The Risk of Foreign Direct Investment: Multinationals of the West German Chemical Industry in the 1970s and 1980s

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Companies permanently take risks, in that they always produce goods or provide services for future markets and make decisions based on past experiences and the expectations of an unrealised future. This ability to anticipate future market developments is one of the central tasks of a company.[1] Companies are able to develop new processes and assess future market prospects, but ultimately there remains a residual risk in terms of how a product or service will sell—especially from a global perspective. Raw materials costs and wages can rise unexpectedly and make profitable production impossible. Financial risks due to the collapse of credit, rising inflation or international exchange rate shifts are also conceivable. New, unforeseeable legal regulations following industrial accidents (such as in Seveso in 1976 or in Bhopal in 1984) or increasing environmental awareness, such as the bans on CFCs to protect the ozone layer and of solvents in paints and varnishes, can also expose production to new risks. Particular risks arise, however, from the expansion of business abroad, where different cultural rules may affect sales and production.[2]

The following article uses the example of two German chemical companies (Hoechst and Bayer) to examine the risks faced by multinational companies in the 1970s and 1980s, when post-war prosperity ended, economic turbulence increased, the new environmental movement emerged and recent globalisation was gaining momentum. External crises and shocks escalated dramatically in this period. Demand for many products decreased, the limits to growth appeared to have been reached and currencies fluctuated unpredictably after the collapse of Bretton Woods.[3] Consequently, inflation surged to alarming levels, which made long-term business planning even more difficult. In response to these crises, companies increasingly

1 *Jakob/Nützenadel/Streb*, Erfahrung; *Jakob/Kleinöder*, Security.
2 *Forbes/Kurosawa/Wubs*, Enterprises; *Stanwick Bårnås*, Management.
3 *Ferguson et al.*, Shock; *James*, Rambouillet; *Doering-Manteuffel/Raphael*, Boom; *Schenk*, Relations, 58–98.

internationalised their operations and created new risks for themselves.[4] Foreign investments proved to be risky due to the economic and political characteristics of individual countries—with new left or right-wing governments, military coups or financial instabilities. Companies had to adapt to these conditions, to learn to manage these risks and to develop security strategies. Risk management became an essential field of corporate activity.

There are various reasons why companies invest abroad—because they are dependent on raw materials from abroad, because labour or energy costs are cheaper, or simply because they want to use their ownership advantages abroad to increase their profits. The literature on multinational companies has collected a whole potpourri of reasons why multinationals emerge or expand abroad, such as competitive advantages for the investing firms (ownership advantages), site-specific attractions (location advantages) or the exploitation of core competencies within the firm (internalisation advantages).[5] Expansion and profit are key drivers. However, no matter which reasons are decisive for foreign investments, they are always associated with risk.[6] In some countries these risks (and expected profits) are lower, in others they are higher and can lead to the loss of the whole investment when states begin to confiscate or nationalise property. The expropriation of German companies in the United States during the Second World War is an example of this,[7] as well as the post-war nationalisations carried out by the UK Labour government under Prime Minister Clement Attlee, starting with the Bank of England and extending to civil aviation, the coal industry, the railways and the electricity and gas supply.[8] These risks can also vary over time. Nevertheless, companies are prepared to take them on in order to recover development costs, make more profit or gain global market shares.

This chapter illustrates different forms of political and cultural risk, going beyond the routine risks incurred in everyday business, and using one industry—the chemical industry—and two companies—Hoechst and Bayer—as an example. Mark Casson and Teresa da Silva Lopes have proposed a typology of the risks facing a firm entering a foreign country and discuss the risk management strategies of foreign investors. They argue

4 Cf. on the internationalisation of the two companies: *Marx*, Globalisierung.
5 *Dunning/Lundan*, Enterprises.
6 *Jones/Lubinski*, Risk; *Kobrak/Wüstenhagen*, Globalization.
7 *Ludwig*, Herausforderungen.
8 *Tomlinson*, Socialism.

that firms always invest in risky foreign environments; however, risk also designates opportunities, for example the chance of gaining a share in foreign markets. The authors categorise risks into *institutional risks*, such as government actions, social movements and financial instability, and *natural hazards*, such as climate and geological disasters. They highlight how political risks, including expropriation, taxation changes and nationalisation, have frequently impacted foreign investors, especially in the context of decolonisation. For example, many European firms had to adjust their strategies after former colonies in African and Asian countries gained independence. Some firms withdrew, while others adapted by forming local partnerships, rebranding or diversifying their operations.[9]

Casson and da Silva Lopes distinguish four main strategies for managing risk and for creating security.[10] One common approach is *avoidance*, where firms decide not to enter a market if the perceived risks outweigh the potential benefits. For those willing to accept risk, *prevention* serves as a proactive measure to minimise potential dangers before they arise. This can involve lobbying governments for favourable policies, establishing strong relationships with influential local figures or securing regulatory protections. Another important strategy is *mitigation*, which focuses on reducing the impact of risks once they materialise. Firms can achieve this by diversifying their investments, forming partnerships with local or international stakeholders or using insurance mechanisms to shield themselves from financial losses. However, when risks become unmanageable, *withdrawal or divestment* may be the only viable option. Companies facing extreme political instability, economic downturns or regulatory barriers may choose to sell their assets, move their operations to a different region or completely exit the market. By employing these strategies—avoidance, prevention, mitigation and withdrawal—businesses can navigate high-risk environments more effectively and make informed decisions about their investments.[11]

The following article builds on these considerations and examines the institutional risks for multinational companies in the 1970s and 1980s. What concrete forms did institutional risks take during this period and what risk or securitisation strategies did companies use in response? This will be highlighted using a number of examples from two companies: Hoechst's

9 *Casson/da Silva Lopes*, Investment, 375–379.
10 *Jakob/Kleinöder*, Security, 13.
11 *Casson/da Silva Lopes*, Investment, 379–397.

establishment of plastics production in Bayport (Texas/USA), from 1980 to 1986; the nationalisation of Hoechst's subsidiary in France from 1981 to 1993; and for both companies, the loss of subsidiaries in Iran in the context of the Islamic revolution from 1979 to 1982 and the impending loss of control in India during the 1970s.[12] At that time, Hoechst and Bayer were among the largest chemical groups in the world. Their foreign share had increased in the 1950s and 1960s, primarily through rising exports.

After the dismantling of IG Farben following the Second World War, its three major successor companies (BASF, Bayer, Hoechst) quickly found their way back to the forefront of the global chemical industry, each defining its own areas of activity. In contrast to BASF, Bayer and Hoechst were less active in the production of basic chemicals, fertilisers and industrial goods.[13] Hoechst was one of the world's largest pharmaceutical companies, and produced man-made fibres (Trevira), polyethylene plastics and dispersions (Mowilith), while Bayer was a leader in polyurethane (foam/plastics) and also produced pharmaceuticals (Aspirin) and man-made fibres (Dralon).[14] In these business areas, the two multinationals had a competitive advantage and built plants globally from the end of the 1960s—with a corresponding increase in risk.

This chapter shows that multinationals were confronted with different risks simultaneously. Hence, the internationalisation of companies required a new global risk management which differed significantly from the classic problems of everyday business (like supply, sales or workforce) and also differed from the experience of conflicts within the national arena where all parties had known each other for a long time and often had access to the political elites. Companies could try to secure their foreign investment alone—as this chapter will demonstrate—or in cooperation with other companies, for example by forming associations.[15] Finally, they had to decide if they would accept the risk, try to mitigate it or try to prevent it—or, if there was no other option, withdraw (divest).[16]

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12 The import substitution industrialisation (ISI) and state-led industrialisation of many Latin American countries (with authoritarian regimes) also produced many risks for chemical companies at that time. Cf. *Marx*, America.

13 For the history of BASF after 1945 see: *Abelshauser*, BASF.

14 *Marx*, Globalisierung.

15 *Pitteloud*, Protection.

16 *Casson/Da Silva Lopes*, Investment.

Global Business in the 1970s and 1980s: Foreign Direct Investment and its Risks in the United States, France, Iran and India

Cultural Differences: Hoechst's Failure in the United States in the 1980s

After the loss of foreign property in the USA during the Second World War, Hoechst subsequently sought to re-enter the world's largest chemical market as quickly as possible. For this purpose, it initially founded the Intercontinental Chemical Corporation (ICC) in 1953 as a distribution company with a capital of 20,000 US dollars (USD) and expanded through investments in several sales companies. In 1961, ICC was renamed American Hoechst Corporation (AHC), bringing the name "Hoechst" back to the US market. Until AHC was reorganised in 1964, it acted as the holding company for Hoechst's distribution and manufacturing interests in the USA. In that year, the Hoechst subsidiaries Carbic-Hoechst Corporation, Hostachem Corporation (formerly Progressive) and Hoechst Chemical Corporation were merged with AHC and formed the new AHC divisions. Hence, AHC became an operating company and also held 100 percent of Esmond Enterprises Inc. (West Warwick, Rhode Island) and 85 percent of Azoplate Corporation (Murray Hill, New Jersey). After ICC's share capital had been increased to USD 500,000 in 1953 and successively raised to USD 5 million by 1959, a further augmentation to USD 15 million was approved in 1960 and to USD 20 million in 1965 as a result of Hoechst's expanding business activities in the USA. Thus, by the mid-1960s Hoechst once again had a sizeable US subsidiary with six divisions and around 1,050 employees and other US shareholdings.[17]

However, compared to the US chemical companies present on their home market, Hoechst's involvement in the country remained modest until the 1960s. According to AHC president Dieter zur Loye, it was important to maintain any presence on the US market, however small compared to its US competitors, until the mid-1970s. In a subsequent phase until the mid-1980s, the company simply tried to ensure that it survived on the market. It was only after this that it began to target the achievement of similarly high profits as the US competition.[18] The former US holding company ICC with loosely affiliated companies gradually developed into an operational

17 Hoechst-Archiv (Friedrichsdorf), Hoe. Ausl. / Amerika / Ordner 1, American Hoechst Corporation (30.08.1967); *Vlaanderen*, Hoechst, 32–35.

18 *Wengenroth*, Industry, 152–155.

coordination centre, with eight divisions and five production companies by 1978.[19]

Hoechst was more and more interested in producing in the USA and therefore increased its foreign direct investment (FDI). Since 1960, its US subsidiary had majority control of the printing plate manufacturer Azoplate Corporation. It took over the shares of the Hoechst Uhde Corporation in 1962, and founded the 50:50 joint venture Stauffer Hoechst Polymer Corporation with the Stauffer Chemical Company in 1964 to produce polyester tubing and PVC films.[20] In addition, Hoechst and the US company Hercules Inc., Wilmington (North Carolina), founded the 50:50 joint venture Hystron Fibers Inc. which produced polyester fibres in Spartanburg (South Carolina). The fibres were sold under the German brand name Trevira. Following a capacity expansion in 1968, the plant in Spartanburg was able to produce 24,000 tons of Trevira fibres per year. This required a total investment of USD 50 million by the end of 1968.[21] As with many other joint ventures, Hoechst took over the remaining 50 percent of the capital of Hystron Fibers Inc. from Hercules Inc. in the spring of 1970 to strengthen its position on the US chemical fibres market, but also because Hystron was still in the red in its third year and Hercules wanted to withdraw from fibre production.

From the mid-1970s, Hoechst intensified its efforts to build up its own production capacities in the USA, particularly for plastics. In 1977, AHC started to invest in the construction of a large-scale plant for the production of styrene and low-pressure polyethylene (Hostalen) in Bayport (Texas) with a total investment of USD 180 million. The plant went into operation in 1980. The construction of a new chemical plant near the company's petrochemical raw material suppliers on the US Gulf Coast had been planned since 1973 and was part of an over USD 300 million expansion programme from the mid-1970s. The huge investment in Bayport aimed at expanding Hoechst's position in the trend-setting US plastics market and was also a response to the shift in currency parities.[22]

19 *Vlaanderen*, Hoechst, 13.

20 Hoechst-Archiv, Hoe. Ausl. / Amerika / Ordner 1, Azoplate Corporation (30.08.1967), Stauffer Hoechst Polymer Corporation (30.08.1967), Hoechst Uhde Corporation (30.08.1967); Hoe. Ausl. 139 / Geschichte verschiedener Hoechst Gesellschaften Ausland / Länderblätter M-Z: USA (1975); *Vlaanderen*, Hoechst, 47–53, 68–75.

21 Geschäftsbericht Hoechst 1966, p. 41; *Vlaanderen*, Hoechst, 76–83.

22 Geschäftsbericht Hoechst 1977, 23–24, 43; Geschäftsbericht Hoechst 1978, 23; Hoechst-Archiv, Ordner USA / AHC, Geschäftsbericht AHC 1977 und 1978; Hoechst-

After AHC had made a loss of around USD 10 million in 1980 due to weak demand, high interest on borrowed capital and the enormous start-up costs for plastics production in Bayport, the US business brightened up in 1983 with the country's economic recovery and the appreciation of the US dollar. Nevertheless, the management decided to divest the styrene production in Bayport. While the Hoechst manager Jürgen Dormann, who took over the leading position on the AHC board of directors in October 1984, argued for the sale of the styrene business for reasons of profitability, Dieter Cron, head of plastics sales at Hoechst in Germany from 1981 to 1995, considered the withdrawal from the world's largest single market to be a mistake. However, even Cron admitted that Hoechst would have been better off not entering the US market with a semi-finished process. The implementation by German managers of a technology that was not fully mature caused numerous problems that prevented a trouble-free production, and thus resulted in enormous economic losses.[23]

Although the losses in the plastics division decreased in 1983 and 1984, the Hoechst management saw little chance of success in plastics production in the USA in the long term and therefore maintained its plans to sell its plant in Bayport. It was not until 1986 that the polystyrene production plants in the USA and the Netherlands were sold. The two plastics plants in Chesapeake (Virginia) and Peru (Illinois) were taken over directly by the US company Huntsman Chemical Corporation in Salt Lake City (Utah), while the plant for the production of monostyrene in Bayport continued to be operated by Hoechst on behalf of Huntsman. Although sales subsequently climbed again by 12 percent and AHC generated a net profit of USD 38 million in 1986, Hoechst's US strategy had reached a deadlock.[24]

For Dormann, who later became CEO of the whole Hoechst Group, the plastics production in Bayport was a "rotten branch" ("fauler Ast")[25] that

Archiv, Hoe. Ausl. / Amerika / Ordner 1, Hoechst will neues Chemiewerk im US-Markt bauen, in: VWD Chemie, 12.10.1973, AHC-Struktur wird auf Wachstum und Sicherheit getrimmt, in: Chemische Industrie XXXII, November 1980, 744–746; *Vlaanderen*, Hoechst, 21, 156–159, 169–171.

23 *Gilpin*, Kenneth N., Business People. American Hoechst Names Chairman, in: New York Times, 25.10.1984, Section D, 2; *Klein*, Operation, 129–146.

24 Geschäftsbericht Hoechst 1986, 15, 45; Hoechst-Archiv, Hoe. Ausl. 57 I / Hoechst G-Beteiligungen im Ausland / Länder A-Z / 2. Nordamerika, American Hoechst gibt Teil des Kunststoff-Geschäfts ab, in: Hoechst informiert, 26.07.1985; Für Hoechst war das Amerika-Geschäft enttäuschend, in: FAZ, 29.03.1986.

25 Cited in *Klein*, Operation, 172.

had to be removed before the way was open for a major investment in the USA. The Hoechst executive board agreed that a stronger commitment to the US market was desirable. Here, Hoechst was in line with the trend of international investment at that time. According to an article in the business magazine *Capital*, legions of emissaries from German companies were travelling through the USA in 1986 to look for investment opportunities.[26] Not least the falling external value of the US dollar made local production attractive. Despite or perhaps because of this setback, Hoechst sought another major acquisition. The US group Celanese, with which Hoechst had been operating joint ventures since the early 1960s, soon came onto the scene.

During the negotiations Dormann made a point of taking over not only the company but also the Celanese management—with the exception of Celanese board chairman John D. Macomber—in order to keep the work organisation intact and to be able to enter the market with a domestic management that understood the cultural idiosyncrasies of doing business in the US. Although Wolfgang Hilger, Hoechst CEO since 1985, and Dormann sometimes took opposing positions, Hilger took a similar view of Hoechst's situation in the USA and saw the necessity of entering the US market with a genuinely American management.[27]

The differences in mentality between German and US management at this time became particularly evident when severance payments were discussed. The US managers had guaranteed themselves lavish severance payments in the takeover agreement and by this caused great displeasure at German headquarters. Only the Americanised manager Dorman fully supported the payments. However, as Hoechst needed these US managers to successfully build up a large-scale business in the USA, it accepted the conditions.[28] As a result, the West German group acquired Celanese and its management in February 1987 for around USD 2.85 billion (almost DM 6 billion). After Unilever's purchase of Chesebrough Pond's for around

26 Hoechst-Archiv, Hoe. Ausl. 57 I / Hoechst G-Beteiligungen im Ausland / Länder A-Z / 2. Nordamerika, Wie deutsche Unternehmen ihre US-Strategie ändern. Rückversicherung, in: Capital, March 1986, Chemieriesen stärker in den USA aktiv, in: Wiesbadener Tagblatt, 21.04.1986.

27 *Wehnelt*, Hoechst, 22–23.

28 *Klein*, Operation, 190–193; *Seifert*, Hoechst, 83–84.

USD 3.1 billion in 1986, this represented the second largest takeover in the history of the US chemical industry up to that time.[29]

Hoechst's failed attempt to set up a plastics production facility in Bayport and the success with Celanese show the difficulties that multinationals had in (re-)acting abroad. Although Hoechst was a globally operating company and had been doing business in the USA for a long time, cultural barriers prevented the establishment of a profitable production in Bayport. This was on the one hand due to the teething troubles of a new technological process, and on the other (and most importantly) because of the cultural differences between the managers and technicians, who were unable to overcome these problems. It was precisely for this reason that Dormann only wanted to take over Celanese if the American management remained. The loss-making investment in styrene production at Bayport highlighted the risks of deploying immature technologies and cultural misalignments in management—an example of business risk that had to be mitigated through divestment and strategic realignment. Hoechst's later acquisition of Celanese can be seen as a form of risk securitisation, as purchasing an established company with local management helped offset market and cultural risks in the US expansion strategy.

Nationalisation in France (1981–1993)

After Hoechst had started to penetrate the French market via a trading company at the beginning of the 1950s, successive acquisitions and company foundations followed from the middle of the decade. In 1966, Hoechst and several partners founded Oxochimie S.A., which produced oxo-alcohols in Lavéra near Marseille.[30] At the end of the 1960s, the Hoechst Group also increased its capacities for dispersions at Polysynthèse S.A. and for polypropylene at Société Normande de Matières Plastiques S.A. (SNMP).[31]

29 Geschäftsbericht Hoechst 1986, 20; *Hicks,* Jonathan P., Hoechst to acquire Celanese, in: New York Times 04.11.1986, Section D, 1; Hoechst-Archiv, Ordner USA/AHC, Geschäftsbericht AHC 1986, 2; *Klein*, Operation, 199–207; *Teltschik*, Großchemie, 295.

30 Geschäftsbericht Hoechst 1966, 40; Geschäftsbericht Hoechst 1968, 29; Hoechst-Archiv, Hoe. Ausl. 98a, Oxochimie S.A. (1975); Hoechst-Archiv, H0073209, Hoechst France, KDA: Das Engagement von Hoechst in Frankreich (10.04.1970).

31 Geschäftsbericht Hoechst 1967, 29; Hoechst-Archiv, H0073209, Hoechst France, KDA: Das Engagement von Hoechst in Frankreich (10.04.1970). In addition to

But Hoechst's investment in France remained modest. The German company only took a significant step on the French market with the takeover of the French pharmaceutical company Roussel Uclaf between 1968 and 1974. In 1968, Hoechst acquired a 43 percent stake in Compagnie Financière Chimio, which held a majority stake in Roussel Uclaf with an authorised share capital of 123.6 million French francs (FF). The takeover of the shares was financed in particular by a capital increase at Hoechst of DM 45 million in new shares, which were taken over by a consortium led by Dresdner Bank and contributed more than DM 200 million to the chemical group's treasury.[32]

The reasons for the cooperation with the French pharmaceutical company Roussel Uclaf were primarily its knowledge of pharmaceutical research and its position on the French market, but also the aim of being present on the emerging European market with a strong Franco-German group. The origins of the Roussel Uclaf company went back to the founding of the family business Laboratoire du Docteur Roussel by Gaston Roussel (1877–1947) in 1911. Together with Albert Caldairou and Alfred Lindeboom, Roussel had then founded the Institut de Sérothérapie Hémopoïétique (ISH) in 1920, followed in 1928 by the construction of the Usines Chimiques des Laboratoires Françaises (Uclaf) in Romainville as the first French production site for pharmaceuticals made from chemical raw materials. Under the management of Jean-Claude Roussel, Gaston's son, the existing factories and laboratories were merged to become the Roussel Uclaf Group in 1961. Subsidiaries had been formed in Spain, Italy and Belgium as early as the 1920s, followed by further establishments in Mexico, Brazil and Argentina in the 1930s and in Asia (India and Japan) and Africa in the 1950s. The co-operation between Hoechst and Roussel Uclaf thus brought together two companies with numerous foreign holdings, even though the core of the business was focused on Europe.[33]

In the context of rising costs in pharmaceutical research, which in the long term exceeded the financial possibilities of a family business, a co-op-

Hoechst, the French industrial gases company Air Liquide and the French chemical company *Société chimique des charbonnages de France* (CdF) each held a one-third stake in SNMP. Cf. Hoechst-Archiv, H0073210, Hoechst France, Hoechst in Frankreich (1970).

32 Geschäftsbericht Hoechst 1968, 19, 29.

33 *Bartmann*, Pharmabereiche, 273–275; *Bäumler*, Farben, 297; *Chauveau*, Invention, 574–575; *Seine-Saint-Denis Conseil Général*, Roussel; Hoechst-Archiv, Hoe. Ausl. 98 Historique du Groupe Roussel Uclaf (1990).

eration with a partner company seemed appropriate from Roussel Uclaf's point of view. In particular, the death of Gaston Roussel's wife Germaine (1897–1967) led to the consideration of selling part of the family estate to pay inheritance tax. French president Charles de Gaulle had rejected a takeover of a company stake by a US investor, as he feared that this would be a step towards selling off the French economy as a whole. The US companies General Electric and Chrysler had already bought into the Paris-based computer company Machines Bull and the Simca car factory.[34] The increase in foreign—particularly US—companies on the French market since the mid-1960s alarmed political decision-makers. While 36 foreign subsidiaries were active in the French pharmaceutical industry in 1964, of which 15 were US-American, five British and four German, by 1972 there were already 82 foreign companies (of which 32 were US-American, 10 British and 19 German). As a result, in 1974 a total of 44 percent of all drugs sold in France were produced by foreign companies; in West Germany, with its strong pharmaceutical manufacturers, the comparable proportion was only 35 percent.[35]

Although de Gaulle had no formal right to prevent the sale of French company shareholdings abroad, it was common practice for the company selling the shares to inform the government and ask for authorisation in advance. However, de Gaulle wanted to approve a sale to a West German company, not least because this decision was in line with his foreign policy, which was directed against the dominance of the USA in the western hemisphere. The collaboration between Hoechst and Roussel Uclaf was therefore primarily a consequence of the specific situation of a family business in conjunction with the industrial policy objectives of the French government at that time.[36]

When co-owner Henri Roussel finally decided to sell his shares in the company, his brother and CEO Jean-Claude Roussel arranged the sale of 43 percent of the holding company Compagnie Financière Chimio, which controlled Roussel Uclaf, to Hoechst in 1968. Personal discussions between Jean-Claude Roussel and Hoechst board member Kurt Lanz had created a relationship of trust that prevented a previously considered sale

34 Gemeinsamer Markt. Roussel Uclaf. Deutsche dürfen, in: Der Spiegel 41/1968, 07.10.1968, 76.
35 *Chauveau*, Invention, 584–592, 656; *Chauveau*, Défi, 959.
36 Gemeinsamer Markt. Roussel Uclaf. Deutsche dürfen, in: Der Spiegel 41/1968, 07.10.1968, 76.

of the French package to the West German competitor Bayer.[37] Despite the takeover, the French attached great importance to being recognised as equal negotiating partners. All issues falling under the responsibility of the management of Chimio and Roussel Uclaf were to be settled by mutual agreement.[38]

According to a secret agreement, Hoechst had been granted the right to acquire the majority of the French pharmaceutical company in the event of the death of Roussel Uclaf's president. When Jean-Claude Roussel died unexpectedly in a helicopter accident in April 1972, Hoechst exercised its right of first refusal and by 1974 had acquired the majority of shares in Compagnie Financière Chimio and thus indirectly a majority stake in Roussel Uclaf. With this acquisition—Hoechst's largest single investment in the pharmaceutical sector to that date—the West German group became the world's largest pharmaceutical manufacturer.[39]

Hoechst's respect for Roussel Uclaf's independence in the following years became particularly evident in the fact that in the 1970s and 1980s there was no German Hoechst representative on the French company's board and the next tier of management was also almost exclusively made up of French nationals. In addition to specific research collaborations between the Hoechst pharmaceutical division and Roussel Uclaf, Hoechst's influence was essentially limited to the latter's supervisory board. Kurt Lanz served as chairman of the supervisory board for several years in the 1970s, which also included some other Hoechst managers.[40]

The conditions of co-operation changed fundamentally at the beginning of the 1980s. Following the election victory of the French Socialists under François Mitterrand in 1981, the German group initially had to fear for its ability to influence its French company. In line with trade union demands,

37 *Bäumler*, Farben, 297–298; *Chauveau*, Invention, 575; *Eck*, Entreprises, 477–478; *Guinot*, Stratégies, 179–180; *Lanz*, Weltreisender, 55–59.

38 Archives Historiques du Groupe Sanofi, Paris (AHGS), N° boîte 0000000082166, Vereinbarung zwischen Jean-Claude Roussel und Farbwerke Hoechst AG (30.09.1968), Accord de Coopération entre Farbwerke Hoechst AG et Roussel Uclaf (30.09.1968), Farbwerke Hoechst an Jean-Claude Roussel (21.04.1970).

39 *Bäumler*, Farben, 297–300; *Chauveau*, Invention, 576; Geschäftsbericht Hoechst 1973, 22, 30; Geschäftsbericht Hoechst 1974, 28; *Schreier/Wex*, Hoechst, 372.

40 Hoechst-Archiv, Geschäftsberichte Roussel Uclaf 1977–1986; Hoechst-Archiv, Hoe. Ausl. 98, Der Deutsche an der Spitze von RU in Paris will eigene Akzente setzen, in: Welt am Sonntag, 27.03.1994; Hoechst-Archiv, Hoe. Ausl. 98b, Hoechst in Frankreich (1988); Nina Grunenberg: Die Chemie stimmt. Ein ungewöhnlicher Fall deutsch-französischer Zusammenarbeit, in: Die Zeit Nr. 20, 08.05.1988, 31–32.

the new French government presented a list of companies to be nationalised, including Saint-Gobain, Pechiney Ugine Kuhlmann, Rhône-Poulenc and Roussel Uclaf. Here, political risk was manifested in full force—an eventuality for which the companies were inadequately prepared. In this context, the French government also accepted the risk that foreign investors might be discouraged from investing in France.[41] Although the strong economic position of the state and the French policy of nationalisation after 1945 were based on a broad social consensus, this was primarily a policy intended to signal the government's Socialist credentials, and represented a counterpoint to contemporary British and American economic policy. It would prove, however, to be of only limited duration and scope.[42]

Hoechst exercised its ownership rights through its French subsidiary Société Française Hoechst (SFH) which had to slightly reduce its majority stake in Roussel Uclaf. However, SFH remained the majority shareholder with 54.5 percent, while the French state acquired a minority stake of 40 percent. This was followed by a capital increase of FF 89 million in non-voting preference shares, in which the state and holders of the previously acquired bonds had a pre-emptive right. As a result, SFH held a minority stake in those securities and the French state, which also secured the right to nominate the chairman of the supervisory board, held around two thirds of those shares. Third-party shareholders, on the other hand, lost almost all influence. In accordance with an agreement between the French government and Hoechst, the supervisory board was henceforth made up of six government representatives and six Hoechst representatives. More decisive than the ownership titles with voting rights were therefore the concretely agreed possibilities of appointment and influence, and for the next years

41 On American attitudes concerning foreign property during and after the Second World War, cf. *Kobrak/Wüstenhagen*, Globalization.

42 *Tuppen*, Recession.

there was no way to circumvent the French state. Changes of government could therefore also lead to new ownership rules in Western Europe.[43]

Table 1: Distribution of share capital at Roussel Uclaf in percentage (1984–1989)[44]

	ordinary shares with voting rights			preference shares without voting rights		
	1984	1986	1989	1984	1986	1989
Société Française Hoechst	54.5	54.50	54.50	35.2	36.82	43.32
French state	40.0	36.25	36.25	63.7	48.45	1.40
ERAP**			4.22			0.78
Other shareholders	5.5	9.25*	5.03	1.1	14.73	54.50

Source: AHGS, Fonds Roussel Uclaf / RU-29, Roussel Uclaf Exercice 1984, p. 30; RU-30, Roussel Uclaf Exercice 1986, p. 33; RU-30, Roussel Uclaf Exercice 1989, 43. Hoechst held its stake at Roussel Uclaf *via its French subsidiary* Société Française Hoechst *(SFH). On 31 December 1981, Hoechst still held 57.9 % of* Roussel Uclaf's *share capital of FF 445 million via SFH. * Of this, 3.75 % was held by* Compagnie Financière de Suez *on behalf of the state. ** ERAP (Entreprise de Recherches et d'Activités Pétrolières) was a state-owned investment and holding company.*

However, the nationalisation policy implemented in 1982 soon crumbled. Between 1986 and 1988, which saw the first "cohabitation" of the Fifth

43 AHGS, Fonds Roussel Uclaf, Cont.N° 786, P.V. Directoire 6, Procès-verbal de la Réunion du Directoire (24.02.1982, 28.04.1982, 05.05.1982); AHGS, Fonds Roussel Uclaf, Cont.N° 786, P.V. Directoire 7, Procès-verbal de la Réunion du Directoire (26.05.1982, 30.06.1982, 26.08.1982); AHGS, Fonds Roussel Uclaf / RU-29, Roussel Uclaf Exercice 1981, 33, Roussel Uclaf Exercice 1982. Allocution du Président (24.06.1983), Roussel Uclaf Exercice 1984, 30, Roussel Uclaf. Assemblée Générale Extraordinaire (25.08.1982); AHGS, N° boîte 82166, Protocole d'accord sur Roussel Uclaf entre Hoechst AG et le Ministre français de l'Industrie (09.02.1982), Charte de coopération Roussel Uclaf-Hoechst (28.02.1983); *Barral*, Molécules, 171–172, Hoechst-Archiv, Hoe. Ausl. 138 / Geschichte verschiedener Hoechst Gesellschaften Ausland / Länderblätter Frankreich, Roussel Uclaf Konzern. 20 Jahre Zusammenarbeit mit Hoechst (1988); "La nationalisation de Roussel-Uclaf Hoechst refuse de céder sa participation mais laisserait la porte ouverte à un compromis", in: Le Monde, 06.11.1981; L'avenir de Roussel-Uclaf. L'État va dans un premier temps acquérir 34 % du capital actuellement contrôlé par le groupe Hoechst, in: Le Monde, 24.02.1982; Hoechst se félicie de 'L'accord de principe' conclu avec le gouvernement français, in: Le Monde, 26.02.1982.

44 On the developing structure of the shareholders see also: AHGS, N° boîte BU627-C13155–71932, Comité de Groupe Roussel Uclaf (16.10.1986, 14.01.1994).

Republic under President François Mitterrand (Parti Socialiste (PS)) and Prime Minister Jacques Chirac (Rassemblement pour la République (RPR)), numerous nationalisations were reversed.[45] This also changed the rules of the game at Roussel Uclaf. In June 1987, Hoechst was authorised to exercise its majority rights again, based on its 54.5 percent shareholding of SFH, and to select seven of the twelve members of the supervisory board who appointed the board of directors.[46]

Three years later in 1990, the chemical group Rhône-Poulenc, which was still nationalised at the time, took over 35 percent of the voting state shares in Roussel Uclaf, thereby further reducing the French state's direct influence on Roussel Uclaf. The Hoechst management had thus almost completely secured its rights of disposal again. This was also reflected in the fact that Christian d'Aumale left the supervisory board in 1990 and Jacques Machizaud returned to Roussel Uclaf to take over the position as chairman of the supervisory board.[47]

In 1993, important ownership decisions were made regarding the future of Roussel Uclaf. After the Rhône-Poulenc management had decided to sell its 35 percent package in Roussel Uclaf, the question arose as to who should take over those shares. Hoechst as the majority shareholder would have been a candidate, but ultimately the shares were sold publicly in 1993. Ernst Günter Afting, who succeeded Édouard Sakiz in 1994 and thus became the first German at the head of the Roussel Uclaf board, stated in an interview that a takeover by Hoechst would have threatened the identity of the French pharmaceutical company, as this would have meant complete integration into the Hoechst organisation. In return for Afting's appointment, the Roussel Uclaf director and pharmaceutical specialist Jean-Pierre

45 *Tuppen*, Chirac, 176–200.

46 AHGS, N° boîte 82166, Participation de Hoechst dans Roussel Uclaf (05.03.1986), Point sur l'accord entre l'État et Hoechst AG (16.06.1987), Actionnariat de Roussel Uclaf (13.06.1988), «Roussel Uclaf: Signature de l'accord entre l'État français et Hoechst» (26.06.1987), Roussel Uclaf: Le souci du maintien des équilibres l'a emporté (18.05.1987), Remarques au regard du droit des Sociétés sur le projet du 29 Avril 1987 (07.05.1987), Le sort de Roussel Uclaf, in: Le Figaro (25.05.1987); Hoechst-Archiv, Hoe. Ausl. 138 / Geschichte verschiedener Hoechst Gesellschaften Ausland / Länderblätter Frankreich, Roussel Uclaf Konzern. 20 Jahre Zusammenarbeit mit Hoechst (1988).

47 AHGS, Fonds Roussel Uclaf / RU-30, Roussel Uclaf Exercice 1989, 43; *Barral*, Molécules, 172–173; *Bäumler*, Farben, 299; Geschäftsbericht Hoechst 1989, 28; Hoechst-Archiv, Hoe. Ausl. 98b, Hoechst in Frankreich (1988); Rhône-Poulenc an Roussel Uclaf beteiligt, in: Frankfurter Allgemeine Zeitung, 20.02.1990.

Godard became head of the pharmaceutical division (*Santé division*) at Hoechst and was therefore responsible for the pharmaceutical divisions of Hoechst and Roussel Uclaf. With this appointment, the Hoechst managers strengthened relations between the French subsidiary and the German parent company.[48]

In addition to the sales opportunities and the availability of qualified staff, the low political risk also argued in favour of setting up production facilities in Western Europe. However, the example of Hoechst in France shows that political risks also existed here. This risk was also noted by Bayer in its assessment of country-specific risks. A detailed study by Alfons Kottmann for the Bayer management board's planning conference in November 1981 analysed Bayer's current situation in France, Italy, the UK and Spain and explicitly included political risks in its assessment of those markets alongside the business climate index and the transfer opportunities for profits and capital. From the perspective of the Bayer management, these risks had increased significantly in France following Mitterrand's election victory in 1981. The business climate, transfer opportunities and political stability were nowhere rated higher than in Germany (and Japan). This was one of the reasons to continue the export strategy (with domestic production) and to simultaneously expand foreign production. The importance of Western European countries compared to Japan was reflected above all in the sales figures, which at that time were around twice as high in France and Italy as in Japan. The establishment of foreign production sites cannot therefore be attributed to a single factor, but only explained on a multi-causal basis.

Bayer's risk assessment was based on the Business Environment Risk Index (BERI) reports for assessing the business climate for foreign investors.[49] The BERI Institute, headquartered in Friday Harbor (Washington State), had been in existence since 1966, and offered expertise to support corporate decisions on foreign investments.[50] The BERI reports provided a kind of

48 AHGS, Fonds Roussel Uclaf / RU-31, Roussel Uclaf Exercice 1993, 4–7, 11–13; Hoechst-Archiv, Hoe. Ausl. 98, Der Deutsche an der Spitze von RU in Paris will eigene Akzente setzen, in: Welt am Sonntag 27.03.1994; *Seifert*, Hoechst, 152–153, 285.

49 Bayer AG: Corporate History & Archives, Leverkusen (BAL) 009/L Alfons Kottmann: Strategie der Bayer-Beteiligungsgesellschaften, Erläuterung zur Tabelle "Beurteilung von Länderrisiken" (1981).

50 BERI is still a private company for business ratings, analyses and forecasts. Today the abbreviation is used for Business Environment Risk Intelligence. See: https://beri.com/ (Accessed September 26, 2025).

hit list of the investment-friendliness of various countries, and included the Political Risk Index (PRI), an analysis of political risk which is made up of the opinions of various experts, taking into account internal and external causes of political risk. Social conflicts and terrorism, for example, were seen as symptoms of political risk, but the election of a Socialist (Mitterrand) as president of one of the largest European economies could also constitute a risk in a democracy.[51] The example of Hoechst shows that a new government in France could go hand in hand with restrictions of property rights. According to the investigation at Bayer, in 1981, 74 percent of Bayer's operating assets were located in countries with no political risk and 18 percent in countries with moderate political risk, but at least three percent in countries with unacceptable risk.[52]

Table 2: Assessment of country risks at Bayer (1981)

	Business climate		**Political risk**		**Transfer options**	
Points system						
ideal case	100		0		100	
stable, hardly any risk	70–99		1–20		70–99	
moderate risk	55–69		21–35		55–69	
high risk	40–54		36–45		40–54	
extremely bad	0		100		0	
Countries	**Mar 81**	**Jul 81**	**Mar 81**	**Jul 81**	**Mar 81**	**Jul 81**
Germany	78.0	75.5	16	17	73.0	75.7
Italy	46.0	46.0	45	45	63.0	63.3
France	62.5	58.0	27	37	72.0	61.9
Great Britain	61.5	60.5	31	32	68.5	68.1
Spain	57.5	55.0	37	38	50.0	50.0
Japan	76.0	76.0	19	18	73.0	72.0
Indonesia	46.0	46.0	50	50	49.0	52.1

Source: BAL 009/L Alfons Kottmann: Strategie der Bayer-Beteiligungsgesellschaften (1981)

51 According to Nathan Jensen, democratic institutions generally lead to lower levels of risk for FDI. Cf. *Jensen*, Risk.

52 BAL 009/L, Alfons Kottmann: Strategie der Bayer-Beteiligungsgesellschaften, Erläuterung zur Tabelle "Beurteilung von Länderrisiken" (1981).

The risk assessment at Bayer illustrates that companies became aware of the increasing risks as a result of growing FDI and that they tried to operationalise and securitise the risks with the help of international consultancies—especially with regard to political risks that went beyond the routine risk assessment of everyday business. However, companies had to gradually build up this competence and gain experience in this area of corporate policy. They were able to make decisions on the basis of international assessment schemes, even if such schemes did not guarantee complete security. At the same time, the use of the BERI reports demonstrates the international dimension of the problem. In the 1960s and 1970s, international information and analysis companies emerged which provided knowledge for internationally operating companies like Hoechst or Bayer in a globalising world. Upon Mitterrand's election victory, Hoechst was not well prepared for such a far-reaching state intervention, but it was willing to bear the risks and accepted the consequences. However, the following example shows that withdrawal could also be a strategic response to risk.

Foreign Subsidiaries in the Islamic Revolution (1979–1982)

In 1970, Bayer acquired a 50 percent stake in the Iranian chemical fibre factory Sherkat Sahami Aliaf from Allied Chemical Corporation and subsequently expanded its capacities as the Iranian government pressed for rapid expansion.[53] As part of the expansion in the mid-1970s, the capital was to be increased, some of the shares were to be issued to the employees and Bayer's shareholding was to be reduced to 34 percent according to the wishes of the government; in the end, however, Bayer's shareholding remained at 50 percent.[54] Although the majority of global FDI continued to circulate within the triad, multinational companies gradually began to invest in culturally more distant and politically less stable regions from the 1960s onwards, signalling increasing international competition and a willingness to take higher risks. The acquisition of Aliaf is an example of

53 BAL 387/1–9, Minutes of the Bayer executive board meeting (21.10.1969); BAL 387/1–12, Minutes of the Bayer executive board meeting (19.12.1972, 05.06.1973); Geschäftsbericht Bayer 1970, 27. The Dutch company AKU had also negotiated the sale of *Aliaf* with Allied prior to the Bayer takeover. Cf. Stiftung Rheinisch-Westfälisches Wirtschaftsarchiv zu Köln (RWWA) 195-A2–38 Minutes of the joint executive board meeting AKU/Glanzstoff (10.06.1969).

54 BAL 387/1–15, Minutes of the Bayer executive board meeting (21.01.1975).

such a spatial expansion of business activities, as Iran was not one of the company's investment priorities.

Even though contacts between Bayer and the Iranian authorities intensified from 1973 onwards due to the prospect of building a caprolactam plant in Iran, Bayer's CEO Kurt Hansen noted in March 1974, with a view to the upcoming Iranian-German investment conference, that there were only few concrete plans for investment in Iran on the part of West German industry—even though the business-friendly press was full of praise for the business opportunities in Iran.[55] In the end, the Bayer management board decided to drop out of the caprolactam project for economic reasons, even though only 30 percent of Bayer's caprolactam demand in Iran could be covered by imports due to Iranian import restrictions. In addition, there was a risk that Bayer's rejection would provoke negative consequences for Bayer's other activities in Iran by the Iranian government; however, the Bayer managers came to the conclusion that a caprolactam production would not generate enough profit.[56]

In the mid-1970s, another subsidiary, the 1961-founded sales company Bayer Pharma Iran AG, which had been expanded into a crop protection formulation and filling plant in 1967,[57] came under the Iranian "People's Share Law" issued by the Shah in April 1975. According to this, public companies had to offer 99 percent and private companies 49 percent of their share capital to the public. The idea underlying this programme was to change the ownership structure of productive units in Iran.[58] Bayer immediately contacted the German Federal Ministry of Economic Affairs and the German Federal Foreign Office and decided not to make any new investments in Iran, and to gradually end its involvement with Aliaf. Hoechst also restricted its investments as a result of the "People's Share Law".[59] Hence, even before Ayatollah Khomenei's return, the business prospects in

55 Caprolactam is an intermediate product in the manufacture of man-made fibres.
56 BAL 302/188, Kurt Hansen, Iranreise (1974); BAL 387/1–13, Minutes of the Bayer executive board meeting (02.10.1973, 22.01.1974, 19.03.1974); BAL 387/1–15, Minutes of the Bayer executive board meeting (18.02.1975, 03.06.1975); BAL 387/1–1, Minutes of the Bayer executive board meeting (01.03.1977); Iran. Ziemlich crazy, in: Der Spiegel 18/1976, 26.04.1976, 142–146.
57 BAL 009/L, Bayer baut in Teheran, in: Chemische Industrie XI, November 1961; BAL 380/7–60, Minutes of the Bayer executive board meeting (03./04.03.1981); BAL 387/1–18, Minutes of the Bayer executive board meeting (18./19.03.1980).
58 *Levasseur*, System, 40.
59 BAL 387/1–16, Minutes of the Bayer executive board meeting (07.10.1975, 18.05.1976); *Lanz*, Weltreisender, 338.

Iran worsened. Between 1976 and 1978, Aliaf lost around half of its capital due to negative results and was therefore under special observation by Bayer's management. With the return of Khomeini from exile and the Islamic Revolution in 1979, the constitutional monarchy in Iran was replaced by a new government, and new rules for foreign investments were implemented. At this time, there was a major disagreement between the shareholders of Aliaf about a possible restructuring of the company by a reduction and subsequent increase in capital. Opinions of the shareholders also diverged considerably on the valuation of Bayer's old debts. For these reasons and because of the politically unstable situation with numerous strikes, the German company withdrew more and more from Aliaf.[60]

It was not until the beginning of the new Persian year in March 1979 that the revolutionary committee in Aliaf was dissolved. Bayer hoped to regain some control of its Iranian subsidiary; however, the general manager appointed during the revolutionary phase remained in position and it proved extremely difficult for Bayer to enforce its entrepreneurial interests.[61] Bayer was by no means an isolated case. Other West German companies, such as the consortium led by the Siemens subsidiary Kraftwerk Union (KWU), which had started building the Buschihr nuclear power plant on the Persian Gulf in the mid-1970s, or the US competitor DuPont, did business in Iran as well—and were confronted with similar problems.[62] West German companies had invested particularly heavily in Iran following the German-Iranian treaty of 1965, which guaranteed mutual protection of capital investments and thus reduced institutional and political risks. Until the mid-1970s, Iran was one of Germany's largest non-European trading partners. In addition to Bayer many other German companies, like Hoechst, Merck, Schering, Boehringer Mannheim and Grünenthal, had opened pharmaceutical production facilities there.[63]

In July 1980, the situation escalated when the Iranian Ministry of Health initiated the nationalisation of all foreign pharmaceutical companies. This

60 BAL 387/1–13, Minutes of the Bayer executive board meeting (21.06.1977); BAL 387/1–18, Minutes of the Bayer executive board meeting (09.01.1979, 03.07.1979, 07.08.1979, 02.10.1979); *Bösch*, Schah; Geschäftsbericht Bayer 1978, 60.

61 BAL 387/1–18, Minutes of the Bayer executive board meeting (03.04.1979).

62 *Romberg*, Nonproliferation.

63 *Blaszczyk*, Synthetics for the Shah; Das ist wie ausgestorben, in: Der Spiegel 7/1979, 12.02.1979, 63–65; *Weißgerber*, Iranpolitik, 87–116, 234–235.

also affected Bayer Pharma Iran AG.[64] Hoechst CEO Rolf Sammet complained that his company had issued bank guarantees in the 1960s in reliance on the preservation of the investments, which were now (1980) threatening to become payable. Hoechst had been active on the Iranian market since the 1950s and had founded the Iranian subsidiary Hoechst Industrie AG in 1965, which had started producing pharmaceuticals and dispersions at the end of the 1960s. In 1980, the West German pharmaceutical industry had invested a total of around DM 100 million in Iranian drug production. Accordingly, the German newspaper *BILD* ran the headline in July 1980: "40 million gone! Khomeini expropriates Hoechst and Merck."[65]

Despite the intervention at the ownership level and the appointment of Iranian government officials to the management in July 1980, the relations of Hoechst Industrie AG with the West German parent company remained intact. But the situation continued to worsen. After the Western pharmaceutical factories were placed under forced administration in mid-1980, the Iranian government prepared for nationalisation at the beginning of 1981. In April of that year, reporting from Iranian pharmaceutical production to Hoechst at Frankfurt/Main ceased, so Hoechst terminated the contracts and prohibited the use of the name "Hoechst".[66] By 1981 at the latest, there was little hope among West German pharmaceutical companies that their foreign assets would return to their control. For this reason, the com-

64 BAL 380/7–60, Minutes of the Bayer executive board meeting (03./04.03.1981); BAL 387/1–18, Minutes of the Bayer executive board meeting (18./19.03.1980).

65 Hoechst-Archiv, Hoe. Ausl. 58 I / Hoechst G-Beteiligungen im Ausland / Länder A-Z / 4. Asien, Iran-Risiken. Den Deutschen droht Enteignung, in: Rheinischer Merkur 09.05.1980; 40 Millionen weg! Khomeini enteignet Hoechst und Merck, in: Bild 10.07.1980; Deutsche Firmen im Iran enteignet, in: Stuttgarter Nachrichten 10.07.1980; Iran enteignet deutsche Firmen, in: Frankfurter Rundschau, 10.07.1980; Pharma-Verband: Bonn hat ‚harte Reaktion' zugesichert, in: Frankfurter Rundschau, 12.07.1980; Iran: Weiter Ungewißheit über die deutschen Pharma-Werke, in: Offenbach Post, 15.07.1980; Geschäftsbericht Hoechst 1965, 41; Geschäftsbericht Hoechst 1966, 42; *Lanz*, Weltreisender, 337–338.

66 Hoechst-Archiv, H0159232, GL 2.3 Pharma, Protokoll der 82. Sitzung des AK Produktion Pharma am 04.11.1980 (17.11.1980), Protokoll der 88. Sitzung des AK Produktion Pharma am 12.08.1981 (08.09.1981); Hoechst-Archiv, Hoechst H0159240, GL 2.2 Pharma, Protokoll der 238. Geschäftsführersitzung (07.07.1980); Hoechst-Archiv, Hoe. Ausl. 58 I / Hoechst G-Beteiligungen im Ausland / Länder A-Z / 4. Asien, Iran will 14 westliche Pharma-Firmen verstaatlichen, in: Wiesbadener Kurier, 24.01.1981. In the 1984 financial year, Hoechst AG finally sold its stake in Hoechst Industrie AG in Tehran, which had already been beyond its control for several years. Cf. Geschäftsbericht Hoechst 1984, 20.

panies, together with the German Federal Association of the Pharmaceutical Industry, pressed for compensation from the Iranian state, but several attempts made by the German federal government in this direction were unsuccessful.[67]

Although Bayer's subsidiary Aliaf was generating a profit at the end of 1980, it was hardly possible for the Iranian company to repay debts to Bayer due to the lack of foreign currency. The West German management was quite prepared to sell Bayer's stake in Aliaf— as demanded by the Foreign Investment Organisation, an authority under the Iranian Ministry of Finance—but the German company insisted on (1) the settlement of the old debts, (2) a valuation of the share capital in the amount of the purchase price and (3) a transfer of the amounts in a hard currency.[68] Bayer thus opposed the position of the Iranian bank representatives on the board of Aliaf, who in the meantime were planning a capital reduction and subsequent re-increase to exclude Bayer. This would have amounted to a de facto expropriation of the German company.[69] Furthermore, Bayer lost control of Aliaf because the German managers were no longer granted work and residence permits from the beginning of 1982.[70] The pressure on Bayer to transfer Aliaf into Iranian hands free of charge increased enormously. The German embassy counsellor Gert Strenziok reported on 22 July 1982: "At the Aliaf shareholders' meeting on July 11, 1982, the Iranian Bayer representatives were threatened that they would be killed if they did not agree to certain [...] company decisions."[71] The negotiations continued throughout the second half of the year, but it was not until the beginning of 1983 that some of Bayer's requirements were fulfilled. Simultaneously, a compensation settlement was reached for the expropriation of Bayer Pharma Iran AG; the West German federal government provided compensation funds of around DM 1.4 million.[72]

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67 Hoechst-Archiv, Hoe. Ausl. 58 I / Hoechst G-Beteiligungen im Ausland / Länder A-Z / 4. Asien, Deutsche Pharma-Firmen bitten um Hilfe, in: Stuttgarter Zeitung, 21.07.1981.

68 BAL 380/7–59, Minutes of the Bayer executive board meeting (02.12.1980).

69 BAL 380/7–60, Minutes of the Bayer executive board meeting (03./04.03.1981).

70 BAL 380/7–63, Minutes of the Bayer executive board meeting (05.01.1982).

71 *Geiger/Peter/Lindemann*, Akten, 817. "In der Hauptversammlung der Aliaf am 11.7.1982 wurde den iranischen Bayer-Vertretern angedroht, sie würden umgebracht, wenn sie bestimmten […] Unternehmensentscheidungen nicht zustimmen würden."

72 BAL 380/7–65, Minutes of the Bayer executive board meeting (24.08.1982, 19.10.1982); BAL 380/7–66, Minutes of the Bayer executive board meeting (01.03.1983). Cf. also: BAL 387/1–8, Minutes of the Bayer executive board meeting (18.07.1967). On 12 May

In addition to the loss of control over foreign investments, West German foreign trade with Iran was also hampered. On the one hand, low oil exports and high war costs increased the country's foreign exchange problems; on the other hand, both pharmaceutical and pesticide imports had meanwhile been transferred to national import authorities. Bayer continued to show interest in the Iranian market and generated sales of around DM 400 million in Iran in 1980. However, in 1982, Bayer even had to reduce the staff of its Iranian sales company Bayer Iranchemie AG (BICH), which had been founded in 1955 as a joint venture with local shareholders; national authorities took over the tasks of BICH. Thus, even the strategy of minimising risk through alliances with local partners was unsuccessful. Trade with Iran therefore continued to lose in importance.[73] From the perspective of supply security in the raw materials sector, however, the direct links of Bayer to the Middle East played only a subordinate role. With regard to the supply side, especially in relation to oil and other primary products, Bayer continued to cooperate with the major global oil companies.[74]

Hence, the regime change in Iran ultimately led to the end of a local production by West German chemical companies, the loss of numerous sales companies, and a significant disruption of German-Iranian trade relations, although the latter did not come to a complete halt. Here, the economic risks of a political regime change became evident, and they could not be circumvented by prevention (such as lobbying or forming alliances with local elites) or mitigation (through partnerships or insurance strategies).

Loss of Control in India?

Although India did not experience a revolution comparable to that in Iran in the 1970s, it was also characterised by internal tensions at that time. With

1987, Aliaf was finally sold to the Iranian state-owned company Bonyade. Cf. BAL 380/8–16, Minutes of the Bayer executive board meeting (19.05.1987).

73 BAL 380/7–63, Minutes of the Bayer executive board meeting (05.01.1982); BAL 380/7–65, Minutes of the Bayer executive board meeting (24.08.1982, 19.10.1982); BAL 380/7–66, Minutes of the Bayer executive board meeting (01.03.1983). In March 1984, Bayer's stake in BICH was 84 percent; the remaining 16 percent was held by Pari Alamir. Cf. BAL 380/7–70, Minutes of the Bayer executive board meetings. Changes to company management and supervisory bodies in domestic and foreign holding companies (1984).

74 BAL 387/1–14, Minutes of the Bayer executive board meeting (04.06.1974).

Indira Gandhi at the head of the Congress Party from the end of the 1960s, politics moved towards the left. In 1969, important banks were nationalised and pension payments to the former Indian princes were stopped. After the landslide victory of the Congress Party under Gandhi in 1971, there was a strong personalisation of politics. However, this centring on Gandhi as a person and her socialist policies also provoked resistance. Strikes, unrest and finally the declaration of a state of emergency in June 1975 by Prime Minister Indira Gandhi created a volatile environment for foreign direct investment in India.[75]

During this period, both Hoechst and Bayer were doing business in India. In the case of Hoechst, the acquisition of a company in Great Britain was particularly important for its Indian business. In 1970, Hoechst acquired Berger, Jensen & Nicholson (BJN), the second-largest British paint and coatings producer, for a total of DM 243 million.[76] As in the case of Roussel Uclaf, Hoechst hardly intervened in the appointment of the local management, as the Hoechst headquarters took the view that foreign managers familiar with the corporate structures and the specific requirements of the market should continue to manage the company: "We are of the opinion that not only some, but as many positions as possible in the management of our foreign subsidiaries should be filled by men from the respective country. Contrary to some somewhat arrogant opinions in Western Europe, our British friends work no less hard than we do, even if they perhaps don't moan about it as much."[77]

75 *Guha*, India, 491–518.

76 Geschäftsbericht Hoechst 1967, 19; Geschäftsbericht Hoechst 1970, 16, 58; Hackney Archives (London), D/B/BER/2/2/2, Minutes of the Meeting BJN Group Board (18.12.1969, 07.01.1970, 08.01.1970, 13.01.1970); Hoechst-Archiv, H0073138, Großbritannien / BJN, Offer to acquire the issued ordinary share capital and warrants of BJN (without date); Hoechst-Archiv, H0073139, Großbritannien / BJN, Agreement between Farbwerke Hoechst AG and Reed Group Ltd. (31.12.1969); Hoechst-Archiv, H0073140, Großbritannien / BJN, BJN Board Meeting (18.12.1969), Excerpt from the minutes of the 355th executive board meeting of Hoechst AG (06.01.1970); Hoechst-Archiv, H0073141, Großbritannien / BJN, Mitteilung der Rechtsabteilung (14.01.1970), Seligman to Asboth (26.01.1970); Hoechst-Archiv, H0073142, Großbritannien / BJN, BJN and the Hoechst-Reed Agreement (20.10.1970), Offer by S.G. Warburg & Co. Ltd. on behalf of Hoechst U.K. Ltd. for Issued Ordinary Share Capital and Warrants of Berger, Jenson & Nicholson Ltd. (12.01.1970); *Schreier/Wex*, Hoechst, 291; *Watts*, Distribution, 86–88.

77 Quoted in German in *Lanz*, Weltreisender, 90 (translation by the author).

This position was very much welcomed by the BJN management and foregrounded again in the guidelines for cooperation between Hoechst and BJN in 1971, as Kurt Lanz later emphasised in his autobiography: "The management of Farbwerke Hoechst have emphasised from the commencement that Berger, as a Group of Companies, must continue to be separately managed and develop its own trading image in those parts of the paint world where it trades."[78] As a result, BJN's management remained in position and largely retained its autonomy. Hoechst followed a strategy here that it was to apply again in the USA—after the failure in Bayport.

With the takeover, Hoechst also acquired the Indian subsidiary British Paints (India) Ltd., in which BJN held a 55 percent stake. The BJN management generally attached importance to a majority shareholding to control its subsidiaries. However, Indian business partners advised the BJN managers to reduce its share at British Paints (India) to less than 50 percent in anticipation of the domestic political situation, which was increasingly hostile to foreign direct investment. They argued, that with regard to the 7,000 free shareholders, BJN could also control the Indian subsidiary with a share of less than 49 percent, as the numerous individual shareholders would never appear at an Annual General Meeting and could not speak with one voice. The advantage was that British Paints (India) Ltd. would no longer be considered a foreign company and would therefore no longer be subject to the restrictions of foreign investment control. The reduction in the shareholding was therefore used strategically to circumvent the government restrictions on foreign companies and to expand the investment.[79]

In fact, BJN reduced its stake in British Paints (India) Ltd. to 40 percent by 1975. In other countries such as Trinidad and Tobago or Nigeria, shareholdings in BJN subsidiaries were also reduced in the 1970s to less than 50, sometimes even less than 30 percent to meet the demands of local authorities. The governments of Asian, Latin American or African countries increasingly demanded the participation of local shareholders in the 1970s to build up a domestic, national industry.[80]

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78 Hoechst-Archiv, H0073138, Großbritannien / BJN, Guidelines for Cooperation of Hoechst and Berger Senior Executives in Trading Areas (03.02.1971).

79 Hoechst-Archiv, H0073138, Großbritannien / BJN, BJN Board Meeting (15.10.1970). Cf. *Roy*, History, 153–202.

80 Hackney Archives, D/B/BER/2/2/7, BJN Report & Accounts 1974, 18, BJN Report & Accounts 1975, 20, BJN Report & Accounts 1977, 4.

Bayer was confronted with similar problems in India. Asia was of little importance to Bayer as a production location and sales region in the first post-war decades. From the 1950s onwards, Bayer sold plastics and rubber to a limited extent in India and made a few investments (Bayer Agrochem Private Ltd. (1958)), but it was not until 1970 that a larger plant was built in Thane near Mumbai (then Bombay).[81] The Indian subsidiary Bayer India Ltd. based in Bombay, which emerged from Bayer Agrochem in 1963, was 51 percent owned by the German company Bayer and remained so in the 1980s; the other shares were distributed among 8,800 shareholders. Accordingly, the board of directors was made up of German and Indian nationals, while the management was in German hands with Harald Lange (at least until 1984). The low capital share of 51 percent was a concession by Bayer to the Indian authorities, who were reserved about foreign investment and wanted to promote the industrialisation of the country through domestic companies. In the pharmaceutical sector, moreover, numerous regulations regarding the import, testing and approval of medicines made access to the market difficult; in particular, mass exports of German pharmaceuticals to India were therefore not considered a strategy. Despite the market access restrictions and the hostile attitude towards foreign capital, Bayer wanted to stay in the huge Indian market. Conversely, the Indian government was interested in new and effective medicines for its population. These included, in particular, Resochin, manufactured by Bayer to combat malaria.[82]

According to an Indian law passed in 1973, the Foreign Exchange Regulation Act (FERA), companies were only considered "Indian" if less than 40 percent of their capital was owned by foreigners. Bayer violated this rule with its 51 percent stake in Bayer India Ltd. While many subsidiaries of foreign groups subsequently changed their legal form and capital composition (like British Paints (India) Ltd.), Bayer India Ltd. remained a majority foreign-controlled company along with a few other chemical companies. Bayer could afford this attitude because of its position as a major chemical and

81 *Lubinski*, Nationalism, 225–228; *Reinert*, Bayer, 178–182; *Verg/Plumpe/Schultheis*, Meilensteine, 456–459, 584–589, 592. See for the struggle for the release of German enemy property in India: *Das Gupta*, Struggling.

82 BAL 380/7–70, Minutes of the Bayer executive board meetings. Changes in the management and supervisory bodies of domestic and foreign holding companies (1984); BAL 380/8–4, Minutes of the Bayer executive board meeting (05.02.1985), Konzernverwaltung Regionale Koordinierung to Bayer-Vorstand (31.01.1985); *Lubinski*, Nationalism, 228–230; *Reinert*, Bayer, 181; *Verg/Plumpe/Schultheis*, Meilensteine, 458–459.

pharmaceutical company, which was considered important for supplying the population with drugs and for supporting the further industrialisation of India – not least to produce high-quality rubber materials for tyres and thus indirectly contribute to the motorisation of the country. The Indian subsidiary of Bayer's US subsidiary Miles, on the other hand, was—due to its lower level of investment—officially considered "Indian".[83]

Despite the restrictions resulting from its status as a foreign company, the sales and earnings of Bayer India Ltd. rose steadily in the 1980s. Bayer India benefited from India's economic growth. The liberalisation policy introduced in 1984 gave large companies more leeway through the relaxation of the Monopolies and Restrictive Trade Practices Act (1969) and the gradual abandonment of import restrictions, but Bayer India was still subject to the FERA regulations and had problems obtaining work permits for its German directors. In combination with the lack of infrastructure and inadequate patent protection legislation, the potential of the Indian market was certainly hindered.[84] Even after a major change of shareholders on the Indian side following the sale of a 7.3 percent stake by the Ghia family, which held an interest in Bayer India Ltd. via Bhupati Investment Pvt. Ltd., Bayer's stake remained constant at 51 percent in 1984/85.[85] Hence, despite India's industrial policy, Bayer held on to majority shareholdings in India. The request of a state secretary in the Indian Ministry of Chemicals to grant a production licence for MDI (methylene-diphenyl-isocyanate) to an Indian state-owned company with the establishment of a 50:50 joint venture was therefore rejected by Bayer in 1987—as in similar other cases.[86]

At the end of the 1980s, in addition to the plant in Thane, Bayer maintained ten regional crop protection agencies with twenty regional distribution warehouses, a network of around 400 sales representatives for the distribution of crop protection products and was also involved in Colour Chemical Ltd. This company was responsible for the sale of dyes and auxiliaries for the textile industry. With crop protection products, pharmaceuticals, rubber chemicals and dyes, Bayer offered a broad range of products tailored to the needs of the Indian market. Around 1990, the

83 *Lubinski*, Nationalism, 234–241; *Verg/Plumpe/Schultheis*, Meilensteine, 458. Cf. *Jones*, Learning; *Roy*, History, 153–202.

84 BAL 380/8–13, Minutes of the Bayer executive board meeting (07.10.1986); *Lubinski*, Nationalism, 241–242.

85 BAL 380/8–4, Minutes of the Bayer executive board meeting (08.01.1985, 29.01.1985), Bayer Konzernverwaltung Regionale Koordinierung to Bayer-Vorstand (03.01.1985).

86 BAL 380/8–17, Minutes of the Bayer executive board meeting (01.09.1987).

workforce of Bayer India Ltd. totalled around 2,000 people, of whom around 1,400 worked in production.[87] With the end of the Cold War, India's orientation towards the Soviet Union and Eastern Europe waned—at least temporarily. As India reduced import licences, lowered tariffs and relaxed foreign exchange regulations, the country became even more attractive to Western investors and Bayer once again expanded its presence in India.[88]

The political and regulatory instability in India during the 1970s posed significant risks to foreign investors, prompting companies like Hoechst and Bayer to adopt strategies to secure their long-term interests. While Hoechst mitigated political risk through indirect securitisation, strategically reducing its equity stake in British Paints (India) to 40 percent to maintain operational control while complying with foreign ownership restrictions, Bayer pursued a different approach, securitising its market presence by leveraging its essential role in public health and industrialization to justify retaining a 51 percent ownership in Bayer India Ltd. Both firms exemplify how foreign multinationals could securitise their investments by balancing compliance with host-country regulations, adjusting corporate structures and emphasising their strategic value to domestic development.[89]

Conclusion

Foreign direct investment has always involved significant risks, as companies must anticipate market developments while navigating economic, political and social uncertainties. The 1970s and 1980s were particularly challenging for multinationals both for internal reasons as a result of their enormous expansion, and for external reasons including economic turmoil, inflation, fluctuating currencies and political instability. Using the examples of the German chemical companies Hoechst and Bayer, this chapter has shown the specific risks these firms faced in expanding their global presence and how they applied different risk management strategies.

87 Geschäftsbericht Bayer 1983, 46; Geschäftsbericht Bayer 1984, 44; Geschäftsbericht Bayer 1985, 47; Geschäftsbericht Bayer 1986, 53; Geschäftsbericht Bayer 1987, 54; Geschäftsbericht Bayer 1988, 83; *Verg/Plumpe/Schultheis*, Meilensteine, 457–459; Wirtschaftsarchiv der Universität zu Köln (WAUK), Bayer Aktionärsbrief `91. Bericht über die 39. Hauptversammlung der Bayer AG, 19.06.1991, 23.

88 *Reinert*, Bayer, 181–182.

89 In some cases 'Indianisation' strategies of German companies added security to long-term business interests. See *Faust*, Void.

As Mark Casson and Teresa da Silva Lopes have proposed, companies face diverse risks and can choose different strategies for managing risks: avoidance, prevention, mitigation, and withdrawal.[90] Hoechst's initial expansion into the US market exemplifies how cultural and operational misalignment can hinder international investments. The company attempted to establish a plastics production facility in Bayport (Texas) but faced technological and managerial difficulties. The inability to integrate German business practices into the American market led to financial losses, prompting the company to divest from plastics production in the United States and instead to acquire Celanese in 1987. This shift from divestment to acquisition demonstrates both the withdrawal and prevention strategies: Hoechst exited an unprofitable venture while learning from its mistakes in Bayport and securing a stronger position through an American-led management team at Celanese. Similarly, the nationalisation of Hoechst's stake in the French pharmaceutical company Roussel Uclaf following Mitterrand's election in 1981 illustrates how government intervention can threaten foreign ownership—even in the Western hemisphere. In this case, instead of withdrawing, Hoechst opted for mitigation by negotiating reduced control while maintaining its presence on the French market. This form of risk management was reflected not least in direct negotiations and a contract between the company and the government. Over time, as political conditions changed, the company regained its influence, highlighting how patient strategic adjustments can help firms to navigate hostile political environments over the long term.

In contrast, Bayer and Hoechst's experiences in Iran following the Islamic Revolution in 1979 illustrate how radical political shifts can render foreign investments untenable. The Iranian government nationalised foreign pharmaceutical operations and negotiations for compensation were prolonged. Despite initial attempts at mitigation through negotiations, both companies ultimately had to withdraw from the Iranian market—at least with their own foreign subsidiaries—, demonstrating how, in extreme cases, withdrawal becomes the only viable risk management strategy. Meanwhile, in India, both firms faced restrictive foreign ownership regulations under the Foreign Exchange Regulation Act (FERA), which mandated that foreign companies reduce their stakes below 40 percent. Unlike Iran, however, India remained a stable regulated market, prompting Hoechst and Bayer to engage in prevention and mitigation strategies. Hoechst strategically

90 *Casson/da Silva Lopes*, Investment.

reduced its stake in its Indian subsidiary below 50 percent as required by the Indian government but maintained operational control, while Bayer leveraged its role in key industries such as pharmaceuticals and rubber production to justify its continued majority stake. Despite regulatory challenges, both firms successfully adapted to India's evolving economic policies, illustrating how compliance and strategic restructuring can allow firms to maintain market presence in restrictive environments.

These case studies demonstrate that multinational firms must continuously assess and adapt to changing political, economic and social conditions using a mix of avoidance, prevention, mitigation and withdrawal strategies. In the 1970s and 1980s, multinationals had to develop comprehensive risk management approaches, and they increasingly relied on international consultancies and risk assessment tools such as the Business Environment Risk Index (BERI) to operationalise their risks and to securitise their business. They established new instruments for the securitisation of risk – even if these tools could not avert all risks. Ultimately, the ability to manage risk effectively determined whether firms could expand abroad successfully or were forced to retreat.

Bibliography

Abelshauser, Werner: BASF since its Refounding in 1952, in: Abelshauser, Werner/Hippel, Wolfgang von/Johnson, Jeffrey Allan/Stokes, Raymond G. (eds.): German Industry and Global Enterprise. BASF: The History of a Company. Cambridge 2004, pp. 362–620.

Barral, Étienne P.: Rhône-Poulenc: Des molécules au capital. Paris 2008.

Bartmann, Wilhelm: Zwischen Tradition und Fortschritt: Aus der Geschichte der Pharmabereiche von Bayer, Hoechst und Schering von 1935–1975. Stuttgart 2003.

Bäumler, Ernst: Farben, Formeln, Forscher: Hoechst und die Geschichte der industriellen Chemie in Deutschland. Munich 1989.

Blaszczyk, Regina Lee: Synthetics for the Shah: DuPont and the Challenges to Multinationals in 1970s Iran, in: Enterprise and Society 9 (2008), 4, pp. 670–723.

Bösch, Frank: Zwischen Schah und Khomeini: Die Bundesrepublik Deutschland und die islamische Revolution im Iran, in: Vierteljahrshefte für Zeitgeschichte 63 (2015), 3, pp. 319–349.

Casson, Mark/Da Silva Lopes, Teresa: Foreign Direct Investment in High-Risk Environments: An Historical Perspective, in: Business History 55 (2013), 3, pp. 375–404.

Chauveau, Sophie: L'invention pharmaceutique: La pharmacie française entre l'État et la société au XX^e^ siècle. Paris 1999.

Chauveau, Sophie: Le défi de l'internationalisation: Le cas de l'industrie pharmaceutique en France depuis la Seconde Guerre Mondiale, in: Bonin, Hubert/Bouneau, Christophe/Fernandez, Alexandre/Marzagalli, Silvia/Cailluet, Ludovic (eds.): Transnational Companies, 19th-20th Centuries. Paris 2002, pp. 955–965.

Das Gupta, Amit R.: Struggling for the Release of German Enemy Property in India (1953–1963), in: Huber, Marie/Yacob, Shakila/Kleinschmidt, Christian (eds.): Security Strategies in International Business History: German Companies in Asia in the 20th Century. New York/London 2026, pp. 99–118.

Doering-Manteuffel, Anselm/Raphael, Lutz: Nach dem Boom: Perspektiven auf die Zeitgeschichte seit 1970. 3rd expanded edition. Göttingen 2012.

Dunning, John H./Lundan, Sarianna M.: Multinational Enterprises and the Global Economy. 2nd edition. Cheltenham 2008.

Eck, Jean-François: Les entreprises françaises face à l'Allemagne de 1945 à la fin des années 1960. Paris 2003.

Faust, Julian: Filling a Colonial Void? German Business Strategies and Development Assistance in India, 1947–1973, in: Business History 64 (2022), 9, pp. 1684–1708.

Ferguson, Niall/Maier, Charles S./Manela, Erez/Sargent, Daniel J. (eds.): The Shock of the Global: The 1970s in Perspective. Cambridge 2010.

Forbes, Neil/Kurosawa, Takafumi/Wubs, Ben (eds.): Multinational Enterprise, Political Risk and Organisational Change: From Total War to Cold War. New York /Abingdon 2019.

Geiger, Tim/Peter, Matthias/Lindemann, Mechthild (eds.): Akten zur Auswärtigen Politik der Bundesrepublik Deutschland 1983. Band I: 1. Januar bis 30. Juni 1983. Munich 2014.

Guha, Ramachandra: India after Gandhi: The History of the World's Largest Democracy. New York 2007.

Guinot, François: Les stratégies de l'industrie chimique. Paris 1975.

Jakob, Mark/Kleinöder, Nina: The Security and Insecurity of Enterprises: Constructing and Negotiating Dangers, Hazards, and Threats in Business History, in: Jakob, Mark/Kleinöder, Nina/Kleinschmidt, Christian (eds.): Security and Insecurity in Business History: Case Studies in the Perception and Negotiation of Threats. Baden-Baden 2021, pp. 9–26.

Jakob, Mark/Nützenadel, Alexander/Streb, Jochen: Erfahrung und Erwartung – eine vernachlässigte wirtschaftshistorische Perspektive?, in: Jahrbuch für Wirtschaftsgeschichte / Economic History Yearbook 59 (2018), 2, pp. 329–341.

James, Harold: Rambouillet, 15. November 1975: Die Globalisierung der Wirtschaft. Munich 1997.

Jensen, Nathan: Political Risk, Democratic Institutions, and Foreign Direct Investment, in: The Journal of Politics 70 (2008), 4, pp. 1040–1052.

Jones, Geoffrey: Learning to Live with Governments: Unilever in India and Turkey, 1950–1980, in: Entreprises et Histoire 49 (2007), pp. 78–101.

Jones, Geoffrey/Lubinski, Christina: Managing Political Risk in Global Business: Beiersdorf 1914–1990, in: Enterprise and Society 13 (2012), 1, pp. 85–119.

Klein, Heribert: Operation Amerika: Hoechst in den USA. Munich / Zurich 1996.

Kobrak, Christopher/Wüstenhagen, Jana: The Politics of Globalization: Deutsche Bank, German Property and Political Risk in the United States after World War II, in: Entreprises et Histoire 49 (2007), pp. 53–77.

Lanz, Kurt: Weltreisender in Chemie. Dusseldorf / Vienna 1978.

Levasseur, Georges: Report on the Legal System in Iran, in: Butler, William J./Levasseur, Georges (eds.): Human Rights and the Legal System in Iran. Geneva 1976, pp. 43–72.

Lubinski, Christina: Navigating Nationalism in Global Enterprise: A Century of Indo-German Business Relations. Cambridge 2023.

Ludwig, Corinna: Amerikanische Herausforderungen: Deutsche Großunternehmen in den USA nach dem Zweiten Weltkrieg. Frankfurt am Main 2016.

Marx, Christian: Wegbereiter der Globalisierung: Multinationale Unternehmen der westeuropäischen Chemieindustrie in der Zeit nach dem Boom (1960er-2000er Jahre). Gottingen 2023.

Marx, Christian: German Chemical Firms in Latin America in the 1970s and 1980s: Strategy and Management of Multinationals in a Volatile Environment, in: Business History (online only). https://doi.org/10.1080/00076791.2025.2456291 (2025).

Pitteloud, Sabine: Multinationals' Need for State Protection: The Creation of the Swiss Investment Risk Guarantee in the 1960s, in: Jakob, Mark/Kleinöder, Nina/Kleinschmidt, Christian (ed.): Security and Insecurity in Business History: Case Studies in the Perception and Negotiation of Threats. Baden-Baden 2021, pp. 111–134.

Reinert, Thomas: Begegnung mit Bayer: Historische Facetten eines innovativen Unternehmens. Frankfurt am Main 2014.

Romberg, Dennis: How to Further Develop the Nonproliferation Regime? West German Nuclear Exports to Brazil and Iran in Context of US Criticism, in: The International History Review 40 (2018), 5, pp. 1094–1114.

Roy, Tirthankar: A Business History of India: Enterprise and the Emergence of Capitalism from 1700. Cambridge 2018.

Schenk, Catherine R.: International Economic Relations since 1945. 2nd edition. London/New York 2021.

Schreier, Anna Elisabeth/Wex, Manuela: Chronik der Hoechst Aktiengesellschaft 1863–1988. Frankfurt am Main 1990.

Seifert, Karl-Gerhard: Goodbye Hoechst: Von Könnern, Spielern und Scharlatanen. 3rd edition. Frankfurt am Main 2019.

Seine-Saint-Denis Conseil Général (ed.): De Gaston Roussel à Sanofi-Aventis. Près d'un siècle d'histoire et de patrimoine pharmaceutiques à Romainville. Bobigny Cedex 2007.

Stanwick Bårnås, Kristin: The Management of Foreign Direct Investment Risk by Two Norwegian Firms in the 1960s and 1970s, in: Jakob, Mark/Kleinöder, Nina/Kleinschmidt, Christian (eds.): Security and Insecurity in Business History: Case Studies in the Perception and Negotiation of Threats. Baden-Baden 2021, pp. 135 – 156.

Teltschik, Walter: Geschichte der deutschen Großchemie: Entwicklung und Einfluß in Staat und Gesellschaft. Weinheim 1992.

Tomlinson, Jim: Democratic Socialism and Economic Policy: The Attlee Years, 1945–1951. Cambridge 1997.

Tuppen, John: France under Recession, 1981–1986. Houndmills 1988.

Tuppen, John: Chirac's France, 1986–88: Contemporary Issues in French Society. New York 1991.

Verg, Erik/Plumpe, Gottfried/Schultheis, Heinz: Meilensteine: 125 Jahre Bayer, 1863–1988. Leverkusen 1988.

Vlaanderen, Edward van: Pronounced Success: America and Hoechst 1953–1978. Bridgewater, N.J. 1979.

Watts, H.D.: The Inter-Regional Distribution of West German Multinationals in the United Kingdom, in: Taylor, Michael/Thrift, Nigel (eds.): The Geography of Multinationals: Studies in the Spatial Development and Economic Consequences of Multinational Corporations. London/Sydney 1982, pp. 61–89.

Wehnelt, Christoph: Hoechst: Untergang des deutschen Weltkonzerns. Lindenberg 2009.

Weißgerber, Bettina: Die Iranpolitik der Bundesregierung 1974–1982. Munich 2019.

Wengenroth, Ulrich: The German Chemical Industry after World War II, in: Galambos, Louis/Hikino, Takashi/Zamagni, Vera (eds.): The Global Chemical Industry in the Age of the Petrochemical Revolution. New York 2007, pp. 141–167.