Continuing the refocusing of its activities on biopharmaceuticals, Bristol-Myers Squibb Co. (NYSE: BMY) made the strategic decision in spring 2008 to spin off of its baby food and nutritional division, Mead Johnson Nutrition (NYSE: MJN), through an IPO. Little did the company know that the market had turned for good and that BMY would face the most difficult IPO market in recent memory following its divestiture decision. Bristol-Myers Squibb had announced in April 2008 its plan to sell approximately 10-20 percent of Mead Johnson Nutrition Company stock to the public through an IPO and to retain at least an 80 percent equity interest for the foreseeable future. This announcement, in addition to the Medical Imaging and ConvaTec sales, was part of the BioPharma transformation to better focus Bristol-Myers Squibb on its biopharmaceutical business.

Bristol-Myers had acquired Mead Johnson & Company, a leader in science-based infant and children’s nutrition in 1967. Mead Johnson introduced its first baby formula in 1910 and over the decades expanded into vitamins, pharmaceutical products and prenatal nutrition. The Enfamil® brand grew to be recognized worldwide for its leadership in pediatric nutrition. However, 40 years later BMY’s focus and business strategy had changed. In particular Bristol-Myers has been trying to hone its business focus to prepare for the patent expiration of its blockbuster blood thinner Plavix in coming years, as well as the upcoming generic competition for several other drugs. James M. Cornelius, chairman and chief executive officer of Bristol-Myers Squibb, explains: “As we continue our transformation into a next-generation BioPharma leader, we are confident in our ability to execute on our strategy and in the strong performance of our BioPharma business.”

Cornelius has spoken out against doing a mega-merger deal to pad the company’s pipeline like competitors Merck (MRK) and Pfizer (PFE) have done this year. He has called Bristol-Myers’ strategy a “string of pearls” approach to doing business. Earlier in 2009, Bristol-Myers had paid $16 per share in cash for Medarex in a deal that valued the company at $2.4 billion as part of its diversification strategy. Through the acquisition, Bristol-Myers Squibb gained $300 million in cash and securities, a late-stage skin cancer drug, and Medarex technology that finds new ways to treat cancer and immunological disorders.

Note that write-ups and presentations espouse the different perspectives of key participants in the IPO process. Here are the details:

- **Write-ups** (to the Chief Investment Officer of a major asset management company) consist of an executive memo to the asset manager’s senior management (e.g., from the senior investment banker advising on the transaction or from a senior analyst at the fund-management company). You are an associate at a major investment bank or asset-management company and
your superiors have requested your opinion on how they should advise senior management. In particular, they have requested that you identify potential opportunities and pitfalls, summarize your bidding and valuation strategy, and what you think the best possible outcome would in light of your analysis and findings.

- **Presentations** (to investors during the roadshow) consist of an MJN valuation, bid solicitations and recommendations, business strategy of MJN and BMY (including confidential forward looking information), price range and return potential, and an analysis of the strategic implications of the proposed IPO for all parties involved.

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

1. Analyze recent trends in global IPO markets preceding BMY’s decision to offer MJN. How did the environment change between the first quarter of 2008 when the initial decision was taken and February 2009 when the division came to market? Why did BMY persist in offering MJN in the face of the most difficult IPO market since the early 1970s?

   (a) What economic and financial factors complicate or facilitate IPOs? What are the traditional drivers of IPO demand?

   (b) How many IPOs did come to market in 2008 and 2009 prior to MJN’s offering, respectively? What was the market environment and how did it change over these 12 months?

2. Analyze recent trends in the biotech, pharmaceuticals and nutritional industries prior to the divestiture decision and, again, around the IPO. Their challenges? Their opportunities? To what degree have recent attempts at consolidation between competitors contributed to the transaction? Does the divestiture make sense in light of the two sectors’ evolution?

   (a) What is BMY’s strategy? Why or why not does MJN fit anymore?

   (b) Is MJN better off on a stand-alone basis or as part of BMY? Why or why not?

3. What are the typical steps in an IPO? What information needs to be provided in what manner, when, and to which parties? Draw the timeline in MJN’s case and explain the steps leading up to the IPO. You might also want to obtain the prospectus (S-1) for future reference and the numerical analysis.

   (a) How are lead managers and underwriters compensated? What type of arrangements are available?

   (b) How are the shares placed? What risks do underwriters face in the IPO process and how do they mitigate them?

   (c) How are issued priced? What information do underwriters need, where do they get it from and how?
4. Carry out a full-fledged DCF valuation exercise for MJN. In particular, derive the division’s intrinsic value before any (lost) synergy or deadweight considerations, growth opportunities, and diversification or restructuring gains. As a preliminary step, you obviously need to calculate and carefully document the appropriate cost of capital for MJN.

(a) Carefully derive the risk-specific cost of capital for the division and fully document your analysis. Be reminded that need to find suitable comparator companies, compute their asset betas $\beta_a$, derive the subindustry asset beta $\beta_a^{IND}$, compute the relevant equity beta $\beta_e$, etc. Derive the required returns on equity and debt and determine an appropriate WACC. Fully document your analysis and assumptions.

(b) Draw up a pro-forma cash-flow statement and determine the appropriate free cash flows for a DCF valuation. What is MJN’s intrinsic value?

(c) Price the IPO on the basis of your analysis.

5. Determine whether MJN owns significant growth or abandonment options. If so, carry out a full-fledged real-options analysis of expansion and other growth or disposal options which MJN can create pursuant to the IPO.

(a) What are the growth options? Are they realistic and what would be a good benchmark to judge them? Why would BMY divest itself of a “cash cow” or are there growth options which the current parent company cannot unlock? If so, why?

(b) Analyze potential future real options, their nature, origin, and unlocking costs on the basis of the supplied information. 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 disposal or growth option premia $c_0$.

(c) How much value, if any, might these real options contribute on a per-share basis to the IPO price? Would you revise your target price range in light of the optionalities?

6. Research the IPO. In particular, determine the offering price, the issue’s reception, and the after-IPO evolution of the stock price. Why did BMY decide to go forward in such a challenging market environment?

(a) How much did BMY initially aim to raise in the MJN offering? What stake were they retaining and why?

(b) How was the IPO received? What happened in secondary-market trading after the IPO?

(c) What is a green-shoe provision and what purpose does it serve? How does it affect IPOs and their proceeds? Did this provision come into play in the case of MJN? Why or why not?

(d) How much money did BMY leave on the table? How much did the IPO cost them in terms of underpricing and fees?
(e) Why do underwriters typically underprice IPOs? Do you think that investors have been fairly compensated for the risks they took in this deal?

7. Carry out a post-mortem analysis of the MJN IPO. Download the requisite price data to analyze the market reaction after the transaction up to the present. What does the market think about MJN? Who gains, who loses and by how much? Why?

(a) What do you think about BMY’s timing of the IPO?

(b) How well would have investors participating in the IPO done? What effect is due to underpricing, systematic market performance, and idiosyncratic performance? Can you think of a technique to distinguish the three performance components?

(c) Using the stock price, return and capital structure data provided in the case estimate $\beta^{MJN}$ after the IPO. Using Excel’s regression function (in the data analysis dialog), run a regression of the form $R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$ where $R_{mt}$ is the daily instantaneous return on the S&P 500 or some similarly broad market index. You can then plot residuals and the regression line to see how well this estimation technique performs. Your corporate-finance should contain more information on estimating $\beta$. What is MJN’s current cost of capital?

8. Reserach subsequent events, especially the spin-off of the remaining MJN shares to BMY stockholders. What does BMY hope to achieve through this transaction?

(a) Why did BMY initially retain such a large stake in MJN? What changed in the year to convince BMY to part company with MJN?

(b) Analyze the IPO in terms of the exercise and creation of real options by BMY. The IPO and December 2009 spinoff respectively correspond to what?

(c) What are the terms of the spinoff? How is it structured? What is the implied price?

(d) As an investor, should you take the offer or not? How well would you have done with either strategy with hindsight?

1 Groups 1, 3, 5, 7

You are the senior i-banker advising BMY about to go on the roadshow with senior management. Advise your client on the various issues surrounding the IPO in such a difficult market environment. How do you expect to go about building the book?

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1If we also had the evolution of the risk-free rate $r_f$ from, say, a T-bill time series, we would estimate $R_{it} - r_{ft} = \beta_i [R_{mt} - r_{ft}] + \varepsilon_{it}$. Since this regression equation does not have an intercept, you would have to check the ‘no intercept’ box in the Excel regression dialog.
2 Groups 2, 4, 6, 8

As an associate or senior analysis of a major asset-management company you have to advise the Chief Investment Officer on the upcoming IPO of MJN. You also foresee issues down the line because your fund holds a major stake in BMY. Advise your senior management on how to proceed regarding the IPO, in particular what price and quantity to bid as part of the bookbuilding process.

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.