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Transforming Sanofi-Aventis

*This case was written by **Debapratim Purkayastha,** IBS Center for Management Research. It was compiled from published sources, and is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.*

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Transforming Sanofi-Aventis

"At a time when every drug giant is (or ought to be) urgently experimenting to discover the right business model, Sanofi has long been perceived as too rigid, too traditional, maybe even too French, to learn Pharma 2.0… [T]he legacy of this titan of French industry, badly damaged in recent years, now depends entirely on Viehbacher and his next-generation team."[1]

- Walter Armstrong, *Pharmaceutical Executive*, in July 2009.

INTRODUCTION

For Christopher A. Viehbacher (Viehbacher), CEO of pharmaceutical company Sanofi-Aventis, the first eight months in the company were nothing short of hectic. Viehbacher had taken charge in December 2008, at a time when Sanofi-Aventis had increasingly come to be viewed as a French relic incapable of keeping up with the rapid changes in the pharmaceutical industry. Determined to transform the company into a global diversified healthcare leader, he took various tough decisions that earned the appreciation of analysts. The analysts said that the initial results looked positive with the company performing very well in 2009. It reported sales of €[2]7,438 million for Q2 2009 as compared to €6,689 million for the corresponding period of 2008.[3] Its stocks had also grown faster than that of its peer group – a complete reversal of fortunes for a company whose stocks had been considered the worst performing of its peer group barely a year earlier (Refer to Exhibit I for Sanofi-Aventis' consolidated income statement for the first half of 2009; and, Exhibit II for its five-year stock chart). However, analysts also felt that, going forward, Viehbacher was likely to come up against many tough challenges.

The Paris-based Sanofi-Aventis was the world's third largest pharmaceutical company as of 2009. However, experts felt that it had a costly and unproductive research and development (R&D) pipeline, with few new products in sight to offset the impact of patent expiries of its top-selling drugs between 2009 and 2013. Analysts also blamed the company's leadership for what they called running the company like a French national treasure. With the company facing one setback after another since 2007, its stock performance deteriorated, and the board decided to bring in GlaxoSmithKline (GSK) veteran Viehbacher to contain the damage. Banque Martin Maurel analyst, Jerome Forneris, commented, "The challenge Viehbacher faces is a big one. He needs to shake things up, motivate his troops, lift their morale, and lead the company back to growth."[4]

What followed were sweeping changes at Sanofi-Aventis with a restructuring of the top management and the R&D organization. Viehbacher also decided to strengthen the company's presence in emerging markets and to diversify into other healthcare businesses such as vaccines,

1 Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.

2 As of August 2009, €1 approximately equals US$1.45.

3 "Very Good Second Quarter 2009 Increase in 2009 Guidance," http://en.sanofi-aventis.com, July 29, 2009.

4 Trista Kelley and Albertina Torsoli, "Sanofi May Cut EU1 Billion in Costs, Buy Biotechs (Update1)," www.bloomberg.com, February 10, 2009.

consumer healthcare (Over-the-Counter/OTCs), branded generics, biologics[5], etc. At a time when some of its rivals had opted for multi-billion dollar mega-mergers, Viehbacher avoided this trend saying that such deals rarely created value. He hoped to make up for the loss of revenues due to patent expiries by increasing sales from growth drivers such as emerging markets, Diabetes drugs, OTCs, and vaccines, in addition to new launches.

Regarding the challenges ahead, Viehbacher said, "The crucial questions facing our industry are clear: "How can we change the model? How can we create more sustainable growth?" To answer these questions, we have to identify the resources and the competencies we need to grow. We are growing in markets as diverse as the patients themselves. New technologies open new avenues of research. Vaccines, biologicals, branded generics, and consumer healthcare (OTC) require our teams to move out of the classical pharmaceutical mindset."[6]

BACKGROUND NOTE

Sanofi-Aventis was formed in 2004 when French pharmaceutical major Sanofi-Synthélabo acquired the Franco-German pharmaceutical group Aventis. As of 2009, it was the world's third largest pharmaceutical company going by prescription drugs sales. A diversified healthcare group, it was also a leader in vaccines, sixth worldwide in OTCs, eleventh worldwide in generics, and third worldwide in animal health. As of 2009, the company had a presence in over 100 countries, employing nearly 100,000 people. The biggest share of its global sales came from Europe (40%) and the US (<30%), but it also had a sizable presence in emerging markets (Refer to Exhibit III for Sanofi-Aventis' Position in Various Segments: 2008; Exhibit IV for top ten pharmaceutical companies by global sales; Exhibit V for Sanofi-Aventis' income statement; Exhibit VI for Sanofi-Aventis' balance sheets; and, Exhibit VII for Sanofi-Aventis' financial ratios).

Both companies had a history of mergers and acquisitions (M&A) behind them. The French government took an active interest in the deal and Nicholas Sarkozy, the then Finance Minister, was said to have orchestrated the deal in the hope of creating a French icon with a number of blockbuster drugs[7].[8] But experts felt that the company had failed to live up to the promise. According to them, despite being one of the top healthcare companies, Sanofi-Aventis had some serious weaknesses. Its product pipeline was one of the costliest but without much to show for it in terms of new product launches. The patents of most of its top-selling drugs were set to expire between 2009 and 2013 (Refer to Exhibit VIII for Sanofi-Aventis' top products in 2008). Analysts noted that about 35 percent of Sanofi-Aventis' revenue would be exposed to generic competition. As lower priced generics flooded the market, the revenues of the original drugs slid drastically.

Some experts also believed that the company could not get a complete hold over the lucrative North American market. While the company had a pre-eminent position in vaccines, major rivals such as Novartis, GSK, and Pfizer were closing the gap.

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[5] OTCs are medicines that can be sold without a prescription; Generics are either copies or the basic form of a brand-named drug produced by large multinationals; Biologics include a wide range of medicinal products such as blood and blood components, allergenics, gene therapy, etc. created by biological processes.

[6] "Transforming Sanofi-Aventis into a Healthcare Leader," http://en.sanofi-aventis.com/at-a-glance/edito.asp

[7] Blockbuster drugs are drugs that have global sales in excess of US$1 billion per annum. These drugs are usually targeted at the mass market as these drugs are indicated for disorders that affect a large segment of the population.

[8] Carol Matlack, "Sanofi Aventis Takes a New Tack," www.businessweek.com, February 11, 2009.

Part of this problem, according to analysts, was that Sanofi-Aventis was being run like a national treasure. The company was perceived as being too traditional and inflexible to be able to transform itself to suit the rapidly changing environment. This perception had been reinforced by Viehbacher's predecessor Gerard Le Fur's leadership in 2007 and 2008. The company was also criticized for not being transparent and for not communicating enough with the US investors.

The company's problems also had a lot to do with the withdrawal of the much-hyped obesity drug Acomplia, the development of which Le Fur had led in his previous role as head of research. As CEO, Le Fur promoted the drug to investors as an answer to the perils of Sanofi-Aventis' patent expiration and spent lavishly on the drug. The drug was approved in 2006 in the European Union and was marketed in 56 markets subsequently. In 2008, EU regulators dealt a major blow to the company when they recommended that the drug should not be used as it had psychiatric side-effects. In October that year, the company withdrew the drug. Analysts felt that this was an embarrassing failure for the company as the sales of the drug had been projected to reach US$4 billion by 2008. The sales had, however, only managed to scrape past about US$200 million. The analysts pointed out that Sanofi-Synthélabo's US$65 billion takeover of Aventis was aimed at obtaining Aventis' big US sales force to market Acomplia in the US. Ironically, it failed to get the drug approved in the US. According to *Pharmaceutical Executive*'s Walter Armstrong, "In retrospect, it's easy to fault Sanofi's insular leadership for its irrational exuberance. The firm's investment (of every sort) in this fascinating but flawed chemical blinded it to the writing on the wall: Cutting-edge science alone will no longer cut it."[9]

Things came to a pass when two of Sanofi-Aventis' major investors that accounted for 25% of the stocks, oil company Total SA and cosmetics company L'Oreal SA, started systematically reducing their stake in the company. Between January 2007 and September 2008, the price of Sanofi-Aventis' stock fell by 30%.[10] In 2008, the performance of its stock was the worst among Europe's top five pharmaceutical companies.[11] By this time, the company realized that it had to modify its strategy in accordance with the worldwide changes in the pharmaceutical industry, and Viehbacher was brought in to give a new direction to the company. The new strategy required Sanofi-Aventis to adapt its R&D efforts to new regulatory and economic constraints, improve its position in emerging markets, and expand its activities related to medicines and healthcare. Viehbacher was given a mandate to shake up the organization.

The decision was largely well received by analysts and investors. "The fact that you're bringing a non-French manager with no axe to grind from either the Sanofi or Aventis side shows there is a change of attitude… A lot of areas were perceived to be untouchable within the group.... It's no longer going to be run as a national treasure, but as a lean and mean corporation,"[12] said Pictet Asset Management's Marc Booty. But some analysts were skeptical. "People are saying, 'Hooray, there's a savior' but new management can't magically create a pipeline to plug all the holes,"[13] said Vontobel analyst Andrew Weiss. Some felt that Viehbacher had been brought in just to do the dirty job and that once things improved, someone from France would again be brought in for the top slot.

9 Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.

10 Greg Keller, "Sanofi Names Viehbacher as New CEO," www.usatoday.com, September 10, 2008.

11 Trista Kelley and Albertina Torsoli, "Sanofi May Cut EU1 Billion in Costs, Buy Biotechs (Update1)," www.bloomberg.com, February 10, 2009.

12 Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.

13 Greg Keller, "Sanofi Names Viehbacher as New CEO," www.usatoday.com, September 10, 2008.

ENTER VIEHBACHER

Viehbacher was half Canadian, half German, and in his late 40s. Before taking over as Sanofi-Aventis' CEO, he had been head of GSK's US operations, and had had more than 20 years' experience in the company. He had previously overseen the French market of Glaxo Wellcome and spoke French fluently. After spending most of the 1990s in France, Viehbacher moved to North America where he was credited with effectively integrating the businesses and cultures of Glaxo Wellcome and SmithKline Beecham following their 2000 merger. In 2007, he lost out in the race to become the CEO of GlaxoSmithKline to Andrew Witty.

Shortly after taking on the new role in December 2008, Viehbacher communicated his vision of transforming Sanofi-Aventis from an "EU/US-centric pharma company" to a diversified global healthcare leader. This would entail a revamp of the company's R&D, greater investment in non-prescription businesses, and an increased focus on emerging markets. Analysts said that cost-cutting would also be on Viehbacher's agenda and added that they expected him to cut costs to the tune of US$1.3 billion. "It's about the 18 billion euros in operating costs he has to deal with…How can he reduce that operating cost effectively and efficiently?"[14] said ABN-Amro analyst Michael Leacock. Some analysts noted that the company's headcount had been steady at around 100,000 since 2003 and noted that Sanofi-Aventis was "almost unique in having a cost-cutting program but no defined targets".[15]

Viehbacher moved quickly to make organizational changes and put a new team in place. Of the company's 6500-strong sales force, 10% got the axe. While Jean-Francois Dehecq (Dehecq) remained chairman, only two of the top management team, namely, Marc Cluzel (head of R&D) and Hanspeter Spek (head of pharma operations) continued to hold on to their positions. While heads rolled, new people were put in place with newly-defined positions. Laurence Debroux was promoted as chief strategic officer (in charge of M&As) and Jean-Pierre Lehner as chief medical officer (in charge of drug safety). Viehbacher brought in Elias Zerhouni, the former director of the National Institutes of Health under President George W. Bush, as scientific advisor, and Jerome Contamine of the French water and sewage group Veolia Environnement as the CFO. The company's US operation was bolstered with the addition of Paul Chew as chief medical/science officer.

Viehbacher said while there would be some optimization of costs, cost-cutting was not the sole objective as one could not save one's way to growth. He also pointed out that the company was already good in this area and held a top position in terms of sales and general and administrative costs as a proportion of revenues.[16] Finally, Sanofi-Aventis set a target of €2 billion (US$2.85 billion) as annual cost savings by 2013.[17]

Within a few months of Viehbacher taking charge, the company started conducting press conferences in English rather than French. Dehecq, who had long been considered as the driving force behind Sanofi-Aventis, was conspicuous by his absence at these meets. This led to analysts opining that Viehbacher was in sole charge of strategy.[18]

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[14] Trista Kelley and Albertina Torsoli, "Sanofi May Cut EU1 Billion in Costs, Buy Biotechs (Update1)," www.bloomberg.com, February 10, 2009.

[15] Trista Kelley and Albertina Torsoli, "Sanofi May Cut EU1 Billion in Costs, Buy Biotechs (Update1)," www.bloomberg.com, February 10, 2009.

[16] Andrew Jack, "Sanofi-Aventis Reveals Targets for Expansion," www.ft.com, February 11, 2009.

[17] Sean Walters, "Sanofi-Aventis's Uncertain Prognosis," http://online.wsj.com, July 29, 2009.

[18] "Viehbacher Sets Out Vision for Diversified Sanofi-Aventis," www.pharmafocus.com, February 11, 2009.

OVERHAULING R&D

Viehbacher said that Sanofi-Aventis' R&D would be overhauled in a bid to make it productive and in sync with patient's needs and the demands of the rapidly changing pharmaceutical environment. The new approach to R&D was aimed at driving creativity and innovation by simplifying the R&D organization; introducing new operating principles; creating customer-focused teams addressing specific unmet patient needs; opening up toward external sources of innovation through partnerships; being more flexible and entrepreneurial and driving a change in culture.[19]

Lehner's role was to be to monitor the benefits/risks in pipeline and marketed drugs while Zerhouni's role would involve helping the company hit the right balance between in-house R&D and external partnerships.[20] A new position of 'chief of industrial development and innovation' was also created.

Shortly after taking over, Viehbacher and the management team did a review of the R&D portfolio. They found that more than 30 molecules were not sufficiently viable and these were promptly axed.[21] In late April, a thorough review of the portfolio was conducted to move high priority projects forward. This freed up resources for external R&D. The portfolio was objectively evaluated across four key dimensions: extent of patient need addressed; degree of innovation; technical & commercial risk; overall value / return on investment. More projects got the axe. "The question I pose is: 'How are you going to make someone's life better with this drug, and why is it better than what they've already got?" If you can't answer that question, I don't really care about molecular structures, or whether this is genomically interesting, or that it's a nifty technology platform. In today's world, we all know you need medicines of value,"[22] said Viehbacher. Such reviews were to be conducted regularly by a newly-created 'Portfolio Management Group' (Refer to Exhibit IX for Sanofi-Aventis' R&D portfolio; and, Exhibit X for new drug development timeline for the US).

In June 30, 2009, Sanofi-Aventis announced its new R&D model. The objective was to set in place an effective R&D organization by 2013 that was more in tune with the rapidly changing pharmaceutical environment. Sanofi-Aventis was to group researchers into more productive structures and also recruit and train to develop the profiles and skills of its collaborators. The model also involved strengthening "exploratory structures" that worked in close collaboration with external entities, fostering a flexible and entrepreneurial approach to R&D. The company said that it would not engage in layoffs, but a plan for voluntary departures was being considered. Sanofi-Aventis also reiterated that it would maintain its level of investments in R&D, remain based in France, and create partnerships with public and private research entities, academic institutions, and biotechnology companies.

Around 27% of the company's business was from outside R&D and Sanofi-Aventis planned to double this. It had entered into innovative partnerships with key biotech companies such as BiPar Sciences, Exelixis, and Kyowa Kirin to boost its base business. For instance, the partnership with BiPar provided it with access to promising first-in-class oncology drugs including one that was at the Phase III stage [23].

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[19] "Sanofi-Aventis Q2 2009 Results," July 29, 2009.

[20] "Viehbacher Sets Out Vision for Diversified Sanofi-Aventis," www.pharmafocus.com, February 11, 2009.

[21] "Viehbacher Sets Out Vision for Diversified Sanofi-Aventis," www.pharmafocus.com, February 11, 2009.

[22] Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.

[23] Drug R&D is a costly and time-consuming process. After initial discovery, screening, preclinical R&D and review by regulators, there are three phases of clinical trials aimed at investigating the efficacy and safety of the drug: Phase I trials are the first-stage of testing a drug in human subjects (20-80); Phase II trials are performed on larger groups (100-300); Phase III trials are large double-blind randomized controlled trials on large patient groups (1000-3000 or more). After successful completion of the trials, the data is reviewed by the regulators before the drug is finally approved for launch.

Experts said that pharmaceutical industry was making a shift from the typical blockbuster model, in which research-based pharmaceutical companies develop and market pills for the mass market, to biotech and specialist-driven therapies. Experts felt that the days of the blockbuster drug were over.[24] This line of thought received further credence after the failure of Pfizer's much-hyped cholesterol lowering drug, Torcetrapib[25], in 2006 and Sanofi-Aventis' Acomplia in 2008.

EMERGING MARKETS

Viehbacher was quick to note that Sanofi-Aventis was the #1 pharmaceutical company in emerging markets, which accounted for around 25% of its revenue and 70% of its growth.[26,27] Sanofi-Aventis held the #1 position in Brazil, Mexico, Algeria, and Morocco; #2 in Russia; #3 in South Korea, Turkey, and South Africa; #4 in China; and #9 in India. It also had manufacturing facilities throughout Africa. "Everybody says they want to go there. But we're already there. We're in business while other companies are still trying to find their way from the airport to the hotel,"[28] he said.

Viehbacher contended that it was a mistake to focus on developing only costly new medicines to treat the wealthy in North America and Europe. In the first few months after taking over as CEO, he went to China, the country which Sanofi-Aventis was the first to venture into from among its peer group, for one week and asserted that he was viewing the market as being at least as important as the US. "When economies grow, there is an increased demand for healthcare. We are well aware that in many countries with high growth rates, we only partly meet their needs. We must pay more attention to global public health issues. Sanofi-Aventis is extremely well positioned here. We are already a leader in the emerging markets, and we must do our utmost to stay ahead,"[29] Viehbacher said.

Experts too felt that the traditional markets of North America and Europe were getting saturated and emerging markets such as India and China would provide the pharmaceutical majors with the next phase of growth (Refer to Exhibit XI for global pharmaceutical sales by regions). Sanofi-Aventis expected emerging markets to give a boost to its pharmaceutical sales by around 50% by 2012, while the company's branded generics, OTC and vaccines segment was also expected to perform well.

DIVERSIFICATION

According to Viehbacher, in order to serve the world's population, Sanofi-Aventis had to move away from the blockbuster model and strengthen its presence in other healthcare segments such as vaccines, consumer health, generics, and biologics. "I don't believe that the blockbuster model is dead — I just don't believe that you can bet the ranch on delivering products of that value. Although we have a lot of exciting products in development, they are not going to be able to compensate for the loss of revenues,"[30] he said. He also pointed out that Sanofi-Aventis had "missed the boat" where diversifying into biological medicines was concerned.[31]

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[24] "The New Branding Model: From Blockbusters to Targeted Therapies," www.pharma-mkting.com, June 2004.

[25] Pfizer expected the sales of Torcetrapib to compensate for the loss of sales of Lipitor post-2010, after the patent for Lipitor expired. Analysts felt that Torcetrapib would go on to become the highest-selling drug in history with sales of US$25 billion per annum.

[26] Carol Matlack, "Sanofi Aventis Takes a New Tack," www.businessweek.com, February 11, 2009.

[27] *Sanofi-Aventis Shareholder Handbook 2008-2009 edition*

[28] Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.

[29] *Sanofi-Aventis Shareholder Handbook 2008-2009 edition*

[30] "Viehbacher Sets Out Vision for Diversified Sanofi-Aventis," www.pharmafocus.com, February 11, 2009.

[31] Andrew Jack, "Sanofi-Aventis Reveals Targets for Expansion," www.ft.com, February 11, 2009.

He said that to develop sustainable growth, the company needed to change its model. The market it was catering to was diverse and required it to move out of the 'classical pharmaceutical mindset'. "Classical small molecules pharmaceuticals, our core business activity, are vulnerable to patent expiry. So we want to build businesses like vaccines, like consumer healthcare, like branded generics, to create a basis for more sustainable growth. We will of course maintain our pharmaceutical business, but we will also reply to future global healthcare challenges with a broader platform of offerings, which are more affordable and accessible to patients with fewer economic resources,"[32] he explained. He added that these segments would be supported by R&D and expected strong organic growth and acquisitions to spur further growth in these segments.

DISCIPLINED ACQUISITIONS

Experts felt that patent expiries, unproductive R&D pipelines, fewer drugs approved each year and lower sales from new drugs, were forcing old-line pharmaceutical companies to opt for mega-mergers or bolt-on acquisitions. Mega-mergers were multi-billion dollar deals between two major pharmaceutical companies aimed at creating a company with more drugs and opportunities to cut costs. In bolt-on acquisitions, a drug company acquired a smaller company to spur its growth by getting access to a fast-growing technology. With there being many such deals in 2009 including Pfizer-Wyeth (US$68 billion) and Merck-Schering-Plough (US$41 billion), there were rumors that Sanofi-Aventis would also opt for a mega-merger with Bristol-Myers Squibb[33] (Refer to Exhibit XI for the top ten pharmaceutical companies after mergers). Viehbacher was quick to dismiss these rumors by saying, "If you get two ugly people, the odds of getting together and creating a beautiful child is [small]… Consolidation and taking out costs buys you time, but it does not get you to growth."[34]

He admitted that he would have to do some deals as Sanofi-Aventis did not have enough new products, but he said that this was not his immediate focus. He pointed out that the company was in a strong financial position generating €4 billion in cash each year and would seek acquisitions to expand in emerging markets, vaccines, and consumer health. He said he did not believe in going in for deals just for the sake of growing bigger in size. He said that he had been part of two mega-mergers in the past, but found that the process sapped the organization's creativity and productivity. "On the surface you would have to say the big deals of the past have not necessarily fulfilled the criteria of shareholder value,"[35] he said.

Viehbacher's preference for bolt-on acquisition was clear with the company going ahead with five bolt-on acquisitions by June 2009, including the US$2.5 billion acquisition of a fully integrated branded generics company, Zentiva. The acquisitions provided it with significant opportunities to tap the Central and Eastern European markets; its generics segment was augmented with the US$700 million acquisition of Medley, Brazil, that made it the leading generics company in Brazil and Latin America, and the acquisition of Kendrick in Mexico for an undisclosed price, boosted its presence in the country; the acquisition of Symbion Consumer gave a boost to its OTC business and provided it with a launching pad for the Asia-Pacific region; the US$450 million acquisition of Acambis gave a push to its vaccines segment. In July 2009, the company also acquired India-based vaccine company Shantha Biotech for US$800 million to fuel its growth in emerging markets.[36]

32 "Transforming Sanofi-Aventis into a Healthcare Leader," http://en.sanofi-aventis.com/at-a-glance/edito.asp

33 The world's 11th largest pharmaceutical company with 2008 sales of US$17.7 billion and with which Sanofi-Aventis co-promotes Plavix.

34 Matthew Herper and Robert Langreth, "The Next Pharma Buyouts," www.forbes.com, March 9, 2009.

35 Andrew Jack, "Sanofi-Aventis Reveals Targets for Expansion," www.ft.com, February 11, 2009.

36 "Sanofi Acquires Shantha Biotech for 550 Million Euros," www.topnews.in, July 27, 2009.

LOOKING AHEAD

For the first half of 2009, the company showed good performance. In particular, Sanofi-Aventis's Q2 revenue and net profit increased significantly over the previous year, and the company raised its 2009 earnings-per-share guidance by three percentage points to 10%.

According to Viehbacher, the company was to generate revenue and net income in 2013 which would be at the same level as it had been in 2008. "Our aim is to achieve at least the same level of sales in 2013 vs. 2008 before any significant external growth opportunities,"[37] he said. Viehbacher expected the growth drivers such as new launches, emerging markets, Diabetes drugs, OTC, and vaccines to mitigate the impact of patent expiries and also provide it with a more sustainable growth with a reduced risk profile. According to him, Sanofi-Aventis' main objectives through 2013 would be to spur internal growth through investments in existing growth platforms and cost reductions; continued focus on external sources of diversification through partnerships and disciplined M&A; and R&D transformation to create a robust pipeline.

Analysts felt that this was a kind of reversal of fortunes for the company as its shares had gained 9.8% between June 2008 and June 2009 – far more than the Dow Jones Health Index, which fell 9.6%. According to MillerTabak analyst Les Funtleyder, "Sanofi is one of the very few pharma stocks that is up for the year… As far as grading [Viehbacher's] job performance so far, the market is satisfied, and investors are happy."[38] Some analysts felt that Sanofi-Aventis might not become the kind of champion the French envisioned, but it could still emerge a winner.[39] Bernard Associates' Stan Bernard said, "He's modeling the GSK playbook, turning a traditional science-based pharma into a consumer-focused healthcare company that can compete."[40]

In June 2009, Viehbacher hinted at another round of restructuring in his quest for a new model that would be more in sync with the changing realities of the industry and would spur sustainable growth. But some analysts were not too sure that the measures adopted by Viehbacher would help boost revenue to levels that would be enough to offset the patent expiry of Lovenox, Eloxatin, and Plavix, which accounted for 25% of Sanofi-Aventis' Q2 sales.[41] Analysts also said that it remained to be seen how long Viehbacher could resist the temptation of opting for a mega-deal as its rivals continued to consolidate. They noted that the CEOs of Pfizer and Merck had also been saying the same things about mega-mergers as Viehbacher in 2008, but had then gone ahead with such deals.[42] "For better or worse, the industry is still consolidating… It's inevitable that Sanofi will be a part of this,"[43] said Funtleyder.

Analysts felt that though Sanofi-Aventis had performed well in Viehbacher's first eight-month reign, its longer-term prognosis was less clear. According to *Wall Street Journal*'s Sean Walters, "Sanofi trades on eight times estimated 2009 earnings, a 30% discount to its peer group. Mr. Viehbacher's growth strategy is credible, diversifying Sanofi's portfolio and avoiding the typically value-destructive mega-mergers some rivals have participated in. But the success of Sanofi's restructuring plan isn't so sure as to yet warrant a re-rating in line with the sector."[44]

[37] "Sanofi-Aventis Q2 2009 Results," July 29, 2009.
[38] Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.
[39] Carol Matlack, "Sanofi Aventis Takes a New Tack," www.businessweek.com, February 11, 2009.
[40] Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.
[41] Sean Walters, "Sanofi-Aventis's Uncertain Prognosis," http://online.wsj.com, July 29, 2009.
[42] Matthew Herper and Robert Langreth, "The Next Pharma Buyouts," www.forbes.com, March 9, 2009.
[43] Walter Armstrong, "French Revolution," http://pharmexec.findpharma.com, July 1, 2009.
[44] Sean Walters, "Sanofi-Aventis's Uncertain Prognosis," http://online.wsj.com, July 29, 2009.

Exhibit I

Consolidated Income Statement: First Half 2009 (€ million)

Net sales	**14,545**
Other revenues	703
Cost of sales	(3,619)
Gross profit	**11,629**
Research and development expenses	(2,260)
Selling and general expenses	(3,627)
Other current operating income/expenses	280
Amortization of intangibles	(1,805)
Operating income – current*	**4,217**
Restructuring costs	(907)
Impairment of PP&E and intangibles	(28)
Gain/loss on disposals, litigation	
Operating income	**3,282**
Financial expenses	(151)
Financial income	37
Income before tax and associates	**3,168**
Income tax expense	(795)
Share of profit/loss of associates	496
Minority interests	(232)
2009 net income (after minority interests)	**2,637**
2008 net income (after minority interests)	2,335
Change 2009 vs. 2008 (in %)	***12.9%***
2009 earnings per share (in €)**	**2.02**
2008 earnings per share (in €)	1.78
Change 2009 vs. 2008 (in %)	***13.5%***

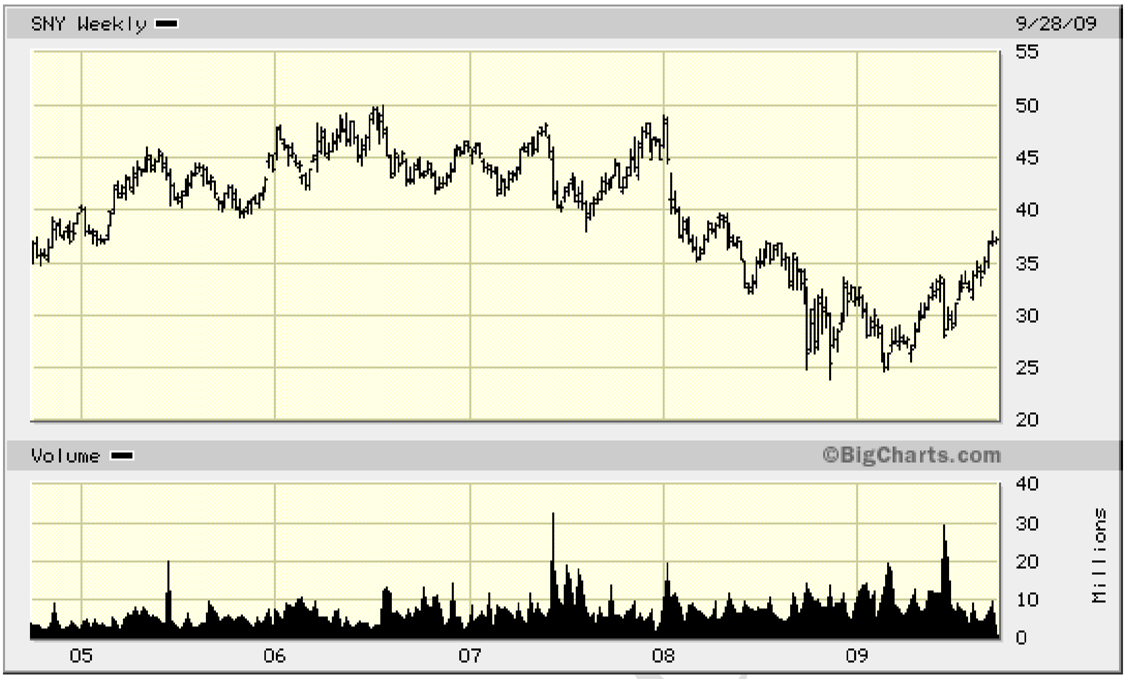
***Operating income before restructuring, impairment of property, plant and equipment and intangibles, gains/losses on disposals, and litigation**

** Based on an average number of shares outstanding of 1,305.5 million in the first half of 2009 and 1,313.7million in the first half of 2008

Source: "Very Good Second Quarter 2009 Increase in 2009 guidance," http://en.sanofi-aventis.com, July 29, 2009.

Exhibit II

Sanofi-Aventis Five-Year Stock Chart



Source: www.bigcharts.com

Exhibit III

Sanofi-Aventis' Position in Various Segments: 2008

Segment	Sales (US$ billion)	Change (%)	Market share (%)	World-wide Rank
Prescription Drugs	33.57	2.9	4.8	4
Vaccines	4.18	9.6	21.8	1
OTC	2.07	5.3	2.1	6
Generics*	0.51	8.7	<1	23
Animal Health	3.87	7.9	14	3

*As of 2009, Generics division was ranked 11, with sales of US$1.47 billion.

Adapted from Sanofi-Aventis, Annual Review 2008.

Exhibit IV

Top Ten Pharmaceutical Companies by Global Sales

Rank	Company	2008 Sales (US$ billion)	% Change	R&D Spend
1	Pfizer	44.2	- 0.5	7.9
2	GlaxoSmithKline	43	11.2	5.2
3	Sanofi-Aventis	38.7	4.8	6.5
4	Novartis	36	10.7	7.2
5	AstraZeneca	31.6	10.1	5.1
6	Johnson & Johnson	24.6	- 1.2	5.1
7	Merck	23.6	- 2.4	4.8
8	Roche	21	3.4	7.2
9	Eli Lilly	19.3	9.6	3.8
10	Wyeth	19	2.3	3.4

*Data courtesy IMS Health.

Adapted from "The Pharm Exec 50," www.pharmexec.com, May 2009.

Exhibit V

Sanofi-Aventis' Income Statement

(In US$ million except per share data)	**2008**	**2007**	**2006**
Revenue	40,617.60	41,289.70	38,904.80
Cost of Goods Sold	10,341.50	11,143.80	10,009.50
Gross Profit	30,276.10	30,146.00	28,895.30
Gross Profit Margin	74.50%	73.00%	74.30%
SG&A Expense	10,103.30	11,118.70	10,580.80
Depreciation & Amortization	4,909.30	5,378.30	5,274.60
Operating Income	6,338.50	8,980.10	6,864.30
Operating Margin	15.60%	21.70%	17.60%
Nonoperating Income	1,144.50	0	0
Nonoperating Expenses	-327	--	--
(In US$ million except per share data)	**2008**	**2007**	**2006**
Income Before Taxes	5,866.30	8,495.80	6,264.00
Income Taxes	961.3	1,011.20	1,055.40
Net Income After Taxes	4,905.10	7,484.60	5,208.60
Continuing Operations	6,049.60	7,746.60	5,285.10
Discontinued Operations	--	--	--
Total Operations	6,049.60	7,746.60	5,285.10
Total Net Income	6,049.60	7,746.60	5,285.10
Net Profit Margin	14.90%	18.80%	13.60%
Diluted EPS from Total Net Income (US$)	2.07	2.86	1.95
Dividends per Share	1.37	1.28	0.99

*Sanofi-Aventis' financial year ends on December 31.

Source: www.hoover.com.

Exhibit VI

Sanofi-Aventis' Balance sheet

(In US$ million, unless mentioned otherwise)

Assets	**2008**	**2007**	**2006**
Current Assets			
Cash	5,956.50	2,518.40	1,521.20
Net Receivables	7,474.60	7,218.20	6,638.70
Inventories	5,060.10	5,488.70	4,827.30
Other Current Assets	3,219.30	3,251.40	3,055.50
Total Current Assets	21,710.50	18,476.80	16,042.70
Net Fixed Assets	9,811.50	9,623.30	8,204.70
Other Noncurrent Assets	69,943.60	77,750.20	78,345.30
Total Assets	101,465.70	105,850.20	102,592.70
Liabilities and Shareholder's Equity	**2008**	**2007**	**2006**
Current Liabilities			
Accounts Payable	3,933.90	4,046.30	3,971.90
Short-Term Debt	2,583.60	3,248.50	3,225.70
Other Current Liabilities	6,654.20	6,937.10	6,362.10
Total Current Liabilities	13,171.80	14,231.80	13,559.80
Long-Term Debt	5,881.80	5,496.10	5,935.50
Other Noncurrent Liabilities	19,173.40	20,561.00	22,937.30
Total Liabilities	38,227.10	40,288.80	42,432.60
Shareholder's Equity			
Preferred Stock Equity	--	--	--
Common Stock Equity	63,238.60	65,561.40	60,160.10
Total Equity	63,238.60	65,561.40	60,160.10
Shares Outstanding (million)	2,631.10	2,631.10	2,631.10

*Sanofi-Aventis' financial year ends on December 31.

Source: www.hoover.com.

Exhibit VII

Sanofi-Aventis' Financial Ratios

	Company	**Industry Median**	**Market Median**
Price/Sales Ratio	2	2.43	6.58
Price/Earnings Ratio	12.95	16.75	23.92
Price/Book Ratio	1.35	2.78	6.33
Price/Cash Flow Ratio	6.18	9.09	40.82

Source: www.hoover.com.

Exhibit VIII

Sanofi-Aventis' Top Products: 2008

Product (patent expiry)	**Sales (US$ billion)**	**Change (%)**
Pharmaceuticals		
Lovenox (2012)	4.00	10.6
Plavix (2011)	3.82	10.5
Lantus (2010)	3.58	27.7
Taxotere (2010)	2.97	13.2
Eloxatine (2013)	1.97	-5.7
Aprovel (2011)	1.75	14.2
Vaccines		
Polio/ Pertussis/ Hib vaccines	1.12	21.9
Flu vaccines	1.07	1.5
Meningitis/ Pneumonia vaccines	0.69	7.0
Adult booster vaccines	0.54	8.1
Travel and other Endemics Vaccines	0.45	-1.6

Adapted from Sanofi-Aventis, Annual Review 2008.

Exhibit IX

Sanofi-Aventis' R&D Portfolio*

	Phase I	Phase II	Phase III	Registration	Total
Metabolic Disorders	3	0	1	0	**4**
Cardiovascular	0	2	1	1	**4**
CNS	4	3	1	1	**9**
Oncology	4	0	6	0	**10**
Thrombosis	0	1	2	0	**3**
Internal Medicine	2	2	0	0	**4**
Vaccines	4	6	6	2	**18**
Total	**17**	**14**	**17**	**4**	**52**

*Data as of July 2009.

Adapted from "Sanofi-Aventis Q2 2009 Results," July 29, 2009.

Exhibit X

New Drug Development Timeline for the US

Discovery, Screening, Preclinical Research & Development	Average 6.5 years
FDA Investigational New Drug (IND) Review	30 days
Clinical Trials – **Phase I**	Average 1.5 years
Clinical Trials – **Phase II**	Average 2 years
Clinical Trials – **Phase III**	Average 3.5 years
FDA New Drug Application (NDA) Review	Average 2 years
New Drug Launch	
Post Marketing Surveillance	

Adapted from www.wtec.org/qsb/report/qsb-kim.pdf and www.fda.gov/fdac/graphics/newdrugspecial/drugchart.pdf.

Exhibit XI

Global Pharmaceutical Sales by Region: 2008

Market	2008 Sales (US$ billion)	Growth (%)	% of Global Sales
North America	311.8	1.4	40.3
Europe	247.5	5.8	32
Asia/Africa/Australia	90.8	15.3	11.8
Japan	76.6	2.1	9.9
Latin America	46.5	12.6	6
Total	**773.2**	**4.8**	**100**

Source: IMS Health Market Prognosis, March 2009.

Exhibit XII

Top Ten Pharmaceutical Companies after Mergers

Rank after Mergers	2007 Rank	Company	2008 Global Prescription Drug Sales (US$ billion)
1	1	Pfizer + Wyeth	63.2
2	2	GlaxoSmithKline	43
3	3	Sanofi-Aventis	38.7
4	4	Novartis + Alcon	38.6
5	7	Merck + Schering-Plough	37.8
6	5	AstraZeneca	31.6
7	8	Roche + Genentech	31.5
8	6	Johnson & Johnson	24.6
9	10	Eli Lilly	19.3
10	11	Bristol-Myers Squibb	17.7

*Data as of May 2009.

**Data courtesy IMS Health.

Adapted from "The Pharm Exec 50," www.pharmexec.com, May 2009.

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