Reorganization of Multinational Companies in the Western European Chemical Industry: Transformations in Industrial Management and Labor, 1960s to 1990s

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Multinationals experienced a great growth after the European postwar boom. Factors in the 1970s included increasing competition from the United States, the emerging European market, as well as ongoing economic crises and changes in the international economy. The articles analyzes three case studies of Western European chemical companies—Hoechst, Akzo, and Rhône-Poulenc—to show the consequences of structural changes on management and the workforce. This article argues that (1) domestic export-oriented supplement investments lost importance, and the domestic workforce had a harder time meeting qualification requirements; (2) organizational changes incorporated divisional competitive elements into a company's organization of work; and (3) managers had to learn to respect national path dependencies and specific skills of the local workforce. Furthermore, it illustrates the developments of the workforce in Europe and abroad and stresses the importance of nationality within the management of multinationals.

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Introduction

Europe's economic "Golden Age" occurred between 1948 and 1973, when a compromise between management and labor was facilitated.[1] High domestic demand and high exports characterized the European postwar boom; hence, managerial decisions about investments abroad were accepted by employees because these supplemental investments were minimal and did not endanger home production. Since the mid-1970s, however, economic crises, social changes, and political transformations fundamentally altered the environment for business strategies and industrial relations. Factors in the international economy included the collapse of stable exchange rates within the monetary system of Bretton Woods, the oil price crises in the 1970s, the gradual creation of a common European market between 1958 and 1970, and the increasing entry of U.S. multinationals into Europe since the 1960s. These all intensified international competition and increased the desire to invest abroad.[2] While tariff and trade barriers were two reasons behind the push for multi-nationalization, lower transaction costs and easier coordination of European production sites in the common market facilitated expansion within the European Economic Community (EEC).[3] Consequently, since the end of the 1960s, a wave of multinationals emerged in Western Europe—a turning point in the history of multinational corporations—and management had to reconsider the organization of work.[4] It had to decide whether domestic plants were to continue production for export or if research and development was more important for the home base. It also had to consider the extent foreign production facilities should supplement or replace domestic production, which of course had corresponding implications for employees. The economic crises of the 1970s did not affect all industries equally. While the majority of jobs were lost in large companies of the "old" industries (e.g., mining, iron and steel, shipbuilding, and textiles), other industries (e.g., chemical and pharmaceutical) faced a much more heterogeneous development. Additionally, internationalization, changes in demand patterns, and the rise of information technology caused deep structural changes between management and work in all industries.

1. Hobsbawm, *Age of Extremes*, 225–402.
2. Black, Pemberton, and Thane, *Reassessing 1970s Britain*; Doering-Manteuffel and Raphael, *Nach dem Boom*; Maier, "Crisis of Capitalism in the 1970s"; Raphael, "Reflections"; Rodgers, *Age of Fracture*; Sirinelli, *Vingt Déscisives*; Wirsching, "Turning Point in European History."
3. Dunning and Robson, *Multinationals and the European Community*, 8–9.
4. Chandler and Mazlish, "Introduction," 2.

The article will highlight these changes from several perspectives. First, European domestic export-oriented supplemental investments lost importance in the 1970s, whereas labor-intensive production grew abroad. As a result, the workforce increased abroad. At the same time, management reduced employment in the home market, and work became more knowledge-intensive. Second, relocation of production had enormous social and monetary consequences for employees related to uncertainty about closing or merging of workplaces and increased qualifications and skills requirements. Unskilled work lost importance. In addition, there was less certainty about in-company careers.[5] Third, in the late 1960s, organizational changes in and a seemingly more flexible divisional structure of European multinationals followed the massive expansion from abroad, as Gareth P. Dyas and Heinz T. Thanheiser emphasized in their outstanding study on French and German companies.[6] The increasing volatility of markets and currencies made these changes unavoidable, so divisions acted more and more responsibly regarding profits, and management incorporated competitive elements into a company's organization of work. Finally, opening factories abroad and other structural changes within multinationals was the managers' responsibility. They had to learn to respect national path dependencies as well as the skills of the local workforce.

I argue that management is central to the study of work in a broader sense, yet the study of work has to incorporate both management and labor, especially in a multicountry comparison in which categories ranging from management and staff to workers differ significantly.[7] Managers had to weigh different organizational forms. By 1970 they often replaced the functional organization of large Western European corporations with a multidivisional or matrix form of organization; many times, this was under the influence of U.S. consulting firms. Starting in the mid-1960s, diversification and divisional structure were celebrated as successful concepts, but this came under pressure with the success of Japanese competitors in the 1980s. This led to a strategy of core competencies matched to the conditions of the capital market. On the one hand, managers were subject to the constraints of technological innovations and market developments; on the other hand, they were the driving forces behind these processes of change. Cross-border cultural differences thus played a

5. Magnusson, "History of Work," 77–78.

6. Dyas and Thanheiser, *Emerging European Enterprise*; Hilger, *Amerikanisierung*, 212–224. For the European Harvard studies analyzing diversification and divisionalization from 1950 to 1970, see Whittington and Mayer, *European Corporation*, 12–14.

7. Lane, *Management and Labour in Europe*, 40–48.

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major role in organizing multinational companies.[8] In this context, the article considers Bartlett and Goshal's idea of a "transnational solution," according to which the head office becomes less a center of control.[9]

This article is a comparative study that offers historical explanations for the diverse responses of multinational companies to similar challenges since the 1970s. The economic systems of the companies were deeply altered with the end of the European postwar boom; and up to the 1990s, these enterprises tried to take part in the new globalization. This article aims to connect the analyses of strategic decisions, business organization, management, labor, and internationalization by using three companies as case studies. This multicountry, multifirm study cannot consider every detail; rather, it offers the opportunity to analyze multinational companies from different perspectives and to compare their development. As a consequence, the scope of analysis varies between companies and perspectives, not least because of the disparate availability of sources. This comparative approach presents various elements of multinational companies that are interconnected but have rarely been examined together, as suggested by the discussion about varieties of capitalism and the emergence of a European enterprise.[10]

In the case of Western European chemical companies, the formation of the EEC and expectations of the futures market played a much greater role than labor costs. Because chemical companies became multinational earlier than other industries, they are particularly well suited for analyzing these processes and understanding the international division of labor during the period of globalization studied here. Three large chemical companies—Hoechst, Akzo, and Rhône-Poulenc—are the focus of this article. Founded in 1863 near Frankfurt am Main, Germany, the Hoechst corporation (until 1974, known as Farbwerke Hoechst AG vormals Meister Lucius & Brüning) was one of the three largest German chemical enterprises after World

8. Dunning and Lundan, *Multinational Enterprises*, 238–249; Jones, *Multinationals and Global Capitalism*, 176–183; Kipping, "U.S. Influence"; Plumpe, "Kapitalismus," 13–17.

9. Bartlett and Goshal, *Managing across Borders*. The problem in organizing workers' interests and trade unions within multinationals, and the regulation of multinationals by the state, are closely related to the organization of work, but they are not the subject of this article. For this topic, see Fetzer, *Beyond Convergence*; Fetzer, "International Challenges"; Fetzer, *Paradoxes of Internationalisation*; Oliveiro, "Multinational Enterprises"; Petrini, "Demanding Democracy"; Schröter, "European Integration by the German Model"; Warlouzet, *Governing Europe*.

10. Dyas and Thanheiser, *Emerging European Enterprise*; Schröter, *European Enterprise*.

War II. The business policy after 1945 focused on the recapture of lost foreign markets through export as well as consolidation of the company in Germany. Following a series of acquisitions, Hoechst became the world's largest pharmaceutical company in the early 1980s, and had a diversified range of products, including plastics, fibers, paints and coatings, films, cosmetics, and plant manufacturing.[11]

Akzo, the largest Western European chemical fiber producer, was formed in 1969 from (1) Algemeene Kunstzijde Unie N.V., in the Netherlands; (2) from Vereinigte Glanzstoff-Fabriken AG, in Wuppertal, Germany; and (3) from Koninklijke Zout-Organon N.V., also in the Netherlands.[12]

The French company Rhône-Poulenc was a diversified, multinational chemical company created in a 1928 merger of Société Chimique des Usines du Rhône (SCUR) and Établissements Poulenc Frères (EPF). During World War I, EPF acquired shares of the British pharmaceutical company May & Baker. In contrast to EPF's acquisition strategy, SCUR built up its own subsidiaries for the production of chemicals and synthetic fibers, especially in Brazil (Companhia Quimica Rhodia Brasileira, in 1919) and Germany (Deutsche Acetatkunstseiden AG Rhodiaseta, in 1927). After a wave of mergers in the 1960s, Rhône-Poulenc was the leading multinational chemical company in France.[13]

This study uses a mix of primary sources from public and corporate archives as well as published sources.[14] However, both the longevity of a company and access to its corporate files varied. Even though published annual reports are aimed at a specific audience (i.e., shareholders), they can compensate for the lack of other sources, and often contain corporate data and social statistics that allow an analysis of long-term developments.[15] The article first presents the historical paths of internationalization in each case study since the 1960s, and highlights the enormous range of expansion and restructuring in the 1970s. It then analyzes these case studies and examines the organization of management, the workforce structure, and the staffing policies in the home countries. The final section offers conclusions.

11. Bäumler, *Farben, Formeln, Forscher*; Schreier and Wex, *Hoechst Aktiengesellschaft*.

12. Vaubel, *Glanzstoff, Enka, Aku, Akzo*; Wubs, "Miracle in Post-War Germany."

13. Cayez, *Rhône-Poulenc*, especially 24–28, 68–70, 91–95, 101–112.

14. The study is part of a larger project on the spread and restructuring of European multinational companies from the 1960s to the 1990s, which is based on much archival material that could not be used here for reasons of space.

15. Hagemann-Wilholt, *Unternehmen*.

Multinational Companies of the European Chemical Industry: Expansion and Restructuring Since the 1960s

The 1970s were a global turning point in the history of multinational companies, marked by a worldwide increase in foreign direct investment (FDI).[16] This development was not limited to the chemical industry, but its companies chose this strategy particularly early and particularly strongly. Through the economic growth that resulted from the war in Korea, the German chemical industry returned to the world market and was responsible for about 15 percent of all German exports.[17] After the loss of its foreign assets and patents, Bayer, for example, successfully repositioned itself on the international market for the first time since the early 1950s.[18] Additionally, the growing integration of European markets played a crucial role in Bayer opening a plant in Antwerp in the mid-1960s. With the EEC taking on the character of a large high-consuming internal market, local conditions gained importance: the labor market, the water supply, and convenient location to the port militated for Antwerp.[19] Even an agreement between the German Bayer and French Rhône-Poulenc (1957–1958) on the exchange of information, which was renewed in the mid-1960s, and the establishment of a working group on the common European market by the board of Vereinigte Glanzstoff-Fabriken AG (VGF) must be seen in the context of European integration.[20]

However, with the ending of patents for polyester fibers in 1966, new foreign chemical companies, such as Imperial Chemical Industries (ICI), DuPont, and Kodak, entered the West German synthetic fiber market, which had been reserved for the trademarks Trevira (Hoechst) and Diolen (VGF) in the prior twelve years.[21] In the case of

16. Chandler and Mazlish, "Introduction," especially 2; Jones, "Multinationals from the 1930s to the 1980s," especially 88; Pollard, *International Economy*, 27–31.

17. Abelshauser, *Wirtschaftsgeschichte*, 428; Buchheim, *Wiedereingliederung*.

18. Kleedehn, *Internationalisierung*, 132; Schröter, "German Question."

19. 009/H-1, Zur Entwicklung der ausländischen Beteiligungsgesellschaften der Farbenfabriken Bayer AG (July 31,1961), Wolfgang Manekeller: Bayer im europäischsten Land Europas (Sonderdruck aus "Unser Werk," Heft 4/1966), Records of Farbenfabriken Bayer AG, Corporate History & Archives, Leverkusen, Germany (hereafter BAL).

20. Vereinbarung zwischen Bayer und Rhône-Poulenc (December 12, 1965), 324/5, BAL; 195-K17-0-3 Notiz für Vits (April 1, 1958), Einige Überlegungen zur künftigen Entwicklung der Chemiefaser-Industrie im gemeinsamen Markt (December 31, 1958), Stiftung Rheinisch-Westfälisches Wirtschaftsarchiv (hereafter RWWA); 195-K17-0-4 Notiz für Vaubel (October 30, 1957), Forstmann an Ritzauer (June 16, 1957), RWWA.

21. "Gemeinsame Tochter Hoechst-Hercules" *Frankfurter Allgemeine Zeitung*, May 18, 1966, 20; "Neue Auslandsengagements der Farbwerke Hoechst" *Frankfurter Allgemeine Zeitung*, September 24, 1965, 31.

the Dutch Algemeene Kunstzijde Unie N.V. (AKU) and the German VGF, increasing competition and decreasing importance of national borders in Western Europe made the previous division of labor along national borders obsolete, resulting in these companies merging in 1969. An internal VGF's study before the merger concluded that the reduction of customs duties within the EEC and the cessation of the polyester patents would lead to new competition between AKU and VGF. This internal study found that, in addition to ICI, DuPont, and Monsanto entering continental Europe, the encroachment of large chemical companies such as Bayer, Hoechst, Rhône-Poulenc, and Montedison into the production of synthetic fibers was another reason for a closer relationship.[22] Thus, the common European market was an enormous challenge for all companies, but due to national and company-specific path dependencies, Europeanization did not lead to complete convergence. Codetermination, for example, was another economic institution that was shaped very differently nationally. There were attempts to improve worker participation on the European level since the 1960s, but it was not until 1994 that the European Commission set up the European Works Council.[23]

Along with Europeanization, there was a particular process that influenced the development of multinationals in Europe after 1945: Americanization.[24] It was a cross-cultural learning and exchange process of management and production practices between Western Europe and the United States. When U.S. multinationals increasingly expanded to Europe in the 1960s, the slogan of the "American challenge" was born. American FDI to Western Europe increased: in 1966 the EEC entered the top investments for U.S. chemical companies. Additionally, U.S. consulting firms spread the idea of multidivisional company structures all over Europe.[25] As will be illustrated with the three case studies, German and French companies had to accept the presence of these new competitors in the domestic market while also capturing new foreign markets and often adapting similar organizational structures as their competitors.

22. 195-A2-53, Gedanken zur möglichen Zusammenarbeit von AKU und Glanzstoff (June 16, 1967), RWWA.

23. Lecher, *Konstituierung*; Jones and Schröter, "Continental European Multinationals"; Schröter, "German Question."

24. Berghahn, *Americanisation of West German Industry*; Hilger, *Amerikanisierung*; Kleinschmidt, *Blick*; Schröter, *Americanization of the European Economy*.

25. Loibl, *US-Direktinvestitionen*, 21; Marx, "Vermarktlichung." FDI in the West German chemical industry developed quickly by 1970: in 1968, it was DM 1,877 million; in 1974 it was DM 3,320 million. Krägenau, *Internationale Direktinvestitionen*, 140–141. Concerning the export of chemical products, the United States moved ahead of West Germany in the 1970s; thus, the portion of chemical imports to Germany increased from 21 percent in 1970 to 35 percent in 1982. Streck, *Industrie*, 303, 312.

Hoechst: Recapturing the Global Market

In the first case study, the export quota and FDI show the increasing degree of internationalization of the German chemical industry since the 1960s. Foreign sales increased continuously and the export quota exceeded 40 percent in the mid-1980s, as analysis of various *Statistisches Jahrbuch für die Bundesrepublik Deutschland* (Statistical Yearbook of Germany) shows. This value was about 10 percent higher than the general export ratio of the German manufacturing sector.[26] The German FDI boom in the 1960s had three directions: Western Europe, North America, and South America.[27] Until the second half of the 1970s, there was a clear preponderance of German FDI into the EEC countries, and then the relationship began to shift significantly in favor of the United States. Here, FDI of the German chemical industry to the United States exceeded FDI in the EEC in 1977 by 4 percent (30 percent and 34 percent, respectively).[28] In geographical terms, the Latin American countries of Brazil, Argentina, and Mexico were the "winners" of West German FDI in the 1960s, while the European and the U.S. markets became the two central investment objectives in the following decade.[29]

In 1967 foreign sales of Hoechst AG exceeded those of domestic sales for the first time via extreme export of domestic production; in 1980, however, foreign production accounted for half of foreign sales, thus reducing the importance of exports. Labor-intensive investments became less attractive at home because of increasing labor costs.[30] By the mid-1960s, the distribution of Hoechst's foreign investment shows that Western Europe (that is, industrialized countries such as Great Britain, France, and the Netherlands) and the Americas represented the lion's share with approximately 85 percent of FDI. The expectation that multinationals would shift their production into countries of the so-called Third World was not necessarily fulfilled. Rather, there was increased competition among countries with similar

26. Statistical Yearbook of Germany 1953–2001 (Chapter: Produzierendes Gewerbe/Industrie/Umsatz der Betriebe in der Industrie). See Marx, "Governance and the Internationalisation of Business."

27. Schreyger, *Direktinvestitionen*, 319–320; Wengenroth, "German Chemical Industry," 152–155.

28. In contrast, the percentage of exports of the German chemical industry into the United States was below the percentage of the manufacturing sector in general (6 percent and 8 percent, respectively). Müller, "Konzerne," 216, 222.

29. Schröter, "Aussenwirtschaft," 98–100; Schröter, "Continuity and Change," 40–42.

30. Annual Reports Hoechst 1968, 12; 1980, 1, Wirtschaftsarchiv der Universität zu Köln (hereafter WAUK), Cologne, Germany; James, *Rambouillet*, 231–236; Richter, "BASF," 458–464; Schröter, "Aussenwirtschaft," 92.

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levels of development. Low wages were not the only reason for FDI; sales potential and market size, as well as the volume of government regulations, had greater impacts on the mobility of investments. This presented different mobility constellations: one group of countries for standard industrial products without complex technological needs, and a second group of countries with high wages for special products and standard industrial products based on complex, long-term competence. There was hardly any competition *between* these two leagues, but there was great internal competition *within* each league.[31] Even in 1991, Hoechst sold 20 percent of its products in North America and 50 percent in the European Union.[32]

After the postwar boom, Hoechst strengthened its position in the European market by acquiring the British paint manufacturer Berger, Jensen & Nicholson in 1970, and four years later it acquired the majority of the French Roussel Uclaf. As a result, Hoechst became the world's largest pharmaceutical manufacturer.[33] In addition to its spread in the European market, Hoechst also set its sights on the United States. Hoechst drew on its experience abroad before World War II and had founded an U.S. subsidiary—Intercontinental Chemical Corporation (ICC)—in the early 1950s, which became American Hoechst Corporation in 1961.[34] The German company increased its U.S. business in the following decades by acquiring the U.S. firm Celanese for nearly DM 6 billion in 1987.[35] With regard to employees and turnover, Hoechst remained focused on the European and North American regions.

In comparison to Hoechst's domestic market, its international business developed much more dynamically. Between 1967 and 1994, the turnover growth of Hoechst-World was significantly stronger abroad than at home; however, the German parent company Hoechst AG was still the center of the World Group at that time with a profit of DM

31. Kädtler, *Umbruch*, 312–317.

32. Annual Report Hoechst 1992, 29, WAUK.

33. Bartmann, *Pharmabereiche*; Chandler, *Shaping the Industrial Century*, 122–123; Schreier and Wex, *Hoechst Aktiengesellschaft*, 291, 372; Teltschik, *Grosschemie*, 223.

34. Hoe. Ausl. 139, Länderblätter M-Z: USA, Records of Farbwerke Hoechst AG, vorm. Meister Lucius & Brüning/Hoechst AG, Business Archives of Hoechst (hereafter, BAH), Friedrichsdorf/Frankfurt am Main, Germany; Vlaanderen, *America and Hoechst*.

35. USA/AHC/Gesch.-Berichte, 1971–1986, BAH; "Fasern und neue Werkstoffe waren der Anreiz" *Frankfurter Allgemeine Zeitung*, November 5, 1986, 16. In 1980 Hoechst opened a plastic manufacturing plant in Bayport, Texas (United States), with an investment of DM 326 million, which represented the largest foreign investment in the history of the company. "Hoechst will den amerikanischen Kunststoffmarkt erobern" *Frankfurter Allgemeine Zeitung*, October 16, 1980, 15.

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2.2 billion in 1989.[36] The focus on Western Europe—especially Germany—was not a coincidence but a decision by management, and that becomes obvious looking at the percentage and location the Hoechst Group spent on research and development (R&D). Hoechst decided to split its R&D efforts; in the early 1990s it increased its research expenses in the United States, even though Europe remained its research center (about 60 percent of spending in Germany, 20 percent for the rest of Europe, and 15 percent in the United States). For reasons of proximity to market, flexible exchange rates and partly because of labor costs, Hoechst management considered it necessary to produce in different countries, although Frankfurt remained its strategic and research center. From this perspective, it can be seen that Hoechst Group, a multinational chemical enterprise, remained a very German company until the 1990s, even as it had operational research centers in fifteen countries.[37]

Akzo: Formation of a Dutch–German Multinational

This section details the second case study. In February 1966 the board of the German-based VGF proposed deeper cooperation with the Dutch-based AKU, which was in possession of VGF's shares, due to international competition. Even before the first postwar recession in West Germany in 1966–1967, AKU's CEO, John Meynen, required collaboration with a third partner to be less vulnerable to fluctuations in the chemical fiber market. Since there were no international laws to legally bind European cross-border mergers, it occurred via national law. First, AKU was transformed into a holding company, and its production plants became subordinated to the newly established Enka N.V. In a second step, the AKU managers closely interlinked the two operating companies, Enka and VGF, by combining its directors. After that, management successfully created cooperation with the Dutch chemical company Koninklijke Zout-Organon N.V. (KZO). All companies promised greater ability to compete on international markets, better access to capital markets, and increased diversification of risk. In the second half of 1969, AKU and KZO merged to form the Akzo Group, with the aim of better compete with the world's top chemical companies.[38] However, the 1970s slump in the chemical fiber business hit the new multinational Akzo, which was now the largest producer of synthetic fibers in Western Europe. The product

36. Annual Reports Hoechst 1983, 63; 1989, 35–39; 1994, 4–5, WAUK.
37. Annual Report Hoechst 1992, 9, WAUK.
38. Vaubel, *Glanzstoff, Enka, Aku, Akzo*, 132–159.

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range had been greatly enlarged through the initial cooperation with KZO, but the share of fibers, which was 85 percent at AKU–VGF in 1968, still represented 52 percent of the turnover after the merger in 1969.[39] Western European production capacities of synthetic fibers had steadily fallen since 1975, but the industry generated even more losses. Subsequently, the Akzo Group reduced its production of textiles, carpet yarns, and polyester staple fibers and instead bought several companies with chemical and pharmaceutical specialty products. It also invested in catalysts, automotive coatings, engineering plastics, and membranes in the 1980s. Thus, the multinational Akzo Group pursued a simultaneous strategy of vast divestments and investments and stopping businesses with less-than-average profitability. In 1985, for example, the expenses for acquisitions of 400 million guilders (mainly for Litton Bionetics and the diagnostic business of Warner Lambert) were confronted with divestments of 800 million guilders (mainly American Enka). From 1984 onward, fibers accounted for only about 30 percent of business.[40]

The merger of these Dutch and German companies could not overcome the crises that occurred throughout the 1970s because the collapse of the chemical fiber business had a European dimension. However, during the 1980s, the Akzo Group regained its standing through restructuring and a stronger global economy. In 1989 its operations in North America topped its German operations for the first time. Despite this shift, the Akzo Group still produced and sold the majority of its products in the EEC in the early 1990s, hence it was—like Hoechst—a mostly European multinational.[41]

Rhône-Poulenc: Expansion and Specialization

The third case study is discussed here. In the 1950s, Rhodiaceta, the synthetic fibers subsidiary in the Rhône-Poulenc Group, became more important to the group. Rhodiaceta had remarkable foreign

39. Ibid., 174; Annual Report Akzo 1969, 9, WAUK. The remaining 48 percent were divided among salt, chemical products, and coatings (20 percent); pharmaceutical products (6 percent), plastics and films (10 percent); and consumer products (12 percent). From 1969 to 1973, nearly half of the profits were made by fibers. Annual Report Akzo 1973, 5, WAUK.

40. Annual Reports Akzo 1980, 4–5; 1984, 2–8; 1985, 1–7, WAUK. Although sales in fibers and chemical products were equal in 1985 (28 percent of total sales), the chemical fiber sector contributed only 19 percent to the operating profit. This development was accompanied by the closure of several German locations, such as the former Spinnfaser-AG in Kassel in 1982. Haase, "Lehrstück," 10, 41; Annual Reports Akzo 1985, 15; 1990, 19; 1991, 66, WAUK.

41. "Betriebsergebnis nach Regionen," Annual Reports Akzo 1980–1990; 1991, 66, WAUK.

plants in Europe and the Americas operating under the name Rhodia, and as a result of the boom in the synthetic fiber market, it had significantly higher growth rates than Rhône-Poulenc Group's chemical divisions. In 1961 managers across the chemical industry and politicians restructured the industry in France, leading Pechiney, Rhône-Poulenc, and Celtex to merge their synthetic fiber production. Celtex, which held 50 percent of Rhodiaceta shares, transferred to Rhône-Poulenc its interests in the companies Rhodiaceta, Rhovyl, Crylor, and Cipso. With this transfer, Rhône-Poulenc became a European producer of man-made fibers that could easily compete with the British Courtaulds and other European companies. Again, increasing competition in the emerging European market was the reason for the mergers of these French companies. The production of synthetic fibers was very profitable for Rhône-Poulenc in the 1950s and 1960s, but the company ran into considerable trouble in the 1970s.[42]

In 1968–1969, Rhône-Poulenc acquired the chemical business of Pechiney-Saint-Gobain and its French competitor Progil, making Rhône-Poulenc the leading multinational chemical company in France. Similar to its West German competitors, Rhône-Poulenc now had a broad product structure that included chemicals, pharmaceuticals, textiles, and films. While more than 50 percent of Rhône-Poulenc's sales in 1969 were in France, this proportion dropped to 44 percent in 1980 in favor of exports and sales of foreign branches. At first, the domestic plants benefited from increased exports, and France remained the central production site in the 1970s, with about 70 percent of all industrial investments made at home. Nevertheless, foreign subsidiaries of the Rhône-Poulenc Group were the long-term winners of this development. The decision by Rhône-Poulenc management to relocate production elsewhere had considerable consequences on the organization of the company and its workforce. In 1980, 36 percent of the Rhône-Poulenc workforce worked abroad. The central foreign subsidiaries were Rhodia S.A. (Brazil), May & Baker Ltd. (United Kingdom), Rhône-Poulenc Inc. (United States), Viscosuisse S.A. (Switzerland), Rhodia AG (Germany), and SAFA (Spain). Some investments, such as in Brazil, the United Kingdom, and Germany, dated from the interwar period; other investments, such as Rhodia Inc. (United States), founded in 1948, resulted from the expansion after World War II. Rhône-Poulenc—as with Hoechst and Akzo—was severely affected by the European synthetic fiber crisis.[43] In 1980 the

42. Cayez, *Rhône-Poulenc*, 189–229; Joly, *Gillet*, 148–149; "Pariser Börse. Glückliche Insel in der Flaute," *Die Zeit* Nr. 27, June 30, 1961.

43. Marx, "Structural Crisis Cartel."

company had a loss of FF 711 million (*marge opérationelle* [operating profit]) in the textile sector (fibers and filaments). Consequently, the net loss of the group (i.e., *résultat net consolidé* [consolidated net result]) fell to nearly FF 2 billion. In addition to the reduction of jobs in the textile sector were two other consequences. The first was that, as part of its specialization strategy, the Rhône-Poulenc Group divested its petrochemical activities to BP and Elf-Aquitaine/Total in 1980, thereby reducing the number of employees by 10,000—mainly in France—to 95,000 persons. The second was that after the electoral victory of the left in 1981, the company was nationalized and supported by public capital.[44]

The withdraw from petrochemical activities and the specialization into downstream production stages (fibers, special chemicals, and pharmaceuticals) required even greater globalization of the Rhône-Poulenc Group.[45] The share of foreign production rose to more than 50 percent due to several acquisitions in the United States in the 1980s; as a consequence, foreign sales (including exports) climbed to 77 percent in 1990. Rhône-Poulenc Group had a strong position in the former French colonies in Africa, because of traditional French economic relations, and in the British Commonwealth through its subsidiary May & Baker.[46] Overall, Rhône-Poulenc's business in the 1980s was characterized by numerous acquisitions and divestitures; corporate rationalizations; and increasing benchmarking between the corporate divisions and a strengthening of the life sciences (agrochemicals and pharmaceuticals), which culminated in the acquisition of the U.S. pharmaceutical company Rorer in 1990, and in the merger with the German competitor Hoechst, forming Aventis in 1999.[47]

44. Annual Report Rhône-Poulenc 1969, 1980, Records of Rhône-Poulenc, Archives Historiques du Groupe Sanofi (hereafter AHGS), Paris; Cayez, *Rhône-Poulenc*, 185–188, 252–281; Gambrelle and Torres, *Rhône-Poulenc*, 100–127; Hancké, *Large Firms and Institutional Change*, 60–61; Joly, *Gillet*, 176–194; Schmidt, *From State to Market*, 94–131.

45. "Le temps n'est plus où les entreprises françaises pouvaient s'enfermer sur le marché français. Mener une stratégie de spécialisation va de pair avec une nécessaire mondialisation." (It is not any more the time when French firms can restrict themselves to the French market. Following a strategy of specialization goes hand in hand with a globalization required.) Annual Report Rhône-Poulenc 1980, 15, Records of Rhône-Poulenc, AHGS.

46. RP.SA-BH0091-1, Rhône-Poulenc. En bref 1986, 2; Annual Reports Rhône-Poulenc 1989, 6; 1969; 1980; 1990. The number of employees in Brazil stagnated in the twenty years after the boom. All files in Records of Rhône-Poulenc, AHGS.

47. Schäfer, "Liaisons Dangereuses." Hoechst and Rhône-Poulenc described the deal as a "merger of equals." If all shareholders accepted the offer, Hoechst would have taken a stake of 53 percent and Rhône-Poulenc 47 percent in Aventis. Bris and Cabolis, "Case of Aventis," 83.

Organization of Management, Workforce Structure, and Staffing Policies in Multinational Companies

The strategic decision to increase FDI starting in the 1960s correlates to several interwoven factors: the recruitment of adequate (local) staff and management, the relationship between employees and management, the oversight of a global workforce, and the national representation of management. Whether investment abroad reduced or decreased employment in the home country depended on what kind of investments were undertaken; and whether foreign production was complementary to that at home or a substitute, and if it depended on inputs produced at the home base. Therefore, the decision on where, when, and why to invest had remarkable consequences on organizations and managers. John Dunning differentiates between job displacement, export stimulation, home office employment, and supporting firm employment effect.[48] The three case studies show a mixture of these effects: sometimes they are similar, but they also highlight different points that arise in the context of the expansive strategy of internationalization.

Hoechst gives some remarkable insights into personnel policies of a multinational, changes in the workforce related to overseas investment, and importance of labor costs in investment decisions. Akzo Group shows the importance of nationality within the management of a multinational and the personnel problems and issues in restructuring when demand of the company's main product decreases. Rhône-Poulenc especially illustrates the relationship between foreign subsidiaries and parent company, and changes in the home workforce.

Management Abroad, the Transition of the Workforce, and the Relevance of Working Conditions for FDI at Hoechst

By 1970 Hoechst—like its West German competitor Bayer—replaced its functional organizations with divisional structures that management considered more flexible and efficient, and were along product lines and/or geographical regions. Hoechst introduced a new corporate organization with twelve product lines in 1969; and Bayer implemented a matrix organization with nine divisions in 1971. Corporate organizational remodeling was an international trend at that time, and it was both a reaction to and preparation for further expansion.[49]

48. Dunning and Lundan, *Multinational Enterprises*, 425–428; Buckley and Artisien, *Arbeitsmarkt*, 59–67.

49. Annual Report Bayer 1970, 12, WAUK; Annual Report Hoechst 1969, 14–17, WAUK; Dyas and Thanheiser, *Emerging European Enterprise*; Whittington and Mayer, *European Corporation*.

Considering falling growth rates, company managers and hired consultancies expected more efficiency through divisional structuring. At the same time, new structures put more pressure on employees because new departments were expected be more profit-oriented.[50]

Until the late 1980s, it was a rule of thumb that Germans led the divisions of the German Hoechst AG, even when those included foreign activities. Foreign subsidiaries such as Hoechst Italia S.p.A., Hoechst UK Ltd., and American Hoechst Corporation (AHC) had a mixture of German and foreign directors on their supervisory boards and/or boards of directors, while a German often held the position of managing director or executive chairman. Acquired foreign subsidiaries had their own national executive management, which was only controlled by Hoechst representatives sitting on the supervisory boards.[51] Dieter zur Loye exemplifies this: he worked for the German parent company since 1955, and became president and chief executive of AHC in 1982.[52] The example of Roussel Uclaf also demonstrates this principle: It was only in 1994 that Ernst G. Afting—a German—became chairman of the executive board; in the 1970s and 1980s, no German Hoechst representative was on the executive management team of the French company. During this period, Hoechst maintained its influence through its supervisory board of Roussel Uclaf.[53]

Consequently, the foreign subsidiaries of a multinational could pursue considerably independent personnel policies and act primarily in the context of a national institutional framework. There were neither centralized corporate personnel policies as a whole nor imitations of the model of German labor relations, with its strong participation rights into foreign subsidiaries. Kurt Lanz, a German who sat on Hoechst's executive board starting in 1956, was responsible for sales management, public relations, and the Central Regional Conference; as vice chairman of the board (1969–1981) in the 1970s, he promoted the internationalization of Hoechst and advocated bringing local men into leading positions at foreign subsidiaries. He believed that language skills and knowledge about regional markets, labor relations,

50. Kipping, "U.S. Influence"; Marx, "Marketization of the Enterprise."

51. "Direktoren der Hoechst AG", Annual Reports Hoechst (1970–1990), WAUK; Hoe. Ausl. 138 und 139: Geschichte verschiedener Hoechst Gesellschaften Ausland (Länderblätter A-L, M-Z), BAH; Edström and Galbraith, "Transfer of Managers."

52. Daniel F. Cuff, "Business People. Hoechst U.S. Chief Yields Post to Aide," *New York Times*, September 30, 1982.

53. Annual Reports Roussel Uclaf 1977–1986, BAH; Hoe. Ausl. 98: "Der Deutsche an der Spitze von RU in Paris will eigene Akzente setzen," in Welt am Sonntag, March 27, 1994, BAH; "Nina Grunenberg: Die Chemie stimmt. Ein ungewöhnlicher Fall deutsch-französischer Zusammenarbeit", *Die Zeit* Nr. 20, May 8, 1988, 31–32.

and national sensitivities were of equal importance to control by corporate headquarters. His colleague Erhard Bouillon embodied the German model of social partnership like no one else. Bouillon, who joined the personnel and social department of Hoechst in 1957, and which he headed starting in 1964, also sat on the executive board of Hoechst as *Arbeitsdirektor* (personnel director) from 1969 to 1988. He was a member of several employer associations, advocated a cooperative management style, and was primarily engaged in the field of vocational training and employees' *Vermögensbildung* (capital formation). However, these measures were limited to domestic employees, even though the department known as international social affairs came under the human resource department.[54]

Since the late 1970s, Hoechst organized decentralized HR meetings for the foreign subsidiaries. Human resource managers met once a year at different locations to discuss unemployment, work hours, inflation, leadership development, motivation, and dismissal of employees in different countries.[55] In 1980 the company's management, in cooperation with its foreign subsidiaries, formulated common principles of personnel and social policies, but the foreign companies were free to act on their own within this framework. Staff and location policies were established onsite. The consensus included the willingness of local management to cooperate with employees and to accept employee representatives (in the form of works councils or trade unions), to transfer management responsibilities to local employees, and to offer additional benefits. With this loose coupling, personnel policies were multifaceted in the Hoechst Group, as can be seen in the examples of Hoechst do Brasil and Hoechst Belgium.

Education and training in Brazil was organized by each subsidiary; however, it comprised not only company-specific knowledge but also wider knowledge that was (in Germany) taught at high schools or universities. At Hoechst do Brasil, for example, mechanical, machinist, and electronical engineer apprentices were trained through *in-house* courses. In 1987 Hoechst do Brasil developed simultaneous formal educational models for industrial, data processing, and logistics management assistants and bilingual secretaries in cooperation with a German school in Sao Paulo. This formalized training through one school rather than through in-house courses made it comparable to the dual training system in Germany. In addition, Hoechst do Brasil offered independent courses for managers that allowed for staff development and better career planning.

54. Annual Report Hoechst 1975, 6–7, WAUK; H0002076, Lanz; H0001016, Bouillon; H0023967, Zentrale Aufgaben der Personalabteilung (1971), BAH.
55. H0156806, Personalverwaltung: PA – Ausland (1976–1990), BAH.

Unlike Hoechst do Brasil, which was a manufacturing company, Hoechst Belgium was a sales company that first and foremost required salesmen. The integration of the European single market intensified this need. In Belgium, there also was no dual system of formal and vocational training as in Germany; hence, an employee could enter either unskilled or after finishing studies. Consequently, Hoechst Belgium had a high share—25 percent—of university graduates among its workforce at the end of the 1980s. Furthermore, Hoechst Belgium took the opportunity to draw on the German system and sent some employees, after they completed German–Belgian vocational school training, to take the final examination at the Chamber of Commerce in Aachen, Germany. While this type of cooperation with German educational institutions was not possible for foreign subsidiaries that were far away, it shows the many facets of personnel policies at Hoechst: personnel policies were organized in very different ways depending on the respective country.[56]

Along with offering educational and training opportunities for foreign workforces, another important aspect was improving foreign managers' skills and establishing corporate standards for an expanding worldwide company. To meet this need, there were technological exchanges and regular meetings of the managing directors of the home base and of the foreign subsidiaries as well as managers of human resource departments. At an HR meeting in Paris in 1984, K. Kinsella, of the British subsidiary Berger, Jenson & Nicholson Ltd., suggested internationalizing personnel through equal monetary incentives to attract worldwide high-quality professionals, and that headquarters or foreign services should not be reserved for home countries. Regular regional meetings of executive managers, such as in the Asia-Pacific region, supplemented this information exchange. Furthermore, Hoechst established several criteria to determine the earnings of German ex-pats abroad: position, performance on the job, cost of living, and living conditions (e.g., hardship). Foreign subsidiaries were divided into five groups according to sales volume, number of employees, and fixed assets. Management skills suitable to the foreign context could not simply be transferred from the home country but had to be developed.[57]

In 1964 Hoechst employed 58,290 people in Germany and 9,300 abroad, but internationalization after the European postwar boom fundamentally changed this workforce structure.[58] While the German

56. Sozialpolitik. Bericht aus dem Personal- und Sozialbereich 1988, 58–67, BAH.

57. H0156806, Personalverwaltung: PA – Ausland (1976–1990), BAH.

58. Annual Report Hoechst 1965, 1, WAUK.

parent company employed 60,000–65,000 people in the 1970s and 1980s, the staff of Hoechst-World (including consolidated groups and subsidiary companies at home and abroad) increased from 115,930 in 1969 to 178,710 in 1974, particularly through acquisitions. The workforce in West Germany decreased starting in the mid-1970s due to sales problems in synthetic fibers and plastics; but that changed somewhat after overcoming the economic crisis in 1982–1983. The number of employees in other regions of the world remained largely stable during this period, with North America experiencing the largest growth. After the expansion in Western Europe starting in the mid-1960s, the United States became the next desirable location for Hoechst's investments.[59] Consequently, the proportion of the German workforce of Hoechst-World decreased from 67 percent in 1973 to 55 percent in 1982. During the same period, the proportion in the rest of Europe rose from 15 percent to 21 percent, and in North America from 4 percent to 7 percent. Hoechst became a bit less of a German company and more of a European company.[60]

With the expansion of foreign production, job requirements and the structure of the domestic workforce changed. Similar to the sector level, the proportion of workers decreased at Hoechst in Germany. Between 1974 and 1983, the number of *Arbeiter* (workers) decreased from more than 50,000 to 44,000; in the same period, the number of *Angestellte* (employees) increased by about 3,500 to 36,000.[61] This indicates a change in work and qualification requirements, which was reinforced by foreign production companies. Simple tasks became less important in West Germany. Between 1974 and 1983, the proportion of employees at Hoechst rose by 4.5 percent, to 45.3 percent.[62] The decline of blue-collar and rise of white-collar work were not peculiar to the chemical industry but general trends in all Western societies.

According to Hoechst's 1983 Social Report, increasing demands for certain skills also played a significant role in the declining proportion of foreign workers; it was 16.6 percent in 1974 and declined by 5.5 percent over the next ten years. In addition, the ban on recruitment

59. Annual Reports Hoechst (1974–1986), WAUK; Schreier and Wex, *Hoechst Aktiengesellschaft*, 358.

60. H0029904, Bericht aus dem Personal- und Sozialbereich Hoechst-Welt (1980–1982), 10, BAH.

61. Angestellte are not workers and are not managers; they are somewhat in-between. They have different social security, different contracts, and so on.

62. Hoechst Sozialpolitik 1983, 21–22, 28, BAH. The gradual approaching of salaried *Angestellte* (employees) and *Arbeiter* (workers) was even reflected in *Bundesentgelttarifvertrag*, the first single collective agreement for both in 1987. See Müller-Jentsch, "Chemieindustrie," 294; Kädtler and Hertle, *Industriepolitik*, 42–43, 120–150.

after the oil price shock in 1973 had a great impact on this development.[63] Finally, age and gender also affected employment numbers. The number of men increased slightly (2 percent) between 1974 and 1983, however, the age structure shows that the proportion of women increased in the long run; by 1983 one-third of trainees were young women. Still, in that same year, male cohorts age 42–55 formed the core of the workforce. Beginning in 1974, staff became significantly older. In 1974, the proportion of people at least 45 years old was 33 percent, which by 1983 had climbed to 45 percent. This was similar at Bayer, which shows an aging and mostly male workforce was a general trend in the German chemical industry.[64] Reasons for the high percentage of older male staff were low personnel turnover and low recruiting rates, although this was counteracted by early retirements in the early 1980s. Low turnover could also have been from the contemporaneous insecurity from rising unemployment, as well as wanting to retain social benefits and high wages.[65] Furthermore, wages were higher than called for in the collective bargaining agreements, which weakened the position of the trade union (IG Chemie). Trade unions in general had difficulties organizing employees in multinational companies, which led to difficulties organizing collective interests.[66]

Labor costs were not the only motive for FDI. In the 1970s, Hoechst management compared production conditions—such as wages, working hours, bonuses, and social services—and workforce structure in foreign Hoechst works. After the collapse of Bretton Woods, fluctuating exchange rates complicated decision making on long-term investments. In 1977 Hoechst had about 80,000 employees abroad: 39.3 percent in the EEC, 10.4 percent in the rest of Western Europe, 12.2 percent in North America, 16.5 percent in South America, 10.7 percent in Asia, 4.9 percent in Australia/Oceania, 5.1 percent Africa, and 0.9 percent in the Middle East. The personnel turnover rate varied considerably nationally, both as a result of national labor regulations and specific plant structures. The international comparison showed that New Zealand had the highest turnover rate at 37 percent, followed by Brazil, the United Kingdom, the United States, Australia, and South Africa, from 21–28 percent; then Mexico, Argentina, Austria,

63. "Gastarbeiter – Prämierter Abschied", *Der Spiegel* 19/1982, May 10, 1982, 28–29; Hoechst Sozialpolitik 1983, 28, BAH; Herbert and Humm, "Gastarbeiter"; Kaelble, *Sozialgeschichte Europas*, 250–254.

64. Hoechst Sozialpolitik 1983, 19–20, 29, BAH,; 342–336, Bayer Jahresbericht Personalwesen 1979, 45, BAL.

65. Kädtler, *Umbruch*, 66–75; Kaelble, *Sozialgeschichte Europas*, 344–349.

66. Bischoff, "Probleme"; Menz, Becker, and Sablowski, *Shareholder-Value*, 81–83.

and the Netherlands, from 10–15 percent. Elsewhere, the fluctuation was less: in France it was at 8.9 percent, and in West Germany it was at 7.5 percent. The Social Report referred not only to the opportunities provided by personnel turnover (for example, implementation of short-term personnel adjustments) but also outlined the costs attached to high turnover. The report calculated one hundred hours of unproductive administrative work, ranging from recruiting to full availability (i.e., able to perform work without additional training); and that the company would gain 1.2 million productive work hours by a 50 percent reduction in personnel turnover. Against this background, a medium- to low-turnover rate became an investment incentive. The distribution of activities also reflects the national identity of Hoechst: 8.8 percent of the employees at the German plants worked in R&D, but this was 2.3 percent at foreign companies. Likewise, engineering played a greater role in Germany: 16.4 percent of employees in Germany as compared to 6.1 percent of employees in foreign countries. Abroad, far more employees were proportionately engaged in sales than at home (35.6 as compared to 13.3 percent, respectively). This reflects the continuing export orientation of the parent company Hoechst AG and the importance of foreign subsidiaries for distribution in the 1970s.[67]

In international comparison, in 1977 the number of hours worked in industrialized high-income countries was well above low-wage countries in South and Central America or Asia. West Germany (1,715 hours per year [h/y]) and the United Kingdom (1,708 h/y) were approximately equal, with France (1,683 h/y) slightly behind and the United States (1,744 h/y) and Italy (1,775 h/y) slightly ahead. These figures could have been an incentive for investing, but they include no information about labor productivity. Here, two developments at the international level became relevant. On the one hand, there were experiments away from the previous 5-day/40-hour work week, including a compact work week and flexible hours. On the other hand, there was also a tendency to globally adjust work time and conditions—new labor arrangements in Malaysia, for example, included the rule of an 8-hour day/6-day work week. In addition, strikes affected the number of hours worked and complicated entrepreneurial planning. An annual average from 1972 to 1977 shows Germany experienced only 32 strike days; meanwhile, Japan averaged 294 days; France 325; the United Kingdom 968; the United States 1,054; and India and Italy averaged a staggering 1,635 and 1,877, respectively. Hence, against the backdrop of low personnel

67. H0029897, Bericht aus dem Personal- und Sozialbereich Hoechst-Welt 1977, 2–8, BAH.

turnover and fewer strike days, the high-wage country West Germany had investment incentives, especially for high-skilled workers in R&D, which was conducted mostly in Germany. However, with the exception of Sweden, labor costs were highest in West Germany. Conversely, West Germany was internationally at the top of nonworking costs (i.e., vacation days, sick days, and other benefits).[68] The Hoechst executive board had to make investment decisions based not only on labor costs but also on a variety of criteria, including infrastructure, supply industries, and markets.

Thus, a simple causal link between wage levels and relocation of production is insufficient to understand the corporate strategy of Hoechst in the 1970s and 1980s. Rather, it was a mixture of opportunities, markets, and location. For this reason, Hoechst established different research, production, and distribution structures to account for the various skills of its national workforces.

Nationality in Management and Organization of Redundancies at Akzo

The merger of AKU, VGF, and KZO in 1969 demanded a new organizational structure. Unlike recommendations suggested by the consulting firm McKinsey, the managers of AKU–VGF favored a compromise between functional and divisional management structures.[69] This decision reflected the ongoing resistance of industrial managers over theoretical organizational knowledge. Its new decentralized organizational structure was the basis for further expansion, similar to Hoechst. In 1969–1970, Akzo acquired chemical fiber companies in Switzerland (Sastig) and Belgium (Fabelta), and made extensive investments in the salt chemical sector in the United States (International Salt Company). Akzo also became one of the largest paint manufacturers in Western Europe through the acquisition of Lesonal-Werke in Germany and Astral in France.[70]

Deciding an appropriate representation of German and Dutch managers in the organizational framework became a central point of discussion. How could management integrate the chemical fiber division into the whole group and share competencies between Arnhem and Wuppertal? As noted earlier, in 1969, in a first step, the Dutch AKU was transformed into a holding company, and its previous Dutch manufacturing companies were moved to the newly founded Enka

68. H0029897, Bericht aus dem Personal- und Sozialbereich Hoechst-Welt 1977, 11–33, BAH.

69. Marx, "Marketization of the Enterprise"; 195-A2-29, Notiz betr. Neuordnung der Beziehungen AKU/Glanzstoff (March 19, 1969), RWWA; 195-B0-52, Notiz Vaubel (February 4, 1969), RWWA.

70. Annual Report Akzo 1969, 11, 18, 35, WAUK.

N.V. Meanwhile, VGF remained unchanged in its legal form. Moreover, the company Enka International N.V. was established for the foreign investments of AKU in the Americas, Spain, and the United Kingdom. At the same time, the two operating companies of Enka and VGF were closely interlinked via a union of their executive and the supervisory boards, consisting one-half each of German and Dutch nationals. The chairs of the supervisory and the executive boards at VGF were German; at Enka, they were Dutch. After 1969, the board meetings of VGF and Enka took place alternately in Wuppertal (in Germany) and Arnhem (in the Netherlands), and the presidency alternated between a German and a Dutch representative. Thus both sides lost some of their autonomy; in light of their previous independent business policies, this was an enormous change.[71]

With the merger of the new AKU and KZO forming Akzo Group, the executive and supervisory boards of both groups also merged; hence, the Germans lost some influence on the new parent company Akzo, but the agreements related to Enka and VGF continued. Afterward, the central management of Akzo was exercised by Algemene Zaaken, a reduced executive body, on which only Ludwig Vaubel, the CEO of VGF since 1969, represented German interests.[72] The executive boards of Enka and VGF discussed relocating the headquarters of the fiber division to Arnhem, where Akzo had its home office, but German managers rejected this idea.[73]

The difficult negotiations on representation shows that nationality was still an important reference point in the thinking and actions of managers in the 1970s and 1980s, even if they were managers of multinational corporations. Although ownership of these large corporations became widely dispersed among countries through globalization, the boards of directors remained heavily biased toward home-country nationals.[74] Obviously, there was more confidence between German managers than between German and Dutch managers. This was not only an aftermath of WW II but also of trustful relationships among German manager created through their integration into the corporate network of Germany Inc. and West German consensus capitalism.[75]

In addition to the main production of man-made fibers in its two divisions—Enka Glanzstoff and Enka International (later Akzo

71. Vaubel, *Glanzstoff, Enka, Aku, Akzo,* 155–159.

72. Ibid., 176–177.

73. 195-B6-1-24, Ergänzungen zum Protokoll der EG-Vorstandssitzung (October 18, 1971), RWWA.

74. Jones, "End of Nationality," 162.

75. Ahrens, Gehlen, and Reckendrees, *Deutschland AG*; Marx and Reitmayer, "Rhenish Capitalism and Business History"; Windolf, "Corporate Network in Germany."

International)—Akzo also produced chemicals, pharmaceuticals, and consumer products via Dutch subsidiary companies.[76] Beginning in the early 1970s, the European chemical fiber crisis created dramatic problems for Akzo, which remained heavily dependent on chemical fiber production despite strengthening its other business segments. Significant losses led to extensive job cuts in the second half of the 1970s.[77] As a result, in 1977 Akzo formed the Enka Group by pooling its remaining chemical fiber interests at Wuppertal, with the exception of American Enka Corporation. By doing this, Akzo ceased the national separation between the Netherlands and Germany in the fiber segment.[78] In 1988 Akzo changed its organizational structure again with the introduction of business units that were now expected to be profit-driven. This restructuring in a way prepared for the separation of the Akzo division fibers and polymers (Enka) in the late 1990s, whose 10 percent return on investment in 1988 was considered too low by management.[79] What were the implications of these strategical and organizational decisions on the Akzo workforce?

Between 1969 and 1992, the Akzo workforce experienced an enormous reduction, especially in the Netherlands and Germany. With a total of nearly 30,000 people, the Netherlands and West Germany had approximately an equal number of employees before the first oil price shock in 1973 (Germany: 28,500; the Netherlands: 29,700). The main reduction took place in both countries from 1974 to 1979. After that, the number of employees at German sites declined from about 20,000 in the early 1980s to fewer than 15,000 in 1991; meanwhile, in the same time period, the number of employees in the Netherlands fell only slightly, from 22,500 to 20,000. In North America the number of employees was about 15,000 after the first oil price shock, which declined between 1982 and 1985 to 5,400 (due to the divestment of American Enka), and then increased to more than 10,000 workers until 1989.[80] Whereas the number of employees increased and decreased in the United States in the 1970s and 1980s, Akzo only reduced its workforce in Western Europe for more than 20 years. In contrast to the management of other chemical companies, the

76. Annual Report Akzo 1971, 38–44, WAUK.

77. Marx, "Vermarktlichung."

78. Annual Report Enka 1977, 7, WAUK.

79. Blok 3169 (AKU-Archiv), Ordner 216: Raad van Bestuur Enka und Ergänzungen 1988, Protokoll der Vorstandssitzung (March 29, 1988; April 19, 1988; July 5, 1988), Gelders Archief, Arnhem, the Netherlands; 195-Z0-7803, Bekanntmachung des Vorstands (November 10, 1988), Protokoll der Wirtschafts-Ausschuss-Sitzung (November 28, 1988), RWWA; 195-Z0-7923, Niederschrift über die Zusammenkunft der Unternehmensvertretung mit dem Gesamtbetriebsrat (May 18, 1988), RWWA.

80. Annual Reports Akzo 1977, 59; 1981, 54; 1991, WAUK.

executive board of VGF–Enka was in a completely defensive position during the 1970s: it had to shut down plants against the resistance of trade unions, and was forced to divest in that decade.[81] For employees, their experiences were even more dramatic. The Augsburg plant of the VGF subsidiary Bemberg AG was closed in 1970, even after DM 15 million had been invested for modernization only one year before. Management decommissioned the plant, even though sixteen of the planned thirty-two automatic power looms were already installed. Uncertainty among employees and distrust of management increased significantly, and a large number of VGF employees at its headquarters in Wuppertal had already undergone retraining, especially the shoemakers, craftsmen, and miners who wanted to escape the decline of their industries and hoped for secure employment in the chemical fiber industry. When in 1972 the VGF executive board presented a structure plan for production reduction and job cuts in Wuppertal (Germany), Breda (the Netherlands), Rorschach (Switzerland), and Zwijnaarde (Belgium), a worker explained his situation as follows: "I was miner for 20 years in Wattenscheid (Germany), and after the colliery had to shut down, I started here five years ago. At that time I was 45. That was my last chance."[82]

Some of these cuts could have been achieved through hiring freezes and natural turnover of staff, but the final closures in Breda in 1981 and in Kassel in 1984 show that this reduction included collective redundancies. Even in the early 1970s, before the first oil price crisis and the economic crisis of 1974–1975, the managers of Enka and VGF and the executive spokesperson of Deutsche Bank, Franz Heinrich Ulrich (who was a member of the supervisory boards of Enka, VGF, and Akzo), agreed on the principle of location concentration rather than linear reduction of capacity. They calculated DM 70 million, including benefits in the context of social plans, for collective redundancies of whole plants. Analyzing the workforce by business sector demonstrates that the job cuts at Akzo occurred mostly because of the European chemical fiber crisis. In contrast to the fiber and polymer divisions of Enka, other divisions increased their staff. Thus, the reasons for job losses at Akzo were less about labor costs and more about overcapacities in the West European fiber industry starting in the 1960s.[83]

In reference to staffing policies, Akzo, and especially its division Enka Glanzstoff, was in trouble beginning in the 1970s. Mass layoffs

81. Jones, *Multinationals and Global Capitalism*, 154–155.

82. Hoffmann and Langwieler, *Arbeiter*, 20–21, 28. Translated by the author.

83. Annual Reports Akzo 1969–1992, WAUK; Marx, "Structural Crisis Cartel"; 195-B6-1-25, Geheimprotokoll (March 13, 1972), RWWA.

and recruitment freezes were necessary to compensate for overcapacities, yet Akzo could not completely give up promoting young talent.[84] As with other German companies, in the 1970s the German arm of Akzo made use of short-term work and then opted for early retirement and part-time work for older employees in the 1980s. However, and similarly to Hoechst, the German arm of Akzo also simultaneously recruited young people to counteract the high average age of its workforce; and its *Betriebsrat* (work council) also admitted to the need of hiring if the necessary qualifications could not be achieved through employee retraining and continuing education.[85] Furthermore, in the case of closures of entire plants (as in Breda and Kassel), management looked for successor companies to safeguard jobs and—according to the German law—had to contract a *Sozialplan* (social plan) with the work council. The work councils of Enka Glanzstoff in Germany and the Netherlands were more willing than the trade unions to compromise because of the loss of DM 488 million in 1975, and agreed to cut jobs at the beginning of 1976. In addition to age-specific compensation, this social plan also included a hardship fund; however, the five hundred employees who were older than fifty-nine years old had enormous problems finding new jobs.[86]

The job losses at major European multinationals such as Akzo attracted public attention, and led to joint actions of different trade unions and involvement by the International Chemical and General Workers' Federation. Akzo World Council was founded to install codetermination at the international level . Pressure on Akzo management reached its climax when Dutch workers occupied the factory in Breda in the early 1970s. As a result, the Akzo management withdrew its proposed reforms.[87] After the planned cuts failed, the executive board at German VGF decided not to enter into further negotiations with a delegation of international trade union representatives, and accused them of making Akzo a test case for international trade negotiations. Further steps were carried out via national law.

The attempt to establish bargaining power on an international level failed, not least because the Dutch Centrale Ondernemingsraad (Central Enterprise Council) negotiated an agreement to close a Dutch site without informing the Akzo World Council and because the Dutch

84. 195-B6-1-25, Protokoll der Vorstandssitzung EG (March 13, 1972), RWWA.

85. 195-D2-1-13-23, Kurzberichte Oberbruch (1973–1975); 195-Z0-6914, Protokoll der Betriebsratssitzung (November 8, 1983; May 14, 1985); 195-Z0-6914, Protokoll der Betriebsratssitzung (January 19, 1982). All files in RWWA.

86. Annual Report Enka Glanzstoff 1975, 12–14, WAUK; 195-B0-59, Interessenausgleich und Sozialplan (February 6, 1976), RWWA; 195-Z0-3548, Geschätzte Kosten des Sozialplans (February 18, 1976), RWWA; Vaubel, *Glanzstoff, Enka, Aku, Akzo,* 189–191.

87. Vaubel, *Glanzstoff, Enka, Aku, Akzo,* 184–188.

unions competed with each other.[88] In the case of Breda in 1981, the Dutch Central Enterprise Council agreed to close the plant because of job employment at a successor company. At the same time, a violent labor dispute erupted in Kassel. Here, management also tried to find a successor company and to establish alternative jobs at other plants of the group, but without great success.[89] However, even though management refrained from international trade negotiations and executed hard social cuts from the late 1960s into the early 1980s, the search for successor companies and the social plans show that it still followed a cooperative model, in contrast to the competitive model of management that was typical for multinationals in the United States.[90]

Starting in the late 1960s, the activities of multinational enterprises forced intense discussions on creating international regulation instruments. In 1976 the Organisation for Economic Co-operation and Development (OECD) adopted the Declaration on International Investment and Multinational Enterprises, including the Guidelines for Multinational Enterprises. One year later, the International Labour Organization (ILO) followed with a Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy.[91] The ILO analyzed the socio-political realities of multinational companies, and integrated the German Enka AG and its Spanish subsidiary La Seda de Barcelona into its study in the early 1980s. According to the reported answers, Enka had a decentralized structure and often held only minority shares in foreign companies, and its foreign subsidiaries produced almost exclusively for the demand of the host country. As the chemical fiber industry was still relatively young in many countries, it also contributed to improving the level of training abroad; in addition, local management often participated in management courses offered by the parent company. Because multinationals like Akzo–Enka operated in different cultural and institutional environments, they were able to draw from a range of value systems and attitudinal perspectives in such training.[92]

88. 195-B0-58, Deutsche Übersetzung des Aktionärsbriefes (November 24, 1975), RWWA; 195-B0-59, Gefährdet Gewerkschafts-Strategie Arbeitsplätze? Enka Glanzstoff tief in roten Zahlen. Bericht im Rahmen der Sendung "Mensch und Arbeit" im Westdeutschen Fernsehen (October 25, 1975), Presseerklärung des EG-Vorstands (October 23, 1975), RWWA; Schröter, "German Model," 87.

89. Asperger, *Glanzstoff*, 137–148; 195-C4-34, Enka Board of Management Announcement (May 5, 1981), Bekanntmachung des Vorstands (September 11, 1981; November 2, 1981), Enka Europa konzentriert Produktion (January 19, 1981), RWWA; 195-C4-34, Bekanntmachung des Vorstands (July 12, 1982), RWWA; Vitt and Haase, *Glanzstoff*.

90. Goodwin, "Impacts of Multinational Corporations," 147–149.

91. Buckley and Artisien, *Arbeitsmarkt*, 82–89; 195-Z0-3212, BDI an Enka (July 30, 1980), RWWA; Warlouzet, *Governing Europe*, 57–77.

92. Dunning and Lundan, *Multinational Enterprises*, 444–450.

In the case of La Seda, the questionnaire listed several problems of work organization. First, Spanish law gave little flexibility in personnel affairs; second, staff productivity was low; and third, workers would often simply not come to work. Furthermore, in contrast to West Germany, Spain lacked a governmental official plan for continuous qualification, making education and training issues at the company level.[93] The management wanted to counteract contemporary criticism that multinationals would exploit employees in foreign countries by offering training abroad. More important, however, was the question related to the difficult working conditions in Spain. Responses show that—similar to Hoechst—labor costs were not the only criterion for FDI decisions in the 1970s and 1980s. Infrastructure, industrial relations, levels of qualification, and market aspects were crucial as well.

Relations Between Rhône-Poulenc's Subsidiaries and Parent Company and the Transition of Its Workforce

The enormous expansion of the French Rhône-Poulenc—in particular from restructuring in the 1960s—was a challenge for management. The informal structure of the recent Rhône-Poulenc holding was no longer sufficient, especially since the acquisition of Progil and Pechiney-Saint-Gobain. The question was: How should work be organized in such a huge company? The response was similar to that of Akzo and Hoechst: decentralization and divisional structural changes as recommended by an external consultancy. At the end of the 1960s, in addition to some central functions, management created a divisional structure for eight product lines that were subject to the *comité exécutif* (executive board). The large foreign subsidiaries took special positions since they were directly controlled by the executive board.[94] This reflected the importance of the foreign companies; it also showed that they could act more autonomously than other smaller subsidiaries, which was similar to the Enka Group within the Akzo corporation.[95]

93. 195-Z0-3212, Beantwortung des Fragebogens MULTI 9–14 Enterprises der ILO, Enka AG (August 5, 1981), ILO-Untersuchung über das Sozial- und Personal-Wesen multinationaler Unternehmen der Textilindustrie, La Seda de Barcelona (May 25, 1981). Both files in RWWA.

94. They were: Rhodia Industrias Quimicas e Texteis (Brazil), Rhodia Inc. (United States), May & Baker (United Kingdom), and since the mid-1970s Viscosuisse S.A. (Switzerland), Deutsche Rhodiaceta AG (DRAG) (Germany), and Sociedad Anonima de Fibras Artificiales (SAFA) (Spain). Annual Reports Rhône-Poulenc 1976, 3; 1977, 3; 1980, 4–5, Records of Rhône-Poulenc, AHGS; Cayez, *Rhône-Poulenc*, 282–297. In 1977 Rhodia Industrias Quimicas e Texteis was renamed Rhodia S.A.; in 1978, Rhodia Inc. was renamed Rhône-Poulenc Inc. since its main interest was not the production of synthetic fibers. Annual Report Rhône-Poulenc 1978, 23, Records of Rhône-Poulenc, AHGS.

95. Cayez, *Rhône-Poulenc*, 186–188.

Two cases exemplify this. This first is the German Deutsche Rhodiaceta AG (formerly known as Deutsche Acetatkunstseiden AG Rhodiaseta from 1927 to 1951). The Nazis had suspended the rights of the executive board and the general assembly, but after 1945 Deutsche Rhodiaceta once again became an integral part of the French group.[96] During the Nazi period and the early years of West Germany, Hermann Linnemann was the executive chairman of Deutsche Rhodiaceta, and the company continued with a German at the head of management up through the 1990s. In the 1970s and 1980s, the board comprised three to four Germans, whose chairmen (Hans Bechert and Gerhard Boos) became heads of the supervisory board after they left the executive board. Only the supervisory board was divided almost equally between Germans and French.[97]

The second example is May & Baker. Its autonomy was even more pronounced since it considered itself more as a British company and less as a French subsidiary. After World War II, Rhône-Poulenc and May & Baker came to a commercial arrangement that enabled Rhône-Poulenc to make technical information and advice available to May & Baker, and vice versa. Despite Rhône-Poulenc's majority share ownership, the agreement was terminable by either side with six months' notice, but it governed the relationship for the next three decades. This was the basis for an enormous expansion of May & Baker after World War II, at home and abroad—especially in India, South Africa, Canada, and Australia. May & Baker maintained its position in the pharmaceutical industry by a skillful combination of its own and Rhône-Poulenc's R&D.[98] May & Baker had no French managing directors. Instead, it had T. B. Maxwell (1941–1968), an American who had come to May & Baker in 1924 and who was appointed managing director in 1941; he was followed by the British E. V. Thomas (1968–1974), Nigel Chancellor (1974–1980), L. B. Heath (1981–1983, who had been with the company for almost forty years), and K. W. Humphreys (since 1983). Similar to Deutsche Rhodiaceta, the board of directors had an equal number of French and British members. In 1983, for only the second time in May & Baker's history, an outsider—Humphreys—was appointed as managing director of the executive board, whose position meant he was in charge of management. He announced several organizational changes; transferred the service functions to operational divisions; and gave those divisions more responsibility for their profitability, as was similar to the parent company.

96. Ibid., 149–150; Lacroix-Riz, *Industriels*, 333–335.

97. Annual Reports Rhodia AG (1970–1989), Library of the Albert-Ludwigs-University of Freiburg, Germany.

98. Slinn, *May & Baker*, 145–172.

Up through the mid-1980s, the chairman of the board of directors has been traditionally a senior executive of Rhône-Poulenc. These included Jacques Borduge (1970–1977), Gaëtan G. A. Pirrone (1977–1980), and Jean-Marc Bruel (1980–1984). This principle ensured a close liaison with the senior executive level of the parent company. However, May & Baker still preserved its identity and image and particularly its function as the leading company for the whole group in certain countries and in some fields of pharmaceutical research. In 1984 this was ended when Humphreys became both the chairman and the managing director. The separation of the board of directors between British and French managers remained stable.[99]

Even though May & Baker pursued its own business policies, it still depended on the development of its parent company. When Rhône-Poulenc decided to merge with Hoechst at the end of the 1990s, May & Baker was split: pharmaceutical production in England at Dagenham became part of Aventis, and the Norwich site was acquired by Bayer Agrochemicals. Both Deutsche Rhodiaceta and May & Baker prove three points: the importance of nationality related to the composition and work of governing bodies; the possibility of independence of foreign subsidiaries in decentralized multinational companies, especially in the case of acquisitions; and the integration of foreign subsidiaries into the regulation framework of the host country, including the national labor market and national training system. The strong position of May & Baker in the former Sterling area—a group of countries that either pegged their currencies to the pound sterling or used the pound as their own currency—could only be explained by the UK's colonial history.

The increasing importance of foreign production manifested in the workforce structure of Rhône-Poulenc as well. Due to restructurings and acquisitions, Rhône-Poulenc's plants were more spread across France than were the factories of its competitors Hoechst, Bayer, or BASF in Germany. In the 1970s and 1980s, about 40 percent of Rhône-Poulenc's domestic workforce was located in the Rhône-Alpes region and 24 percent worked in the region of Paris. Abroad, most of the Rhône-Poulenc workforce was employed in its major subsidiaries. In 1980 Rhodia S.A. (Brazil) had a workforce of 13,500 people; May & Baker (United Kingdom) had 8,000; Viscosuisse (Switzerland) had 3,600; Rhodia (Germany) had 2,500; SAFA (Spain) had 2,300; and Rhône-Poulenc Inc. (United States) had 1,300. These six foreign subsidiaries employed more than 31,000 employees of the total 34,600 workers abroad in the Rhône-Poulenc Group; at the same time, about

99. Annual Reports May & Baker Ltd. (1981–1986), British Library; Lesch, *First Miracle Drugs*, 197; Slinn, *May & Baker*, 173–188.

60,000 employees worked in France.[100] With the economic turbulences of the 1970s, Rhône-Poulenc imposed a hiring freeze and cut jobs, especially in the textile sector: in 1976 it cut 9.5 percent in the textile division as compared to 4.3 percent of the whole group. Similar to Hoechst and Akzo, Rhône-Poulenc was severely affected by the European chemical fiber crisis and reduced its workforce in this sector between 1976 and 1980 from 13,200 to 8,000. The social plan anticipated a further reduction of 3,000 people, which was nearly achieved in 1983 when the workforce was reduced to 5,900.[101] Natural turnover of staff and internal transfers also reduced the workforce. Simultaneously, management reduced recruiting, sought to provide employment for its core workforce, and used early retirement and short-term employment.[102] Thus, while jobs in the French (and the European) chemical fiber industry were plentiful during the European postwar boom, Rhône-Poulenc workers experienced great uncertainty with regard to the permanent preservation of their jobs in the 1970s.

In comparison to its German competitor Hoechst, the French workforce had greater differentiation: it had *cadres*, *ingénieurs/techniciens*, *employés*, *agents de maîtrise*, and *ouvriers* (managers, engineers/technicians, employees, supervisors, and workers, respectively). The proportion of workers decreased at Rhône-Poulenc from the mid-1970s to the mid-1980s; in 1979, workers and salaried employees represented 64 percent of Rhône-Poulenc's workforce but five years later they represented only 57 percent. This shift in the workforce is related not only to changes in manufacturing and the scientification of production but also with divestments of business units to BP and Elf-Aquitaine/Total. The proportion of each social group within the divisions was unequally distributed. In 1980, the share of workers and salaried employees in the central functions was only at 30 percent (compared to managers at 25 percent); in the films and systems division 53 percent (compared to managers at 8 percent), whereas in the textile and the chemical-fertilizer division it was about 70 percent because production still needed manual work (compared to managers at 5 percent to 8 percent). Furthermore, the preponderance of male employees (76 percent to 78 percent in the 1970s and 1980s)—particularly the 45- to 54-year-old group—was characteristic of Rhône-Poulenc, as was the case at both Hoechst and Bayer.

100. Annual Report Rhône-Poulenc 1980, 4–5, 37–39, Records of Rhône-Poulenc, AHGS.

101. Ibid., 1976, 15; ibid., 1980, 14; Rhône-Poulenc, Nationalité française – Vocation internationale 1983, Records of Rhône-Poulenc, AHGS.

102. Annual Report Rhône-Poulenc–Financial Year 1975, 15–16, Records of Rhône-Poulenc, AHGS.

The proportion of women increased slightly (from 23 in 1980 to 23.8 percent in 1984).[103] As with Hoechst, the shift in the domestic workforce toward skilled workers and women was not only the result of increasing multi-nationalization staring in the late 1960s but also of the opening of (higher) education institutions offering degrees in science and computer technology for large segments of the population. The liberalization of the labor market for women also had an impact on this development.

Nevertheless, the expansion of foreign production capacities was not without consequences. For managers, the complexity of decisions increased. For the workforce, competition (on the market and within companies) and individual job requirements increased, leading to feelings of insecurity about the workplace with regard to rising unemployment in Western Europe.

Conclusion

The managerial organization of work, the workforce structure, and the staffing policies of the companies in these three case studies were by no means completely parallel due to the individual business histories and the national contexts of the parent companies. The product ranges of the companies also differed. Akzo, for example, was foremost a producer of chemical fibers, although Hoechst and Rhône-Poulenc were active in this business, too. Likewise, the companies differed in terms of geographical spread. The German company Hoechst tried to reenter the world market after the loss of its foreign assets and patents during World War II. Akzo was a merger of German and Dutch companies that relied on cooperation starting in the 1920s. Rhône-Poulenc's foreign subsidiaries had a continuity that originated in the 1920s. Of course, there also were similarities. After high expectations about Latin America did not happen in the 1950s and 1960s, FDI of Western European chemical companies moved toward other EEC countries. Both the merger of AKU and VGF and the cooperation of Hoechst and Roussel Uclaf were aimed at the emerging European market. At the same time, the U.S. market held special attraction due to its size and trend-setting. The European chemical companies founded subsidiaries in Western Europe, the United States, and Japan. For example, in 1959 Roussel Uclaf created a Japanese subsidiary called Nippon Roussel K.K., followed in 1963 by Roussel Medika K.K., and in 1973

103. Ibid.; Rapport social sur les sociétés françaises du Groupe Rhône-Poulenc 1980; Annual Report Rhône-Poulenc 1984, 39–45. Both in Records of Rhône-Poulenc, AHGS.

by Nippon Uclaf K.K. Starting in 1966, the sale of Hoechst products in Japan was centralized at Hoechst Japan Ltd. Furthermore, Hoechst held shares in three producing joint ventures (Kasei Hoechst Co. Ltd., Hoechst Gosei Co. Ltd., and Nippon Hoechst Co.), which became part of Hoechst Japan Ltd. in 1979. Rhône-Poulenc also founded a distributing company (Rhône-Poulenc Japan) in 1967, and established several joint ventures between 1975 and 1984 (Showa Rhodia Chemicals K.K., Rhône-Poulenc Yakuhin K.K., Hospal Ltd., Nippon Magphane K.K., Nippon Fransil K.K., and Nippon Polymides K.K.). However, due to market restrictions with Japan, subsidiaries were often organized as joint ventures with Japanese companies, and thus did not become as important as their European or U.S. counterparts.[104]

The expansion of international business during the boom period was based to a large extent on exports. From the mid-1960s onward, evermore manufacturing plants were constructed abroad, and in the 1980s research institutions also emerged abroad. The West German chemical industry remained export-oriented and its export quota increased until the end of the century, but the expansion abroad was no longer accompanied by the expansion of its domestic workforce.

With respect to Dunning's model of the four possible domestic employment consequences of foreign activities, the three case studies have shown that foreign production competed with exports and sometimes even replaced them, whereas innovating and managing activities remained at home until the 1990s.[105] In the case of the European chemical fiber industry, some of the capacities shifted to industrializing countries in Asia, following the textile industry, but other parts of chemical production remained in Europe. Hence, job displacement and home office employment were often the consequences of multi-nationalization in the 1970s and 1980s. For a time, expansion abroad secured (high-skilled) jobs at home; meanwhile, in the home country, production-related jobs tended to be eliminated.[106]

Overall, this research has shown that the accelerated expansion to foreign markets after the European postwar boom had two main characteristics. First, management had to find and implement new organizational structures that fit the (control) requirements of the

104. RP.SA-BH0091-1 Annual Report Rhône-Poulenc 1984, 36, Records of Rhône-Poulenc, AHGS; Hoe. Ausl. 74/Japan, Hoechst in Japan (August 29, 1990), BAH; Dourille, "Tournant."

105. Dunning and Lundan, *Multinational Enterprises*, 426.

106. In a contemporary study, Bailey concluded that German multinationals expanded more in low-wage countries than in their home country from 1961 to 1975; however, there was still an increase in the German employment level. Hence, even though transfers of particular production lines occurred, expansion caused no large scale permanent employment export. Bailey, *Employment Effects of Multinational Enterprises*.

expanding company. Starting in the 1960s, this challenge determined management's day-to-day work. Corporate leaders studied various organizational proposals to better manage the growing complexity that arose with a company's expansion and changes in international economy. However, they were overwhelmed by the magnitude of this work and often turned to external consultancies for help. The restructuring of Western European companies in the 1960s and 1970s led to decentralization, and new divisional structures inserted competitive elements into the internal organization. However, diversification and divisionalization were not the end-point of universal economic progress, as Chandler assumed. In the 1960s, European companies did move toward the same business structure as pioneered in the United States in the 1920s; but from the 1970s onward, the Japanese corporate model replaced the U.S. model for effective management.[107]

At the same time, decentralization increased the scope of work of foreign subsidiaries. Roussel Uclaf, May & Baker, and Deutsche Rhodiaceta demonstrated that foreign subsidiaries were often managed by local management. Supervisory boards, working as representatives of the parent company, controlled the subsidiaries. The merger of AKU and VGF was different because it had its origin in AKU's acquisition of VGF shares in the 1920s. Furthermore, in many of the examples (e.g., Roussel Uclaf, May & Baker, and Enka), they appeared as multinationals within multinationals, which made a looser coupling with headquarters both possible and necessary. Therefore, the idea of a "transnational solution" only partially describes the division of management in multinationals.[108] Foreign affiliates like Roussel Uclaf or May & Baker did not have to worry about control from within the corporation, but there were also subsidiaries that were more dependent on the parent company. Thus, how management organized the relationship between subsidiary and parent company depended on several factors of the affiliate, such as ownership structure, legal status, geographical spread, position in the market, product structure, capacity to innovate, and function within the multinational.

Second, multi-nationalization had a vast impact on employees and their work at home and abroad. When foreign production expanded, export-oriented investments at home lost importance. Consequently, the pressure on domestic staff increased, not least because mass unemployment returned to Western Europe and competition between divisions and between plants at home and abroad increased. After the rise of industrial work in Western Europe starting in the early nineteenth

107. Chandler, *Strategy and Structure*; Whittington and Mayer, *European Corporation*.

108. Bartlett and Goshal, *Managing across Borders*.

century, traditional industries such as shipbuilding, iron, and steel experienced a decline in the 1970s. Deindustrialization affected a significant number of Western European industrial workers.[109] Western European producers of chemical fibers and bulk plastics came into trouble as well, but this was less true for the pharmaceutical and special chemical industries. As a consequence, employee qualification requirements rose at home, not least because of increasing computerization and changes in the workforce structure. Production relocation particularly happened within a group of countries that had similar levels of development, and was motivated first by market incentives and second by production costs.[110] Relocation of highly complex production structures into countries with poor infrastructure and low-skilled workers made no sense to the managers. Because of the concentration on core competencies, the rise of financial market capitalism, and the financialization of industrial enterprises since the late 1980s, strategies and structures changed again, initiating numerous restructurings and mega-mergers, as well as the formation of industrial parks.[111] In the 1990s, multinational corporations contributed to precarious work security by outsourcing jobs, but this phenomenon will need to be examined in future research.

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109. Daumas, Kharaba, and Mioche, *La désindustrialisation*; Raphael, "Industriearbeit(er)"; Raphael, *Kohle*, 38–56, 81–88.

110. Kädtler, *Umbruch*.

111. Berghoff, "Varieties of Financialization"; Krippner, "Financialization of the American Economy"; Lazonick, "Innovative Business Models."

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