The first point to note is that, Peter Hayes’s polemics notwithstanding, there is a considerable degree of agreement between him and us on the question of the relationship between the state and businesses during the Nazi era. Hayes does not dispute that the economic system of the Third Reich was not a typical planned economy. Firms in National Socialist Germany had more room for maneuver in decision-making than enterprises in the Soviet Union did. That room for maneuver was not unlimited, of course, as firms took the prevailing political and economic circumstances into consideration. That is the case in every economic system in which private enterprises exist. But it was precisely those circumstances that made the National Socialist economic order different from other capitalist systems. As a result, the decisions firms made were also sometimes very different.

Peter Hayes writes:

[D]ecisions were increasingly channeled in directions the regime desired by the interaction of government funding and state-guaranteed profit margins for producing certain goods, on the one hand, and steadily tightening official controls, stiff penalties for their violation, the possibility of government compulsion, and the danger that the refusal to cooperate opened opportunities to competitors, on the other. (Hayes, p. 31)

Later, he continues: “When business sought to pursue lines of development justified by commercial calculations that were not also national ones, it usually found the authorities to be implacable and effective impediments.” (Hayes, p. 32) We can agree by and large with this key passage from Hayes’s essay. As we have written elsewhere, “Industry adapted to the regime’s sometimes irrational wishes, often at little financial cost but by deferring development plans of its own. It is obvious therefore that there existed, in the
words of Hayes, opportunity costs to enterprises.” Where, then, does the difference of opinion between Hayes and us lie? It concerns two main points, we believe: the interpretation of the dynamics of state regulation and the extent to which the state threatened to use force and carried through on that threat.

I. The Dynamics of State Regulation

According to Hayes, there was a clear development, driven solely by the state, in the direction of steadily stronger and more comprehensive regulation of the economy from the very outset of the Nazi era. “…[T]he interventionist spiral set in motion by Nazi trade policy in 1933-34 developed by 1938 into a full-blown, comprehensive and state-mandated rationing and allocation system for every factor of production. That system then became more rigorous during the war and almost airtight from 1942 on.” (Hayes, p. 30) In our view, state regulation and the reasons behind it were far more complex. First of all, the regulations were usually formulated in such a way that the affected firms still had considerable room for maneuver in decision-making, so they were never “airtight.” We have repeatedly demonstrated that this was the case in a variety of industries dependent on rationed raw materials. Rationing meant that firms did not have a free hand in determining how much of certain important raw materials they could consume; but they nonetheless had numerous options in deciding what products they would produce with the raw material allocated to them. Moreover, special quotas of raw materials were frequently available to firms producing goods for the Wehrmacht or for export. Such special quotas often made production for export very appealing, a point Hayes fails to recognize. Even if export revenues did not fully cover costs, production for export helped guarantee raw material supplies, especially as a raw materials bonus was sometimes available. Moreover, as a matter of principle, firms did not want to be forced out of profitable markets even if they were not making money in those markets in the short run. Further freedom in decision-making existed in the domestic market, as firms were generally free to choose between customers.

It can be shown, moreover, that, contrary to the claim by Hayes quoted above, at no point were all factors of production fully subject to rationing and state control. It is well known, for example, that labor was not strictly controlled and could not be fully mobilized even during the war. That is very clearly evident from the high number


of women employed as housemaids throughout the war and the fact that numerous German women were able to avoid the obligation to work. Nor, despite tight state control of the capital market, can it be maintained that firms’ possibilities for financing were entirely dependent on the state’s good will. High levels of profit meant that firms almost always had the option of financing investments on their own as an alternative to the capital market.\textsuperscript{5}

If purely private investment—investment that was in no way supported by state guarantees or subsidies—was nevertheless extremely limited during the Nazi era,\textsuperscript{6} that was not only a result of the state hindering investments that did not serve its goals, as Hayes would have the reader believe (see Hayes, p. 32). It was also due to the fact that firms did not want to invest in industrial assets because they were afraid of being left with overcapacity when the state-driven economic boom came to its expected end. This point is confirmed not only by the comments of businessmen and contemporary observers of the economic scene\textsuperscript{7} but also by the actions of many firms—or, more to the point, their non-action. Consider the example of the cellulose-based synthetic fiber industry. Despite pressure from the state and offers of state subsidies (which, however, were considered inadequate), IG Farben, one of the major firms in this industrial branch, declined to invest in expanding its production of synthetic fiber beyond the level that it deemed profitable in the long run.\textsuperscript{8} The most prominent example, however, was the steel industry. Germany’s private steel companies were not prepared to expand capacity to meet the rapid increase in demand arising from the state’s rearmament program despite the high profits they were earning. It was this unwillingness that first induced the state to introduce iron and steel rationing.\textsuperscript{9} Steel companies preferred to hoard liquid assets rather than invest them even though expanding capacity would have been extremely profitable in the short run.\textsuperscript{10} The problem, in their eyes, was the prospects for profit in the mid and long term; they could not justify major investments on the basis of the narrow armaments-driven upswing in demand. These and other examples suggest that in some instances Hayes’s argument has to be turned on its head. The state would have been glad to see firms take advantage of the great financial resources available to them for certain types of capital investment, but firms did not do so because it seemed too risky in the long run. This was a manifestation of the autonomy in decision-making that still existed for private firms, and the exercise of that autonomy was highly detrimental to the interests of the state.

\textsuperscript{4} Rolf Wagenführ, \textit{Die deutsche Industrie im Kriege 1939-1945}, 2d ed. (Berlin, 1963), 139.
\textsuperscript{5} Mark Spoerer, \textit{Von Scheingewinnen zum Rüstungsboom: Die Eigenkapitalrentabilität der deutschen Industriaktiengesellschaften 1925-1941} (Stuttgart, 1996), 146-53.
\textsuperscript{9} Ulrich Hensler, \textit{Die Stahlkontingentierung im Dritten Reich} (Stuttgart, 2008); = Diss. Mannheim, 2006), 40-59; also see Hensler, “Iron and Steel Rationing during the Third Reich,” in Buchheim, \textit{German Industry}, 54-57.
\textsuperscript{10} One example was Krupp; see Buchheim, \textit{Wirtschaftsentwicklung im Dritten Reich}, 659, note 38.
The example of the iron and steel industry also illustrates, however, the opportunity costs specific to the National Socialist economic system that firms had to bear. Hoarding liquid assets, after all, is not usually a firm’s strategy of choice. Iron and steel producers were passing up opportunities for growth by doing so and also running the risk, given the signs of repressed inflation, of seeing a loss in the value of their monetary assets. It should be stressed, however, that the constraints on firms in the iron and steel industry—and, indeed, on firms in other branches as well—were partially self-imposed and that the associated opportunity costs had nothing to do with particular governmental prohibitions or controls. However, as Hayes rightly notes (see the passage cited above and page 36–37), company behavior that was potentially at odds with the state’s priorities was sometimes curbed by the fear of permanently losing government contracts to competitors who were more willing to expand capacity. At the same time, state institutions often competed with one another to have private firms give their orders priority, which gave firms considerable sway in their negotiations with their public sector customers. The relationship between the state and private firms in the market was thus much more nuanced than Hayes’s account would suggest.

The same holds for the relationship between governmental regulation and firms’ conduct. As with the imposition of the steel quota system, regulations were often a response to actions on the part of private firms that ran counter to government objectives. But that was not the end of the matter. As firms failed to respond as intended, the state’s methods of regulation were constantly changed or adjusted. A particularly striking example comes from the textile industry. Starting in 1936, producers of cotton and wool textiles for private domestic consumption were obliged to substitute a portion of natural fiber with cellulose-based synthetic fiber. Previously, textile manufacturers had, on their own accord, rarely mixed natural and synthetic fibers because of the poor reputation such products had among German consumers. That changed dramatically once they were compelled by state regulations to do so, and consumers were left without a choice. Indeed, manufacturers thereupon frequently used a much higher percentage of synthetic fiber than mandated in official regulations. That proved to be extremely inconvenient to the government as the quality of textile products declined markedly and thus the public’s acceptance of them was undermined even further. Consequently, new regulations setting maximum levels of synthetic fiber content were imposed, but, in response to pressure

11 This was also noted in Buchheim, “Unternehmen in Deutschland,” 361–65, 386–88.
12 This can be observed, for instance, in the development of the steel quota system, as Hensler (see note 9) has shown in detail.
from textile manufacturers; those levels were quickly increased.\textsuperscript{13} The “interventionist spiral,” in other words, was not kept in motion by the state alone; it was largely propelled by private firms’ decisions that the state saw as undesirable responses to regulatory initiatives. The sheer numbers of private firms meant, moreover, that compliance with regulations often could not be generally monitored. That, in turn, meant that there was little chance in practice that noncompliance might result in prosecution, which greatly reduced the deterrent effect of the threat of punishment.\textsuperscript{14}

All in all, it can be concluded that regulations were never “airtight,” as private firms always had multiple options for adapting their conduct to them. Consequently, the goals the state sought to achieve through regulation were achieved only in part; indeed, in some instances, firms’ actions made a mockery of the state’s regulatory efforts. In any event, the regime saw itself constantly confronted with the task of revising the methods of regulation, but it never succeeded in steering firms entirely in the direction it wanted.

A decisive change in regulatory methods occurred with the introduction of the system of industrial committees following Albert Speer’s appointment as minister of armaments in 1942. That change can, in effect, be seen as an official admission of the state’s failure to impose a comprehensive system of regulations unilaterally. To make the war economy more efficient, the state now consciously sought to mobilize industry’s capacity for self-regulation. The result of Speer’s changes in the state’s approach to regulation was that industrialists, in particular the chairmen of the hundreds of self-regulating industrial committees, officially had a large say in decisions such as the awarding of governmental contracts and the allocation of raw materials. In the process, needless to say, they did not neglect their own interests.\textsuperscript{15} For this reason, Hayes is wrong when he claims that, from the regime’s perspective, the official rationing system was all but perfect in the period from 1942 on.

\section*{II. The Threat and Use of Force}

Hayes refers to some specific coercive measures carried out by the state: the nationalization of the Junkers firm, the founding of

\textsuperscript{13} Höschle, Textilindustrie, 114-28.

\textsuperscript{14} On pricing practices in the textile industry, for instance, see Höschle, Textilindustrie, 162-69; on price control policy, see André Steiner, “Industry and Administrative Price Regulation 1933-1938/39,” in Buchheim, German Industry, 85-95; on the illegal hoarding of rolled steel, see Hensler, Stahlkontingentierung, 119-21.

Brabag, the seizure of the Salzgitter mines, and the dismissal of executives like Paul Reusch and Ernst Heinkel. These examples of coercion are cited time and again in the scholarly literature on the Third Reich, and, indeed, almost all of them are noted in our work. However, even democratic systems use similar sorts of coercive measures on occasion. The West German government, for instance, collected a compulsory loan from industrial firms within the framework of the 1952 Investment Aid Law [Investitionshilfegesetz]. Rescue legislation enacted in 2009 allowed the German government to strip shareholders of the Hypo Real Estate Group of their property. The U.S. government's breakup of AT&T's monopoly in 1984 can likewise be viewed as a coercive action. Both the constitution of the Weimar Republic (Article 153 II) and the Federal Republic's Grundgesetz (Article 14 II) allow for the possibility of state expropriation of private property for the common good. Yet nobody claims that industrialists in democratic societies are intimidated by such state actions and constitutional principles or that they generally take account of such possibilities in their everyday planning and decision-making.

Hayes attempts to make the opposite case for the Third Reich. He points to the absence of the rule of law (see Hayes, p. 32) and offers a number of quotations from businessmen that seem to confirm his argument. The first point is one that we have made as well. As for Hayes’s second point, a critical examination of the source from which he drew at least one of his quotations would support an interpretation that is at odds with the one Hayes offers. Opel’s management raised the “veiled threat of confiscation” in 1936 not because of a threat from the regime but rather as a tactical maneuver in its negotiations with its corporate parent, General Motors, to secure dollars for financing rubber imports. Furthermore, Göring’s often drastic-sounding public pronouncements were frequently not taken seriously, not least because he sometimes also called for a reduction of the state’s engagement in the industrial sector and even took steps in that direction. Many government officials and important functionaries took similar steps—and often precisely in connection with projects of the Four Year Plan. From the regime’s perspective, we would argue, establishing the Hermann-Göring-Werke and Volkswagen were stopgap measures that the regime would have preferred to avoid. That the regime did not want to get involved in running businesses is also suggested by the fact that it not only sold off its majority holdings in two major
banks and the Vereinigte Stahlwerke in the course of the 1930s but also tried to privatize as many state-owned armaments firms as possible.  

There are additional reasons not to overestimate the Nazi regime’s threats to business. For one, Nazi ideology placed great value on private enterprise. Even Hitler frequently expressed his opposition in principle to bureaucratic management of the economy. By impeding the process of natural selection, state intervention in the economy would, he believed, “give a guarantee to the preservation of the weakest average [sic] and represent a burden to the higher ability, industriousness and value, at the expense of the general welfare.” Indeed, Hitler thought businessmen performed a function that others could not easily take over: “For the good of the economy, practical understanding of business is needed. Generally speaking, a National Socialist who has only a theoretical grasp of business is more dangerous than a businessman who is only a businessman and not a National Socialist.” Finally, there are many examples of large and small firms in all branches of industry that declined to make the capital investments the state wanted and did not experience any negative consequences. Those firms, at least, were not intimidated by the regime’s threats, which suggests noncompliance was possible. Why that should not have been the case with other firms as well, Hayes neglects to explain.

Hayes himself makes an observation that suggests the Nazi regime did not in general consider coercion a useful means to achieve its economic goals. “Naturally,” he writes, “in a system that wished to harness business’s energy and expertise, the regime generally displayed flexibility in order to obtain them, usually by offering financing options that reduced the risk of producing what the regime desired, and resorted to the alternatives of seizure or founding state-owned competitors only in highly important instances when Plan A failed.” (Hayes, p. 32) Hitler’s highest priority from the outset was to prepare for war as quickly as possible. It was thus opportune, from his point of view, to have existing capitalist enterprises take care of the economic side of those preparations – even if that meant having to accept that they would continue to pursue their own ambitions. Comprehensive use of coercive state power would have undermined the efficiency of private firms – “business’s energy and expertise,” as Hayes puts it – and would therefore have impeded the realization of the state’s own goals. The Nazi state thus acted accordingly – for
example, by entering into negotiations with firms about the investments it sought and offering incentives that took their calculations of long- and short-term profitability into account.\textsuperscript{26} And because that approach was seen by firms as normal behavior on the part of the state, it influenced their conduct in the same way—that is, they assumed that they would continue to enjoy freedom of contract in their dealings with the state. It thus seems unlikely that they would, in general, let their conduct be guided by the handful of instances when the state applied coercive measures.

Neither regulation nor threats deterred firms from gearing their actions to profitability calculations. The state was nonetheless able, by and large, to achieve its economic goals, but it had to take firms’ pursuit of profit into account and offer incentives accordingly. State intervention in the economy did indeed limit firms’ options, but almost never so narrowly that they were left entirely without alternatives. It is completely mistaken to call the economy of the Third Reich a “‘Skinner Box’ economy,” as Hayes does (Hayes, p. 31). For the state could not condition businessmen like rats. On the contrary, if its goals were to be successfully realized, the state had to make them compatible with businessmen’s interests as far as possible.

\textit{Translated by David B. Lazar}

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\textsuperscript{26} See Jonas Scherner, \textit{Die Logik der Industriepolitik im Dritten Reich: Die Investitionen in der Autarkie- und Rüstungsindustrie und ihre staatliche Förderung} (Stuttgart, 2008).