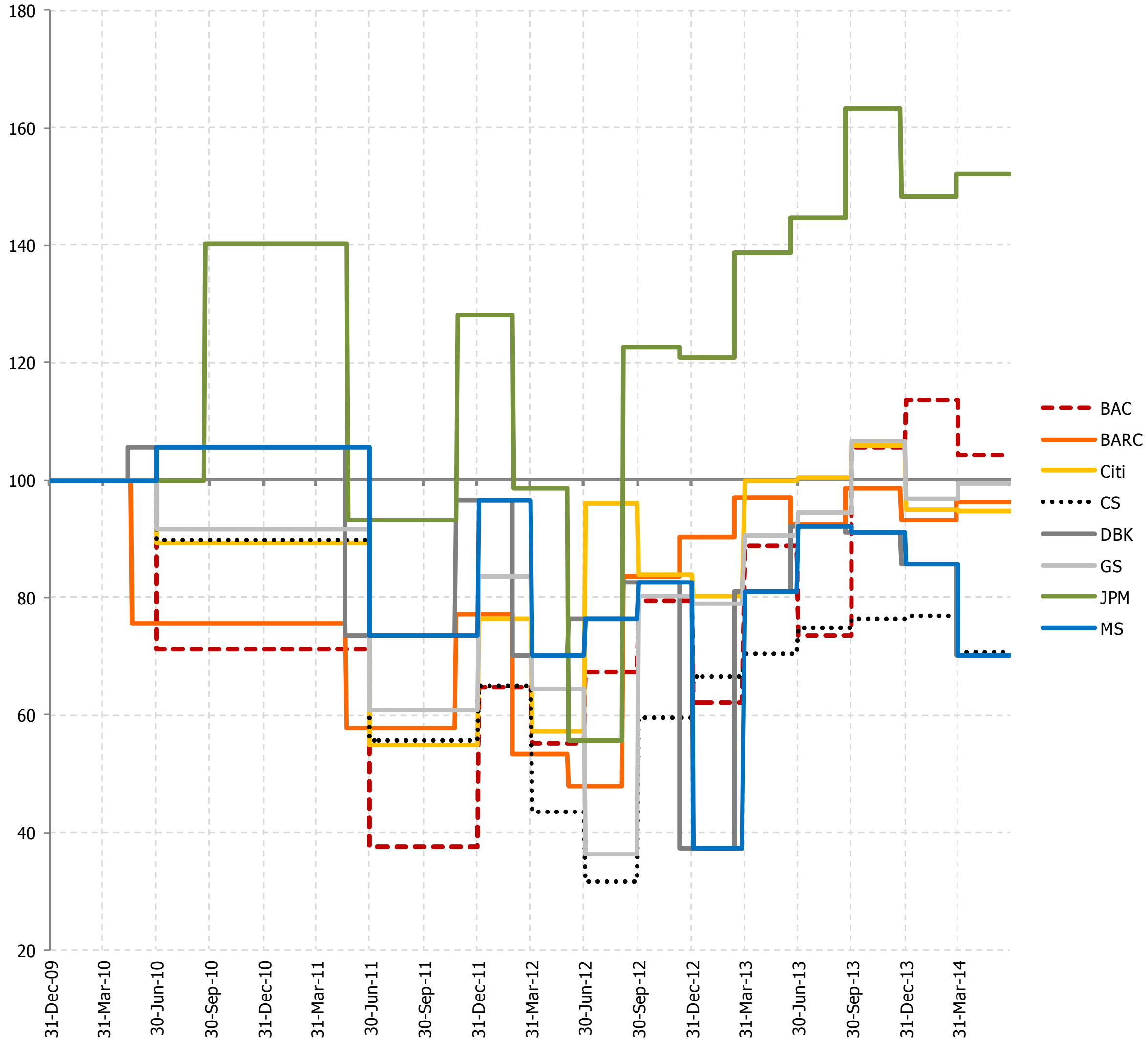
Morgan Stanley



Source: NASDAQ, FT.com, Tricumen book value analysis.

Appendix 2 – P/BV dynamics

P/BV dynamics (1-Jan-10 – end-June-14)



Source: NASDAQ, FT.com, Tricumen book value analysis.

About Tricumen

Tricumen was founded in 2008. It quickly became a strong provider of diversified market intelligence across the capital markets and has since expanded into transaction and corporate banking coverage. Tricumen's data has been used by many of the world's leading investment banks as well as strategy consulting firms, investment managers and 'blue chip' corporations.

Situated near Cambridge in the UK, Tricumen is almost exclusively staffed with senior individuals with an extensive track record of either working for or analysing banks; and boasts what we believe is the largest capital markets-focused research network of its peer group.

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