

## Anti-monopoly Policy and New System of Large Corporate Groups in Germany after World War II

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### Abstract

This paper discusses competition policy, in particular anti-monopoly policy and the development of a new system of industrial concentration in Germany after World War II. When examining industrial concentration in Germany, the cooperative mechanisms for corporations are the most characteristic manifestation of corporate group systems. Large corporate group systems evolved during the dissolution and reconcentration of monopolies after the war. Anti-monopoly policy influenced new developments in the system of large corporate groups. Therefore, this paper discusses anti-monopoly policy and the restructuring of a system for large corporate groups. It first examines influence of the US occupation policy on monopolies in relation to monopoly deconcentration policy and anti-monopoly policy in Germany. Next it analyzes anti-monopoly policy reform. Furthermore, it considers the restructuring of corporate group systems in relation to the dissolution of monopolies under the occupation policy and their reconcentration in the latter half of the 1950s. Drawing on this discussion, how large business operations were restructured through reconcentration or concentration, and how, as a result, divisions of labor in business domains developed in response to oligopolistic competition will be clarified.

**Keywords:** Anti-monopoly policy; Deconcentration of Monopolies; Industrial concentration; Inter-firm relationship; Large corporate groups; Reconcentration of Monopolies; Restrictive Trade Practices Act

### Research Problems

Germany developed its enterprises, industries, and economy by establishing its own systems of industrial concentration while deploying and adapting technology and management methods from the USA after World War II. Industrial concentration exhibited new postwar developments. German characteristics of industrial concentration, which were based on prewar industry-bank relationships, included new developments in the industrial system that coordinated interests and shared information between industry and banks and between corporations. Monopolies that had been dissolved by the postwar occupation policy reconcentrated. In addition, the system of large corporate groups began to re-emerge and reconcentrate, and with it came new developments in the system of large corporate groups. The system played a crucial role in the formation of the German capitalism's accumulation structure, the cornerstone of industrial concentration. The postwar era necessitated the restructuring of the system of large corporate groups that emphasized the benefits of division of labor based on specialization in response to oligopolistic competition. This phenomenon represented the transformation of the prewar system of industrial concentration that controlled markets on the basis of massive trust and wide-ranged cartels, which encompassed the entire industrial sector in the 1920s. The US occupation policy and anti-monopoly policy influenced the restructuring of corporate group systems after the war.

From the perspective of market control, this new system, based on industry-bank relationships and large corporate groups, was an important element supporting the development of postwar productive

forces and accumulation structures. Industrial concentration developed as an important process in the progress of German corporations while exhibiting new characteristics of cooperation in German capitalism. By understanding the changes in industrial concentration from the perspective of accumulation structures, this paper will show the significance of the postwar system of large corporate groups and the cooperative nature of German capitalism (For "Cooperative managerial capitalism" in Germany, see [1]). Therefore, in this paper, the characteristics and significance of the new industrial concentration system in postwar Germany will be analyzed in relation to the US occupation policy and competition policy, in particular anti-monopoly policy of Germany's federal government.

Many studies approach this theme from the perspective of economic and business histories, and economic system (See books and articles cited in this paper). However, these studies do not always identify functional aspects of new system of large corporate groups. This paper attempts to explain significance and limitations of postwar anti-monopoly policy and how large business operations were restructured through reconcentration or concentration, and how, as a result, divisions of labor in business domains developed in response to oligopolistic competition.

First, Section 2 considers influence of the US occupation policy on monopolies. Next, Section 3 examines the deployment of anti-monopoly policies in Germany. In Section 4, reconcentration of monopolies and new developments in the system of large corporate groups are discussed. Furthermore, concluding remarks of this paper are presented in Section 5.

### Influence of the US Occupation Policy on Monopolies

Section 2 first examines influence of the US occupation policy on monopolies. It considers monopoly deconcentration policy and influence of the US occupation policy on anti-monopoly policy in

Germany. For corporate group systems, the postwar occupation policy dissolved the concentration of monopolies and catalyzed new developments in large corporate groups through the reorganization of business structures that were adaptive to oligopolistic competition; it was not simply a return of the prewar structure.

## **Influence of the US Deconcentration Policy on Monopolies**

### **Expansion of monopoly deconcentration policy**

First, examining monopoly deconcentration policy, it is important to note the US belief that excessive German economic and political power should be curtailed through monopoly dissolution and decartelization [2, S.156]. The basic policy was to turn Germany into an oligopolistic market founded on the principle of competition, very similar to that in US [3, S.280; 4, p.167].

Separating the coal industry from the iron and steel industries through dissolution deeply impacted these groups [5, p.95, p.110]. In heavy industries, the eight large corporate groups were eventually divided into 23 steel companies. Vereinigte Stahlwerke AG's steel division was split into 13 separate companies, which further split three into the coal sector, one in processing, and one in trading [6, S.237; 7, S.55]. Krupp had its main plant, the Friedrich-Alfred-Hütte iron works, demerge and dissolve into a separate company, Hüttenwerk Rheinhausen AG, and Essener Kruppzechen also split [8, S.24]. Previously, Krupp had been able to globally produce superior products in both quality and price through its effective cooperation and complementary functioning with materials industries and processing plants. However, its ties with these production stages were terminated and the company changed completely [9, S.49; 10, S.28, S.30]. This type of dissolution also occurred at Mannesmann, Hoesch, and Gutehoffnung, among other corporations [11, S.24-25; 12, S.23, 13, S. 23-24; 14, S.24; 15, S.21]. However, West Germany strongly opposed the complete separation of the coal industry from the iron and steel industries, which was envisioned by the occupation forces, and the parallel management of both iron and steel and coal companies was approved with an upper limit of 75% of coke consumption [16, p.141].

The chemical firm IG Farben was also dissolved, resulting in a restructured oligopoly of three main companies: BASF, Bayer, and Hoechst [17, 18]. Major changes in capital relationships also occurred. The banking industry was split into 30 small-scale regional banks, with specific bank operations limited to a specific state regions [19, S. 102-104; 4; 20, S.227-228]. However, the universal banking system was not reformed through these dissolutions and restructuring, a very important factor in the new development of the industrial system based on industry-bank relationships.

### **Significance of monopoly dissolution and restructuring**

The dissolution of large corporations was a huge setback to the corporations; nevertheless, it was also an opportunity for monopolistic corporations to undergo a rationalized process of restructuring. For example, in the case of Vereinigte Stahlwerke, dissolution provided an opportunity to restructure as a large company with a scope appropriate for management, with a functional monopoly or oligopolistic system. In addition, IG Farben was able to liquidate an immovable, excessive group to create a functional, large corporate group with a more rational structure that responded to postwar technological reforms while allowing them to pioneer new areas and expand their base [16,

pp.145-147]. The US proposal for organizational restructuring of the coal and iron and steel industries, which accompanied the dissolution of monopolies, attempted to rationalize these industries, thus reducing costs and improving efficiency while increasing production [5, p.90, p. 95, pp.108-109; 4, p.166]. US postwar reforms primarily focused on market restructuring by terminating monopolies and cartels and the achievement of economies of scale [21, p.361].

For example, in the iron and steel industry, a great deal of production capacity was allocated to other steel production units through the dissolution of monopolies. Thus, components of the industry's rolling mill capacity spread throughout the entire industry rather than within a single corporation. This type of production capacity allocation created conditions for oligopolistic competition, and not only raised the cost of diversification but also generated possible incentives for corporate growth through an increase in the scale of corporate rolling mills [21, p.364]. The prewar structure of domestic markets was replaced by an oligopolistic structure through a policy of deconcentration, and the previously existing monopolies and specialization were replaced by mass production [21, pp.352-353, p. 368]. Such industrial restructuring created a foundation for the expansion of corporate activities suitable for oligopolistic competition, which differed from the assumptions of the prewar German iron and steel industry structure, industrial organization, and market structure.

IG Farben's dissolution in the chemical industry revived inter-firm relationships in same form taken before the company was created. However, the restructuring actually created the industry's three giants in response to the move from coal to petroleum chemistry, wherein a unique, multifaceted industrial complex was created to produce synthetic rubber, synthetic resins, synthetic fibers, and other petroleum-based products. This change was not merely a return to prewar conditions, but a rational restructuring that established a more competitive inter-corporate structure [22, p.378]. The following two achievements resulted from the dissolutions: (1) the chemical market was restructured along competitive lines. (2) The new and sufficiently large-scale units were established to act as an engine useful for the rebuilding and growth of Western Europe and to survive in the multi-lateral liberal capitalistic world trade system dominated by the US [5, p.95].

The restructuring of corporate organizations to their prewar form was not the primary objective; rather, it was to create resilient trust structures [23, pp.147-148]. Significantly, dissolution and restructuring created stronger control in the heavy equipment manufacturing industries. Krupp, Gutehoffnung, Klöckner, and others demonstrated and laid the foundation for the rapid development of the heavy machinery sector [24, p.65].

## **Influence of the US Occupation Policy on Anti-monopoly Policy**

Next, influence of the US occupation policy on anti-monopoly policy in Germany is considered. The US occupation policy included the physical rebuilding of German industries as well as the shift to a German capitalist structure, whose obvious manifestation had been in the Third Reich [3, S.326]. Eradicating the cartel-like nature of economic concentration, characterizing prewar German capitalism, was a method for achieving this objective [25, p.84]. In Europe, cartels were an important practice of corporate cooperation [26, p.67]; thus, England and France did not oppose them as long as they produced and distributed goods [26, p.56; p.212]. The US, on the other hand,

considered the elimination of practices that restricted competition by cartels and trusts in OEEC member nations [27, pp.17-18].

Thus, the US industrial policy that occupied Germany at the time emphasized the removal of the strong cartel tradition from the German business world, and the movement toward an oligopolistic market based on the principles of competition, such as that in the US [3, S. 280]. Structural reforms to rebuild the German economy and industries were designed by the US and focused on the creation of production units and corporate scale, such as those in the US, and regulation of economic activities that suppressed competition through anti-trust laws [4, p.111].

Occupation authorities, particularly those in the US, questioned the benefits of a forced economic reform. A project to transfer US anti-trust laws and traditions to West Germany was designed such that it could be taken over by West German's at a point in time [4, pp. 167-168], and economic and industrial structural reforms initiated by US occupation authorities were achieved in the context of West Germany [4, p.104, pp.109-110, p.162]. However, they were not transferred by force, rather the spontaneous imitations of West Germany by a group under the leadership of L. Erhard, Minister of Economic Affairs with guidance and education from the US, were effective the economic and industrial system, wherein mass production and mass consumption were linked to competition, and worked toward a set of objectives that closely conformed to US projects [4, p. 111]. Based on this point, the US direction and compulsion of an Anti-Monopoly Act in Japan significantly differed from those in Germany.

## Deployment of Anti-monopoly Policies in Germany

### Basic characteristics of anti-monopoly policy

Section 3 will examine the various characteristics of postwar anti-monopoly policy. The Restrictive Trade Practices Act was finally passed in 1957 as an anti-monopoly regulatory law. Although this law was influenced by the US, it was formulated to replace the Allies' anti-trust law [National Archives, RG59, 862A.054, Summary of German Press Coverage of Passage of Cartel Law (6.8.1957), p.1].

The Restrictive Trade Practices Act aimed to destroy cartels originally recognized under the Cartel Ordinance of 1923, based not on the principles of "abuse regulations," but rather on those of "prohibition" [National Archives, RG59, 862A.054, Developments concerning the German Cartel Law (3.7.1956), pp1-2]. However, the Restrictive Trade Practices Act was an extraordinarily loosely conceived bill, leaving several loopholes for reviving cartels [National Archives, RG59, 862A.331, Correspondence to R. H. Harlan from Society for the Prevention of the World War, Inc (22.5.1958), p.3]. For example, many economic sectors, such as agriculture, banking and insurance, and shipping, were excluded from adaptation. In addition, in case restrictions on competition or other ordinances were believed to be in the best interests of the state, a clause in the law allowed the Ministry of Economic Affairs to recognize cartels on the basis of these individual cases [National Archives, RG59, 862A.054, Summary of German Press Coverage of Passage of Cartel Law (6.8.1957), p.1]. These loopholes were particular to rationalization cartels and export cartels [28]. There were several limitations from the beginning, such as the lack of planning for regulations on mergers [3, S.280], and until a revision in 1973, the Federal Cartel Office merely had the authority to investigate mergers and not the authority to prohibit them [National Archives, RG59, 862A.33, Reconcentration in Iron, Steel and Coal

Industries of the Federal Republic (5.10.1959), p.5]. In addition, the Restrictive Trade Practices Act did not recognize market-dominating enterprises under the same criterion as cartels, thereby making it possible to avoid cartel regulations, but creating the risk of concentration [29, S.99, S.101].

The circumstances leading to the lack of effective anti-monopoly regulations under the Restrictive Trade Practices Act were further influenced by the strong opposition from industries, whose trade associations had long opposed the anti-cartel act from being passed [National Archives, RG59, 862A.054, Status of Decartelized and Deconcentrated German Coal and Steel Companies (23.6.1955), p.1; 30, pp.40-41]. Due to this opposition, the Ministry of Economic Affairs was forced to reach a consensus when adopting a policy of limited resistance against more radical proposals by the Allies [5, pp.172-173].

Thus, the Germans exhibited a strong initiative with anti-monopoly regulations [30, pp.44-48], but created a political compromise in the conflicting approach to cartels, that is, "prohibition" vs. "abuse regulation" approaches [31, p.172]. From an industrial perspective, the Restrictive Trade Practices Act weakened the principled prohibition of cartels to the extent that the industrial world was satisfied [32, p.250, p. 256]. As a result, the idea behind the original bill, which was thorough in its prohibitory provisions doing away with monopolies as well as granting authority to the monopoly office, had largely become a shadow of its former self by the time it was enacted into law [20, S. 288]. The Act even considered control through conditions wherein the formation of large corporate units within specific economic sectors was beneficial [33, S.109]. Evidently, Germany diverged from the US model in anti-trust laws between the 1950s and 1960s [34, p.24].

### Significance of the Restrictive Trade Practices Act

In practice, the Restrictive Trade Practices Act faced major problems and suffered significant limitations. For instance, courts adopted a theoretical legal approach that prohibition regulations could only be applied when there was clear evidence of cartel operator contracts or cartel resolutions of trade associations. Thus, many court cases brought by the German Federal Cartel Office against cartels were lost due to insufficient evidence [35, p.178]. The Federal Cartel Office also tended to prioritize court decisions over rulings by administrative decree or make decisions with merger parties prior to making them public [36, p.53]. Further, the Restrictive Trade Practices Act aimed to decentralize economic power through the prohibition of cartels, and anti-trust laws and regulations in Germany allowed intervention only when there was a clear abuse of power in the market through a merger [37, p.132]. These legal deficiencies were rooted in policies intended to strengthen the export competitiveness of large corporations and corporate groups, because exports were seen as the primary method for rebuilding the West German economy [35, p.202].

Subsequently, in 1966 and 1973, the authority of the Federal Cartel Office was expanded to include the regulation of mergers [4, p.170]. The revision in 1973, in particular, granted the Federal Cartel Office the authority to prohibit mergers, leading to the establishment and strengthening of market control. However, when merging corporations provided evidence that their mergers facilitated competition that sufficiently offset disadvantages through market control, the Office had no choice but to approve the merger [38, p.192]. The creation of the Federal Cartel Office, responsible for the implementation of the Restrictive Trade Practices Act, was a symbolic systematization of US-style competition within Germany [4, p.174]. However, this organization could neither hasten or enforce corporate

decentralization orders nor prevent or delay corporate mergers and acquisitions [37, p.54; 39, S.27-28, S.30].

Compare with the prewar period, these reforms did in fact dramatically decrease the number of cartels. In 1929, the number of cartels had risen as high as 4,000, but in 1968, only 200 cartels were recognized as legal by the Cartel Office [37, p.54]. Despite the political intent to ensure free market competition and free trade, the actual business environment from 1950 to 1970 was not sufficiently based these factors [37, p.48]. As noted by A.D. Chandler, Jr., the characteristics of “cooperative managerial capitalism” [1] essentially remained unchanged. Many believe that anti-cartel liberal philosophies were far more lenient than was generally perceived [40, p.348]. For example, H G. Schröter argues that the complete dissemination of US anti-cartel beliefs throughout West Germany required more than one generation, and it was not until the 1960s that industrialists shared these views [41, S.151; 42, p.143, pp.152-153].

Rationalization cartels, important exceptions to anti-monopoly regulations, fulfilled critical roles in industry anti-recession and structural policies in certain cases. In the 1960s, state-led rationalization cartels were being developed; in particular, the 1963 measures that were implemented in the coal industry were a primary example [43, S.17-18]. These rationalization cartels were also seen in the iron and steel industry, where excess capacity was an issue at the end of the 1960s, and the formation of rationalization cartels in iron and steel firms enabled production specialization in rolling mill products. Thus, they were successful in avoiding destructive competition by responding to market demands and lowering costs with such division of labor [44].

In our abovementioned considerations, this section examined competition policy and new methods for regulating monopolies. If we analyze the implication of competition policy on trade policy and the global economy, we will see the important efforts made to form a common market through West European integration. For West Germany, admission into European international relationships, such as the European Coal and Steel Community (ECSC) and the European Economic Community (EEC), meant that they were participating in a European system to suppress cartel-like competition-limiting activities [45, p 163, pp 167-169]. Thus, the issues of state competition policy and anti-monopoly regulations were by character a response to the postwar framework in the European regions.

## **Reconcentration of Monopolies and New Developments in the System of Large Corporate Groups**

### **Development of the Reconcentration of Monopolies**

#### **Background of the Reconcentration of Monopolies**

Section 2 and 3 have discussed influence of the US occupation policy on monopolies and deployment of Anti-monopoly Policies in Germany. The latter half of the 1950s, although brought about the reconcentration of monopolies, new developments in the system of large corporate groups will be our next topic of discussion.

Since the end of World War II and during the 1957 and 1958 crises, Germany experienced a wave of corporate amalgamations with large corporate group structures, providing the foundation for mergers and acquisitions of subsidiaries. Enterprise concentration in the same

capital groups were also central to this movement [46, S.24] and played an important part in the reconcentration of dissolved corporations.

Three factors influenced this reconcentration and new concentration from the latter half of the 1950s through the end of the decade: (1) the benefits of economies of scale, (2) the legal benefit of scale, and (3) psychological factors. First, these developments achieved economies of scale. Second, tax benefits were applied to vertically integrated corporations. Third, cartels and concentration, rather than competition, were always the lingua franca of Europe’s economic system and were known to the market players [National Archives, RG59, 862A.33 Reconcentration in Iron, Steel and Coal Industries of the Federal Republik (5.10.1959), pp.3-4].

For legal benefits, national growth policies played a significant role and four laws enacted by the government dealt with this issue. The 1956 Transformation Law and 1957 Tax Law enabled large corporate groups to concentrate their power on a previously unseen scale and rid themselves of small shareholders. Revisions to corporate law allowed corporations to enjoy tax benefits by elimination or reduction of taxes on a portion of their profits and transforming it into equity capital. Further, the Restrictive Trade Practices Act publicly acknowledged about 250 cartels in 1958 and 1959 [47, S.5].

The reconcentration of previously split or dissolved large corporate groups continued apace in conjunction with the European Coal and Steel Community (ECSC). Article 66 of the ECSC Convention, May 1954, allowed concentration of companies that did not obstruct market competition and were granted relatively broad freedom for merging corporations within the coal, iron and steel industries; these new rules accelerated reconcentration [48, S.48; 49]. With reconcentration permitted for vertically integrated corporations affiliated with the coal and iron and steel plants, several coal and iron and steel companies that were previously dissolved, such as Mannesmann, Klöckner, and Rheinstahl-Phönix, restructured their corporations on the basis of the prewar foundation, that is, the consolidation of coal and steel [National Archives, RG59, 862A.054, Status of Decartelized and Deconcentrated German Coal and Steel Companies (23.6.1955), p.1]. Among the 34 instances of corporate concentration in West Germany approved by the 1962 ECSC, 14 were related to the reconcentration of corporations that were forced to dissolve postwar [50, S.245].

This powerful concentration of production in a relatively small number of large corporations was a result of highly intensified competition [47, S.5], and it increased in the latter half of the 1950s in response to the competitive conditions in the market. For example, according to Thyssen’s 1957/1958 annual report, the Thyssen group of corporations had the following four objectives : (1) strengthening cooperative ties that had already emerged, (2) strengthening resistance to market changes through horizontal integration of specialized production domains, (3) exploring new possibilities for rationalization and lower costs, and (4) greater competitiveness [51, S.11]. The emerging need for stronger ties within the group as a method to adapt to the market’s business environment and increasing competitiveness necessitated reconcentration. EEC member nations were definitely not complementary partners in their industrial production structure, but rather competitors; this competitive environment greatly accelerated the concentration and consolidation process [52, S.20].

For banks, the abolition and cancelation of allied nation regulations was a great opportunity for reconcentration. With the approval from the US in 1952, banks were zoned into three operational districts—northern, western, and southern—and concentrated into nine large

banks through mergers. Deutsche Bank, Dresdner Bank, and Commerz Bank, each inherited three financial institutions [National Archives, RG59, 862A.14, Reconciliation of German Commercial Banks (10.1.1957), p.1; 4, p.165; 53, S.102-104; 54]. The December 1956 law abolished mutual capital participation by banks, personalities among executives from inherited banks, and restricted issuance to only that of registered stock [55, p.49]. The top three banks were authorized to establish themselves, except for subsidiary financial institutions in Berlin, and return to their respective pre-war institutions [National Archives, RG59, 862A.14, Reconciliation of German Commercial Banks (10.1.1957), p.1; 53, S. 105; 56, S.40-41]. The reconcentration occurred in 1957. Deutsche Bank's primary reasons were to improve their international standing and the position of the new group in their handling of large accounts, gain greater flexibility in maintaining unified credit policies, and realize the economic potential of its business operations [National Archives, RG59, 862A.14, Present and Forthcoming Bank Merger in West Germany (3.5.1957)].

In their reconcentration efforts, the top three banks strongly lobbied the government while demonstrating their initiative [Vgl.57, S. 526-544]. At the time, government policy offered no opposition to mergers, and even most Social Democratic Party (SPD) leaders agreed to return to the concentration of banks [National Archives, RG59, 862A.14, United States Policy regarding Reconciliation of German Banks (15.12.1955), p.1]. With the new order in Europe during the 1950s and with efforts through new cooperation models in a larger economic sphere, early postwar regulations on large German banks were no longer deemed appropriate, but rather unreasonable, an opinion that continued to gain momentum [58, S.35].

Banks played a critical role in the concentration of monopolies and in bringing about new developments in the system of large corporate groups. Klöckner's reconcentration exemplifies concentration through bank intermediaries, from which they gained majority interests in coal companies that split from larger corporate group [59, S.26; 60, S.25].

### **Reconcentration of monopolies and development of divisions of labor in business domains**

Based on the abovementioned developments, the next important issue are how large businesses operations were restructured amidst reconcentration or concentration, and how, as a result, the system of large corporate groups was restructured. The most striking manifestation of the restructuring of operations in conjunction with the reconcentration of monopolies occurred in the coal, iron and steel industries. Thus, we will focus on these industries in the next section.

In the iron and steel industry, the process of corporate concentration beginning in the 1950s essentially proceeded in two stages. The first stage was the return of a company temporarily deconcentrated through dissolution to its previous state; this stage ended in 1958 and 1959 as reorganizations ended. The second stage included the close cooperation of many large corporate groups in production and investment [52, S.1].

As discussed, the dissolution of monopolies in the postwar era was related to the "integrated economy" that underpinned productive forces in Germany's heavy industry. Thus, the movement to reconcentrate proceeded with the aim of expanding production units and product types and strengthening the vertical combination of coal and iron and steel industries [61, S.9; 62, p.53]. These goals were also intended to integrate production capacity in the iron and steel industry and adopt advanced technologies [21, p.381].

Examining the successor companies of Vereinigte Stahlwerke AG, Phönix and Rheinrohr corporations merged due to the relationship of the former as a supplier of semi-finished steels with the latter [National Archives, RG59, 862A.331, Merger of Rheinische Roehrenwerke AG and the Huettenerwerke Phoenix AG with Approval of High Authority (11.2.1955); ThyssenKrupp Konzernarchiv, NST/82, Zusatzprotokoll zur Niederschrift über die 38. Aufsichtsratssitzung der Hüttenwerke Phoenix AG am 2.07.1954 zur geplanten Fusion, S.7]. In 1959, Ilseeder Hütte decided to convert two subsidiaries into parent companies to simplify their management structure and ease financial and other burdens [National Archives, RG59, 862A.053, Reconciliation of Ilseeder Huette, Pein (1.4.1959), p.1]. For Thyssen, the initial target of reconcentration was entirely related to the Duisburg region.

They signed an Agreement of Community of Interests in September 1955 prior to merging capital. The next year August Thyssen and Niederrheinische Hütte AG consolidated their corporations by stock exchanges [ThyssenKrupp Konzernarchiv, A/33073, Die Schritt über die Entscheidung über die Genehmigung des Abschlusses eines Interessen-gemeinschaftsvertrages zwischen der August Thyssen-Hütte Aktiengesellschaft und der Niederrheinische Hütte Aktiengesellschaft durch die Hohe Behörde (23.5.1956), S.1, S.3; ThyssenKrupp Konzernarchiv, A/33073, Rückgängigmachung von Entflechtungsmaßnahmen im Bereich der August Thyssen-Hütte und der Niederreinhischen Hütte (16.1.1956), S.3; 7, S.60]. The effective complementary relationship between these two companies disappeared as a result of the dismantling of Thyssen's production equipment as part of the occupation policy. In addition, for Niederrheinische Hütte, it became impossible to produce thick and medium plates because of the dismantlement of the production equipment. Thus, the reconcentration of Thyssen and Niederrheinische Hütte, which was in response to these difficult conditions, aimed to fill the supply gap since it could not be resolved through a supply agreement [ThyssenKrupp Konzernarchiv, A/30819, Abschluss eines Interessengemeinschaftsvertrages zwischen der August Thyssen-Hütte AG. und der Niederrheinische Hütte AG., Duisburg (15.9.1955), S. 7-9].

The second target of Thyssen's reconcentration was Deutsche Edelstahlwerke AG, with which they merged in 1957. This was a result of August Thyssen lacking his own electric steel production plant in Duisburg, and in that regard, the possibility for cooperation in production technology, especially for crude steel, was considered [ThyssenKrupp Konzernarchiv, A/30778, Pressenotiz zur Übernahme eines Mehrheitpakets der Deutsche Edelstahlwerke AG durch August Thyssen-Hütte AG (20.12.1956); 7, S.60, S.330]. The merger of Thyssen with these two companies provided the impetus for the divisions of labor that followed. Thyssen valued the production of flat bars, semi-finished steels, and large profile iron. In response, Niederrheinische Hütte AG focused on rod wire and bar steel, whereas Deutsche Edelstahlwerke AG focused on the production of high-grade steel and other value-added steels [ThyssenKrupp Konzernarchiv, A/30819, Abschluss eines Interessengemeinschaftsvertrages zwischen der August Thyssen-Hütte AG. und der Nieder-rheinische Hütte AG., Duisburg (15.9.1955), S.8-10; ThyssenKrupp Konzernarchiv, A/30819, Interessengemeinschaftsvertrag zwischender Niederrheinische Hütte Aktiengesellschaft, Duisburg-Hochfeld, und der August Thyssen-Hütte Aktiengesellschaft, Duisburg-Hamborn (15.9.1955), S.1; 63, S.219]. With the purchase of shares in Hüttenwerke Siegerland AG and Rasselstein-Andernach's steel rolling company in 1957 and 1958/1961, respectively, Thyssen secured sales channels for band iron. These purchases also achieved the benefit of division of production labor on a

product-by-product basis [ThyssenKrupp Konzernarchiv, A/31870, Unser Antrag auf Genehmigung des Zusammenschlusses unseres Unternehmens mit der Phoenix-Rheinrohr AG (27.4.1960), S.3; ThyssenKrupp Konzernarchiv, A/31870, Die Schrift an den Herrn Bundeskanzler von Dr.Pferdmenges, ThyssenKrupp Konzernarchiv, A/31870, Der Brief an Herrn Dr. Robert Pferdmenges (3.9.1960); 63, S. 215, S.218; 64, pp.156-162]. The new Thyssen group became the only capital group in West Germany with a steel production plant in the postwar stage. This plant was characterized by ultra-large scale blast furnaces, LD converters, continuous rolling to automatic rolling mills, and a steel production system on a large scale. The restructuring through post-dissolution reconcentration was also significant for such economies of scale [64, p.1, p.179].

Among the 13 successor companies resulting from the postwar dissolution of Vereinigte Stahlwerke AG, reconcentration in the 1950s resulted in only four surviving companies by the early 1960s: August Thyssen, Phöenix-Rheinrohr, Rhein Steel, and the Dortmund-Hörde Hütten Union. Within most of these, corporate mergers and expansions did not result in direct competition with the other corporations; each company chose to expand and integrate production capacity in separate domains, seeking profit through division of labor. That is, most of Vereinigte Stahlwerke AG's steel production capacity was once again folded into the operations of either Thyssen or Phöenix-Rheinrohr. This specialization of product supply in the rolled-product markets for the most part did not overlap, and they enabled a product-based division of labor between the two companies. Specifically, Thyssen specialized in the production of lighter plate, semi-finished and finished rolled sheets, coils, rod wire, and specialty steel, whereas Phöenix-Rheinrohr specialized in the production of steel pipe, heavy plates, semi-finished steels, and raw iron. As a result of the dissolution of Vereinigte Stahlwerke AG, Rheinische Stahlwerke AG inherited Vereinigte's interests, except for those from steel production. The Dortmund-Hörde Hütten Union became an important producer of crude steel; however, unlike the other corporations, it was not broadly diversified into the iron and steel industry. The Union planned for concentration in two domains, heavy plate and both bar and structural steel by the early 1960s. Other large corporate groups such as Hoesch, Klöckner, Mannesmann, Hüttenwerk Oberhausen AG, and Krupp predominantly followed the Dortmund-Hörde Hütten Union's path of specialization. Each attempted to organize the production of steel and rolled products, such that companies could realize a strong position in the limited number of markets [21, pp.381-383; 65, S.110-115, 66, ThyssenKrupp Konzernarchiv, A/31927, Zusammenschluß im Sinn des Artikel 66 des Montanunionvetrages (MUV) zwischen der August Thyssen-Hütte AG(ATH) und der Phoenix-Rheinrohr AG Vereingte Hütte- und Röhrenwerke (Phoenix) (22.5.1962), S.1].

Next, we will examine companies other than Vereinigte Stahlwerke AG. Within a few years after the restructuring that occurred with dissolution, Flick, Gutehoffnung, Klöckner, Otto Wolff, and Hoesch re-emerged as an integrated organization that was larger in investment and production scale than the previous Vereinigte Stahlwerke AG [67, S.532]. At Mannesmann, the disassociation with the coal company due to the postwar dissolution had been restored by the mid-1950s, and the restoration of an integrated organization proceeded [68, S.27; 69, S.27]. Thereafter, in the fall of 1958, their six most important subsidiaries merged with the parent company [70, S.1439]. Similarly at Hoesch, of the three successor companies that split due to dissolution, two were returned to the parent company. The plan called for a vertical integration of coal and steel industries, as this was a condition for survival among Ruhr's coal and steel corporations [71, S.36-37; 72, S.

1163]. Hoesch restructured as a large corporate group comprising of four core corporations in the late 1950s, with many subsidiaries established thereafter [73, S.1092; 74]. Even at Krupp, Hüttenwerk Rheinhausen AG assumed control over Bochmer Verein, a successor to Vereinigte Stahlwerke AG, with the primary objective of benefitting from the division of labor. Hüttenwerk Rheinhausen AG mainly produced mass products through Thomas steel, as opposed to Bochmer Verein, which focused on the production of high-grade steel using LD processes and electric furnaces. This consolidation facilitated the expansion of production programs and division of labor. Within materials supply in the processing sector, Krupp formed a lucrative consolidation with its supplier, Bochmer Verein [62, pp.98-100]. At Gutehoffnung, dissolution measures ended vertical ties, and the reconcentration movement affected reconsolidation of the steel and coal sectors in 1957. The energy-related consolidation of Hüttenwerk Oberhausen AG and Bergbau AG Neue Hoffnung expanded through ties with Ruhrchemie AG, in which Bergbau AG Neue Hoffnung had capital investments [62, pp.124-125]. Reconcentration in coal and steel industries thus generated more advantageous conditions than those before dissolution.

The reconcentration of monopolies temporarily ceased in the late 1950s, but with the growth of fierce competition and pressure from the 1958 crisis, the process of accumulation and concentration proceeded in the second stage. The new economic advances that emerged in 1959 and 1960 were already forgotten as the economy stagnated again in 1961. In addition, the Thyssen group began building close cooperative relationships with the Dortmund-Hörde and Hoesch groups at the beginning of the 1960s in response to the powerful expansion. Hoesch, in a collaborative effort with Mannesmann, begun construction of a large steel pipe factory, and the cooperation of these three groups was partially demonstrated in joint capital procurements and in the joint use of rolling facilities. In 1962, Thyssen, Mannesmann, and Hoesch formed agreements regarding cooperation in production and investment [52, S.2]. Thus, one form of concentration resulting from increased competition at the end of the 1950s and the beginning of the 1960s was the various pacts between large corporate groups for joint research and development activities and the allocation of production equipment for joint use [47, S.5-6].

### Significance of new developments in large corporate group systems

Based on the foregoing discussion, we will now turn our attention to the significance of new developments in the systems of large corporate groups that accompanied the dissolution of monopolies and later reconcentration. During this period, to simplify management, large companies formed scales that were suitable for management, which were founded through liquidation of large corporate groups; this was observed through the process of concentration and reconcentration of monopolies. This process created important preconditions for thorough rationalization [75, S.11, S.13].

This type of concentration helped create a system that exhibited economies of scale through the benefits of specialization and division of labor. This approach intended to reform systems that enables large corporate groups to develop more effective operations in response to opportunities for technological reforms, provided by US implementation under the transition to a system of oligopolistic competition. In other words, this type of development strengthened the systems of inter-firm relationships; these relationships formed for the expansion of corporate activities that emphasized market segments

adapted to oligopolistic competition in the form of “division of labor complementary to each product.” For the iron and steel industry, this approach meant leveraging “integrated economy” benefits between the coal and steel industries to transform the system on the basis of collaborative inter-corporate relationships in pursuit of scale merit through “division of labor with complementary products” between large corporate groups.

This systemic transition aggregated production, sales, and management as the foundation of an industrial system; in terms of maintaining economic consistency, it strengthened German large corporate groups [76, pp.3-4, p.8] functioning on the lines of organic parent-subsidiary corporate groups based on the principle of product-based division of labor. It created better conditions for business rationalization and facilitated the pursuit of economies of scale as well as strengthened the foundation for cooperation-based market control. This postwar business structure differed from industrial concentration systems that were based on market control with a high level of concentration through giant trusts, which included industrial sectors seen in the prewar era, particularly those in beginning of the 1920s; instead, it more carefully pursued functional benefits. Relationships with such “complementary product-based divisions of labor” among corporate groups proceeded between large corporate groups [36, pp. 3-4, p.8]. These relationships differed from the prewar period’s economic concentration through cartels, and were meaningful as a systemic transformation for monopolistic market control based on the economic benefits of the division of labor. This was a system of large-scale business, appropriate to large corporate groups; however, they differed from Japan’s industrial groups and the full-set industrial structure found thereafter. These were reforms to the system of large-scale business that incorporated collaborative relationships in response to global and domestic competition. The system helped German corporations avoid intense price competition and was an important foundation for the development of management methods, which adopted a style of management that focused on competing with quality.

## Concluding Remarks

Based on the foregoing analysis, we present conclusion in this paper. Concerning competition policy, in particular anti-monopoly policy, Germany’s federal government considered the social market economy in the framework of a postwar economic order as critical for economic policy, particularly to further expand and solidify the domestic market economy and competition [77, S.150]. Before the war, monopolies and cartels in the market were accepted under the Nazi-controlled economy, with the state meddling in economic affairs of a “politicized economy”; however, postwar, the state played a more regulatory role in economic policy. This economic policy was based on a philosophy that emphasized market mechanisms by limiting government to an auxiliary role and the strict separation of politics and economy [78, pp. 196-197].

Regarding the formation of anti-monopoly policy and Germany’s freedom in its process, even with the US dominating anti-monopoly policies, Germany had more freedom than Japan throughout the process of enacting anti-monopoly regulations.

For instance, in Japan as defeated nation, anti-monopoly policies, such as the 1947 Anti-Monopoly Act, were enacted early on under the strong guidance and pressure from the GHQ. Although several subsequent revisions to the law eased restrictions, the overall

framework continued to follow the guidelines established by occupation authorities; holding companies were outlawed as were the buying and holding of treasury stocks [79, pp.664-665]. In contrast to Japan, Germany’s Restrictive Trade Practices Act passed in late 1957 permitted holding companies, which served as a means of corporate control and inter-corporate unions. These issues were, and have remained, fundamental to the harmonious state of German capitalism and corporate concentration and unions.

Regulatory mechanisms under the Restrictive Trade Practices Act, which dealt with regulative and anti-monopoly policies, were linked to an industrial system based on inter-firm relations. They influenced business development based on trust, which replaced cartels, and a complementary division of labor in the product fields within large-scale corporate groups. The restructuring of the system of large corporate groups emphasized the benefits of “division of labor” based on specialization in response to oligopolistic competition. The systems of inter-firm relationships after the war formed for the expansion of corporate activities that emphasized market segments adapted to oligopolistic competition in the form of “division of labor complementary to each product.” Development of divisions of labor in business domains among the large corporate groups as well as inside the large corporate groups built the foundation for corporate behavior focused on quality competition rather than price competition and became an element of cooperative characteristic of German capitalism.

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