CASE STUDY

Bank of America and FleetBoston Financial:
Bigger, Better, more Profitable?

Rarely do the opinions of practitioner and academics diverge more than in the case of bank mergers. Although numerous studies have shown that synergy gains from mergers in the banking industry are elusive (or even illusive) financial institutions continue to acquire each other at a furious pace. Be it hubris or a business model predicated on external growth, management typically justify their acquisitions by pointing to the fragmented nature of the US banking industry, the regional focus of most banks, and the significant economies of scale and scope to be reaped from M&A transactions.

The acquisition of FleetBoston by Bank of America, itself a product of many a merger, represent only the latest in a long string of big-bank mergers. In this case, you are asked to study the rationale for buying a midsized, regional bank that, after all, does not seem to have to offer a lot to its new parent, one of the few, truly national, cost-to-coast financial institutions. Is Bank of America succumbing to its own management’s predilection for size? Are its shareholders victims of both weak governance (i.e., a toothless boards unable to control entrenchment management interests) and management hubris? In theory, there might be true gains from the acquisition to its shareholders but what does BofA’s track record say about its management’s ability to realize such gains? Why does FleetBoston feel the need to put itself on the market? With an industry in flux and considerable uncertainty about the future of the banking industry, it is not clear that a merger is the answer to the various real and imaginary problems that besets the partners.

Fortunately, the banks can rely on the in-house expertise of their own investment bankers in addition to the analysis from their outside advisors. Working for the senior banker on the deal you have studied the two companies in question and familiarized yourselves with the recent history of the US banking system. Now it is time to summarize your analysis of the deal in order to advise the parties on valuation, price, and execution.

However, you cannot help but feel ill at ease with several facets of the proposed transaction. In particular, you understand that the clients, i.e., the banks’ senior management, might have interests beyond the narrow focus of their shareholders. At the same time, the scientific evidence gives you cause for pause. Unfortunately, recent academic work in the area of bank mergers provides you ample reason to be skeptical about the merits of the deal. But then, is it not the task of the senior investment bankers to find value where nobody else dares to tread?

Note that write-ups and presentations espouse the different perspectives of each bank. Here are the details:

- **Write-ups** (from each party’s advisors) consist of executive memos to Bank of America’s or FleetBoston’s senior management (e.g., from the senior investment banker advising on the transaction to each board) outlining the opportunities, potential difficulties, bidding and valuation strategy, and desired outcome on the basis of your analysis.
Presentations (to the boards of the respective companies) consist of valuation, bid submissions, and an analysis of the strategic implications of the proposed transaction.

To gain a better understanding how the market assesses the transaction you might want to carry out simple event studies of the various events and look at their impact on shareholder wealth. As a reminder, a typical event study proceeds as follows:


2. Identify important announcements in the exit and acquisition process and determine the precise announcement date from the case materials or news wires, company websites, etc.

3. Collect and organize the required stock market data into date-matched continuously compounded returns.

4. Estimate a market model of stock returns analogous to the CAPM $R_{it} = \beta_{0i} + \beta_{1i}R_{mt} + \epsilon_{it}$ where $R_{it} = \log \frac{P_t}{P_{t-1}}$ is the firm’s continuously compounded daily return and $R_{mt}$ is the continuously compounded return of an appropriate market index such as the S&P 500. Use at least 180 data points but stop 50 days before each announcement under investigation. If you have closely grouped event dates, do not re-estimate the market model.

5. Analyze the price reaction of BofA and Fleet stock prices around (1) the initial expression of interest, (2) the announcement of competing interests, (3) the announcement of the acquisition terms, and (4) the completion of the transaction. Present your findings in a table containing the event, its date, the event’s CAR $(−1, 0)$ and CAR $(−1, 1)$, their respective statistical significance, and their wealth effects $W_i(−1, 0)$ and $W_i(−1, 1)$ for all firms.

(a) Identify the precise dates corresponding to the various events.

(b) Compute daily abnormal returns around the announcement date $AR_{it} = R_{it} - \hat{R}_{it}$ from, say, 5 days prior to the announcement/event to 5 days after, i.e., $t = −5, −4, \ldots, −1, 0, 1, \ldots, 5$. Given that you estimated a market model by regression methods, you need to use the corresponding market returns around the announcement date to derive predicted normal returns $\hat{R}_{it} = \hat{\beta}_{0i} + \hat{\beta}_{1i}R_{mt}$. On the basis of your parameter estimates $\hat{\beta}_{0i}, \hat{\beta}_{1i}$, plug in the market return realization $R_{mt}$ to obtain the predicted normal return $\hat{R}_{it}$, and, finally, calculate the abnormal return as $AR_{it} = R_{it} - \hat{R}_{it}$.

(c) Fix an event window around the announcement date, e.g., from 2 days prior to 2 days after the announcement, say, and calculate the cumulative abnormal return $CAR_{i} (−2, 2)$ by summing the abnormal returns over the event window: $CAR_{i} (−2, 2) = \sum_{t=-2}^{2} AR_{it}$. You are asked to carry out this procedure for the two and three day windows from one day before to one day after the announcement, i.e., $CAR_{i} (−1, 0)$ and $CAR_{i} (−1, 1)$.

(d) Finally, to see the total shareholder wealth effect you compute cumulative abnormal wealth created by multiplying the appropriate $CAR$ with the company’s market capitalization $K_{i−11}$ on $t = −11$, i.e., the eve of the event window around the announcement date: $W_i (\tau_1, \tau_2) = CAR_{i} (\tau_1, \tau_2) \cdot K_{i−11}$.

6. Assess the statistical significance of $AR$s and each $CAR$ by calculating the standard error of the CARs and their statistical significance ($p$ values).

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Carefully motivate your choice of index for the market model on the basis of the supplied data.
7. Finally, to see the total shareholder wealth effect you compute cumulative abnormal wealth created by multiplying the appropriate CAR with the company’s market capitalization $K_{i-11}$ on $t = -11$, the eve of the event window around the announcement date: $W_i(\tau_1, \tau_2) = CAR_i(\tau_1, \tau_2) \cdot K_{i-11}$.

The following questions are meant to assist you in your group discussions and guide your analysis.

1. Analyze recent trends in the US banking industry. What is the state of the industry at the time BofA and Fleet decided to merge? Its challenges? Its opportunities? To what degree have recent events contributed to the transaction? Does it make sense in light of the banking sector’s current evolution?

2. Identify the partner’s respective strengths and weaknesses and research their (recent) corporate history. What do they bring to the table? Where is the fit and, if so, what do the parties need to do in order to make the merger a success?
   
   (a) How well has BofA performed? What is its track record in terms of acquiring financial institutions and successfully integrating the targets into its operations?
   
   (b) Analyze Fleet’s current and past performance. What are its strengths and weaknesses? Why is it seeking a merger partner?
   
   (c) What is BofA’s business strategy and what piece of the puzzle does FleetBoston represent?

3. What are typical sources of synergies for bank mergers? In addition to the usual revenue and cost synergies you might also want to look at diversification gains that arise in banking from a more diversified loan portfolio, less exposure to particular sectors or regions, and other risk-management gains often alleged in bank mergers. Analyze risk-management issues resulting from mergers both on the assets (loans and other investments) and liabilities (deposits, securities issued, etc.) side of the balance sheet.
   
   (a) How does scale (and balance-sheet size) fit into the synergy picture for banks?
   
   (b) What are purely financial synergy gains? Where do they come from and what do they mean for banking mergers? What would regulators concerned both with a level playing field (competition) and deposit insurance (risk management) about such mergers?
   
   (c) Investigate the scope for other (operational) synergies between the two parties. Given the various sources of synergies in banking, what is the rationale for a merger between BofA and FleetBoston? Where would you expect the synergies to come from?

4. Carry out a full-fledged valuation exercise for the two parties. In particular, value Fleet on a stand-alone basis, i.e., derive the target’s intrinsic value before any synergy considerations, growth opportunities, and diversification or restructuring gain for BofA. Next, value the acquirer, i.e., BofA; finally, derive an estimate of the synergy gains. As a preliminary step, you obviously need to calculate and carefully document the appropriate costs of capital for both partners.
   
   (a) Carefully derive the cost of capital of the two banks and fully document your analysis.
(b) What is the value of BofA and Fleet, respectively, without any acquisition-related benefits and costs on a stand-alone basis? Fully document your analysis and assumptions. From a bidding perspective, what does the intrinsic value correspond to? How would the stand-alone value of the parent firms affect their stance in the merger transactions?

(c) Analyze the synergy gains carefully distinguishing between (i) cost synergies, (ii) revenue synergies, (iii) risk-management gains, (iv) easier compliance with capital-adequacy standards. What type of options, if at all, do they correspond to? How would you analyze risk-management gains? What investments, if any, will be needed to unlock the synergy gains? Are they recurrent or one-off expenses?

(d) Are they very uncertain? Very certain? What is the track record in banking when it comes to realizing potential synergy gains from large-bank mergers? How would you expect the nature of synergy gains to affect the bidding for Fleet? How might it have affected BofA’s offer(s)?

5. Carry out a full real-options analysis of synergies and other growth or disposal options created through the deal.

(a) What possible synergies exist between the parents and where are they expected to come from? Are they realistic and what would be a good benchmark to judge them? What are the growth options? Would BofA just acquire a “cash cow” or are there operational synergies?

(b) Analyze the expected synergies, their nature, origin, and unlocking costs on the basis of the supplied information for each bank. What is their present value, their net present value? Carefully document your sources and assumptions. Study the relationship between the current value of these assets $V_0$, estimates of the cost to unlock them $K$, and the implied synergy or growth option premia $c_0$.

(c) Which party stands to gain more from an acquisition from a pure synergy and growth opportunity point of view?

6. How much should BofA bid for Fleet? How should the bid be structured (cash, stock, combination thereof)? What is the minimum price that Fleet should hold out for? Investigate the pricing of the deal and to what degree the hoped-for synergies can justify the premium BofA is paying.

(a) How large do the synergy gains need to be to justify the premium? To what degree does the realization of synergies depend on factors beyond the partners’ control?

(b) Does the banking industry seem to suffer more or less from winner’s-curse phenomena? How does buyer’s curse enter into banking mergers in general, and the BofA-Fleet transaction in particular?

7. Use the supplied market data to analyze the market reaction to the transaction. Identify key dates (expression of interest, announcement of the deal, completion of the acquisition) and carry out an event study of the stock-price reaction for BofA and Fleet. What does the market think? Who gains, who loses and by how much? Why?

8. Follow up on the acquisition and find out what happened to the three firms after the acquisition. How well is BofA doing? How well did they integrate Fleet and to what degree did
they create value commensurate with the premium they paid for the target? Where is the acquirer in terms of identifying, analyzing, and unlocking synergies? What does the market think of the integration effort and how well has the combined entity performed? Who, in your opinion, won and who lost in the deal?

1 Groups 1, 3, 5, 7

You work for the senior banker advising BofA and have to come up with a valuation and bidding strategy for FleetBoston. Should BofA jump into the fray and bid for Fleet? If so, at what price? How should they proceed to reach the desired outcome and what are the various strategic considerations that have to go into the formulation of a coherent plan?

2 Groups 2, 4, 6, 8

As a managing director of the investment bank advising FleetBoston, you are to lay out the strategic options to your client regarding the future of the institutions. What are Fleet’s long term interests and needs? What type of deal should they be aiming for? Is BofA the answer to their problems and, if so, at what price?

Please note the following ground rules for the case write-ups:

- the maximal group size is 5; every group member gets the same grade
- at most 2 pages of analysis and 6 pages of technical appendices;
- show your work, staple the pages together and be professional;
- late write-ups will not be accepted for any reason; they are due at the beginning of class for which the discussion is scheduled;
- graded write-ups will be available a week later.