3 Reform versus Mobilization

The outbreak of war in Europe in 1939 created difficulties both for American firms participating in international cartels and for the antitrust drive. War automatically suspended cartel agreements between firms in the countries involved. Because the United States did not formally enter the conflict until December 1941, however, cartel accords still bound American firms, often to German ones. Because the United States was, despite its legal neutrality, supporting Germany's foes, this at best was embarrassing and at worst interfered with mobilization, which was under way well before the Japanese attack on Pearl Harbor. At the same time, the Antitrust Division of the Justice Department found that mobilization put a premium on reconciliation between the business community and government, a process that marginalized it. In response, Thurman Arnold began to focus on international cartels, arguing that they retarded mobilization and that by attacking them his bureau contributed to mobilization. These issues festered for the two and a half years that Washington remained neutral. Only American entry into the war forced the suspension of cartel accords and a decision on the proper role of antitrust in the national emergency.

Cartels in Wartime

The outbreak of war in Europe in September 1939 had grave implications for all Americans. Although technically neutral, the United States found itself playing a large role in the conflict. The Roosevelt administration strongly opposed German ambitions, but initially it believed that Britain and France could contain the Nazis on their own. During the first nine months of war, the United States pursued a policy of benevolent neutrality toward the Allies, allowing them to purchase what they needed in this country and tolerating the British blockade that cut off trade with Germany. The fall of France to the Nazis in June 1940 radically changed the situation, however, making a German victory seem likely. Washington increasingly channeled support to Britain, selling it weapons on favorable terms and, after March 1941, providing military aid through the Lend-Lease program. The United States also built up its own defenses, initiating construction of a two-ocean navy, imposing conscription, and laying plans for an air force of thousands of planes. Although most Americans still hoped to avoid conflict, by the fall of 1941, war with Germany seemed probable.

At the same time the war initiated economic recovery. Defense orders, first from Britain and France and then from the American government itself, reactivated factories long idle. For the first time in a decade firms were able to sell all they could produce, and millions of unemployed workers found jobs. Yet prosperity brought its own problems, most notably inflation and shortages.

Some firms, however, had special difficulties: cartel ties with German firms that remained in force despite the slide toward war. The problem ran deepest in the chemical industry. Before 1914, German companies had dominated the production of the industry's most sophisticated products, fine chemicals like dyestuffs, pharmaceuticals, and photographic chemicals. They sold approximately 80 percent of the world's dyes; pioneered drugs like aspirin, novocaine, and salvarsan (the first effective treatment for syphilis); and sold to Kodak ingredients critical for its film. Between 1914 and 1918, however, the British blockade cut the Germans off from their chief export markets. Allied governments seized the patents and local facilities of German companies, selling them to domestic firms on good terms. These companies quickly replaced the Germans, doing well as long as the war continued. Peace, however, brought renewed German competition for which the newcomers were not equipped. The German firms had superior research establishments and unsurpassed experience in developing and bringing to market new products. Moreover, they possessed know-how in the production and sale of chemicals that their challengers could not gain simply by purchasing seized patents. Fierce competition loomed as German firms sought to reestablish themselves while the newer companies, generally supported by their governments, tried to hold on to recent gains.

Eventually a series of mergers and a network of cartel agreements worked out in the 1920s brought order to the chemical industry. In the United States, several leading companies joined to form Allied Chemical. Allied took its place as the nation's second largest chemical firm after DuPont, which had itself expanded in part by acquisitions. The two strongest British firms, Nobel and Brunner-Mond, merged with several smaller competitors to form Imperial Chemical Industries (ICI), which became not only the leading chemical producer in Britain but also that nation's largest industrial firm. The most important merger occurred in Germany, where in 1925 all the leading dyemakers and several other firms joined to form IG Farbenindustrie. These firms already participated in a cartel known as IG Farbenindustrie, but they had concluded that their situation required even closer coordination. After the merger they retained the name, which translates roughly as "dye industry cartel," because of the good will attached to it. The IG, as it was known, was the world's largest chemical company and by most measures the biggest firm of any sort in Europe. It had unmatched research capabilities perhaps best symbolized by the position of Carl Bosch, a Nobel laureate chemist, at the company's head.

A complex network of international cartels supplemented these mergers. Such accords had been common before 1914 in specific fields like explosives and synthetic alkali, and they reemerged on a broader scale after the war. Leading firms such as the IG, ICI, DuPont, Allied, and Union Carbide were party to literally dozens of agreements—the historian of ICI estimates that it signed eight hundred[1]—whereas smaller companies almost always adhered to at least a few accords. Most of these cartels rested on patent rights, though a few, such as those for synthetic nitrates and alkali, involved more conventional market sharing and price fixing agreements. The average cartel covered only one product or process, but on occasion firms formed broader compacts. Imperial Chemical Industries and DuPont had an alliance under which they shared their patents, with each getting exclusive rights in its home market (the United States for DuPont and the British Empire for ICI). In third markets of mutual interest, the two companies operated through jointly owned subsidiaries.[2] Standard Oil of New Jersey (Exxon), the world's largest oil company, had an agreement with IG Farben covering the entire petrochemical field.

These agreements became suspect during the national emergency. The chemical industry produced a host of vital war materials, most obviously explosives and ammunition, but also goods like plastics and specialty rubber. No nation threatened by war could permit international cartels to govern the production of such materials. Moreover, IG Farben, the ultimate symbol of German industrial prowess, was a party to most chemical cartels—often the dominant party.

No American firm had more stake in its cartel ties than Standard Oil of New Jersey. During the 1920s, IG Farben had invested heavily in hydrogenation, a process to produce oil from coal, perfecting it by 1929. Yet the Germans despaired of ever making the process commercially viable because recent discoveries in Texas and Oklahoma had driven oil prices well below the cost at which Farben could make petroleum from coal. Hydrogenation, however, interested Standard, which thought the process could increase the amount of gasoline its refineries could get from a barrel of oil. Moreover, Standard believed that some governments, desiring self-sufficiency in oil, might subsidize hydrogenation, in which case Standard would have to provide the technology or lose business. In 1929, the two firms struck a deal. In exchange for a block of Standard stock worth about $35 million, Farben transferred the rights to the hydrogenation process outside Germany to the Standard/IG company. Standard owned 80 percent of the firm; the IG, 20 percent. The agreement also declared that Standard would stay out of the chemical business and Farben would avoid the oil industry, save in Germany, where the IG hoped that government subsidies might yet make oil from coal profitable.[3] The deal worked out well for Standard Oil. Though hydrogenation never produced much oil outside Germany, the process substantially increased the efficiency of Standard's refining operations and allowed it to develop new products like high octane gasoline and synthetic toluol, a basic ingredient of the explosive TNT. As a historian of the oil industry put it, "A good deal of technical knowledge was flowing to Standard [from IG Farben]."[4] Standard also licensed the technology to other oil companies and even to ICI. Meanwhile, the acquisition of Standard's stock allowed Farben to cover about half of the cost of developing hydrogenation.

The 1929 agreement had one significant flaw. It neglected the growing field of petrochemicals, an area between the petroleum and chemical industries that interested both Standard Oil and IG Farben. The two companies solved the problem with a 1930 accord that set up the Joint American Study Company (Jasco) to exploit any developments by the two companies in petrochemicals. The agreement had one exception—Farben retained rights to its discoveries in the German market. The two firms agreed to treat each technology separately, with the originator receiving five-eighths financial interest and enjoying control. Because the IG contributed all the initial patents to Jasco, it effectively controlled the firm.[5] This aspect of the agreement particularly appealed to Farben. Its attempts to negotiate broad alliances with firms like ICI, Allied, and DuPont had always foundered on Farben's demand for control, which the others refused to grant. These companies had no intention of returning to 1914, when the Germans had dominated their industry. But Standard, which considered chemicals a sideline, had no such reservations. By 1939, Jasco owned the rights to several valuable technologies, including the buna process for making artificial rubber.[6]

The German invasion of Poland in September 1939 put Standard Oil in an uncomfortable position. It anticipated doing substantial business with the Allies, which needed oil, while the British blockade prevented Standard from supplying its German operations with petroleum, effectively suspending its business in the Reich for the duration. Yet France and Britain might be reluctant to deal with IG Farben's partner. Moreover, if the United States eventually joined the Allies, Standard would find its ties with the IG even more embarrassing. Fortunately for the American company, Farben had its own reasons to terminate the alliance. The firms that had merged in the 1920s to form the IG had suffered heavily during World War I from the confiscation of their foreign holdings, particularly patents, and the IG believed that it could structure a divorce in such a way that it would help defend the German company's property, at least in part.

Officers of the two firms met in September 1939 in The Hague, in the Netherlands, which was then still neutral territory. They quickly reached an agreement. The IG sold its interest in the Standard/IG company to Standard Oil and put its Jasco stock in trust for the American firm. Jasco transferred to Farben all its patent rights outside the French and British empires and the United States. Though ostensibly a divorce, The Hague memorandum, as it was called, contained provisions for future cooperation. Jasco and Farben were supposed to compare their financial results on a regular basis and, should the profits of the two firms differ from what would have been the case under the old agreement, arrange compensation. Thus Farben retained a financial interest of sorts in Jasco, even though as a practical matter the company became a subsidiary of Standard. In all, the agreement covered 2,000 patents.[7] The State Department knew of the meeting in The Hague, having received an invitation from Standard to send an observer from its embassy in the Netherlands. It did not avail itself of the opportunity, however, and it seems unlikely that Washington knew the details of the arrangement.[8]

Though no other American firm was as tightly tied to IG Farben as Standard Oil, other important links did exist and often caused substantial trouble. Even DuPont, the strongest chemical firm in the United States, encountered problems. The first of these involved not ties with the German firm but DuPont's alliance with ICI of Britain. In the summer of 1939, Duperial of Argentina, the joint ICI/DuPont subsidiary in that country, signed an agreement with the IG to form an enterprise, Electroclor, to operate in fields of mutual interest. The signatories had not put the arrangement into operation before the Nazis invaded Poland, however, and once Britain was at war with Germany, ICI concluded, "The proposed partnership relation is not permissible and that as a 50 percent stockholder in Duperial they cannot sanction the completion of the agreement."[9] DuPont, as a neutral, took upon itself the thankless task of breaking off the arrangement. It offered to return Farben its money with interest, but the IG proved stubborn. It suggested that the deal go forward but that, for the duration, DuPont represent it on the board of Electroclor. DuPont refused. It told Farben, "ICI could not agree to have done indirectly what they could not do directly. Moreover, DuPont's only interest in Argentina is through Duperial in which we are equal partners with ICI. We have no men of our own in that country to represent us."[10] In the end, DuPont simply returned Farben's money and declared the matter closed, saying that it "can now only hope that the present sad and unfortunate condition of affairs may not long continue and that eventually effective and pleasant cooperation in this field can be established in Argentina."[11]

These events did not sever DuPont's relations with the IG, however. The two firms had several agreements covering specific products, including one on DuPont's great discovery, nylon, which Farben wanted to exploit in Germany. These accords continued in force despite the war in Europe, with DuPont and Farben exchanging technical information and paying each other royalties. Finally, on April 18, 1941, DuPont wrote to the IG that, considering "the nature of government restrictions on the export of technical information, . . . [w]e suggest that it be mutually agreed between us that until the present emergency has passed we discontinue our exchange of technical information, patent applications, etc."[12] Farben, realizing that the two firms had little choice, agreed.[13] Yet some agreements still bound DuPont.

In the 1930s, one of its subsidiaries, Remington Arms, had obtained rights from the IG to a superior primer for ammunition, tetrazene. The contract between the two companies banned Remington from exporting ammunition made with this product. As a result, Remington could not sell tetrazene-primed ammunition to the British, despite London's interest.[14] The prohibition apparently remained in force until the attack on Pearl Harbor.

Though DuPont's dealings with IG Farben escaped publicity, Rohm & Haas, a much smaller firm, encountered sharp criticism because of its agreement with a German enterprise. This firm's history made it particularly vulnerable. Formed in the United States before 1914 by Otto Haas, a German immigrant, the company had intimate ties to the German firm of the same name, Rohm & Haas of Darmstadt. Otto Rohm ran that company, and he had a substantial interest in the American firm, just as Haas had in the German one. American entry into World War I disrupted ties temporarily, but with peace the two quickly resumed their close relationship, again exchanging stock and licensing technology from each other for various products.

In June 1941, *Click* magazine, an imitator of *Life*, published an exposé, charging, "The Nazi bombs that pulverized Coventry and Birmingham, the German tanks that had rolled into the Low Countries and France, might well have been labeled 'Made in U.S.A.' because American dollars helped pay for them." The article quickly focused on Rohm & Haas, noting its German ties and then observing that Plexiglas, its most important product, had come from the laboratories of the German Rohm & Haas and that the American firm paid royalties to its German twin on the product. The magazine concluded, "Plexiglas is still one of the steadiest sources of revenue the Nazi war chest has in America." Finally, *Click* observed, "Today, the great bulk of Plexiglas royalties come from American defense orders." Not only was the American government indirectly subsidizing Germany, but information included in royalty reports might yield useful intelligence to the Nazis.[15]

These revelations caused an uproar and sparked talk of a congressional investigation. Yet on closer examination, the facts in the case took on a different aspect. Plexiglas had important military applications, particularly in warplanes, where it replaced regular glass because it was lighter and shatterproof, and because it better withstood the rapid changes in temperature encountered at high altitudes. Yet as one of Rohm & Haas's officials stated, "Plexiglas was a German development. We got it from Germany, and if we hadn't secured from German concerns both the patents and the technical information there wouldn't be an inch of Plexiglas in an American bomber or pursuit plane."[16] To obtain the technology, Rohm & Haas had paid royalties to its German partner. The payments, however, were based on dollar sales and contained no information on military consumption, and the company had stopped them completely at the end of 1940. One member of Congress who had had the *Click* article read into the *Congressional Record* subsequently declared himself, after a more careful study of all the evidence, "satisfied . . . that the charges contained in the article were not founded on fact."[17]

Though the Plexiglas agreement seems to have served in the interests of the United States, other accords yielded more questionable results. Right after World War I, Sterling Products Company had bought from the American government patents to many German-developed pharmaceuticals, most notably aspirin, which Washington had seized during the war. Yet Sterling had rights only in the United States, and even at home it needed German expertise to exploit fully the patents it had obtained. It soon reached an agreement with IG Farben that gave Sterling technical assistance and guarantees against IG competition in the United States and Canada in exchange for half the profits from its pharmaceutical division, Winthrop Chemicals, and a promise to abstain from exports. Farben subsequently purchased half of Winthrop.

With the outbreak of war in 1939, the British blockade cut off the IG from its lucrative Latin American markets. Determined to retain this business, Farben started supplying its Latin sales network from North America, relying on its U.S. subsidiary, General Aniline & Film, for dyestuffs and photographic chemicals. For pharmaceuticals, however, the IG turned to Winthrop. It purchased Winthrop's products unlabeled and then sent them to South America, where the IG's sales network marketed them under Farben's brand names. Winthrop and, through it, Sterling enjoyed sales that they would not have made otherwise, but the IG got the better of the deal, keeping its Latin American network supplied and maintaining its presence there. Moreover, the foreign exchange that Farben earned often ended up financing Nazi espionage and propaganda in Latin America, whereas the IG's offices sometimes provided cover for German spies.[18]

Although Sterling's experience reflected bad judgment on the part of its management, which as half owner of Winthrop simply could have refused to supply the IG, the case of Bausch & Lomb demonstrated how the terms of a cartel accord themselves could threaten national security. The history of optics resembled that of chemicals, though on a smaller scale. Before 1914, the German firm Zeiss dominated the production of optical instruments throughout the world, including military goods like rangefinders. The war cut Zeiss off from Western markets while vastly expanding the demand for military optics. Bausch & Lomb capitalized on this opportunity, but like American chemical companies it could not, in four years, match the expertise that the Germans had developed over decades. In 1921, fearing renewed competition from Zeiss, Bausch & Lomb signed a cartel accord with the German firm. Zeiss agreed to give Bausch & Lomb patent rights to all its discoveries in the military field, past and future. The American company promised to pay the Germans royalties on all military sales and to abstain from exporting. The Navy Department, which wanted access to Zeiss's technology, supported the agreement, though it is not clear it knew the details.[19]

European rearmament in the mid-1930s created problems for the accord. Britain and France placed orders with Bausch & Lomb that the company had to refuse because of its agreement with Zeiss. The American firm disingenuously announced that it would not sell its products abroad "because they might conceivably be used against the United States or its interests in another War." One of the firm's officers stated, "They are not prepared for war over there [Europe], . . . and if we refuse to help them prepare, it puts it off just that much."[20] These statements would earn Bausch & Lomb a reputation for hypocrisy when the facts came out in 1940. Rearmament in the United States led to further trouble because the cartel agreement required Bausch & Lomb to provide Zeiss with detailed information on all its sales to the U.S. military, information that German intelligence might find quite useful. Yet despite these serious problems, the United States benefited from the accord. Bausch & Lomb obtained valuable technology from Zeiss that, it claimed, "resulted in great improvement of optical fire-control equipment for our armed forces."[21] In 1940, when its cartel dealings became public, Secretary of War Henry Stimson wrote in a public letter to Bausch & Lomb, "The War Department has complete confidence in your company, for the excellence of workmanship, productive ability, and patriotic cooperation."[22] Secretary of the Navy Frank Knox provided a similar testimonial.[23]

By 1940 and 1941, cartel accords with German firms had clearly outlived their usefulness. Agreements based on common interests or, at least, a live-and-let-live attitude made little sense when the signatories' governments were in conflict. True, the United States and Germany were not technically at war, but they were definitely hostile. In the past, cartel agreements had given American firms access to valuable technology, but as long as the war continued Germany was unlikely to let such information out of the country. Yet in May 1940, the Antitrust Division reported that it was investigating ongoing foreign cartel ties in "military optical equipment, non-ferrous metals (such as magnesium, beryllium, chromium, tungsten carbide, etc.), steel alloys, various chemicals and a variety of other commodities."[24]

Why did firms maintain these agreements? First and probably most important, they were not easy to evade. Most rested on legal contracts involving patents. Second, the accords often provided American firms with valuable technology, and a company could not challenge an agreement without challenging its right to that knowledge. Finally, patent rights obtained through these accords sometimes gave American companies powerful weapons against competitors in the United States. Though Congress probably could have passed a law suspending cartel agreements for the duration of the European conflict, it never explored the possibility.[25] Such a step would have required the legislative branch to admit that war with Germany was likely, and this it refused to do. Although the vast majority of Americans hoped for an Allied victory, most still wanted to avoid direct military involvement. The failure of business to sever its cartel ties with Germany, and the failure of the government to force it to do so, represented another example of the half-hearted American response to Nazi aggression.

Antitrust and the Politics of Readiness

The outbreak of war in Europe put New Deal reformers in an uncomfortable position. Next to the question of American participation in the war, issues such as labor relations and antitrust law seemed insignificant. Rearmament, which enjoyed fairly strong support, dictated a rapprochement between business and government because it required cooperation between the two to produce weapons on a large scale. World War I had marked the end of the Progressive Era, and many Americans feared (or hoped) that World War II would do the same to the New Deal. Such concerns led Thurman Arnold and the Antitrust Division to latch on to international cartels as a way to relate their activities to mobilization.

During this time Franklin Roosevelt's attention shifted from domestic to foreign affairs, a process that had started in the late 1930s because of the president's frustration with political deadlock at home and, more important, his concern about German and Japanese aggression. By 1940, the transformation was complete. Roosevelt was devoting almost all his time to helping the British hold off the Nazis, containing the Japanese threat in East Asia, and winning an unprecedented third term as president.

The president's new focus led to some confusion in Washington. Administratively, Roosevelt's style is best described as "freewheeling." He rarely set clear lines of authority, resisted delegation, and actually encouraged infighting among subordinates by giving them overlapping responsibility. Every program seemed to require a new bureaucracy. This system kept would-be empire builders off balance, circumvented bureaucrats who might obstruct Roosevelt's plans, and allowed the president to hold open his options. It worked fairly well as long as Roosevelt maintained a close watch on developments.[26] Yet even the limited military buildup initiated in 1940 and 1941 revealed the weaknesses of this approach.

The president did not have the time to oversee the details of the military buildup himself, but he refused to let anyone else do so. In 1939, Roosevelt created the War Resources Board (WRB) to plan for possible mobilization, yet when the WRB recommended that Roosevelt lodge authority for war production in a centralized agency staffed largely by businessmen, he promptly disbanded it. With the collapse of France in 1940, FDR tried again. He established the Advisory Commission for National Defense (ACND), which had neither a leader nor a clear mandate and functioned largely as a debating forum for top officials. By January 1941, the clear failure of the ACND led Roosevelt to create the Office of Production Management (OPM). Although an improvement over the ACND, the OPM had two chief executives and limited authority. Not only did it lack power over such important agencies as the Office of Price Administration (OPA), which the president created in the spring of 1941 to combat inflation, but the OPM did not even control its own public-relations staff. To sort out the bureaucratic snarl, FDR established the Supplies Priorities and Allocations Board in the summer of 1941 to draft directives for the OPM. This innovation did not help much.[27] Arms production did increase sharply during 1940 and 1941, but it came largely from industrial capacity idled by the Depression.

Roosevelt believed that the national emergency required political unity. In the summer of 1940, he appointed two prominent Republicans, Henry Stimson and Frank Knox, to the key posts of secretary of war and secretary of the navy, respectively.[28] Though talented public servants, neither Stimson nor Knox supported the New Deal, and as the leaders of the military in a crisis they had immense influence over policy. The president also sought to make peace, or at least negotiate a truce, with the business community. As journalist and historian Bruce Catton wrote, the government had "to bring into the defense effort, as active cooperators, the proprietors of the nation's chief physical assets. The job couldn't be done without them, but their fears and suspicions—which, when Franklin Roosevelt was concerned, were deep and beyond number—had to be allayed. . . . The game had to be played their way."[29]

Antitrust seemed likely to be an early casualty of mobilization. Many assumed that firms would have to cooperate closely to deal with shortages and to fill huge military contracts. During World War I, Washington had suspended the antitrust laws. No one proposed such a drastic step in 1940 or 1941, but a climate of accommodation did exist. Jacob K. Javits, a young New York attorney who subsequently became a noted U.S. congressman and senator, urged amendment of the Sherman Act so that it would not "prevent the integration and coordination of business efforts, without which American industry cannot make its maximum contribution to national defense."[30] Thurman Arnold himself wrote, "The antitrust division will go as far as anyone likes in accepting the finding of fact of the National Defense Commission when any particular combination is necessary for national defense." Yet at the same time, he claimed, "It is difficult to imagine any case where the actual needs of defense can possibly conflict with the antitrust laws since both are aimed at efficiency in production and distribution."[31] Contrary to this assertion, however, even antitrust cases that did not deal directly with government procurement could slow mobilization. Suits required extensive attention from the top executives of the targeted firms, and even the partial mobilization of 1940 and 1941 severely taxed the nation's limited cadre of experienced managers. Every hour an executive spent dealing with the Antitrust Division was time away from organizing production. Though the situation did not justify dropping cases, it was a good reason to delay proceedings until the emergency had passed. Administrative questions aside, political realities demanded accommodation. As *Business Week* put it in 1941, "The Defense Commission would like to keep the industries essential to its procurement program happy and cooperative."[32] Antitrust suits rarely made their targets "happy and cooperative."

Thurman Arnold resisted this retreat from antitrust. Privately, he argued that Washington should "operate under the drastic powers of the act passed in 1916 which allows the government to compel business to furnish goods at fair prices."[33] Publicly, he continued to attack monopoly. Arnold warned, "During the last war the monopolistic combinations of war industries levied a tribute on the American consumer so wasteful that it led to proposals to draft capital in the next war. The same kind of thing can happen again today. Basic war materials are still dominated by small groups. Every combination in war industry needs constant scrutiny as to how it is using its organized power."[34] The reaction to Arnold's rhetoric was not always what he desired. As *Business Week* put it, "Arnold's own words present him in the light of baiting business and, so, raise the question of how he can expect others to accept him as sincerely trying to further the defense procurement program. It's possible consequently that Arnold himself is destroying whatever usefulness his policy may serve in that connection, even if that policy as such may be regarded as sound."[35]

Legal developments further weakened Arnold's position. In early 1941, the Supreme Court decided that the antitrust laws did not apply to labor unions. The Justice Department had invested heavily in suits targeting the anticompetitive practices of organized labor, and this decision severely hurt its prestige. At the same time, the Antitrust Division's willingness to prosecute such cases had alienated the unions, an increasingly powerful element in the Democratic Party and usually among the leading proponents of economic reform.[36]

Arnold did not stand alone, however. The war in Europe had not eliminated reformers' concerns about big business, and many of them actually blamed the conflict on the machinations of large firms. Marxists worked out the link in the greatest detail. They considered fascism to be capitalism in extremis, a last desperate attempt by the exploiting class to stave off revolution. In his book *The Spirit and Structure of German Fascism,* Robert Brady, a Marxist and a professor of economics at the University of California at Berkeley, declared Nazism "a dictatorship of monopoly capitalism. Its 'fascism' is that of business enterprise organized on a monopoly basis, and in full command of all the military, police, legal, and propaganda power of the state."[37] Harold Laski, a British Marxist whom historian Arthur Schlesinger, Jr., claimed "had the greatest effect [of any Englishman] on American left-wing thought in the thirties," wrote the foreword to this book, noting ominously, "Professor Brady shows how profound are Fascist tendencies in the United States."[38] Franz Neuman, a German émigré and Marxist in the social democratic mode, provided a more subtle analysis that nevertheless tied big business to Nazism. In his book *Behemoth*, he stated, "It is the aggressive, imperialistic, expansionist spirit of German big business . . . which is the motivating force of the [Nazi] economic system. Profits and more profits are the motive power." "Democracy," he argued, "would endanger the fully monopolized system. It is the essence of totalitarianism to stabilize and fortify it." Unlike Brady, Neuman did not consider big business identical to Nazism. For instance, it had little stake in Hitler's racial policies. Still he asserted that "with regard to imperialist expansion, National Socialism and big business have identical interests."[39] Neuman did not ignore cartels, which were particularly strong in Germany. He insisted that "the cartel structure is not democratic but autocratic." "They are much more than the democratic mask that industrial magnates use to disguise their autocratic power. Behind the powerful cartel movement there is a still more powerful trend of centralization, which had reached a scale never dreamed of before."[40]

This analysis found a receptive audience among the non-Marxist left in the United States. American reformers had traditionally feared the political consequences of economic concentration. Big business, they believed, had the ability to control government, distorting or even destroying political democracy. Accordingly, Brady's and Neuman's description of Nazism made sense to them. A review of Brady's book on the first page of the *New York Times Book Review* noted, "Here are laid bare all the objectives of the Big Business State and the role that the Nazi party has played and is playing in making such a state possible."[41] *The Nation* declared Brady's work "the clearest analysis of the motive power of German fascism and of the engineers who tend this political machine."[42] Book reviewers had no monopoly on such attitudes. In 1937, Robert Jackson, the head of the Justice Department's Antitrust Division and later attorney general and Supreme Court justice, claimed that large companies "are as dangerous a menace to political as they are to economic freedom."[43] At the same time, Interior Secretary Harold Ickes asserted that, should the New Deal falter, "then the America that is to be will be a big-business fascist America—an enslaved America."[44] For many reformers the struggle against big business at home and fascism abroad were merely different aspects of the same war. Their analysis was dubious—whatever the faults of the American business community, its members were not Nazi sympathizers. Nevertheless, this logic dictated the attitudes of many reformers toward mobilization. Military success abroad, purchased with concessions to big business at home, merely substituted one threat to democracy for another.

Arnold played to this sentiment, which to a degree he shared. He wrote, "Our great problem today is the undermining of American democracy by private groups in big business, little business, and labor. . . . The channels of trade in the distribution of every necessity are taxed by organizations which give no public account for the use of that power."[45] The situation had ominous parallels abroad. Ever since the late nineteenth century, Arnold claimed, German business had tended toward ever larger and more powerful economic concentrations. By the 1920s, "industrial Germany became an army with a place for everyone, and everyone was required to keep his place in a trade association or cartel. Here was arbitrary power without public control and regimentation without public leadership. That power, exercised without public responsibility, was constantly squeezing the consumer. There was only one answer. Germany was organized to such an extent that it needed a general and Hitler leaped to power. Had it not been Hitler it would have been someone else." Arnold conceded that the United States in 1940 was in less danger than Germany in 1930, but he warned, "We can observe a few disquieting symptoms of the same process in this country."[46]

Arnold contended that the country could not entrust mobilization to big business. As production increased in 1940 and 1941 and the economy experienced shortages of key materials—"bottlenecks"—Arnold warned of an "economic fifth column" that was behind the problem, though he added, somewhat paradoxically, that it was "not a malicious fifth column."[47] In late 1941, he stated, "For the first ten months our defense effort was hampered by the fear of expansion of the production of basic materials. Businessmen, indulging in wishful thinking, concealed shortages by over-optimistic predictions of supply. I would still insist that the general attitude of dominant American business, fearing overproduction after the war, was responsible for this lag in production."[48] Arnold attributed this attitude to "powerful groups who fear expansion may destroy their domination of industry."[49]

His analysis contained much truth. A decade of economic stagnation and memories of overcapacity following the last war had left most businessmen wary of constructing new plants, and ultimately Washington itself had to finance much of the new capacity built to supply the war effort. Yet Arnold went too far when he attributed the situation to monopoly. Skittishness about expansion affected almost every sort of business, whether it enjoyed monopoly power or not.[50] Alcoa, which enjoyed a monopoly over the production of raw aluminum, proved much readier to expand capacity than the steel industry, which was substantially more competitive. The difference largely reflected calculations of postwar demand, not the level of concentration within the two industries.[51]

Arnold focused on international cartels as a cause of problems with mobilization. These organizations, which linked large firms from around the world, including Germany, confirmed the worst fears of reformers about big business. Many even went so far as to describe them as a "fascist international." Arnold wrote to a friend soon after the war began in 1939, complaining "about the complete betrayal of England by British industrial interests. Up to the time of the outbreak of war they were furnishing Germany with the oil, the coal, and many of the other materials without which she could not have been in a position to carry on war against England."[52] In public Arnold claimed that "Hitler assisted the monopolists in democratic countries to restrict their own production while he was expanding his, playing on their fear of surplus output." "His technique was to make deals between German firms and American firms whereby, to avoid competition at home, American manufacturers would leave foreign markets to Germany. This meant, of course, the restriction of production here. Now in various important industries we find ourselves without the plant capacity to turn out essentials for defense."[53]

Even before the war started, the Justice Department had displayed a willingness to challenge the American operations of international cartels. In the summer and fall of 1939, it filed a series of suits against the fertilizer industry that targeted the international nitrates cartel. The Antitrust Division acted to protect farmers, the chief consumers of fertilizers and, according to Arnold, the foremost victims of monopoly. Nitrates, in addition to being a vital ingredient of fertilizer, were critical to other chemical products, particularly explosives. Many European governments subsidized the production of nitrates, despite worldwide overcapacity, because they wanted domestic supplies in case of war. This, coupled with the impoverishment of farmers during the Depression, had created a glut that led to the formation of an international cartel in the 1930s that allotted half the sizable U.S. nitrates market to Chilean miners of natural nitrates and the other half to domestic manufacturers. Only two American firms, DuPont and Allied Chemical, produced synthetic nitrates on a large scale.[54] DuPont used its output in-house for explosives or sold it to other firms that used it in a similar fashion. Allied made almost all the synthetic nitrates that went into fertilizer and, through a subsidiary, controlled the sale of nitrates produced as a by-product in other industries, particularly steel making. Companies in such fields produced substantial quantities of nitrates but did not want to go into the fertilizer business, which would have distracted them from their main operations. They were happy to sign long-term contracts with Allied to dispose of their nitrates. Allied itself marketed through a system of exclusive dealers with clearly defined territories that agreed to sell at prices set by the company. This not only prevented them from competing with one another but also kept them out of the way of Chile's agents. Allied further reduced the risk of competition with the South Americans by basing its prices on transportation costs from the ports where Chilean nitrates landed, even though its products originated elsewhere. At the behest of the international cartel, other foreign producers avoided the U.S. market and refused to license their technology to firms here.[55]

The Justice Department filed charges against the New York offices of the Chilean nitrates agency and the international cartel, as well as Allied Chemical and DuPont. Though the suit did not challenge practices abroad, it represented an audacious step. The Chilean cartel operated with the support of that country's government. The international cartel, which revolved around Europe's three largest and most efficient producers—IG Farben, ICI, and the Norwegian firm Norske Hydro—had ties to governments throughout Europe.

DuPont and Allied settled in May 1941. They agreed to sever all contacts with the Chilean and European cartels, and Allied promised to reduce its presence in the marketing of nitrates produced as by-products in other industries, limiting itself to 35 percent of a business that it had heretofore dominated. It also agreed to base prices on transportation costs from its own plants, not from the ports used by the Chileans.[56] The Justice Department never settled with the international cartel because the war led the organization to suspend operations, which never resumed.

Though the fertilizer case received little publicity, the suit against the Aluminum Company of America (Alcoa) claimed headlines for months. Filed under the tenure of Robert Jackson in 1937, the Alcoa trial dragged on from mid-1939 to mid-1940, producing approximately 70,000 pages of transcripts. Alcoa was a rare company, one that enjoyed a complete monopoly in the United States over the production of an important commodity, raw aluminum. The Justice Department attributed this situation to Alcoa's underhanded tactics: the purchase of all likely sources of bauxite (the raw material of aluminum) within the United States, the engrossment of the hydroelectric power vital to aluminum production through long-term contracts with utilities, a willingness to buy out competitors at inflated values, and predatory pricing to discourage rivals. The government also claimed that Alcoa relied on the international aluminum cartel to keep foreign competitors from exporting to the United States or building plants here, and that in exchange for this protection the American firm abstained from exports.

Alcoa had a second-hand relationship with the international aluminum cartel that nevertheless probably gave the American company a significant voice in its operations. Organized in 1931, the cartel allocated markets for aluminum outside the United States, and it included all the world's major producers save Alcoa. The Justice Department, however, argued that the American firm had a "back door" into this organization. In 1928, Alcoa had spun off all its foreign holdings to a Canadian subsidiary, Aluminum Limited (later Alcan), and then had distributed all the shares of this enterprise to its own stockholders, legally separating the two firms. This maneuver put Alcoa's valuable foreign assets, which had often suffered from neglect, under a single leadership devoted solely to them. But Alcoa and Aluminum Limited remained very close. Stockholding in the two firms remained concentrated, with six shareholders, one of whom was Alcoa's president, owning most of the firms' equity. The presidents of the two companies were brothers. Though Alcoa did not participate directly in the international cartel, Aluminum Limited was a leading member. The Antitrust Division assumed, probably correctly, that Aluminum Limited represented its American counterpart in the cartel, making sure that members avoided the U.S. market. Proving this in court, however, was another matter. The agreement to reserve the American market for Alcoa was informal, not contained in any official document. Indeed, it is possible that cartel members never actually discussed it, relying instead on an implicit understanding. This weakness is ironic because, from an economic point of view, the cartel charges were the strongest part of the government's case. Alcoa lacked domestic competition largely because no one could duplicate its highly efficient, tightly integrated facilities without prohibitive expense. Foreign producers already had such facilities, but they avoided selling in the United States because of the implicit understanding embodied in the aluminum cartel.[57]

The Alcoa case soon became entangled with mobilization. Aluminum is critical to the production of airplanes, and military demand promised to outstrip peacetime consumption by a huge margin. The country had to expand capacity, but how? Alcoa did invest in new facilities on its own, but soon observers realized that the firm could not keep pace with military needs.

The government had to act directly. Alcoa was willing to manage even more plants if Washington would pay for them, and many in the government, realizing that Alcoa was the only U.S. firm with experience making aluminum, were inclined to accept the offer. Yet the Antitrust Division and other critics of big business like Harold Ickes feared strengthening Alcoa and demanded an alternative.[58]

Mobilization authorities hoped the problem would somehow resolve itself. Edward R. Stettinius, a former president of U.S. Steel who was in charge of the industrial materials division of the Advisory Commission for National Defense, claimed in late 1940 that he saw "no serious shortages in aluminum supplies for aircraft and other military items now required for national defense."[59] Within six months, however, it became clear that a serious shortage did loom. In May 1941, *Time* magazine reported, "If the U.S. by terrific effort attains an aluminum ingot capacity of 600,000 tons (up 420,000 tons from 1940) by next year, and cuts off all aluminum for civil and indirect military uses, it *may* have barely enough to respond to defense needs."[60] Blame naturally attached to Alcoa, the nation's only producer. The *New Republic* reported in May 1941, "The testimony before the [Harry S.] Truman committee [on war procurement] proved that Alcoa had failed to respond to defense needs," and the magazine added, "These hearings are a clear and urgent warning that we can no longer afford to tolerate the restrictive control of a vital defense industry."[61]

Thurman Arnold blamed the shortage on the machinations of the international aluminum cartel. He pointed out that the cartel had originally assigned its members rights to a certain percentage of the total world market: Aluminum Limited got 29 percent; German producers, 20 percent; and so on. A Swiss firm created by the members oversaw operations of the cartel, keeping track of output and sales and maintaining a stockpile of aluminum to which it added or from which it sold to keep the market stable.

German rearmament wrecked the arrangement. The Reich planned to build a large air force that would require much aluminum, and according to the cartel agreement it would have to import a substantial portion of the metal. The German government had no intention of becoming dependent on suppliers abroad for a key war material; it also probably lacked the foreign exchange to buy large quantities of aluminum. In 1934, the German producers demanded freedom to sell in their domestic market unhampered by quotas. The other members grudgingly agreed, provided that the Germans sharply limited exports, which they did. By 1939, largely because of sales to the Luftwaffe, Germany had become the world's largest producer of aluminum, ahead of even the United States. As Arnold described it, "The democracies thus were free to pursue their restrictive policy without fear of German competition. Under this arrangement, Hitler tripled aluminum production for aircraft and war materials while the democracies stood still. . . . Now we know there is a shortage. We could have saved precious time and precious materials had we not listened to the wishful thinking of men whose financial interest lay in preventing new production in order to preserve their monopoly after the war."[62]

Alcoa denied these charges. In an official letter from one of its officers, Alcoa "categorically denies that it was in any way a member of the [international] cartel." The letter continued, "Any member of the cartel would have been as free as was Germany to produce as much aluminum as it desired provided it was consumed at home; but apparently only Germany was building a tremendous machine for war in the air. That other nations did not produce more aluminum is attributable not to self-limitation on the part of the aluminum industries, but to the failure of the nations within whose borders they operated to order the metal for military purposes, as Germany was doing." The current shortage was inevitable in light of the huge jump in military demand. "Chrysler Corporation," Alcoa's representative noted, "is not criticized for not immediately having a tank factory built and in operation the day the government needed a large quantity of medium tanks, nor are Ford or General Motors criticized for not beginning to build bomber plants on the date of the fall of France."[63] Alcoa's denial of involvement in cartels, though technically true, was probably disingenuous, but the rest of its argument had validity. The aluminum cartel had abandoned its quota system in 1936, and was inactive by 1938 because European rearmament had all the continent's facilities producing at capacity. Moreover, the market sharing agreement had never bound Alcoa, which was free to produce as much aluminum as it could sell in the United States. Germany produced more aluminum than any other nation because the Nazis were buying more than any other government.

Did Alcoa's monopoly impede American mobilization? One of the staff of the Antitrust Division wrote, "In a competitive industry there is always some excess capacity, which can be put to use when demand increases, but a monopoly does not have to provide spare capacity. The Aluminum Company, like any other monopoly, has kept its capacity so low that in 1939, before the national defense program commenced, it was already operating at its full capacity of 327,000,000 pounds. Therefore, when defense requirements began to increase demand, the nation was left without that safety margin of extra capacity which is always guaranteed by competition."[64] This analysis ignored the scale of military requirements. In 1941, even before the attack on Pearl Harbor, officials were speaking of the need to produce 1.2 billion pounds of aluminum a year, and in 1944, at the peak of wartime demand, the country produced 2.328 billion pounds of aluminum, a sevenfold increase over 1939.[65] Had the American aluminum industry been more competitive in 1939, prices might have been somewhat lower and output somewhat higher. Yet because Alcoa pursued a relatively moderate policy, regularly increasing capacity in line with demand and actually dropping its charges from $.23 a pound in 1931 to $.17 by 1941,[66] it seems unlikely that the difference would have been enough to affect mobilization in more than a marginal way. On the whole, greater problems arose because the debate over Alcoa's monopoly delayed government plans to expand capacity until the fall of 1941, months after shortages were evident.

Aside from the unfortunate publicity, Alcoa survived the Justice Department's assault fairly well. In October 1941, the judge in the antitrust case, after making his way through the huge quantity of testimony, decided in Alcoa's favor on every count.[67] Meanwhile, the government's Reconstruction Finance Corporation (RFC) signed a contract with Alcoa to finance aluminum plants to be designed and run by the company. Many—from radical columnist I. F. Stone to Interior Secretary Harold Ickes—criticized the deal as a gift to monopolists,[68] but the contract served its purpose by massively increasing aluminum capacity. Though supplies remained tight throughout the war, shortages of aluminum did not hamper the military effort.

The Antitrust Division did appeal the *Aluminum* decision, securing victory of sorts in 1945. The final decision, drafted by the noted jurist Learned Hand, concluded that regardless of how it developed, the very existence of Alcoa's monopoly violated the antitrust laws. The decision set an important precedent, substantially modifying the Supreme Court's 1911 *Standard Oil* decision, which had made the distinction between "reasonable" and "unreasonable" restraints of trade. Hand's opinion concluded that the control of a market was in itself "unreasonable" regardless of how obtained. Despite its sweeping language, however, the conclusion had limited impact on Alcoa itself. The decisive blow to the company's monopoly came right after the war when Washington sold, below cost, many of the aluminum plants that Alcoa had built and managed during the conflict to Reynolds Aluminum and the Kaiser organization. These two firms thus became, almost overnight, formidable competitors to Alcoa.[69] Subsequently, a suit decided in 1950 forced the dominant shareholders in Alcoa and Aluminum Limited to dispose of their holdings in one or the other, severing a key tie between the two companies.[70]

Though it garnered less publicity than the Alcoa case, the Justice Department's attack on patent agreements yielded greater results. The first important suit in the field dealt with conditions at home and involved DuPont, Standard Oil of New Jersey, and General Motors. They jointly owned the Ethyl Company, which produced a patented anti-knock compound added to almost all gasoline sold in the United States. Ethyl sold its product to refiners on the condition that they sell gasoline only to retail jobbers licensed by Ethyl. The company gave licenses to jobbers free of charge but retained the right to revoke them at will. Ethyl ostensibly imposed this system to ensure that its product, which in concentrated form was quite toxic, received safe handling. But it also used its power to force jobbers to stabilize gasoline prices. The Justice Department sued to overturn the arrangement, and in 1940, the Supreme Court concluded, "The record leaves no doubt that appellate [Ethyl] has made use of its dominant position in the [gasoline] trade to exercise control over prices and marketing policies of jobbers in a sufficient number of cases and with sufficient continuity to make its [hostile] attitude toward price cutting a pervasive influence in the jobbing trade."[71] The court allowed that a firm could impose such restrictions on a patented article, but Ethyl had no patent on gasoline, only an additive contained in it, and the Supreme Court concluded, "A patentee may not, by attaching a condition to his license, enlarge his monopoly and thus acquire some other which the statute and the patent together do not give."[72] Although the decision did not specifically relate to international cartels, it did have implications for them. The rules for domestic and international patent agreements were the same, and some international cartels did operate like the Ethyl arrangement. General Electric, for instance, used its patents on machines for making lightbulbs to regulate their sale.

The Antitrust Division sought to follow up this victory and establish more specific precedents against patent accords. It first targeted Bausch & Lomb. In 1940, Washington challenged the company's alliance with Zeiss, arguing that it was a cover for monopoly and citing internal documents from Bausch & Lomb indicating that the firm considered some of Zeiss's patents weak and continued to abide by them chiefly because they stifled its domestic competitors. Bausch & Lomb tried to use its military contacts to avoid prosecution. As Arnold described it, the company "attached a letter to their bid to the Navy Department for rangefinders on two cruisers in which they said that because of the trial they would have to extend delivery date on rangefinder equipment about six months."[73] This threat was particularly serious because Bausch & Lomb was the only American producer of such goods. The Justice Department refused to back down. Arnold wrote, "We immediately called up Bausch & Lomb and stated that in our opinion their representation as to necessary delays because of the suit were false, and informed them that we would publish excerpts from letters in our possession indicating their practices in the past. We stated we would add to the publication the threat they made not to complete rangefinders on time for the navy, and that we would ask for a Congressional investigation. We finally added that we considered their representations to the navy proper to present to the court in the event of conviction as a basis for imposition of jail sentences rather than the fines which are ordinarily imposed." Not surprisingly, Bausch & Lomb quickly settled the case on the government's terms, severing ties with Zeiss and paying fines.[74]

The next year, Sterling Chemical settled a similar case. It received gentler handling than Bausch & Lomb, supposedly because it was more cooperative. Some noted that Sterling had retained Tommy Corcoran, a friend of Arnold's and an influential New Dealer who had just embarked on a legendary career as a Washington lobbyist, and alleged that the peaceful outcome owed chiefly to his intervention with the Antitrust Division. In any case, Sterling canceled its agreement with IG Farben without too much fuss.[75] For the time being, however, Farben retained its half ownership in Sterling's pharmaceutical division, Winthrop.

Sometimes the Justice Department achieved its goals even before settling a case. In the 1920s, General Electric had licensed from the German steel maker Krupp a process to make tungsten carbide, an extremely hard alloy used for the cutting edge of machine tools. Once assured of monopoly through this patent agreement, GE raised the price of tungsten carbide in the United States to over $200 a pound, whereas in Europe Krupp charged about $50. The situation attracted the attention of the Justice Department, and the Antitrust Division filed suit against GE and Krupp. General Electric's position was already eroding because in 1940, a federal court invalidated several of its tungsten carbide patents.[76] The antitrust suit further emboldened potential competitors. As was its usual practice, GE had licensed other companies to produce tungsten carbide but had set strict conditions on their output and prices. With the antitrust suit under way, one of these firms decided that it could ignore its agreement. It cut charges sharply, forcing GE to follow suit, and the price soon fell to between $27 and $45 a pound.[77]

Another Justice Department case freed up the magnesium industry. Alcoa, Dow Chemical, and IG Farben owned key patents among themselves covering the production and fabrication of magnesium, a light metal useful in both airframes and incendiary explosives. They had joined together in the 1930s and had forged an agreement under which Dow made all the country's raw magnesium and Alcoa and the IG licensed all fabricators, a group of which Alcoa was the largest. In January 1941, the Justice Department indicted the combination, arguing "that there are inadequate facilities in the present period of national defense for the production of magnesium . . . [and] that the development and use of magnesium and magnesium products in the manufacture of airplanes and other products has been restricted, restrained, and discouraged."[78] Dow and Alcoa settled the case in April 1942, paying $140,000 in fines and agreeing to license their patents free of charge.[79]

Despite its successes, the Justice Department did not get the precedent it wanted against patent agreements. Because most companies settled out of court on terms favorable to the government, none of these cases reached a final decision before the attack on Pearl Harbor. Presumably companies settled because they considered defeat likely, but they may have also acted to avoid the negative publicity attached to cartel ties with German firms. The legitimate boundaries of patent agreements remained undefined.

Arnold's attack on cartels had yielded mixed results. On one hand, the uproar surrounding the aluminum case probably delayed the badly needed expansion of capacity. On the other, the magnesium and tungsten carbide cases made heretofore tightly held patents widely available and, with tungsten carbide, drove prices down.

The cartel issue did not generate the sort of public reaction for which Arnold had hoped. The effort did earn approval. A *New York Times* editorial claimed, "No sharp line can be drawn between manufacturing for commerce and manufacturing for national defense. . . . The Government has a right to scrutinize these international patent licenses. They are in effect private treaties which have world-wide economic effects."[80] Yet many were skeptical of Arnold's oft-repeated claim that cartel agreements had seriously hampered mobilization. With respect to the magnesium case, *Time* noted, "Collusion was not necessary to explain why the U.S. magnesium industry is so small. Its market is new and limited; it has only recently become sufficiently corrosion-proof to be widely used in U.S. Navy planes."[81]

The Antitrust Division occupied a precarious position. Prosecutions continued largely because no one in the various mobilization agencies had the authority to stop them. Should Washington centralize mobilization, as it presumably must sooner or later, the Antitrust Division would face strong pressure to desist. Unless Arnold could somehow rally overwhelming public support, he would have little choice but to comply.

War, Rubber, and the Last Stand of Thurman Arnold

American entry into the world war ended Thurman Arnold's antitrust crusade. The need to coordinate mobilization and placate the business community led to sharp restrictions on the Antitrust Division and eventually forced President Roosevelt to get rid of Arnold. Arnold resisted, however, using international cartels to relate the activities of his bureau to mobilization. The effort failed in its immediate objects but would define the cartel issue for the rest of the decade.

The Japanese attack on Pearl Harbor and Germany's declaration of war against the United States in December 1941 focused American public life, giving the nation an overriding goal—military victory. Eager to minimize domestic political division, Roosevelt announced that "Dr. Win-the-War" had replaced "Dr. New Deal."[82] Overworked and increasingly in poor health, the president devoted most of his time to foreign and military affairs. Congress also turned away from domestic reform and even scrapped several New Deal agencies.[83] The military situation lent urgency to the drive for unity at home. During the first half of 1942, the Japanese overran Southeast Asia, as well as American outposts in the western Pacific, and German submarines inflicted severe losses on Allied shipping in the Atlantic, often within sight of American shores. In Europe, the German army was advancing deep into Russia. With crises on almost every front, domestic squabbling seemed inappropriate.

The president streamlined the mobilization bureaucracy, although he did not advance as fast as he might have. In January 1942, Roosevelt created the War Production Board (WPB), merging the discredited OPM and SPAB and putting them under the leadership of one person, Donald Nelson, a Sears, Roebuck executive. But confusion persisted. The WPB lacked control over military procurement, which meant that it did not set production targets, the goals that determined all other decisions. The Office of Price Management remained outside the WPB's purview, as did the special agencies Roosevelt created to deal with specific problems like the rubber shortage. In May 1943, Roosevelt tried again, naming James Byrnes, a South Carolina politician and former Supreme Court justice, to head the newly constituted Office of War Mobilization (OWM), which would coordinate the activities of all other wartime agencies. Byrnes did a superb job, reducing infighting and generally imposing a measure of harmony on mobilization.[84] Nevertheless, his appointment came eighteen months after the attack on Pearl Harbor.

War cast business in a special role. Large companies provided ready-made organizations through which to mobilize industrial resources, and Washington relied on them both as producers and as coordinators of the activities of thousands of subcontractors. "Dollar-a-year men," executives on loan from private firms, even staffed mobilization organizations.[85] This policy yielded impressive results. Management expert Peter Drucker described the obstacles General Motors faced in building large plants to make aircraft, a business entirely new to it: "This division was built up in great haste in 1942 and 1943. It was necessary to train in the shortest possible time more than forty thousand workers and close to two thousand foremen. Many of the foremen had never before been in an industrial plant, not even as unskilled workers."[86] General Motors' experience was not unique—Alcoa's payroll increased by three and a half times during the war, and DuPont's more than tripled.[87] Despite the strain, American companies produced huge quantities of arms and material critical to defeating the Axis. The federal government's dependence on private industry, however, made it reluctant to antagonize business interests.

Government controls replaced the workings of the free market. Victory required Washington to allocate resources on military rather than economic criteria. It limited the output of consumer goods despite rising income and financed the expansion of heavy industry with little reference to the economic viability of plants. The government rationed scarce materials like steel, aluminum, and copper. It fixed prices. In this atmosphere, Arnold's crusade to restore economic competition was irrelevant, if not counterproductive.

Washington's wartime management of foreign trade in commodities demonstrates the problems the Antitrust Division faced. Here the U.S. government not only tolerated existing cartels but actually organized new ones, a process under way well before the attack on Pearl Harbor. Nazi victories during the spring of 1940 had forced the United States to focus intently on Latin America. The economies of these nations looked as much to Europe as to the United States, at least until German military success and the British blockade cut off trade. This situation threatened severe economic dislocation as European export markets vanished, and it gave the Germans, who after 1940 controlled the European continent, a way to insinuate themselves into South America. Washington, intent on securing its own hemisphere, worked to exclude the Nazis from the region. At a July 1940 meeting of the foreign ministers of the nations of the Americas, Secretary of State Cordell Hull recommended the "creation of facilities for the temporary handling and orderly marketing of accumulated surpluses of those commodities which are of primary importance to the maintenance of the economic life of the American republics, whenever such action becomes necessary." This meant the "development of commodity agreements with a view to assuring equitable terms of trade for both producers and consumers"—"commodity agreement" being a common euphemism for cartel.[88]

The coffee accord provides a good example of how these arrangements worked. Europe had absorbed about 40 percent of Latin America's coffee before the war; the loss of this market created a severe crisis. Because the United States was the only large importer remaining, it seemed likely that producers would soon be dumping coffee there, driving the price down. Washington feared the economic and political dislocation that would follow such a development, and in April 1941 put into effect an agreement with Latin American producers under which the United States took from each country a fixed amount of coffee at a fixed price.[89] This formula did not eliminate the problems caused by the disappearance of European markets, but it did keep the price from collapsing and gave producing nations a framework in which to organize their own schemes to limit output.

During the next several years, the U.S. government negotiated dozens of commodity agreements, chiefly (but not solely) with Latin American governments. Unlike the coffee accord, most were aimed at goods in short supply rather than those in surplus, and by 1943, a variety of agreements with over twenty countries covered nearly seventy commodities. In cases such as wheat and sugar, Washington worked through cartels established in the 1930s. Commodity accords usually provided for the United States to purchase a fixed amount at a set price; sometimes the agreement committed the United States to purchase a country's entire output. The accords furnished supplying countries with generous prices guaranteed over several years, which encouraged production. At the same time, they ensured supply and protected Washington from even higher prices. During the war, shortages abounded and, had the government left importation in private hands, different American firms probably would have bid against one another, driving prices to astronomical levels.[90] By 1945, much of U.S. foreign trade ran through what were in effect government-controlled cartels.

The war severely weakened Thurman Arnold and the Justice Department's Antitrust Division. The businessmen whom the government charged with running mobilization agencies had little use for antitrust prosecutions, and the civilian and uniformed personnel of the War and Navy Departments generally agreed with them. The focus of industry on war production lent private enterprise an aura of patriotism and made it more likely that antitrust prosecutions, by forcing executives to concentrate on matters other than production, would hinder the military effort. Finally, the centralization of authority over mobilization, however halting, made it more difficult for Arnold to ignore the wishes of others in the government.

American entry into the war put an end to the Antitrust Division's campaign against patent cartels linking German and American firms, in which Arnold had invested so heavily. The declaration of war automatically suspended such agreements.[91] As Wendell Berge of the Justice Department noted in 1944, "The argument that these agreements are abrogated by the war can be harmful to our cartel program. The defendants urge this abrogation in order to show that our case against them is moot." Unfortunately from the perspective of the Antitrust Division, temporary suspension did not resolve the long-term problem posed by restrictive accords. Berge argued, "It is exceedingly likely that these agreements will be resumed after the war unless there is a court decision finding them invalid."[92]

Realizing the weakness of its position, the Antitrust Division continued to try to make a place for itself in mobilization, an effort that involved heavy emphasis on international cartels. The task proved difficult, however, as the case against General Aniline & Film and General Dyestuffs demonstrated. These two companies were the chief subsidiaries of IG Farben in the United States. General Aniline produced a wide variety of goods, enjoying particular strength in dyes and photographic chemicals. General Dyestuffs marketed Aniline's products, as well as those made in Germany by the IG. Together they had a substantial presence in the American market, selling about 40 percent of dyestuffs consumed in the United States, as well as a host of other products.[93] The two firms composed perhaps the most important German investment outside Europe, and the IG was not eager to lose them as its predecessors had lost their American assets in World War I. Almost from the beginning Farben had tried to conceal its interest in General Aniline and General Dyestuffs, first running them through a Swiss holding company and then, after war began in Europe, transferring nominal ownership to Germans resident in the United States. As early as 1935, representatives of the IG told incredulous DuPont officials "repeatedly and unequivocally that the German IG did not own directly or indirectly the General Aniline Works."[94] Despite such assertions, however, the link between the American firms and the IG remained a secret open to anyone who took the trouble to examine the matter.

American entry into the war forced Washington to take action against these two companies, particularly General Aniline, a major industrial firm in a high-tech field. A Treasury Department memo noted that the company "has succeeded by several devices in providing access for its men—often German aliens or German-born American citizens—to the drafting rooms of about 3500 industrial plants, including defense installations and Government experimental laboratories, and in amassing valuable industrial information." In another instance, "a company laboratory, in charge of a German alien assisted by two other German aliens, was found to be developing and processing films of experimental United States Army tanks." The Treasury Department concluded that General Aniline "provides the German Government, through IG Farben, with unusual opportunities for the concealment of German agents and expenditures for propaganda and other subversive purposes."[95] Yet the company's considerable resources would make it a valuable military contractor if the government could eliminate German influence.

On December 19, 1941, less than two weeks after the attack on Pearl Harbor, the Antitrust Division filed suit against Farben, General Aniline & Film, and General Dyestuffs, claiming that the three had "agreed to combine all their dyestuff properties in the United States into a single manufacturing company and not to compete otherwise in the manufacture or sale of dyestuffs." The suit also attacked similar ties among these companies governing photographic chemicals, an area in which Farben was the world's leader. The government sought the end of these accords.[96]

Though at first glance plausible, the reasoning behind the suit weakened on closer examination. The Antitrust Division wanted to sever the ties between IG Farben and its American subsidiaries. Yet if General Dyestuffs and General Aniline were indeed subsidiaries of IG Farben, the agreements cited by the Justice Department were simply management arrangements legal under the antitrust laws, which did not require that different parts of a company compete against one another. The Antitrust Division had a case only if it accepted the fictitious claims of General Aniline and General Dyestuffs that they were independent of IG Farben. In this circumstance, the government might well secure a consent decree or court order terminating the agreements, though the war would have already suspended such accords. But this would not eliminate pro-German managers or spies on the payrolls at the two firms.

In March 1942, Washington resolved the problem by seizing ownership of General Aniline & Film and General Dyestuffs. The Alien Property Custodian, a wartime agency responsible for the assets of Axis nationals, took over these properties—along with other IG assets like its 50 percent holding in Winthrop Chemical and its Jasco stock, which had been in trust for Standard Oil of New Jersey—and promptly installed new management. Eventually, General Aniline became an important war contractor.

The Antitrust Division, however, could not bring itself to drop the matter. Its suit dragged on for years. More important, the Antitrust Division objected to the managers whom the Alien Property Custodian had put in charge of General Aniline. One was an officer of an oil company, and as an Antitrust Division memo observed, "the connection between IG Farben and all oil concerns here is well-known." Another was the chairman of the Corn Products Refining Company, which had had German subsidiaries before the war. "It can be assumed," the same Justice Department memo noted, "that these subsidiaries . . . are connected by cartel agreements with other German chemical works, especially with IG Farben."[97] These accusations were both unfair and unwise. They cited no specific evidence concerning the individuals in question. Even had the Antitrust Division possessed such information, cartels were an accepted way of doing business in almost every country except the United States. Within the United States, patent agreements had traditionally served a similar function, and the Justice Department, despite its success in negotiating consent decrees, had yet to get a definitive court ruling against such accords. Aside from the legal and moral questions, almost every major chemical and oil firm had at some time participated in some sort of cartel. Washington could not mobilize these critical industries while shunning the companies that constituted them. In any event, the Alien Property Custodian ignored the Antitrust Division's objections, which Arnold may not have pushed very hard. Their very mention, however, could not have won the Antitrust Division friends among those responsible for mobilization.

Thurman Arnold and the Antitrust Division seized on the rubber crisis as a last chance to relate antitrust, and specifically the drive against international cartels, to mobilization. Japanese victories in the first half of 1942 had cut the United States off from Southeast Asia, by far the most important source of natural rubber, and catastrophe threatened. Americans relied heavily on cars and trucks for transportation, and Washington planned to build a vast mechanized army. Without rubber tires, the country could not keep its economy running, much less wage a victorious war. The nation had a rubber stockpile that might, if carefully husbanded, last for eighteen months, but beyond that the prospects were bleak unless the country found new supplies.

The government counted on a massive synthetic rubber program to avoid disaster. The German army already ran on synthetic tires made of a substance produced by IG Farben, buna rubber. DuPont also produced a synthetic of its own devising, neoprene, but neoprene required calcium as a feedstock, whereas buna used cheaper and more plentiful oil. Jasco, the joint Standard/IG company that had in 1939 become a de facto subsidiary of Standard Oil of New Jersey, controlled the American rights to buna rubber. In December 1941, Standard put the rights to buna into a patent pool set up by the rubber industry and covering several types of synthetics. Washington soon laid plans for a massive artificial rubber industry that it would finance and in which buna would have the leading place, composing almost three-quarters of output.[98]

At this point the Antitrust Division intervened. It had been investigating the relationship between Standard and IG Farben for at least a year, and in early 1942, the Antitrust Division informed Standard that it intended to file suit. After a considerable internal debate Standard decided to settle, even though most of its officers believed that their firm had done nothing wrong.[99] On March 25, 1942, the company signed a consent decree with the government, paying $50,000 in fines and agreeing to license all its synthetic rubber patents free of charge for the duration of the war, thereby in all likelihood forgoing several million dollars in revenue.[100] Standard's press release on the occasion no doubt reflected the thoughts of its management: "The developments made under these agreements [with IG Farben] have advanced the progress of American industry and its ability to meet the war emergency. Nevertheless the company realizes that to obtain vindication by trying the issue in the courts would involve months of time and energy of most of its officers and many of its employees. Its war work is more important than court vindication."[101]

Though Standard thought otherwise, Thurman Arnold did not consider the matter closed. The very day after signing the consent decree he appeared before the special Senate committee charged with monitoring mobilization and chaired by Harry S. Truman. Arnold announced, "We believe that the [Standard] cartel arrangements with Germany . . . are the principal cause for the present shortage of synthetic rubber." Backed by a mass of documents subpoenaed from Standard's files, the antitrust chief outlined in detail the agreements with Farben by which Standard had gained control of hydrogenation and how the American firm had ceded dominance over the petrochemical field to the Germans through the Jasco Agreement. The latter accord gave Farben the authority to refuse to license the buna patents in the United States, a power it had exercised at the behest of the German government, which did not want this technology exploited abroad. As Arnold put it, simplifying the tale somewhat, "Standard Oil delayed the use of buna rubber in this country because the Hitler government did not wish to have this rubber exploited here for military reasons." Berlin relented only at the end of 1938, but even then Arnold claimed, "Standard delayed the introduction of buna rubber even after it had received permission from IG Farben to make suitable arrangements." Jasco attached prohibitive conditions to licenses, requiring that firms use synthetic output only internally (not selling raw rubber to anyone else), pay a very high royalty of $.075 per pound, and license back to Standard any improvements in the buna process. These terms, which Standard retained even after assuming full control of Jasco, found few takers. Arnold claimed that "Standard, apparently, could not bring itself to offer terms to these rubber companies which would afford even a modicum of independence." The nation's buna capacity remained negligible until the attack on Pearl Harbor. Referring to unsuccessful attempts by Goodyear Tire and Dow Chemical to negotiate licenses for buna in 1938, Arnold mused, "I don't know what Goodyear could have done with it. I don't know what Dow could have done with it. But if we look . . . we can see what free enterprise and experimentation is capable of, and I am perfectly sure that had this thing been opened we would have developed it [synthetic rubber] as Germany did."[102]

Standard Oil's restrictive policy, Arnold claimed, extended not only to buna, the IG's discovery, but also to its own invention, butyl rubber. In the mid-1930s, at the same time that Farben was refusing to license American production of buna, Standard turned over to Jasco its newly discovered butyl process for making synthetic rubber, which Arnold claimed effectively put it under German control.[103] After 1939, the American firm gained control of Jasco, but Arnold observed "that on Standard's own development; namely, butyl, Standard refused to license all but two rubber companies, with the exception of specialty companies." This policy stifled a promising development. Arnold noted that butyl's cost, "as estimated by Standard, was between 7 and 15 cents a pound, compared with approximately 20 cents per pound for natural rubber. In addition, it apparently can be used to make an overall tire. No natural rubber is necessary for the carcass," as was the case with other synthetics.[104]

Thurman Arnold could explain Standard Oil's actions. He asserted, "There is no alliance with German interests from unpatriotic motives." Rather, the company acted "to restrict world production in order to retain . . . control." Standard's drive for a protected market reflected a broader problem. "There is essentially no difference," Arnold claimed, "between what Standard Oil of New Jersey has done in this case and what other companies did in restricting the production of magnesium, aluminum, tungsten carbide, dye stuffs, and a variety of other critical materials."[105]

Arnold's revelations caused an uproar. Senator Truman said, "Even after we were in the war, Standard Oil of New Jersey was putting forth every effort . . . to protect the control of the German government over a vital war material."[106] Senator Joseph O'Mahoney of Wyoming told a Standard executive, "Your difficulty proceeds from the fact that you are bound by two loyalties . . . loyalty to IG Farben [and] . . . loyalty to the United States."[107] TRB, the leading columnist of the *New Republic*, mused, "Standard of New Jersey was still more loyal to the business international than to the United States of America."[108] The final report of Truman's committee, though more measured than Arnold's testimony, stated, "The documentary evidence out of Standard's own files requires the conclusion that Standard, as a result of its cartel arrangements with IG Farben, and as a result of its general business philosophy, did hamper the development of synthetic rubber in the United States."[109]

Standard Oil of New Jersey vigorously denied Arnold's claims. Its president said, "Any charges that the Standard Oil Co. or any of its officers has been in the slightest respect disloyal to the United States is unwarranted and untrue. I repel all such insinuations with all the vigor at my command. I do so with indignation and resentment." He continued: "Standard has no apologies to make for the part it played and is now playing in the development of synthetic rubber. It brought to this country from Germany the IG buna rubber invention now being used in the government rubber program." Standard conceded that until 1938 the IG had, according to its rights under the Jasco agreement, blocked the licensing of buna rubber on orders from the German government. Yet Farben had developed buna, and the Jasco accord gave it no power over the process that it would not have enjoyed in any case. At the same time, however, the Germans had provided Standard with substantial technical information on buna through Jasco, withholding only the actual blueprints for the large plant that the IG was building in Germany to produce it.[110]

After gaining control of Jasco in 1939, Standard had tried to develop the buna process commercially. Unfortunately, buna production costs were high. In 1942, Standard estimated the cost at approximately $.25 to $.30 a pound, whereas natural rubber cost under $.10 a pound. This calculation reflected the impact of a much-improved method developed by Standard in 1941 for producing butadiene, the critical ingredient of buna. The old method, devised by the IG, was considerably more expensive. As the head of Standard's research operation put it, the commercialization of buna required either "general industry cooperation in which the industry itself removes competitive hazards, or else the government must step in and take control of the matter."[111]

Standard had explored both private cooperation and public support. In January 1940, it had devised a combine that would encompass the entire rubber industry. Each tire firm would agree to use buna for a certain percentage of its output, passing the extra cost on to consumers. This setup would guarantee that no one firm would gain a cost advantage over the others by forgoing the most expensive synthetic for natural rubber. Moreover—though Standard's officers did not emphasize the fact—it would have guaranteed Standard's control of the synthetic rubber business because Standard would have owned 51 percent of the combine.[112] The plan collapsed, in part because it was too complicated, and in part because of fears that it would violate the antitrust laws.[113] Standard's approach to the government fared no better. In 1940, it had recommended to the Advisory Commission on National Defense that the United States build plants capable of producing 150,000 tons of synthetic rubber per year, supplying a quarter of U.S. consumption. The government soon scaled the program back to 40,000 tons. In the end, President Roosevelt and Jesse Jones, the head of the Reconstruction Finance Corporation, which was supposed to finance the plants, decided against the investment. It would have been expensive and have absorbed scarce resources, and neither Roosevelt, Jones, nor anyone else in the government imagined that the Japanese would be able to cut off American supplies of natural rubber.[114]

Subsequently, Standard abandoned immediate plans for large-scale production and instead issued licenses only for the production of specialty rubber. In a few cases, the synthetic article was superior to natural rubber, largely because it better withstood corrosion from petroleum. Buna could, therefore, command a substantial premium for products like engine hoses and sealants. DuPont already did a good business with its synthetic, neoprene, and Standard hoped to profit as well. Because Standard anticipated that rubber companies would get a high price for specialty products, as much as $1 a pound, it charged a relatively steep royalty of $.075 a pound. Standard also anticipated making money selling the rubber companies butadiene, the critical ingredient for buna. At the same time, Standard limited the uses to which rubber firms could put buna, keeping open the possibility of initiating mass production itself if the opportunity arose. Nevertheless, specialty rubber production in the United States expanded from a rate of about 2,500 tons a year at the beginning of 1939 to a rate of 20,000 tons at the end of 1941, with buna accounting for much of the increase.[115]

Outside experts supported Standard's account. In 1942 William Balt of the War Production Board blamed the government for the failure to develop synthetic rubber.[116] P. W. Litchfield, the chairman of Goodyear Rubber, whose exclusion from synthetic production Thurman Arnold had so lamented, stated that his firm had been able to develop tires from buna rubber despite Standard's control over the process. But he added, "We never pushed so hard on the synthetic in volume until it became apparent at Pearl Harbor that we were likely to have a sudden cession of our crude rubber supply." Litchfield said, "We are looking forward, roughly, on synthetic to somewhere about twenty-five cents a pound. We know that crude rubber can be produced in the plantations, running full, probably somewhere in the neighborhood of ten cents a pound." As he explained it, "At that particular time [before the attack on Pearl Harbor] there was plenty of crude rubber coming in, and this [synthetic] cost so much more than crude that there wasn't any need to do any more than learn how to do the job in case necessity should later prove it to be necessary." The president of Goodrich Rubber, which had actually sold a few synthetic tires before the attack on Pearl Harbor, when asked point blank, "Did your failure to reach an agreement with Standard Oil impede your development of synthetic rubber . . . in any way?" replied, "No, it did not."[117]

Butyl rubber presented an equally complex picture. The product itself represented an improvement by Standard on vistanex, a polymer developed by IG Farben.[118] As required by its contracts with the IG, Standard turned over the process to Jasco. Standard nevertheless continued research on butyl during the 1930s. Unfortunately, when the Americans gained control over Jasco in 1939, the product was far from commercial exploitation. Not until 1941 did Standard perfect mass production of butyl, a development that led it to build a small plant for the specialty market.[119] The company confined itself to this niche because butyl, although relatively inexpensive, equaled neither buna nor natural rubber in quality. Rubber companies managed to produce an all-butyl tire in 1941 that would last for 10,000 miles, but it would quickly disintegrate if driven above 35 miles per hour.[120] Such a product was unlikely to compete with tires made from natural latex.[121]

The evidence indicates that Standard Oil's policies did not seriously hinder the development of synthetic rubber. Indeed, its ties to IG Farben may have given it access to technology that would otherwise have been unavailable to Americans. Although Arnold often pointed to Germany's widespread use of synthetic rubber, this reflected heavy government subsidies, which the United States did not institute until 1942. Without such subsidies, synthetic rubber was not economically viable in the early 1940s. It is hard to escape the conclusion that, in the case of rubber, Arnold either did not know what he was talking about or did not care.

In the end, synthetic rubber saved the United States. A program of gasoline rationing reduced the wear and tear on tires and allowed the United States to stretch its stocks of natural rubber until massive plants producing the synthetic article came on line. In 1944, America produced about 800,000 tons of artificial rubber,[122] approximately three-quarters of it buna. Without this material, the U.S. war effort might well have collapsed.

Whatever the facts, this episode severely damaged Standard Oil's public image. The company did have defenders. The *New York Times*, reviewing the evidence in an April 1942 editorial, claimed, "Mr. Arnold's charges that the Standard Oil is responsible for the shortage of synthetic rubber simply evaporate."[123] Yet the *Wall Street Journal* provided a better picture of the political situation when it observed, "Even if each and every one of the charges brought by the representatives of the Department of Justice should be found to be without a shred of basis, there will be many people who to the end of their days will believe—or affect to believe—that in this time of war the Standard Oil Company was giving aid and comfort to the enemy for greed or profit."[124] Since before the turn of the century, economic reformers had demonized Standard Oil, and many Americans were willing to credit almost any charge leveled against it. In September 1943, Vice President Henry Wallace asserted, "Subterfuge, concealment and double dealing, deliberately stalled some of our rubber and chemical companies in order to keep them from developing synthetic rubber. . . . Behind all this subterfuge, concealment, and double dealing was the sinister figure of the cartel of Standard Oil and IG Farbenindustrie."[125] As late as 1976, John Morton Blum's book *V Was for Victory*, one of the best and most widely read accounts of the home front during World War II, repeated Arnold's accusations uncritically.[126] Twenty years later, Alan Brinkley repeated the same exaggerated charges in *The End of Reform*, his generally superb history of liberalism during the late 1930s and the war.[127]

The Standard Oil case, as laid out by Thurman Arnold, served as the starting point for the debate over international cartels. Despite intense publicity at the time, the issue never penetrated except in the shallowest fashion to the proverbial "man on the street," who was concerned chiefly with winning the war and securing a good job when it was over. Most Americans opposed anything unfortunate enough to be labeled a "cartel," but few thought further on the subject. As one irate journalist wrote in 1945, "The American people, though temporarily aroused [against cartels] when the agencies of the government ripped open the veil of secrecy in the first days of the war, are showing signs of lapsing again into indifference and apathy."[128]

The cartel issue did penetrate the consciousness of a large group of academics, journalists, and middle-level government officials who thought in the same terms as Thurman Arnold and who, in the hectic atmosphere of wartime Washington, shaped policy toward cartels. Of equal importance, the rubber case discouraged corporate executives who might otherwise have defended international cartels. As the history of Standard Oil put it, "The effect [of Arnold's accusations] on the personnel of parent company and domestic affiliates was traumatic."[129] Once it had regained its collective balance, Standard tried to dissociate itself from cartels, sacrificing the truth if necessary. In 1943, the company's president actually stated at a stockholder's meeting, "We never had *any* cartel agreement with I.G. Farbenindustrie. What we *did* do was to *buy* from IG Farben some patent rights and part interest in inventions."[130] Most other firms, eager to avoid Standard's public humiliation, followed suit. If the companies that had negotiated cartels were unwilling to defend them, few others were likely to do so.

Thurman Arnold's public-relations coup in the Standard Oil case did not salvage his position within the government, however. Mobilization agencies and the military remained under the control of businessmen or officials sympathetic to them, and if anything, Arnold's handling of the Standard Oil case further alienated these people. Henry Stimson, perhaps the most important member of the cabinet at the time, no doubt summed up their opinion when he said of Arnold, "He had frightened business . . . making a very great deterrent effect upon our munitions production." At another point, the secretary of war described the antitrust chief as a "self-seeking fanatic."[131]

Soon the service departments gained the power to halt antitrust suits for the duration. A March 20, 1942, memo signed by Stimson, Navy Secretary Frank Knox, Arnold, and Attorney General Francis Biddle stated, "Such [antitrust] court investigations, suits, and prosecutions unavoidably consume the time of executives and employees of those corporations which are engaged in war work. In these cases we believe that continuing such prosecutions at this time will be contrary to the national interest and security." The memo provided for consultation among the signatories, but "if after study and examination they disagree, then, upon receipt of a letter from the Secretary of War or the Secretary of the Navy stating that in his opinion the investigation, suit, or prosecution will seriously interfere with the war effort, the Attorney General will abide by that decision."[132]

The military used its power aggressively. By early 1943, the army had forced the Antitrust Division to halt cases against GE involving lightbulbs and tungsten carbide and against various chemical companies involving heavy chemicals, dyestuffs, and plastics.[133] These and similar actions, according to one historian, reduced Arnold's job to a "sinecure."[134]

In addition, the Antitrust Division found itself in conflict with the War Production Board. The desire of Donald Nelson, the head of the WPB, to hire as his deputy Charles Wilson, the president of General Electric, played a part in the rupture. Arnold strongly opposed the appointment, noting, "Mr. Wilson has been trained in the cartel school of industrial combination, international alliances with other businesses, to the exclusion of nationals and the elimination of independent enterprise."[135] Most disturbing, Owen D. Young, the chairman of GE, insisted that Wilson could not take the WPB job until after the resolution of antitrust charges involving Wilson personally—a demand that the Justice Department and President Roosevelt himself feared might set a bad precedent, allowing companies to dictate their relationship with the government.[136] It was one thing to treat companies generously, another to let them set the terms of cooperation. Wilson eventually got the WPB position, but Washington only suspended prosecutions against GE. As with cases against other firms, the Justice Department reserved the authority to take them up again after the war.

Arnold's intervention in the Wilson case occurred in the context of an already bad relationship with Nelson. The Antitrust Division had taken upon itself the task of reviewing WPB operations to keep monopoly at bay, and apparently the board's personnel were tired of the meddling. In September 1942, Nelson complained to Attorney General Biddle of "unremitting interference by the Antitrust Division with the work, organization and personnel of the War Production Board by unwarranted acts, thoughtless and unjustifiable disparagement of motives, and incessant nagging." "As a direct result," Nelson concluded, "the War Production Board is finding it increasingly difficult to obtain the services of able and seasoned industrial personnel, whose participation is essential to the successful accomplishment of its job."[137]

Arnold contemptuously dismissed this communication. Privately he stated, "The incoherent rambling letter of Donald Nelson is a pathetic confession of weakness."[138] For Nelson's consumption he replied, "We believe that there is monopoly domination in most of our great industries involving war production. That monopoly domination has been and is now the principal reason for our shortages in basic materials and our failure to convert independent industry to war production. We have a real function to perform in exposing undercover dealings of monopoly groups in this country." Arnold concluded, "I assume Mr. Nelson did not personally write this letter, and therefore it is no disrespect to him to say that its writer apparently does not believe in actually curbing the evils of monopoly."[139]

This reply did little to calm Nelson. It does seem that Attorney General Francis Biddle managed with some careful diplomacy to prevent a public break. In a final communication, however, Nelson complained of "a widespread and growing impression in American industry that Mr. Arnold has made it his special, extrajurisdictional purpose to 'drive the businessmen out of Washington.' " As for the claim that the WPB was unconcerned about monopoly, Nelson wrote, "This charge is a typical example of the groundless and irresponsible accusations [by Arnold]. . . . The charge is nonsense, and I feel that Mr. Arnold must know that it is nonsense."[140]

The president got rid of Arnold in January 1943, by appointing him to the District of Columbia Court of Appeals. Roosevelt had little choice. If Arnold had incensed Nelson, who was by most accounts an accommodating, low-key individual, he had almost certainly alienated everyone associated with the military and mobilization. The administration wanted to conciliate business, whose help it believed it needed to win the war, and the president simply could not allow Arnold to ignore that policy.

The appeals court represented a comfortable perch, but everyone, including Arnold, realized that he had received the appointment to get him out of the Antitrust Division. In public, Arnold took the change philosophically. "I guess I'm like the Marx brothers," he said, "they can be awfully funny for a long while, but finally people get tired of them."[141] Privately, Arnold was more bitter. Several years after the war, he wrote, "FDR, recognizing that he could have only one war at a time, was content to declare a truce in the fight against monopoly. He was to have his foreign war; monopoly was to give him patriotic support—on its own terms. And so more than 90 percent of all war contracts went to a handful of giant empires, many of them formerly linked by strong ties with the corporations of the Reich."[142] As it turned out, Arnold found the judiciary dull and left the bench after only two years.

However unhappy the end of his tenure, Thurman Arnold had accomplished much as head of the Antitrust Division. Despite the rhetorical importance attached to the antitrust laws since the Progressive Era, enforcement had been uneven at best before the late 1930s. Arnold increased both the Antitrust Division's staff and its concept of its responsibilities, and despite a temporary retreat during the war, these changes endured. After 1945, compliance with the antitrust statutes became for the first time a regular concern of most large companies. Though not solely Arnold's accomplishment, he deserves more credit than anyone else. Arnold also did more than anyone else to bring the issue of international cartels to the fore and to shape the nature of the debate on them. The process started in 1940 and 1941, culminating with the Standard Oil hearings in 1942. By the time Arnold left the Antitrust Division, the momentum was strong enough to survive his political demise.

Yet the factors that accounted for Arnold's successes ultimately led to his downfall. He fervently believed that collusive practices pervaded American industry and made rooting them out a personal crusade. In 1938 and 1939, his enthusiasm energized the Antitrust Division and helped win important court victories. Yet Arnold's crusading spirit came at the expense of his sense of perspective. Contrary to his belief, antitrust could not solve all of the country's problems. In particular, it had little to contribute to mobilization, which suspended the normal workings of the free market and required close cooperation between business and government. Prosecutions merely distracted hard-pressed executives from military production and poisoned relations between industry and government. Whereas in peacetime Arnold had been a constructive if narrowly focused figure, in war he became a destructive one.

Congress and Cartels

Congressional policy toward cartels demonstrates the odd political dynamics of the issue. The subject did not penetrate the popular consciousness except in a shallow way, creating a prejudice against anything unfortunate enough to be labeled a "cartel," but no widespread demand for any specific set of reforms. Up to a point this was sufficient for the opponents of cartels, as almost no one was defending these organizations per se. When anticartel measures challenged powerful interests, however, the lack of deep public support proved crippling. Yet at the same time, the popular prejudice against cartels was strong enough to block any measure that might benefit these organizations.

In 1943, Senator Joseph O'Mahoney of Wyoming introduced a modest bill requiring American companies to provide the Justice Department with copies of agreements with foreign concerns, documents that would be open to public inspection.[143] Though hardly revolutionary, the measure would have increased knowledge of cartels and exposed them to greater public scrutiny. Business groups accorded O'Mahoney's bill a mixed reception. Though few voiced any objection to it in principle, many saw practical difficulties. The president of Standard Oil of New Jersey, Ralph Gallagher, warned, "The definition of 'foreign contract' as it now stands in the bill is so broad . . . that it can be interpreted as requiring the registration of all contracts which involve directly or indirectly total or partial performance outside the United States. . . . This would burden thousands of business enterprises, large and small, with the necessity of registering hundreds of thousands of routine contracts. It would overwhelm government departments with a mountain of paper." Standard's chief also feared that "the provisions of the bill making foreign contracts open to public inspection could lead to severe handicapping of American industries in their competition for foreign business."[144] Still, more careful drafting could presumably resolve these problems. Surprisingly, the Executive Branch seemed hardly more enthusiastic about the measure. Attorney General Francis Biddle wrote to O'Mahoney, "I find no objection to the enactment of the bill"—hardly a ringing endorsement. He also seconded concerns that O'Mahoney's proposal might create serious administrative problems.[145] A State Department memo stated, "We should, I think, be careful not to enthuse over it [the O'Mahoney bill]."[146] Registration might be useful, but the benefits were not worth putting heavy burdens on business or government officials.

A few businessmen hoped that a measure similar to O'Mahoney's might clarify the status of international cartels. The courts had issued no definitive ruling on the role that U.S. firms could legitimately play in these organizations, and companies wanted to know exactly what was and was not legal. Some executives, including Gallagher of Standard Oil, suggested that firms be able to submit international agreements to the government for review with the provision that approval would protect a company from antitrust prosecution.[147] In early 1945, these ideas coalesced into a proposal by the National Foreign Trade Council (NFTC), a group consisting of about seven hundred American firms involved in foreign trade.[148] The council urged Congress to "recognize that Americans may enter into international business agreements valid under foreign laws provided they result in no unreasonable restraint of trade within the United States." The council recommended a bill requiring that all companies register foreign cartel agreements with the State Department, which would then approve or disapprove of them. The State Department could subsequently rescind an affirmative ruling, but until that time, the signatories would enjoy immunity from antitrust prosecution.[149]

The NFTC program enjoyed little support. The foes of cartels naturally opposed it—the measure would give cartels legal recognition and reduce the Justice Department's authority over them by lodging the power of review with the State Department. State also opposed deviation from the antitrust principle. One memo noted, "As to 'advance clearance' and immunity from the Sherman Act, we should take a firm, negative position."[150] The business community did not lend much support either. The National Foreign Trade Council was a relatively narrow organization, representing chiefly large companies with extensive interests abroad. The more broadly constituted National Association of Manufacturers refused to endorse the bill.[151] Although individual firms did have substantial interests in international cartels, the American business community as a whole did not.

The NFTC measure raised serious legal questions as well. The courts had not yet decided exactly what sort of foreign agreements might constitute "unreasonable restraint of trade within the United States." As a State Department committee noted, "Until pending cases have been adjudicated, government officials will be as uncertain as anyone else."[152] Once the courts had ruled, the need for review would diminish. DuPont, which with its extensive cartel ties might be expected to favor the NFTC proposal, rejected it on practical grounds. "As presently written," a company official noted, "the [National Foreign Trade Council] resolution involves much of the blank check idea. One might vote favorably on it without having any adequate comprehension of what he was voting for."[153]

Congress enacted neither O'Mahoney's nor the National Foreign Trade Council's proposals. Despite Senator O'Mahoney's persistence—he introduced his bill every year from 1943 to 1945—the measure failed every time. It aroused neither strong opposition nor support and died of indifference. Why impose new administrative burdens on business and government that would change little? The National Foreign Trade Council's proposal fared even worse. Support for it was never broad, and the more people reflected on it the more doubts they developed. Although the press discussed the recommendation, it received almost no notice in Congress. The only measure enacted was an amendment to the Reciprocal Trade Act requiring that diplomats take into account "the operations of international cartels" when negotiating bilateral trade accords—an interesting statement of concern but hardly revolutionary legislation.[154]

No doubt the press of war-related business diverted attention from these measures, but lawmakers who wanted to deal with international cartels confronted broader difficulties. Congress could intervene decisively on the issue only by revising the antitrust laws, explicitly exempting international cartels from the Sherman Act or expanding that law so that it unambiguously banned American participation in them. Yet support for loosening the antitrust laws did not exist—they were too popular and international cartels too controversial. As for strengthening the law, opponents of cartels insisted that as written, the Sherman Act prohibited American participation in international accords. If Congress moved specifically to outlaw international cartels, it would be implying that as the law stood they were legal. The principals would have to fight out the issue in court without help from the legislative branch.

The possibility of legislative action did remain in one important area—the patent laws. Thurman Arnold spoke for many when he wrote in 1942, "The principal smoke screens under which domestic and international cartels have cloaked their activities are patent laws—which, like lost sheep, have gone astray."[155] Certainly firms extracted every advantage they could from patents. General Electric based its lightbulb cartel on patent agreements, and patents formed the foundation of the arrangement between Standard Oil and IG Farben, as well as countless other accords. Wendell Berge of the Justice Department warned, "In many branches of industrial production vast monopolies exercised a dominating influence over research. It is the abuse and misuse of patents by such concentrated groups wielding tremendous economic power which have brought patents into conflict with the fundamental purpose of the patent law and the Sherman Act."[156]

According to Berge, patents actually allowed large companies to choke off research. He claimed, "The power which modern monopoly wields over research, by virtue of patents, often perverts the spirit of discovery." He continued: "What incentive is there to inventors to develop new products or processes when they may be, in effect, inventing their way into a patent infringement suit?"[157] Thurman Arnold believed "that the patent law has no place in the protection of any dominating concern, that the patent laws do not encourage research by such concerns. Indeed, it is so used as to prevent the research of others from becoming effective." He added, with his usual rhetorical flair, "The use of the patent law by a struggling company is an entirely different phenomenon than if used by General Electric. If you discuss them both at the same time it is like discussing tree trunks and travelers' trunks under the same classification."[158]

Various schemes existed for changing the patent laws. The Temporary National Economic Committee had recommended the licensing of all patents for a "reasonable" fee. Thurman Arnold went a step further, writing that the holders of patents "should be prosecuted if, instead of using the patent to get the most royalties, he uses it to prevent a necessity from being produced in the greatest possible quantity. If he tries to do that, we believe the law should cancel his patent."[159]

In December 1941, a few days after the attack on Pearl Harbor, President Roosevelt appointed the National Patent Planning Commission to investigate and recommend improvements in the patent laws. Charles F. Kettering, the head of research for General Motors, chaired the group, which also included Owen D. Young, the chief of General Electric. As Senator O'Mahoney aptly observed, "This commission . . . is clearly representative of industry."[160] The commission's final report, delivered in the spring of 1943, contained proposals to streamline the granting of patents and to prevent the extension of their life beyond the usual seventeen-year limit. It also recommended mandatory licensing of patents for national defense programs and the registration with the government of patent agreements between American companies and foreign firms. Nevertheless, the commission's report concluded that "the American system [of patents] is the best in the world." It continued, "The patent system is the foundation of American enterprise and has demonstrated its value over a period coextensive with the life of our government. The principle of recognizing a property right in intellectual creation is sound and should be continued as contemplated in the constitution."[161]

The report failed to satisfy critics of the patent laws. Already in 1942, Senators O'Mahoney, Homer Bone of Washington, and Robert LaFollette, Jr., of Wisconsin had introduced a measure for radical reform. They proposed to invalidate automatically any patent that was not, within three years of its issue, actively worked, as well as to ban licensing agreements that restricted sale price or output, voiding the patents on which such accords rested. Companies would have to submit all patent agreements to the Federal Trade Commission for approval.[162] The first part of their proposal, at least, had precedent, because several other countries, including Britain, premised the validity of patents on their being utilized. Measures comparable to that suggested by O'Mahoney, Bone, and LaFollette surfaced in every session of Congress through the end of the war. A bill introduced in 1943 made "illegal any use or non-use of a patent which has the effect of unreasonably limiting the supply of any article in commerce."[163] Another variant permitted the Justice Department to involve itself in any patent case.[164]

The business community and researchers vociferously opposed such reforms. Lawrence Langner, a patent attorney, wrote in a response to Thurman Arnold, "The patent or copyright is not a monopoly in the sense that large corporations or labor unions may be monopolies, for the inventor or author, in exchange for the patent or copyright, gives the public something which did not exist before: a new invention or a new work of art. . . . The enormous sum of over $300,000,000 in capital is invested annually by research departments of American corporations and by individual independent inventors. The patents obtained upon the resulting inventions represent insurance policies for the return of this capital to the progressive industrialists or inventor who expends it." Langner concluded, "Emasculation of the American patent system will mean the decline of American invention, and this in turn will be followed by the decline of industrial civilization as we know it."[165]

The often-expressed objection to corporate ownership of patents was, businessmen argued, foolish. Hugh Sanford, a Knoxville, Tennessee, inventor whose views Thurman Arnold elicited, wrote, "The corporation pays these men [scientists] to devise improved methods in this field. It supplies the engineers or research men with the tools and equipment to make various and sundry experiments and tests and bears the expense of keeping the department and making the tests. Therefore, when the inventions are made, it would seem that the corporation is entitled to own them, and I believe that if the corporations did not put up money for research, etc., these inventions would not be made."[166] As for the claim that large companies suppressed inventions, one scientist asserted, "There is no authenticated example of the actual suppression of a major industrial development which was patented and then monopolistically withheld in order to protect obsolete practices."[167] Weakening patent protection might actually slow the transmission of knowledge. One scientist feared that "rather than disclose technological advances by applying for patents, industry in self defense would degenerate into the mere seeking to analyze and copy the other fellow's products."[168] With respect to hardships allegedly imposed by the patent laws on smaller firms, the National Association of Manufacturers claimed that in fact many small companies "could not continue without the protection afforded by the exclusive rights granted by their patents, and . . . would have had difficulty in raising funds for getting started except for such protection."[169]

Patent law presented the enemies of monopoly with a basic contradiction. As Hugh Sanford wrote, "The object of a patent is to give a monopoly, and the legitimate use of a patent to obtain a higher than average profit during the life of the patent seems to me to be entirely proper. If this could not be done by means of a monopoly, the patenting of new ideas would cease."[170] Senator O'Mahoney himself said, "It [a patent] is a justifiable monopoly. It is a monopoly which the Congress intended to grant to the individual person. However, the antitrust law is directed against the use of any device, whether patent or otherwise, to restrain trade or monopolize any industry."[171] Try as it might, the government could not abolish this contradiction but instead had to strike a balance between the goals of encouraging invention and maintaining competition.

Most lawmakers seemed unwilling to rewrite the patent laws. Although Congress approved some of the more modest recommendations of the National Patent Planning Commission, it showed no enthusiasm for a system of compulsory licensing such as that advocated by the TNEC and other critics of patent system.[172] The legislative branch apparently agreed with the lawyer who stated, "It is both impossible and impracticable to legislate against every fancied and remote possibility of the misuse of property [patents] by its owners."[173] The solution advanced by NAM seemed more reasonable. "Patents of course may become a cloak for illegal cartels," the organization noted, "but in such event redress is obtainable in this country under our antitrust laws. Those desiring to make a legitimate use of their patents should not be deprived of their rightful opportunity to do so merely because such property rights may, in some cases, have been used to cloak illegal cartels."[174] NAM clearly hoped that the courts would treat patent monopolies generously, but its argument was nevertheless strong. The complexity and contradictions inherent in patent and antitrust laws made flexibility imperative, and the courts could provide it more readily than Congress. In this area, as in others, the judiciary would decide policy toward cartels.