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CORPORATE GOVERNANCE CONVERGENCE THROUGH CROSS-BORDER MERGERS: THE CASE OF AVENTIS [*]

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Abstract

In this paper we illustrate the role of cross-border mergers in the process of corporate governance convergence. We explore in detail the corporate governance provisions in Rhône-Poulenc, a French company, and Hoechst, a German firm, and the resulting structure after the two firms merged in 1999 to create Aventis, legally a French corporation. We show that, despite the nationality of the firm, the corporate governance structure of Aventis is a combination of the corporate governance systems of Hoechst and Rhône-Poulenc, where the newly merged firm adopted the most protective provisions of the two merging firms. In some cases this resulted in Aventis' borrowing from the corporate governance structure of Hoechst while in others Aventis replicated Rhône-Poulenc's structure. Most interesting is the situation where Aventis introduced improved provisions over both systems. The resulting corporate governance system in Aventis is significantly more protective than the default French legal system of investor protection.

I. Introduction

The extant corporate governance literature, pioneered by La Porta et al. (1997, 1998, 2000, and 2002), provides strong evidence that countries with a common law system protect investors better than countries with civil law. Better protection translates into more valuable firms (La Porta et al., 2002), and more developed financial markets (La Porta et al., 1997), at least since the end of the Second World War (Rajan and Zingales, 2002). The natural question is then how countries converge towards a better corporate governance system.

Gilson (2000) identifies three kinds of corporate governance convergence: functional, formal, and contractual convergence. Functional convergence occurs when institutions are flexible enough to respond to demands by market participants and no formal change in the rules is necessary. Formal convergence occurs when a change in the law forces the adoption of best practices. Finally, contractual convergence occurs when firms change their own corporate governance practices by committing to a better regime, possibly because the legal system lacks flexibility or laws cannot be changed.

The evidence on functional and formal convergence is mixed. An example of functional convergence is the creation of new exchanges in Europe, which give investors the protection that the law does not provide. [1] At the same time, Gilson (2000) also recognizes the limits of functional convergence by pointing out that these countries have started to make reforms at the formal level as well. In the matter of formal convergence, Johnson and Shleifer (1999) and Coffee (1999A) analyze the experience of Poland and the Czech Republic and show that the better protection provided by the Polish commercial code resulted in a more developed stock market. In this case, however, Pistor et al. (2001) conclude that, as in medicine, transplants are sometimes rejected and countries that have adopted U.S.--type corporate laws do not experience the expected corporate development.

[1] New Exchanges in Europe are the Investment Market of the London Stock Exchange, and the Euro.NM market. The latter includes: the French Nouveau Marché, the German Neuer Markt, the Belgian Euro.NM, the Euro.NM market in Amsterdam and the Nuovo Mercato in Milan.

Evaluating the impact of contractual convergence is equally complicated. Of this type of convergence the most noticeable example can be found in the case of the General Principles issued by CalPERs as a precondition for investing in foreign securities. Another example is foreign listing. Dual listing of securities in the U.S. is a means for foreign issuers to commit to better governance (Coffee, 1999B). However, the choice of a U.S. market is not necessarily a signal of good governance since some companies list in a foreign market only because they cannot go public in their own (Coffee, 1999B). Additionally, non--U.S. companies are exempt from several disclosure requirements, so they do not fully adopt the U.S. system of corporate governance.[2]

We suggest that cross--border mergers provide an alternative mechanism for the contractual transfer of corporate governance. In a cross--border merger, the target usually adopts the accounting standards, disclosure practices, and governance structures of the acquirer, and vice versa. For example, in the 1999 acquisition of Canadian Seagram by French Vivendi, the newly merged firm adopted the French accounting system. Similarly, Seita, a French Tobacco company, was acquired in October 1999 by Tabacalera, from Spain, to form a new entity called Altadis, which started to report under Spanish GAAP. DaimlerChrysler, the result of the merger of a German and a U.S. company, is domiciled in Germany and, as such, has adopted a two--tier board structure, as required by German law. In fact, Bris and Cabolis (2004) show that, according to international law, a 100 percent acquisition by a company from a foreign country results in a change of nationality for the target, and therefore a change in the law that protects investors.

Because the contractual arrangements between the merging parties can be cumbersome, it is useful to study in detail the corporate governance structures resulting from a particular merger. In this paper we describe and analyze the 1999 merger between the French firm Rhône-Poulenc and the German firm Hoechst that resulted in the creation of Aventis, a new entity domiciled in France. We consider this case to be representative of the recent trend in cross-border mergers and

[2] U.S. companies must file quarterly reports with the Securities and Exchange Commission that contain interim financial information. Non-U.S. companies are not required to file quarterly reports. Also, non-US companies and their officers, directors, and controlling shareholders are exempt from the insider trading rules that apply to U.S. companies.

acquisitions. Moreover, from the corporate governance standpoint, the case of Aventis is worth studying for several reasons:

(1) The two merging parties come from countries with similar institutional characteristics, economic development, and financial markets. Furthermore, both France and Germany are members of the European Union and the European Monetary System.

(2) The two merging parties come from countries with different legal origins, following the definition in La Porta et al. (1998).

(3) Both merging parties operated multinationally, belonged in the same industry (pharmaceuticals), and were listed in the New York Stock Exchange.

(4) It was a merger of "equals". Aventis was formed as an exchange of Rhône-Poulenc shares for Hoechst shares. After the exchange, former Hoechst shareholders owned the majority of Rhône-Poulenc shares. However Rhône-Poulenc owned 96 percent of Hoechst's shares, and Rhône-Poulenc changed its name to Aventis. Therefore, there was not a "formal" acquirer in the development of Aventis. This is important because it shaped the perception of the population in the two countries involved and it determined the legal effects of the merger. It is the latter that makes this case crucial in the study of corporate governance.

(5) Finally, because the two countries where the firms belonged in were politically integrated (see point 1), some aspects of the deal that are usually relevant in other cross-border mergers were not challenging here: combination of different markets, exchange rate considerations, and the domicile of the newly created firm. However, one of the major difficulties in the deal was the integration of the managerial cultures in the two firms. The case is a good example of a merger where the design of governance rules facilitated the integration of the two different managerial cultures.

Aventis is legally a French corporation. In this paper we show that, despite the nationality of Aventis, its corporate governance structure combines the corporate governance systems of Hoechst and Rhône-Poulenc. Indeed, Aventis borrowed some features of the Hoechst governance system that were more protective to investors than the respective provisions in the Rhône-Poulenc corporate governance code. Interestingly, we document that both companies operated under stricter corporate governance rules than the ones dictated by their respective national corporate laws. Aventis' corporate governance in turn was designed combining, not the national corporate laws in both countries—the system by default—but the stricter rules of the two companies.

In this paper, we specifically study two main characteristics of the Aventis code of corporate governance: the organization of the Board of Directors, and the structure and functioning of the shareholder meetings. With respect to the Board of Directors, we first describe how Aventis adopted a two-tiered German-style corporate governance structure comprised of a Supervisory Board of independent directors elected by shareholders and a Management Board of top executives selected by the Supervisory Board. The two-tier structure permits oversight of management by representatives of shareholders and employees. Consistent with the German model, the Management Board must prepare an annual management report on the company. At the annual shareholders' meeting, the Supervisory Board must comment on both, the management report and financial statements. However, Aventis borrowed from Rhône-Poulenc some other characteristics of the Board which favor shareholders relative to those in Hoechst: a smaller Board size, fewer employees on the Board, and the requirement that Board members must own at least one share in the company.

With respect to the functioning of the shareholder meetings, we find that both Rhône-Poulenc and Hoechst were very similar prior to the merger. Aventis, however, rather than combining the two structures, introduced new provisions that improved the governance structure of both merging companies. For instance, while Rhône-Poulenc and Hoechst require a deposit of shares within five and seven days prior to the meeting respectively, Aventis reduces such period to only three days.

Our paper focuses on the issue of shareholder protection. Aventis is a corporation formed under the laws of France. Because the merging parties were multinational entities, the levels of creditor protection and rule of law in Aventis are determined by several courts. Moreover, because both Rhône-Poulenc and Hoechst had ADRs trading in U.S. markets, matters relating to trading in Aventis ordinary shares or American Depository Shares are justiciable in the courts of the markets in which trading occurs (France, Germany, and the U.S.) Creditor matters and operational matters generally are justiciable by courts in the various jurisdictions in which the claims arise, or in which the defendant is located. With respect to director liability to shareholders or to the corporation, such matters are subject to adjudication by the courts of France, irrespective of the location of the shareholders. Therefore, determining the default legal system applicable to shareholder protection matters is a more direct and focused issue to be addressed.

In sum, our paper describes a case of corporate governance convergence through a cross-border merger where the resulting entity is more protective of shareholders than the two original firms, and where the new entity improves the default legal system prescribed in the national Corporate Code.

In Section II we describe the merging companies, Rhône-Poulenc and Hoechst. In Section III we depict the merger and outline the formation of Aventis. In Section IV we analyze the corporate governance characteristics of the two merging parties, relative to their corresponding corporate codes. In Section V we analyze in detail the corporate governance structure of Aventis, and in Section VI we conclude.

II. THE MERGING PARTIES

A. Hoechst AG

After a long history, modern Hoechst was reborn as an industrial chemical and dyes company in December 1951.[3] Over the next 40 years Hoechst developed into a worldwide chemical and life

[3] Hoechst AG Archive: http://www.archive.hoechst.com/english_3er/hoechst_ag/frameset.html

science company through organic growth and acquisitions.[4] In 1994, following a comprehensive strategic review, Hoechst reorganized as a holding company and shifted its focus exclusively to life sciences.[5] This organizational and strategic change allowed Hoechst to "promote entrepreneurial initiative and accountability as well as to facilitate the divestment of non-core activities."[6] Hoechst implemented the strategy through a series of acquisitions and joint ventures in the 1990s.

At the time of the merger, Hoechst had seven primary businesses. They included Hoechst Marion Roussel (HMR), AgrEvo, HR Vet, Dade Behring, Centeon, Celanese (with several smaller chemical companies), and Messer. HMR, the pharmaceutical group, developed drugs in a range of therapeutic areas.[7] AgrEvo, a joint venture with Schering, produced and sold crop protection agents and pest control products.[8] HR Vet researched, developed, produced, and sold products to "prevent and treat diseases suffered by farm animals and domestic pets."[9] The Dade Behring and Centeon joint ventures focused on blood plasma protein and diagnostics respectively.[10] Celanese and Messer produced chemicals, acetate products, and industrial gases.[11]

Hoechst AG had "subscribed capital of DM 2,939,768,450 (€ 1,503,079,741), which was divided into 587,953,690 shares."[12] In **Table 1** we report the pre-merger characteristics of Hoechst. Hoechst had 161,618 employees in 1996, with the majority in Europe (62 percent) and the Americas (26 percent).[13] The company spent € 3.99 billion on Research and Development in 1997.[14] **Table 2** contains key Hoechst personnel and their role in the merger.

[4] Hoechst AG Archive: http://www.archive.hoechst.com/english_3er/hoechst_ag/frameset.html
[5] Merger Report, p 10
[6] Merger Report, p 11
[7] Merger Report, p 8
[8] Merger Report, p 15
[9] Hoechst Annual Report 1997, p 4
[10] Merger Report, p 13
[11] SEC Form 14D-9
[12] Merger Report, p 7
[13] Hoechst 1996 Annual Report, p 18
[14] Hoechst 1997 Annual Report, p 1

B. Rhône-Poulenc

Rhône-Poulenc, a major chemical and industrial conglomerate, was nationalized by the French Government in 1982 and privatized in 1993. In the late 1990s, Rhône-Poulenc and Hoechst followed parallel paths, as Rhône-Poulenc also focused on "separating its life sciences businesses from its industrial chemicals businesses, forming joint ventures, and making important acquisitions and divestitures to strengthen these businesses."[15]

At the time of the merger, Rhône-Poulenc operated in the pharmaceutical, plant and animal health, and chemicals industry segments.[16] The pharmaceutical businesses included Rhône-Poulenc Rorer, Centeon, and Pasteur Merieux. Their products ranged from cardiology, oncology, and respiratory drugs to vaccines and plasma proteins.[17] The Rhône-Poulenc plant and animal health division included Rhône-Poulenc Agro, Rhône-Poulenc Animal Nutrition, and Merial. They helped prevent and cure animal diseases and enhance "the profitability and quality of animal production."[18] Rhône-Poulenc also had a 67 percent share in Rhodia, which conducted their specialty chemical business. [19]

Rhône-Poulenc had € 1,421,611,212.24 in subscribed capital, divided into 372,255,840 shares with a nominal value of € 3.82 each.[20] **Table 3** has sales by region and corporate assets and liabilities. The company had 75,000 employees worldwide in 1996; the majority lived in France (45 percent), elsewhere in Europe (17 percent) or in the U.S (18 percent).[21] Rhône-Poulenc invested 9 percent of 1996 net sales in R & D and had at least 15 products in their pharmaceutical pipeline.[22] These new developments complimented an already large portfolio of pharmaceutical, animal health, and chemicals products. **Table 4** includes key Rhône-Poulenc personnel and their role in the merger.

[15] Merger Report, p 27
[16] Merger Report, p 26
[17] Merger Report, p 31 - 36
[18] R-P 1996 Annual Report, p 22
[19] Merger Report, p 39
[20] Ibid, p 38 - 39
[21] R-P Annual Report 1996, p 38
[22] R-P Annual Report, 1996, p 18

C. Pharmaceutical and Life Sciences Market

The life sciences market grew rapidly in the 1990s, driven by "*growing populations, increasing life expectancies, and higher standards of living…and…by the advances of basic knowledge and applied technology in the areas of biotechnology and genetic engineering*."[23] Two trends characterized the industry, according to merger documents. First, "*new companies with innovative products and smaller companies with positions in niche markets are emerging at a rapid pace*." [24] Second, rising costs "*and faster product obsolescence made it increasingly difficult for existing companies to maintain a leading position…on the basis of their own resources*."[25] This led to intense consolidation and a string of mergers that included Upjohn and Pharmacia in 1995, Astra and Zeneca in 1999, and Sanofi and Synthelabo in 1999.[26] Still the pharmaceutical market was relatively fragmented, as "the leading 20 companies accounted for only 57 percent of prescription pharma sales."[27]

In the agricultural market, "changing *business dynamics spurred cooperation and consolidation*."[28] Unlike pharmaceutical, however, "*the global crop sciences market [was] already relatively concentrated with the top ten manufacturers accounting for over 80 percent" of total sales in 1997*." [29] Regional demand in the crop protection market was seasonal and influenced by global farm commodity prices.[30] Significant scale and scope helped companies thrive in the agricultural market.

III. THE MERGER: THE FORMATION OF AVENTIS

A. Preliminary Steps and the Exchange

The merger identified three preliminary steps: a share repurchase by Hoechst, a special dividend payment for Hoechst shareholders, and a divestiture of Celanese that included Hoechst specialty chemical assets and € 1 billion in consolidated net debt.[31] Hoechst held the open-market share

[23] SEC 14D-9, p 61
[24] Merger Report, p 37
[25] Merger Report, p 37
[26] Sec 14D-9, p 61
[27] Sec 14D-9, p 61
[28] Merger Report, p 45
[29] Merger Report, p 45
[30] Merger Report, p 16
[31] Merger Report, p P57 - 58

repurchase to reduce the number of shares outstanding in order to increase the earnings per share going forward.[32] The special dividend served as an added incentive for shareholders to tender and compensate Hoechst shareholders for tax credits that were to be issued after the completion of the exchange. [33] The Celanese divestiture further increased Aventis' focus on life sciences.[34] Though it was a condition of the exchange offer, the divestiture would have happened even if the exchange failed. In advance of the conversion to Aventis, the companies planned several changes to their businesses. All non-core life-sciences entities from the two companies were to be divested, "*in order to better represent the focus of Aventis on life sciences*."[35] Hoechst also decided to sell their HR vet business, since it did not fit into the other animal nutrition businesses of Aventis.

During the exchange, which took place in October 1999, Rhône-Poulenc acquired 90 percent of Hoechst.[36] Hoechst shareholders received one Rhône-Poulenc share for every 1.333 Hoechst shares they held. [37] Rhône-Poulenc also agreed to acquire the holdings of Gallus GmbH, a subsidiary of Kuwait Petroleum Company that held about 25 percent of Hoechst shares.[38] The exchange ratio was based on the ratio of the market valuations, each company's outstanding share numbers, and the number of desired Aventis shares.[39] The exchange was conditional on Rhône-Poulenc purchasing at least 90 percent of Hoechst.[40] However, either party could reduce the requirement to 75 percent according to a clause in the contract.[41] Following the successful completion of the exchange, Hoechst shareholders would receive the dividend and Celanese shares. Barring anti-trust problems, Rhône-Poulenc would be renamed Aventis and begin operations. **Table 5** outlines the merger history and exchange timeline.

[32] Merger Report, p P57
[33] Ibid, p P57
[34] Merger Report, p P64
[35] Merger Report, p P64
[36] SEC 14D-9 form, Pp 2. Hoechst still exists primarily because it is organized under German law, which does not have a procedure to eliminate minority shareholders involuntarily. From time to time, Aventis has purchased Hoechst shares when they have become available, and as of July 2004 owns approximately 98 percent of Hoechst's shares.
[37] Merger Report, p P2
[38] Merger Report, p P94
[39] SEC 14D-9, p P2
[40] SEC 14D-9, p P3
[41] SEC 14D-9, p P2

The one-step structure of the merger/exchange allowed stakeholders to "directly invest in Aventis rather than indirectly through Hoechst and Rhône-Poulenc as envisaged in the two-step process…"[42] The benefits of this structure also included the immediate unification of "the shareholder base of Hoechst and…Rhône-Poulenc," a faster realization of synergies for Aventis shareholders, and a shorter time schedule for the combination of the companies. [43] Overall, Aventis would own 90 percent of Hoechst, while the remaining 10 percent would be owned by minority shareholders.[44]

B. Strategic Rationale

The Hoechst and Rhône-Poulenc management cited the geographic fit between the companies, their complementary product mixes and shared entrepreneurial vision as factors that led to the merger.[45] However, their primary cited motivators were: "*the creation of one of the world's largest life sciences companies; the opportunity to maintain adequate financial, marketing, and technological strength in light of industry consolidation; and the potential for synergies*."[46] They hoped Aventis would achieve: global scale, enhanced innovation potential, strong product portfolio with high growth potential and a promising product pipeline, steady flow of product launches, expanded global sales and marketing forces, and improved cost position through better manufacturing administration and research and development.[47] The realization of these objectives would significantly increase returns for shareholders.

The merging parties described the deal as a "merger of equals" and tried to structure it appropriately. If 100 percent of the shareholders accepted, Hoechst shareholders would end up with a 53 percent stake in Aventis.[48] According to a "merger of equals" analysis by Lazard Freres, Hoechst would contribute 47 percent of sales, 51 percent of EBITA and 46 percent of net income.[49] They also split representation on the management and supervisory boards between the two companies.

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[42] Merger Report, p P52
[43] Merger Report, p P52 - 53
[44] SEC Form 14D-9, p P44
[45] SEC 14D-9, p P65 - 66
[46] SEC 14D-9, pP 66 & 68
[47] Merger Report, p 38 (check!)
[48] Ibid, p P2
[49] Form 14D-9, p P73 & p 74

C. Investor Benefits, Synergies, and Synergy Value

Both companies adopted a focus in the 1990s on "higher-margin and higher-growth life science activities."[50] The merger would validate this strategy and create "a pure life sciences entity with the necessary critical mass, the potential for product innovation, and a more effective sales and marketing force" to drive higher growth rates and better earnings per share.[51] The projected gains included annual gross margin improvements of between 0.5 and 1 percent and net margin improvements of 1.5 – 2.0 percent from 1999 and 2002.[52] The "earnings impact of synergies [achieved through] substantial operational efficiencies and potential of earnings growth" would drive these gains.[53]

The companies anticipated about € 1.2 billion per year in direct cost savings and synergies.[54] They anticipated € 700 million in savings from sales, general and administrative efficiencies and an additional € 500 million to be split between research and development and drug innovation and approval.[55] Each business segment would realize savings according to their filings. They predicted € 750 million in their pharmaceutical business, € 350 million in their crop science division, and € 100 million in corporate functions. [56] They hoped to apply these savings to "additional product discovery and development activities" that would strengthen Aventis and improve their portfolio.[57]

D. Aventis: Mission and Structure after the Merger

The mission of Aventis was to "*discover, develop and market innovative drugs for unmet medical needs in major therapeutic areas. Its key strategic goals would be to focus on key growth products in the areas of prescription drugs and vaccines and to obtain a leadership position in innovation in order to be able to ensure a steady launch of new innovative products*."[58] They would continue to divest their industrial businesses after the merger to help meet these goals.

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[50] Merger Report, p P50
[51] Merger Report, p P50 for quote; SEC form 14D-9, p P65
[52] SEC 14D-9 Form, p P65
[53] Merger Report, p P50
[54] Form 14D-9, p P64
[55] Ibid, p P64
[56] Form 14D-9, p P64
[57] Merger Report, p P44
[58] Merger Report, p 38

Aventis would work in two industry sectors: pharmaceuticals and agricultural products. The pharmaceutical division, managed by Aventis Pharmaceutical, would be "a German entity headquartered in Frankfurt." [59] It would contain five businesses: Aventis Pharma, Centeon, Aventis Vaccines, Pasteur-Merieux, and Dade Behring.[60] The crop sciences division would be a French entity headquartered in Lyon. It would contain: Aventis Crop Science, Aventis Animal Nutrition, and Merial.[61] According to pro-forma projections, the pharmaceutical sector would account for 73 percent of Aventis' 1998 net sales and the agricultural sector accounted for the remaining 27 percent.[62]

The overall corporate headquarters would be in Strasbourg, France, which gave Aventis a French incorporation. They considered themselves a European multinational, however, and planned to "explore economically feasible possibilities for its transformation into a European stock corporation with corporate domicile in France once such form becomes available."[63] As a French company, they "would benefit from reduced income tax rates through the French regime of worldwide tax consolidation (*'régime du benefice consolide'*)".[64] Former German Hoechst shareholders would also benefit from a French Tax Credit—*avoir fiscal*—which amounted to 50 percent of the net dividend.[65]

Aventis would have a corporate governance structure composed of a ten-member Supervisory Board and a four-member Management Board.[66] The role of the two boards is detailed in Section V. **Table 6** presents the proposed board members and executive committee at the time of the merger.

In 1999, Aventis had net sales of € 18.4 million with earnings of € .96 per share.[67] Their shareholders were located in Europe (approximately 40 percent), the U.S. (22 percent) and in

[59] Ibid, p P56
[60] SEC Form 14D-9, p P44
[61] Ibid, pP 44
[62] Form 14D-9, p P74
[63] Merger Report, p P53
[64] Merger Report, p P58
[65] Merger Report, p P58
[66] SEC Form 14D-9, p94
[67] Aventis Annual Report 1999, p 1

Kuwait (14 percent). [68] At the same year, Aventis spent € 3 million on research and development, with € 2.5 million going to the pharmaceutical group (roughly 17 percent of their net sales).[69] The company ended 1999 with 100,000 employees who were located in Europe (54 percent), North America (20 percent) and Asia (14 percent).[70] They were projected to have the sixth largest worldwide pharmaceutical sales force, with 18,000 sales representatives.[71] This was just one indication of their significant size and scope in life sciences.

IV. CORPORATE GOVERNANCE: RHÔNE POULENC, HOECHST, AND THE FRENCH AND GERMAN CORPORATE CODES.

A. Sources of Data and Overview of Results.

In this section we analyze the differences between the French Corporate Code and the German Corporate Code. These dictate the corporate governance systems by default of Rhône-Poulenc and Hoechst, respectively. Once we determine the intrinsic differences between the two systems, we characterize the improvements that the two companies had adopted with respect to their default system. In the final section of the paper, we compare the resulting corporate governance structure of Aventis relative to the two original companies.

In what follows, we have used the following data sources. The description of the legal systems is taken from the respective Corporate Codes[72]. We obtain firm-specific corporate governance provisions from the Hoechst and Rhône-Poulenc F-4 and 20-F documents filed with the SEC in the years 1997, 1998 and 1999, and the Aventis forms F-4 and 20-F for the years 2000 and 2001. We also obtain information from the companies' annual reports and by-laws, and from the "Report on the Business Combination of Hoechst and Rhône-Poulenc".[73]

La Porta et al. (1998) compare the legal systems of 49 countries and construct indices of shareholder rights, creditor rights, accounting standards, and law enforcement. In particular, they show that France has an index of antidirector rights of three (over a maximum of six), and

[68] Ibid, p 40
[69] Ibid, p 23
[70] Ibid, p 35
[71] SEC Form 14D-9, p 50
[72] The main source for the German code is *Modern German Corporation Law Volumes I & II*, by Enno W. Ercklentz, Jr.1979 Oceana Publications, Inc. Dobbs Ferry, New York. The main source for the French code is *French Company Law* by J. Le Gall, General Editor Robert R. Pennington LL.D.Oyez Publishing, London.
[73] Available at www.archive.hoechst.com

Germany has an index of one. The French law explicitly allows proxy voting by mail, and constraint directors' rights to new equity issues. Moreover, it requires a minimum of 10 percent to call an extraordinary shareholder meeting. In contrast, the German law does not contemplate the possibility of proxy voting by mail nor limits directors' rights to equity issuance. With respect to the call of an extraordinary shareholder meeting, it requires a minimum of five percent. With respect to shareholders rights, Germany is the least protective country among all countries of German legal origin.

Table 7 summarizes the index of antidirector rights. In addition to the country-specific index we construct a firm-specific index. Whenever the corporate charter is silent with respect to some component of the index, we assign to the firm the value of that component in the corresponding country. This is because the country´s corporate code is the firm´s default system. Otherwise we characterize the index component as described in the corporate charter. This methodology allows us to construct indices of antidirector rights for both Rhône-Poulenc and Hoechst.

Our results in **Table 7** summarize the main finding of this paper. Rhône-Poulenc, a French company, has an index of antidirector rights which mirrors the one established in the French Corporate Code. In particular, Rhône-Poulenc system of corporate governance provides to its shareholders the same rights to block decisions by the Board to issue new securities that the French Corporate Code requires. Because Rhône-Poulenc is silent with respect to Proxy by Mail and the percent of shares to call an extraordinary shareholder meeting, the French system is the default. In total, Rhône-Poulenc has an index of antidirector rights of three.

Hoechst is more stringent that the German Corporate Code. For instance, Hoechst charter has an explicit "one share-one vote" provision and allows proxy voting by mail (the one-share-one-vote indicator is not a component of the LLSV antidirector rights). These provisions, however, are not required by the German Corporate code. Interestingly, it also declares the absence of limits in the directors' discretion to issue new capital. Finally, because the charter is silent on the percent of shares required to call an extraordinary meeting, the German system becomes the default system (five percent), and Hoechst has a total index of antidirector rights of two. Therefore Hoechst provisions are more protective of shareholders than the prescriptions in the German Corporate law.

As the previous section established, Aventis is a French company. In the absence of any contract between the merging parties, Aventis should have, by default, an antidirector rights index of three. **Table 7** shows that this is the case. Aventis borrows from the Hoechst structure that proxy

by mail is allowed, even though the French law already incorporates such provision. Besides, Aventis' charter borrows the "one share-one vote" provision from Hoechst. In sum, Aventis' index of andirector rights is constructed upon the default French system (the percent of share capital required to call an extraordinary meeting and proxy by mail), some features of the Rhône-Poulenc system (preemptive rights to new issues), and some features of the Hoechst system (proxy voting by mail allowed). Including provisions in favor of one share-one vote, Aventis improves the protection given to minority shareholders, relative to the original companies.

Because the La Porta et al. (1998) index of antidirector rights is only a summary indicator, in what follows we describe in details the main differences between the French and German systems.

B. The French and German Systems

The main difference between the French Corporate code and the German Corporate code regards the structure of the Board of Directors. The German law only permits a two-tier structure while the French law allows a choice between a unitary structure and a two-tier structure. This option was introduced under the 1966 legislation reform and is based on the German Corporate Law. Most French companies, though, have the unitary structure.[74]

Unitary system

As stated above, the unitary system is allowed in France only, and it is comparable to the U.S. structure of the Board of Directors. In that sense, the unitary system has a Board of Directors or *Counseil d'adminitration* whose members are elected at the general meeting of shareholders. The law states that this Board is composed by at least three and no more than twelve members (24 in case of a merger), which can be either individuals or corporations. According to the law, members of the Board can be of any nationality unless the by-laws of the company provide something different. There are some requisites stated in the law to be eligible as member of the Board. Some of the most important requisites are:

- Lawyers, Notaries, and Accountants are not allowed in the board
- Each director has to hold a required number of shares when appointed
- Directors are appointed for a fixed period of time not to exceed 6 years if elected by the general meeting, or 3 years if nominated by the statutes
- Employees can be appointed directors if they comply with certain requirements

[74] Discussion of Individual Corporate Governance Codes Relevant to the European Union and Its Member States. Anex IV. Weil, Gotshal & Manges LLP in consultation with ESAD and ECGN. Page 64. Most of the information in the current section comes from this report.

- Companies with at least 50 employees must have a *comite d'enterprise.*

Traditionally, the Board of Directors poccesses broad power and the authority to act in the name of the company. The President of the Board of Directors is usually given extensive command to act on behalf of the company in the statutes of the SA. The President usually dominates the board and the management of the company. This dual power has been recently criticized and the two-tier system aims to solve this kind of problem.

The French law stated that at least two thirds of the board must be non-executives. This description, however, does not include executives of subsidiaries and affiliated companies who are not considered company-executives. [75]

Two-tier system

The two-tier structure was introduced in France under the 1966 legislation reform, which was based on the German Corporate law. The two-tier structure attempts to solve and separate some of the problems that arise in the unitary system where the President of the Board, traditionally controls both, the Board and management.

The principal duty of the Board of Supervisors is to supervise and monitor the management of the company but does not partake in the company's day-to-day business. Similarly to the Board of Directors in the French unitary system, the members of the Supervisory Board are elected at the general meeting of shareholders in France as well as in Germany. In Germany though, only natural persons can be appointed as members of the Board of Supervisors.

In France, members of the Board of Supervisors, should own at least 1 share of the company, just as members of the Board of Directors do. In Germany, however, such requirement does not exist. In the French case the Supervisory Board has a minimum of three members and a maximum of twelve (24 if merger) just as the Board of Directors does.

In Germany, the Co-determination Act—introduced after the World War II and expanded in the 1970s—states that companies with fewer than 2,000 employees should have 2/3 of the Supervisory Board elected by shareholders and 1/3 elected by the employees. In companies with more than 2,000 employees the ratio is 1/2 elected by the shareholders and 1/2 by the employees.[76] The general rule in Germany states that the Supervisory Board shall consist of three

[75] IBID. Ppg 65
[76] IBID. p 90

members. Exceptions allow the Board of Supervisors to have as many as 21 members. For companies with more than 20,000 employees the Board of Supervisors consists of 20 members equally representing the shareholders and the employees.

In France, the members of the Supervisory Board are appointed for a maximum term of 6 years if elected at the general meeting or 3 years if nominated by the statutes, just as the members of the Board of Directors above. In Germany, the maximum term is five years. In both countries, the members of the Supervisory Board appoint the Management Board and the President of the Management Board for a set term.

In the French case, the powers of the Management Board are stated as "the same as those of the Board of Directors". In sum, the Management Board in France, is responsible for ensuring the company's compliance with the law as well as preserving the financial integrity of the company's financial system. In both countries, it is the duty of the Management Board to elect the Chairman of the Management Board. The principal function of the Management Board on both countries consists of the direction of the company's interval affairs and the representation of the corporate entity in its dealings with the outside world. The German law goes further and states that in complying with its principal function, the Management Board should take into account not only the interests and wellbeing of the company and its shareholders, but also those of the employees and the larger surrounding community. The German law also provides some statutory duties of the Management Board which essentially consist in the periodic submission of reports to the Board of Supervisors, maintain the proper books and records, prepare and execute the resolutions of the meeting of shareholders, and effect all filings and recordings with the Commercial Register.

General Meetings are called by the Management Board in both countries but the Supervisory Board has the power to do so if necessary. In the German law, shareholders holding 5% or more of the stated capital may request the Management Board to call a meeting of shareholders. In France, however, shareholders owing at least 10% can do so. Notice of the call of the meeting must be given by publication in the respective Gazettes provided in each of the two laws. While the French Law requires a minimum quorum of a quarter of the shares outstanding to hold a meeting, the German law does not require such quorum. In both countries resolutions are passed by the simple majority rule unless otherwise specified in the articles. Both laws appoint the Chairman of the Supervisory Board and Chairman of the shareholders meetings.

V. CORPORATE GOVERNANCE OF AVENTIS.

The corporate governance structures at Rhone-Poulenc, Hoechst, and the resulting Aventis are quite different. Even though the format and sections of the by-laws of Aventis are more like those of Rhone-Poulenc, the corporate governance structure *per se* is more like that of Hoechst.

Supervisory Board/Board of Directors

On the one hand, Rhône-Poulenc was established in France, under the predominant unitary system. This system is comparable to the structure in place in the US. It has a Board of Directors or *Counseil d'Adminitration* whose members are elected at the general meeting of shareholders and a Chairman of the Board. Hoechst, on the other hand, was established in Germany under the two-tiered system which consists mainly of a Board of Supervisors and a Board of Management. Finally, Aventis, even though incorporated in France, was structured as Hoechst, with a two-tier system allowed in France since the legislation reform in 1966. The companies agreed that Aventis should have a two-tiered German-style corporate governance structure primarily because this model would be more familiar to the former Hoechst shareholders and the new Aventis management, which was headed by former Hoechst executives.[77]

The Board of Directors from Rhône-Poulenc had a minimum of twelve members and a maximum of eighteen, three of whom were employee representatives. The Supervisory Board from Hoechst had 20 members, half of whom were employee representatives. Aventis has a Supervisory Board of 16 members, four of whom are employee representatives. All non-employee representatives were/are elected at the general meeting of shareholders. According to this, Hoechst's employees have lower representation in the Supervisory Board, while Rhône-Poulenc's employee representation has, in the worst case, remained the same and, in the best case, increased by 8.3%.

All Hoechst Supervisory Board members had to be individuals and, even though the French law allows corporations to be members of the Board of Supervisors, Rhône-Poulenc's and Aventis' by-laws state that only natural persons are eligible.

While the members of the Board of Directors at Rhône-Poulenc had to hold at least 10 shares during their term in office, the members of the Supervisory Board at Hoechst did not have to hold any shares. Aventis combines these two different approaches and requires members of the

[77] This reason was pointed out to us by Aventis officials.

Supervisory Board to own at least one share in the Corporation, however, only one current member owns just one share.

The term in office of Rhône-Poulenc was six years while in Hoechst was five years. Aventis has maintained the Hoechst term. The members of the Board of Directors of Rhône-Poulenc could not be older than 65, while that restriction did not exist at the Hoechst's Supervisory Board. Aventis incorporated the requisite that no more than one-third of the members of the Supervisory Board in office at any time may be 75 years of age or more.

The Board of Directors of Rhône-Poulenc had to meet as often as corporate matters required. At Hoechst, meetings of the Supervisory Board had to be held at least every six weeks while at Aventis the term is one every quarter. Rhône-Poulenc proceedings were subject to quorum and majority , while at Hoechst, resolutions of the Supervisory Board were passed by simple majority. Aventis adopted Hoechst's structure. Members of the Board of Directors, as well as members of the Supervisory Board can be re-elected.

At Rhône-Poulenc members of the Board of Directors received an attendance fee while at Hoechst it was composed of a fixed part (DM 5000 for all members except the Chairman and the Vice-chairman who received [2x] and [1.5x] respectively), and a variable part. Aventis adopted the same fixed/variable structure as Hoechst.

At Hoechst and Aventis, the Supervisory Board appoints the members of the Management Board as well as the Chairman of the management Board for a fixed term. The Supervisory Board fixes the remuneration of the Management Board and can call general meetings, however, the Management Board holds this primarily obligation. Finally, the Supervisory Board shall review the financial statements and the report of the Management Board.

Table 8 shows that, in six out of 11 features of the Board of Directors that we investigate, Aventis borrows the alternative that is the most protective with respect to shareholders. Within the remaining five features, two of them are almost similar to the most protective system (ownership limit to become a member of the board, and frequency of meetings), while the other three are hard to classify (majority rules, age limit, and fees).

Management Board

Rhône-Poulenc did not have a Management Board. For Hoechst and Aventis, the Management Board bears the responsibility to manage the Corporation. The term for members of the

Management Board at Hoechst was five years and that term has been maintained in Aventis. The number of members of the Management Board was set by the Supervisory Board at Hoechst, but it is fixed at seven in the by-laws of Aventis. The Management Board is responsible to call shareholders' meetings in both cases (Hoechst and Aventis).

On the one hand, the German law stated that members of the Management Board at Hoechst could not be removed arbitrarily but only for a material cause. On the other hand, Aventis' by-laws state that such members can be revoked at any time by the Supervisory Board in accordance with the provisions of the French Commercial law.

While at Hoechst members of the Management Board did not have any restrictions on age, at Aventis they cannot serve if they are older than 65. This restriction seems to be carried over from the Rhône-Poulenc restriction imposed over the members of the Board of Directors.

Decisions of the Management Board are passed by the simple majority rule and, while at Hoechst the Chairman had casting vote in case of equality of votes, this power has been removed from the Aventis' Chairman. Additionally, at Hoechst there were no limitations regarding the decisions made by the Management Board, while at Aventis, the French law requires some decisions to be approved by the Supervisory Board, as well as any decision that is of major strategic importance.

In both cases, Hoechst and Aventis, members of the Management Board are entitled to attend Supervisory Board meetings when considered necessary.

Shareholders' Meetings

Shareholders' meetings at Rhône-Poulenc were called according to the French law, as well as those of Aventis. Hoechst's general meetings were called according to the German law.

Holders of Rhône-Poulenc shares had to deposit their shares at least five days prior to the general meeting to have the right to attend. Hoechst shareholders had to deposit their shares no later than the end of the 7th day before the meeting. Aventis has the same restrictions with Rhône-Poulenc but reduces the term to two days before the meeting.

At Rhône-Poulenc notice of the general meeting's had to be published in the French *Bulletin des Annonces Légales Obligatories* (BALO) and had to comply with all the information required in the French Law. The case of Hoechst was similar but complying with German Law. Aventis'

notices are more like those of Rhône-Poulenc but they introduce new technological ways of communicating meetings, such as, e-mail and any other telecommunication tools recently developed.

All three corporations allow proxies. Rhône-Poulenc allows also mail voting and Aventis introduces videoconference and telecommunication tools as means to vote. The general rule is that each share carries one vote but Rhône-Poulenc and Hoechst had special multiple voting rights depending on the year in which the shares were acquired. Aventis does not have any of multiple voting rights. All resolutions at general meetings are passed by the simple majority rule at Rhône-Poulenc, Hoechst and Aventis.

Table 9 summarizes the requirements and procedures of the shareholder meetings in Rhône-Poulenc, Hoechst, and Aventis. Although there are minor differences between Rhône-Poulenc and Hoechst prior to the merger, we can conclude that the resulting requirements at Aventis are even more stringent than in the founding companies.

VI. CONCLUSION

Extensive academic research has documented a strong association between good investor protection and measures of financial development. In the area of cross-border mergers, Bris and Cabolis (2004) present evidence that shareholders of a company that is acquired by a firm operating in a more protective corporate governance environment realize substantial gains. The use of large sample of cross-border mergers, necessarily abstracts from issues of private contracting between merging parties. Nevertheless, the design of the corporate governance framework that the new merged entity adopts is of crucial importance, and it is addressed in this paper.

We explore in detail the corporate governance provisions in Rhône-Poulenc, a French company, and Hoechst, a German firm, and the resulting structure after the two firms merged in 1999 to create Aventis, legally a French corporation. We show that, despite the nationality of the firm, the corporate governance structure of Aventis is a combination of the corporate governance systems of Hoechst and Rhône-Poulenc. Indeed Aventis adopted some of the features of the

Hoechst system that were more protective to investors than similar provisions in the Rhône-Poulenc corporate governance code.

We study two main characteristics of the Aventis code of corporate governance: the organization of the Board of Directors, and the structure and functioning of the shareholder meetings. With respect to the Board of Directors, we first describe how Aventis adopted a two-tiered German-style corporate governance structure comprised of a Supervisory Board and a Management Board of top executives selected by the Supervisory Board. However, Aventis borrowed from Rhône-Poulenc some other characteristics of the Board which favor shareholders relative to those in Hoechst.

With respect to the functioning of the shareholder meetings, we find that both Rhône-Poulenc and Hoechst were very similar prior to the merger. Aventis, however, rather than combining the two structures, introduced improved provisions that were not present in the merging companies.

In sum, our paper describes a case of corporate governance convergence through a cross-border merger where the resulting entity is more protective of shareholders than the two original firms, and where the new entity improves the default legal system prescribed in the national Corporate Code.

At the time this paper is being written, Aventis' shareholders have accepted a friendly offer to merge with Sanofi-Synthelabo, its French rival.[78] The French government has welcomed the deal between the country's two main pharmaceutical groups, which would lead to the creation of the world's third largest company behind U.S. giant Pfizer and Britain's GlaxoSmithKline.

A natural extension to our study is an analysis of the effects that the improved corporate governance of Aventis relative to the minimum legal requirements have played in the consummation of the deal. Bris and Cabolis (2004) show that shareholders of a company acquired by a more protective firm realize substantial gains . In their paper, however, the large sample of cross-border mergers that they study does now allow for incorporating the role of

[78] As of August 12, 2004, Sanofi-Synthelabo has secured almost 90 percent of the voting rights in Aventis. The deal was accepted by Aventis' Board in May 2004.

private contracting among the merging parties. This important issue in the study of corporate governance is clearly addressed in this paper.

Table 1A: Hoechst Pre-Merger Assets, Debt, and Sales (from 1997)[79]

Category	*Final Book Value, 1997 (in MM)*
Fixed Assets	
Intellectual Property	1466
Land, Buildings	5209
Goodwill	13734
Plant and Machinery	7201
Other Plants, Factory, Office Equipment	1666
Advanced payments for tangible fixed assets And construction in process	1785
Investments	
Shares in subsidiaries	759
Shares in Associated Companies	5727
Loans to Subsidiaries	14
Loans to companies in which a participating Interest is held	96
Investments in Securities	356
Other Investments	551
Deriviative Instruments – Currency	6605
Deriviative Instruments – Interest Rate	5968
Corporate Debt and Liabilities:	
Loans	2391
Liabilities due to bank	12617
Liabilities related to leasing contracts	137
Commercial paper	729
Other misc. liabilities (tax, payroll, interest, Bills payable, etc…)	5351
Other financial obligations (to third parties arising from capital projects started)	1590
Commitments not in balance sheet (guarantees, warranty agreements, notes payable, etc..)	611

Table 1B: Hoechst Sales by Region, 1995:

Region	**Percent of Sales/Assets/Operating Profit**
Europe	60 percent (sales); 46 percent (assets); 76 percent (profit)
Americas	31 percent (sales); 18 percent (assets); 47 percent (profit)
Asia, Africa, Australasia	9 percent (sales); 6 percent (assets); 7 percent (profit)

[79] Hoechst 1997 Annual Report, p. 78-85,

Table 2: Key Personnel from Hoechst[80]

Company	Name	Position	Role in Merger
Hoechst	Horst Waesche	HMR	Involved in early meetings
	Klaus-Jurgen Schmieder	CFO	Primary negotiator
	Dr. Gerhard Prante	CEO, AgroEvo	Involved in Early meetings
	Richard Markham.	Mgt. Board Member	Involved in early meetings
	Jurgen Dourmann Utz-Hellmuth Felcht	CEO Celanese, Herberts, Ticona	Primary negotiator
	Justus Mische	Trevira	
	Claudio Sonder	AgrEvo, Hoechst Roussel Vet Nutrinova	
	Ernst Schadow	*Director of Personnel* Messer Group, Hostalen	

[80] All Rhone Poulenc Information from their 1998 Annual Report, P77

Table 3A: Rhône-Poulenc Assets, Debt and Sales (from 1997)[81]

Category	*Net Book Value, 1998 (in MM)*
Assets	
Cash, Marketable Securities, short term Deposits`	11,018
Net Trade accounts and notes receivable	10,993
Net Inventories	14809
Prepaid Expenses	15,100
P, P & E	35,019
Intangible Assets	54,516
Investments	
Investments in Equity Method Investees	7963
Deposits and long term receivables	3000
Other investments, deferred charges, other Assets	7096
Corporate Debt and Liabilities:	
Current Liabilities	54,398
Long Term Debt (debentures and bank Borrowing)	25,369
Other long term liabilities (pension, deferred taxes, ect..)	17,333
Redeemable Partnership Interests	2608
Interests in net assets of subsidiaries	6743
Amoritizable preferred securities	2,227

Table 3B: Rhône-Poulenc Sales by Region, 1997[82]

Region	**Percent of Sales**
Europe (excluding CIS)	45.1 percent
CIS and Africa	3.5 percent
North and Central America	23.6 percent
South America	10 percent
Asia/Pacific	9.2 percent

[81] Rhone Poulenc 1998 Annual Report, from F13 – F15.
[82] Rhone-Poulenc 1998 Annual Report, p 1

Table 4: Key Personnel from Rhône-Poulenc[83]

Company	Name	Position	Role in Merger
Rhône-Poulenc	Jean-Rene Fortou	Chairman/CEO	Primary negotiator
	Igor Landau	Group President	
	Phillipe Desmarescaux	Group President, Scientific Affairs, Industry, and Safety	
	Jean Jacques Bertrand	Vice Chariman, Rhône-Poulenc Pharma; Chairman/CEO, Pasteur Merieux Connaught	Involved in early meetings
	Alain Godard	Chairman of Rhône-Poulenc Plant and Animal Health	Involved in early meetings
	Patrick Langlois	CFO	Primary Negotiator
	Rene Penisson	Supervises HR and Corporate Communications, supervises W. European and N. African zones	
	Martin Pinot	Executive committee member	
	Michel De Rosen	Chairman, Rhône-Poulenc Pharma and Rhône-Poulenc Rorer; supervises N. American zone	Involved in early meetings
	Jean Pierre Trouflet	Chairman of Rhodia; supervises CIA, Middle Eastern, E. European zones	Involved in early meetings
	Thierry Soursac	Executive VP, Rhône-Poulenc Rorer	Involved in early meetings

[83] Rhone Poulenc, 1998 Annual Report, p 77

Table 5: Merger History and Exchange Timeline[84]

Early 1998:

- The group president and CFO of Rhône-Poulenc met with Hoechst's CFO and board member Mr. Waesche to discuss a combination of their life sciences businesses.
- Exploratory meetings between the Chairman of Rhône-Poulenc Rorer, chairman of Pasteur Merieux Connaught, Executive VP of Rhône-Poulenc Rorer, and the Chairman of Hoechst Marion Roussel.

August 1998:

- Meetings between senior management of the companies' agriculture and pharmaceutical sectors. They included the Managing Director of Rhône-Poulenc Agro/Rhodia's VP for Strategic Projects, Chairman of Rhône-Poulenc Plant and Animal Health, CEO of AgroEvo, and the head of Hoechst Marion Roussel from Hoechst.
- The CFOs of Rhône-Poulenc and Hoechst meet to discuss the "legal, tax, and financial implications of a life sciences combination" and possible structures.[85]

September and October 1998:

- A series of meetings between the CEOs and the CFOs to review the earlier meetings and discuss a joint venture among their life sciences businesses.

November 1998:

- Each company began their preliminary due diligence for the merger
- Company CEOs and CFOs, plus others including Mr. Dormann and Mr. Fourtou, meet to discuss issues in Merger Agreement Step One

December and January 1998/1999:

- Companies sign Merger Agreement Step One. Announce their intention to "constitute a life sciences joint venture composed of their life sciences subsidiaries, followed by a full merger of Rhône-Poulenc and Hoechst within a few years."[86]
- Held a series of implementation meetings to prepare anti-trust filings, documentation, and final merger agreement. Also conducted due diligence of the others operations and finances.

February – May, 1999:

- Meetings between company CEOs and CFOs to complete due diligence and resolve all outstanding issues
- Announce their desire to expedite the merger plan. A working group from both companies discussed and decided on an accelerated merger plan and a structure for the business combination.
- Boards of both Rhône-Poulenc and Hoechst (their Management Board) approved the combination
- Companies agreed on the one-step merger plan and signed the business combination

[84] All Events Quoted from SEC Form 14d-9, p 20, 84, 85
[85] SEC Form 14D-9, p 100
[86] Ibid, p 100

Exchange Timeline Proposed in the 14D-9[87]:

October 26, 1999: Beginning of the offer period

November 26, 1999: Expiration of the initial offer period

November 29, 1999: Hoechst ADSs suspended from NYSE trading; Aventis ADSs begin trading on NYSE (on a 'when issued' basis)

November 29, 1999: Hoechst and Rhône-Poulenc announce results of exchange offer

December 9, 1999: Hoechst shareholders meeting to approve the special dividend

December 15, 1999: Rhône-Poulenc shareholders meeting to approve issuance of new shares

December 20, 1999: Delivery of Aventis shares and ADSs

December 20, 1999: Aventis ADSs start regular trading on NYSE

[87] Ibid, p 5

Table 6: Proposed Aventis Board, 1999[88]

Supervisory Board Members:

Name	Former Position	Former Company
Dr. Martin Fruhauf	Chairman, Supervisory Board; Member, management Board	Hoechst
Dr. Hubert Markl	Member, Supervisory Board	Hoechst
Dr. Gunter Metz	Member, Supervisory Board; former deputy chairman of Management Board	Hoechst
Seham A. Razzouqi	Member, Board of Directors of Kuwait Petroleum Corp.; Managing Director of Finance, Administration, and External Relations of Kuwait Petroleum	Hoechst
Dr. Hans-Jurgen Schinzier	Member, Supervisory Board	Hoechst
Marc Vienot	Member, Board of Directors	Rhône-Poulenc
Jean-Marc Bruel	Member, Board of Directors	Rhône-Poulenc
Serge Kampf	Member, Board of Directors	Rhône-Poulenc
Didier Pineau-Valencienne	Member, Board of Directors	Rhône-Poulenc
Michel Renault	Member, Board of Directors	Rhône-Poulenc

Management Board Members

Name	Former Position	Former Company
Jurgen Dormann (chairman)	Chairman, Board of Management	Hoechst
Horst Waesche	Member, Management Board	Hoechst
Jean-Rene Fortou (vice chairman)	Chairman and CEO	Rhône-Poulenc
Igor Landau	Group President ; member, Board of Directors	Rhône-Poulenc

[88] Form 14D-9, p. 95 – 99 and http://www.aventis.com/main/page.asp?pageid=6417223222 3845167816&lang=en

Executive Committee Members

Name	**Former Position/Company**	**Position within Aventis**
Richard Markham	Hoechst Marion Roussel, Chairman of Management Board	CEO of Aventis Pharma
Jurgen Dormann (chairman)	Hoechst, Chairman of Board of Management	Chairman of Management Board
Alain Godard	Rhône-Poulenc Plant and Animal Health, President	CEO of Aventis Agriculture
Klas Schmieder	Hoechst, CFO	Chief Administrative Officer
Rene Penisson	Rhône-Poulenc, Director of Human Resources	Chief Human Resources Officer
Patrick Langlois	Rhône-Poulenc, CFO	CFO

Table 7: Antidirector Rights Index

	Rhône-Poulenc		Hoechst		Aventis
	Corporate Law (France)	Company	Corporate Law (Germany)	Company	
One share - One vote	0	0	0	1 (Charter)	1 (Charter)
Proxy by Mail Allowed	1	1 (Law)	0	1 (Charter)	1 (Charter)
Shares not Blocked before meeting	0	0	0	0	0
Cumulative Voting / Proportional Representation	0	0	0	0	0
Oppressed Minority	0	0	0	0	0
Preemptive Rights to New Issues	1	1 (Charter)	0	0 (Charter)	1 (Charter)
% of Share Capital to Call extraordinary Shareholder Meeting	10%	10% (Law)	5%	5% (Law)	10% (Law)
Mandatory Dividend	0	0	0	0	0
Antidirector Rights	**3**	**3**	**1**	**2**	**3**

We construct an index of shareholder rights following La Porta et al. (1998). The indices for France and Germany are from La Porta et al. (1998). The indices corresponding to Rhône-Poulenc and Hoechst are obtained either from the corresponding company's charter, or from the default system in the corporate law when the corporate charter is silent. In parentheses, the table reports the source of each of the index components. The Aventis' index is from the company's charter, or the French corporate code when the charter is silent. The index of shareholder rights is the sum of six indicators 0/1 corresponding to the rows One share - One vote, Proxy by Mail Allowed, Shares not Blocked before meeting, Cumulative Voting / Proportional Representation, Oppressed Minority, Preemptive Rights to New Issues, Mandatory Dividend; and an indicator equal to one when the % of Share Capital to Call extraordinary Shareholder Meeting is less or equal than 10 percent. The index ranges from zero to six.

Table 8: Supervisory Board / Board of Directors

	Rhône-Poulenc	Hoechst	Most Protective	Aventis	Is Aventis the Most Protective System?
Unitary System / Two-tier System	Unitary	Two-Tier	Two-Tier	Two-Tier	✓
Members	12-18 members	20 members	12-18 members	16 members	✓
Employees on the Board	3 (16-25 percent)	10 (50 percent)	3 (16-25 percent)	4 (25 percent)	✓
Who can be a Member of the Board	Individuals and Corporations	Only Individuals	Only Individuals	Only Individuals	✓
Ownership limits to become a Member of the Board	At least 10 shares	No Limit	At least 10 Shares	At least 1 share	
Term	6 Years	5 Years	5 Years	5 Years	✓
Age limit	At most 65 years old	No restriction	At most 65 years old	At most 1/3 of members 75 years or older	
Frequency of Meetings	As often as necessary	At least once every 6 weeks	As often as necessary	Once Every Quarter	
Majority Rule	Majority Rule	Simple Majority	Simple Majority	Simple Majority	
Fees	Attendance Fee	Fixed Part + Variable Component	Fixed Part + Variable Component	Fixed Part + Variable Component	
Control over Management Board	No Management Board	Supervisory Board appoints the members of the Management Board as well as the Chairman of the management Board for a fixed term. The Supervisory Board fixes the remuneration of the Management Board and can call general meetings. The Supervisory Board shall review the financial statements and the report of the Management Board	As Hoechst	As Hoechst	✓

The Table shows the characteristics of the Board of Directors (Supervisory Board in Hoechst and Aventis), for the two merging companies and the resulting Aventis. We determine the most protective system between the two merging companies. The last column compares the most protective system with the resulting characteristic in Aventis. Source: Companies´By-laws, Annual Reports, and SEC filings.

Table 9: Shareholder Meetings

	Rhône-Poulenc	Hoechst	Most Protective	Aventis	Is Aventis the Most Protective System?
Deposit of Shares	Within 5 Days Before Meeting	Within 7 Days Before Meeting		Within 3 Days Before Meeting	
Notice of Meetings	Published in *BALO* (*Bulletin des Annonces Légales Obligatories*)	Published in Official Bulletin	Published in Official Bulletin	Published in *BALO* (*Bulletin des Annonces Légales Obligatories*)	✓
Proxy Voting	YES	YES	YES	YES. Videoconference and Telecommunication Tools are Allowed	✓
One-Share, One-Vote Rule	YES	YES. Multiple Voting Rights Depending on the Year of Acquisition of Shares	YES	YES	✓
Majority Rule	Simple Majority	Simple Majority	Simple Majority	Simple Majority	✓

The Table shows the Shareholder Meetings for the two merging companies and the resulting Aventis. We determine the most protective system between the two merging companies. The last column compares the most protective system with the resulting characteristic in Aventis. Source: Companies´By-laws, Annual Reports, and SEC filings.

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