

STRATEGIC SHORTAGES IN THE
NAZI WAR ECONOMY

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STRATEGIC SHORTAGES IN THE
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CHAPTER I

INTRODUCTION

The Concept of the Strategic Shortage

The aim of strategy is victory at the lowest cost possible.¹ Being both powerful and relatively bloodless, economic warfare is thus a very effective weapon. For the Germans in the years preceding the Second World War, the most telling demonstration of the effectiveness of economic warfare had been the British naval blockade of Germany in World War I. In addition to its effect upon the course of that war, it had left the Germans with terrible memories and potent lessons. Knowing that economic warfare had played a decisive role in their defeat and that the strategic shortages upon which it had been based not only still existed but were in general even more serious, the Germans sought to devise defenses against economic warfare.

The victors, too, believed they had learned a lesson: Might not peace be easily maintained and wars won cheaply through economic means? British reliance on the League and its sanctions, so fateful for British rearmament, sped the coming of war. When the war came, the popular illusion of victory through economic warfare and a static front lingered until the events of May 1940 laid it to rest.

Strangely enough, despite the importance attached to economic warfare by both the victors and the vanquished of World War I, the

¹ Sir Basil Liddell Hart, Strategy, rev. ed. (New York: Frederick A. Praeger, Inc. 1962), pp. 327-328.

literature of the years between the two wars contains virtually no definitions of the term "strategic shortage". The U.S. War Department made an attempt at definition-an appalling example of the worst aspects of official jargon-without really defining the term at all.² As no really good formal definition exists, we shall define a strategic shortage as an insufficient supply of any factor of production needed by a nation to wage war with maximum effect and efficiency. Of the many ways of creating or worsening strategic shortages, four were particularly important for Germany:

- 1)the military severance of trade,e.g. the blockade
- 2)the non-military severance of trade, e.g. preclusivebuying
- 3)the conquest of sources of supplies, e.g. the loss of Petsamo
- 4)the destruction of sources, e.g. bombing.

Similarly five methods of evading strategic shortages were particularly important for Germany:

- 1)importation
- 2)instituting or increasing domestic production
- 3)stockpiling
- 4)substitution
- 5)reduction of requirements.

The Literature on Nazi Strategic Shortage

During the twelve years of Nazi rule in Germany, an extensive literature arose on Germany's notorious strategic shortages problem. Generally the authors, starting from the premise that Hitler sought war, argued that he had no doubt prepared for one ever since he took

²G. A. Roush, Strategic Mineral Supplies, (New York: Mc Graw-Hill Book Company, Inc., 1939), pp. 6-7.

office. Bearing in mind the example of World War I, they believed the ensuing war would be lengthy and fought on an immense scale. They assumed Hitler was preparing for such a war in a planned, orderly, and methodical way and then went on to prove that even so, because Germany lacked the necessary economic base, she could only lose. Some of these authors, e.g. Sternburg and Lajos,³ used only official German sources in support of their thesis.

Since the conclusion of these authors proved to be correct, one might think their writings would be regarded as brilliant and prophetic. Instead the discovery by the United States Strategic Bombing Survey that not until 1942 or 1943 had Hitler begun to prepare for a major war, discredited their works.

Although far better sources for the study of the German war economy have become available since 1945 than were available to contemporary writers, very little has been written on the subject. The reports of the United States Strategic Bombing Survey comprise the most important source in English, but they deal principally with the last part of the war and the effects of strategic bombing, and seventy-two of them are still classified. Largely in the basis of this evidence, two important works on the German war economy have been written. The first was by Burton H. Klein, a civilian economic historian, whose

³Fritz Sternburg, From Nazi Sources: Why Hitler Can't Win, (New York: Longmans, Green, and Co., 1939).

Ivan Lajos, Germany's War Chances As Pictured in German Official Literature, (London: Victor Gallancz, Ltd., 1939).

Germany's Economic Preparations for War concentrated on the period 1933-1942.⁴ His work was followed in 1965 by Alan S. Milward's The German War Economy, which concentrated on the period 1942-1945.⁵ In the first portion of his book Milward shows that Klein put the date Germany converted to a full war economy a year too late and over-emphasized the role of Albert Speer in the conversion.⁶ Otherwise, however, Milward and Klein are in reasonable agreement on the economic history of Nazi Germany.

The Course of the Nazi War Economy

The technique of Blitzkrieg was developed by the Nazis as part of their military strategy with the problem of strategic shortages in mind because it would complicate the creation of strategic shortages by the Allies and simplify their evasion by the Germans. By substituting short bursts of heavy fighting involving relatively small armored spearheads for the prolonged, mass infantry offensives of World War I, Blitzkrieg would, it was hoped, reduce the amount of materiel that would be needed. At the same time, a victorious Blitzkrieg would make possible the exploitation of conquered areas which would otherwise not have been available as German sources of supplies. Nevertheless Blitzkrieg would not solve all Germany's economic problems. It would still be necessary to raise production in many fields,

⁴Burton H. Klein, Germany's Economic Preparation for War, (Cambridge: Harvard University Press, 1959).

⁵Alan S. Milward, The German War Economy, (London: The Athlone Press, 1965).

⁶Ibid., pp. 54-57.

and to institute the production of substitutes for such basic materials as oil and rubber which the Germans had little prospect of conquering in sufficient amounts. But due to the first two effects, fewer items and smaller quantities would be required. Substitution further assisted this effort. Finally stockpiling was made almost unnecessary by the reduction in requirements and the speed of conquest. As Germany lacked the foreign exchange to build massive stockpiles, this made it possible to open the war sooner.⁷

Blitzkrieg complicated Allied efforts to create, intensify, and exploit Germany's strategic shortages. Both military and non-military severance was much harder when Germany had direct access to virtually all of the land area and coastline of Europe. Moreover the vast conquered areas provided an extensive shield against both the conquest of domestic sources of supplies and against their destruction by air bombing.

Even though Blitzkrieg economics gave Germany such great advantages, they are often condemned because in the end they proved inadequate. Their failure as an economic weapon arose only after and because of Hitler's failure to fight the short war for which they were intended. The precise date at which this breakdown occurred is disputed. Klein and the U.S.S.P.S. both said this did not occur until after the defeat at Stalingrad in February, 1943.⁸ Later Milward argued that the defeat before Moscow in 1941 and not the loss of

⁷Klein, p. 56.

⁸Ibid., p. 203.

Stalingrad in 1943 was the vital crisis. According to him, Hitler realized that Blitzkrieg economics were no longer adequate sometime between December 3, 1941 and January 10, 1942 when his Führer Command Rüstung 1942 formally ordered Germany to convert to a full war economy over a year before Stalingrad.⁹

In spite of their strategic shortages, the Nazi attempt to raise military production levels was extremely successful. At first they sought to obtain qualitative supremacy as well, but as the pressure of the advancing Allied armies and of the Allied air offensive grew this became increasingly pointless. Therefore on June 19, 1944 Hitler issued his Konzentrationserlass forbidding technological improvements in German armaments after December 19, 1944.¹⁰ But by then Germany's position was hopeless and her fall but a matter of months.

⁹ Alan S. Milward, "The End of Blitzkrieg," Economic History Review, 2nd Series Vol. XVI (April, 1964), pp. 499-518.

¹⁰ Milward, German War Economy, pp. 100-101, 123-129.

CHAPTER II

IRON ORE

Introduction

When the Nazis came to power more than eighty percent of Germany's iron ore came from imports, most of which could not be depended upon in wartime.¹ Consequently in the pre-war years the Nazis tried to evade the expected strategic shortage of iron ore. Because they failed, iron ore became the first strategic shortage to decisively influence German strategy in the Second World War.

The Evasion of the Strategic Shortage in Iron Ore

The Pre-War Situation

Before the war, the Nazis sought to evade the strategic shortage in iron ore by raising domestic production. Vast reserves of ore with an average iron content of only thirty percent lay in Hanover and South Germany. Since the imported ores had much higher iron contents, the German iron and steel industry had not chosen to exploit these resources. In 1936 it refused a government request to make an additional eighteen million tons of steel annually from German ores. The government then created the Hermann Goering Ore and Foundry Co. to attain this level of production by 1944. The iron and steel industry, however, continued its opposition and succeeded in forcing the government to curtail these plans for domestic ore production.² Even had

¹Klein, pp. 41-42.

²Ibid., pp. 41, 51-54.

this not happened the war would have been well under way before the new facilities, not begun until 1933, could have significantly affected Germany's dependence on imported iron ore. Moreover, Germany would have remained very dependent on ore imports because the old steel plants, which would still be producing two-thirds of Germany's steel, would receive none of the German ore, all of which was to be reserved for the Goering company's own, newly built steel mills.

The Wartime Situation

When the war began, access to all of Germany's pre-war sources of iron ore, other than Sweden, Norway, and Luxembourg was severed. Due to the resultant iron ore shortage by the spring of 1940 crude steel production had fallen twenty percent from the level of September 1939. Had the British now succeeded in cutting off Germany's imports from Scandinavia as Churchill, at that time First Lord of the Admiralty was planning, eighty-five percent of her remaining imports in 1940 would have been cut off as well.³ As a result her iron and steel industry would have been reduced to operating at less than fifty percent of capacity.⁴ The German leaders correctly decided that the sources available to them through normal trade could not have been relied upon and that no combination of raising home production,

³Ibid., 116. This figure probably understates the effect of such a move. Much of the fifteen percent of Germany's 1940 iron ore imports that came from non-Scandinavian sources, was doubtless obtained after the fall of France made French and Spanish sources available.

⁴Ibid., 116-117.

stockpiling, and substitution offered a satisfactory substitute. Consequently the Axis wished to secure their imports through conquest.

The Norwegian Campaign

Germany's iron ore imports from northern Sweden were transported from the Swedish port of Lulea, which was icebound in winter, and of Oxelosund, which was ice free but much less important.⁵ When Lulea was icebound most of the ore was shipped by rail to the Norwegian port of Narvik and thence down the Norwegian coast to Germany. This route was exposed to action by the Royal Navy which had cut it in World War I and had requested permission to do so again.⁶

On October 3, 1939 Admiral Raeder, the Commander-in-chief of the German Navy, requested the Naval Staff to study means of gaining naval bases on the North Atlantic for a presentation he wished to make to Hitler.⁷ On October 10, 1939, he suggested to the Fuhrer that Germany should seek bases in Norway to give her a secure outlet to the North Atlantic.⁸ He also mentioned iron ore and Hitler, while interested, preferred to push plans for the invasion of France.

⁵T.K. Derry, The Campaign in Norway, (London: Her Majesty's Stationery Office, 1952), 10.

⁶Ibid., p. 11-16.

⁷Earl F. Ziemke, The German Northern Theater of Operations 1940-1945, (Washington, D.C: U.S. Government Printing Office, 1959), 7.

⁸Rear-Admiral H.G. Thursfield (ed.), Brassey's Naval Annual, (London: William Clowes and Sons, Ltd., 1948), 47. The naval Conference of October 10, 1939.

In a number of meetings, the German High Command decided that the Allied expeditionary force expected to land in Norway would seize Narvik on the way.⁹ In December Quisling came to Berlin and saw Rosenberg, Raeder, and Hitler.¹⁰ As a result of these discussions a special staff was established in order to plan (1) a peaceful occupation following a successful revolt by Quisling and (2) an invasion.¹¹

The boarding in Norwegian waters of the German naval auxiliary vessel Altmark by H.M.S. Cossack on February 17, 1940 infuriated Hitler and made the British threat to the iron ore shipping route all the more apparent. Sending for General von Falkenhorst, Hitler told him he had decided to attack Norway for three reasons: (1) to protect his Baltic coastline from British attack, (2) to gain Atlantic naval bases, and (3) to protect the ore-route. He then appointed Falkenhart commander of the operation.¹²

The attack on Norway and Denmark began in the pre-dawn darkness of April 9, 1940. Oslo, Bergen, Trondheim, Stavanger, and Narvik fell the same day.¹³ The Allied counterattack was successful in retaking Narvik (May 28) which was then abandoned because of their defeat in France. With the signing of an armistice by General Ruge, the Norwegian

⁹Zienke, p. 10.

¹⁰Zienke, pp. 7-9.

¹¹Brassey's Naval Annual, p. 66-67. Fuehrer Naval Conference of December 12, 1939.

¹²Brassey's Naval Annual, p. 83-84. Fuehrer Command for Fall Weserübung.

¹³Derry, p. 35-41.

¹⁴Zienke, p. 104.

commander, the invasion came to a successful conclusion on June 9.¹⁴ Norway was held until the end of the war and with it the iron ore from Scandinavia. In the same month the conquest of the French iron ore fields ended the problem of the iron ore shortage.¹⁵ In June 1940 the British government announced that it would not surrender to the German army.¹⁶

Sequel — The Later Problems of the German Iron and Steel Industry

The solution of the strategic shortage in iron ore did not completely insulate the German iron and steel industry from strategic shortages. Even after they also overcame their shortages of ferroalloys by substitution, conquest, and the reduction of need, strategic shortages still limited their iron and steel production.¹⁷ Surprisingly enough a shortage of coal, which Germany had in abundance, and not of iron ore which she had lacked imposed the final limit on Germany's iron and steel production.

Conclusions

First the German failure to evade the iron ore shortage before the war began indicates that the Nazis did not have complete control over their economy in those years and did not choose to act in their strategic shortages problem with the ruthless decisiveness they were to show later.

Second the Norwegian campaign was staged in part to secure German iron ore imports, a clear case of a strategic shortage deflecting German war strategy.

Third the inability of the Germans to utilize their iron and steel industry to the fullest extent was due to concealed strategic shortages,

¹⁴Zienke, p. 104.

¹⁵Klein, pp. 117-118.

¹⁶Ibid., p. 118.

¹⁷Ibid., pp. 118-21. ¹⁸Ibid., p. 121-122.

especially in coal, which did not become apparent until after the anticipated strategic shortages in iron ore and ferroalloys were solved.

CHAPTER III

OIL

Introduction

Oil was the lifeblood of the armed forces engaged in World War II. Without oil nothing could move—neither aircraft nor ships nor tanks. The more heavily motorized an army was the more helpless it was without oil. It was the proud boast of the Allies that, as General Marshall said, "No [Allied] plane has failed to fly, no ship has failed to sail, for lack of oil."¹ The Axis powers could make no such boast and their failures in this area were a prime cause of their defeat.

Nazi Germany suffered from great geographic disadvantages in regard to oil. In 1941 almost 90% of the world's oil came from three areas: the Western Hemisphere (1,700 million barrels per year), the Caucasus and Middle East (320 million barrels per year), and the East Indies (60.3 million barrels per year). The rest of the world produced a total of only 68 million barrels per year.² The only major oil producing area within reach of the Germans was the Caucasus and Middle East. With the exception of the oil fields around Maikop in the Caucasus she never reached any of the oil fields there. Thus the only supplies of natural petroleum available to her were those of Europe, the most oil-poor continent of all. The resultant strategic shortage was perhaps the most important Germany faced in World War II.

¹Louis L. Snyder, The War: A Concise History, 1939-1945, (New York: Dell Publishing Co., 1964), p. 398.

²ibid., p. 396.

The Allies' blockade of Germany cut her off from the Western Hemisphere which was the source of 85% of her oil supplies in the pre-Nazi years. The Germans countered with intensive exploitation of all available oil fields and with synthetic production from coal. As neither was affected by the blockade, the Allies sought to eliminate them by bombing. The result was a close struggle throughout the war with Germany never more than a few months from disaster.

German Efforts to Bridge the Strategic Shortage in Oil

The Utilization of European Oil Fields

Germany

Germany had a domestic oil production of 500,000 tons a year when the Nazis assumed office. As part of the Four Year Plan they sought to raise this figure through the discovery of new oil fields and increased production in known oil fields. No new oil fields were discovered, but production from her existing oil fields was doubled to 1,000,000 tons a year.³

Russia

During the period of Nazi-Soviet co-operation, substantial quantities of oil were imported from the Soviet Union. According to the official German Statistisches Jahrbuch 1941/1942, oil imports from the Soviet Union, negligible before the war, rose to 620,000 tons in 1940, and comprised one-third of Germany's oil imports in that year.⁴ In the first four months of 1941 an additional 232,000 tons arrived.⁵ Since the

³Klein, p. 40.

⁴Ibid., p. 63.

⁵Raymond J. Sonntag and James S. Meddie (eds.), Nazi-Soviet Relations, 1939-1941: Documents from the Archives of The German Foreign Office, (Washington, D.C.: U.S. Government Printing Office, 1943), p. 340. A memorandum by the head of Eastern European and Baltic Section of the Commercial Policy Division of the German Foreign Office. May 15, 1941.

attack on the Soviet Union failed to secure working oil fields in the Caucasus and secured only minor oil fields elsewhere in the U.S.S.R., oil imports from the Soviet Union virtually ceased just when the attack on her greatly increased consumption.

Rumania

The Rumanian oil field at Floesti was the oldest and most important in Europe. Its oil was vital to Germany. Having a much weaker military position in the Balkans than Germany and yet owning and running the refineries at Floesti, the Allies planned to reduce the flow of oil to Germany by exclusive buying and covert delaying. In the first quarter of 1940 these measures combined with ice on the Danube cut German imports to a mere 50,000 tons. By comparison in the first half of that quarter the United Kingdom received 895,000 tons.⁶ To ensure that the Germans could not circumvent these tactics by seizing the refineries, the Allies wrote secret clauses into the Anglo-Rumanian and Franco-Rumanian military alliances providing that in the event of a German attack the refineries were to be destroyed by the Allied technicians operating them. This had been done successfully in 1916, but when Paris fell the files of the Deuxième Bureau and with them the plans for the demolition of Floesti, were captured. The Germans then forestalled the Allies with a quick pre-dawn attack by the Iron Guard on the key Allied agents in Floesti.⁷

Floesti and Barbarossa

Germany did not, however, feel secure in Floesti after the Allies' sabotage plan was blocked. In the same month Germany saved Floesti from

⁶Milward, German War Economy, pp. 49-50.

⁷James Dugan and Carroll Stewart, Floesti: The Great Ground-Air Battle of 1 August 1943, (New York: Random House, 1962), p. 24.

destruction by the Allies, the Soviet Union demanded Bessarabia. Hungary, fearing a Soviet-Rumanian war which might result in the loss of Floesti, advised Rumania to yield. The presence of the Red Army so near Floesti worried her.⁸ Twice in the remaining months of 1940 Hitler acted without regard for Soviet interests in his haste to protect Floesti. First in the Vienna Award he attempted to forestall a Hungarian-Rumanian war in which the U.S.S.R. might intervene and second he sent military advisors to Rumania.⁹ The first task of these advisors was, Hitler ordered, "to protect oil district against seizure by Third Powers or destruction."¹⁰ Germany publicly guaranteed Rumanian territorial integrity as well and soon sent a Panzer division and several anti-aircraft regiments to reinforce her "advisors". It was generally and correctly assumed that all these moves were motivated by fear the U.S.S.R. might seize Floesti and were accordingly directed against her.

The Soviet Union naturally protested.¹¹ Such protests only increased Hitler's fears and these fears for his oil supplies may well have been among the reasons he attacked Russia. Two years later, in 1942, he spoke of these fears to his companions at dinner

If, in accordance with their plan, the Russians had been able to foresee our actions, it is probable that nothing would have been

⁸ Nazi-Soviet Relations, pp. 155-163.

⁹ Allan Bullock, Hitler: A Study in Tyranny, (New York: Harper and Row, Publishers, 1965), pp. 510-512.

¹⁰ Ibid., p. 611. The quotation is from a secret order dated September 20, 1940.

¹¹ Nazi-Soviet Relations, pp. 180-184, 264-272.

able to stop their armoured units, for the highly developed road system of central Europe would greatly have favoured their advance. ... Suppose for example that, when the Russians marched into Mesopotamia, they would in one swoop have grabbed all the oil fields of the country, and we should have found ourselves, from the spring of that very year, completely frustrated as regards our supplies of petrol.¹²

Howver does this give he attacked the U.S.S.R. in 1941?
his oil supplies?

The decision to attack the U.S.S.R. and the selection of the date of the attack were separate decisions. In both Mein Kampf and the Speeches Hitler advocates an eventual attack on the U.S.S.R. for reasons totally unrelated to Russia and petroleum. The Nazi revolution was a strategic maneuver rather than a chance of heart. In 1940 Hitler did not decide to attack the U.S.S.R. What he decided was the date.

The decision to attack in 1941 was based primarily on three factors. The first of these was Hitler's misestimation of the strength of the Red Army. He believed he could win after a campaign of eight weeks. Supremely confident of this he even initiated economic demobilization before the campaign began.¹³ Obviously the conquest of the U.S.S.R. would bring immense military and economic gains. Not only would there be no threat of a "stab in the back", but the natural resources of the U.S.S.R. would be fully available to him. Even more important, perhaps, were the ideological satisfactions:

I again feel spiritually free. The partnership with the Soviet Union, in spite of the complete sincerity of the efforts to bring about a final conciliation, was nevertheless often very irksome

¹² Adolf Hitler, Hitler's Secret Conversations, 1941-1944, trans. Norman Cameron and R. H. Stevens, (New York: Signet Books, 1961), p. 461. Conversation of May 13, 1942 at supper.

¹³ Klein, pp. 131-135, 139-195.

to me, for in some way or other it seemed to me to be a break with my whole origin, my concepts, and my former obligations. I am happy now to be relieved of these mental agonies.

For these gains, an eight week campaign was surely an acceptable price.

Whether a winter campaign would have been is something we can not say.

Hitler's underestimation of the power of the Soviet Union

was the most important reason he attacked her in 1941.

The second reason he fought in 1941 was the singularly unattractive nature of his alternatives. The reasons Operation Sea Lion could not be mounted in 1940 held with renewed force. Goering's proposed conquest of the Mediterranean was too indirect an operation for his tastes and had too remote a chance of defeating the U.K. to satisfy him. Finally U-boat warfare could promise no immediate results. All of the alternatives to an attack on the U.S.S.R. appeared less likely to succeed than that one, whereas an eight weeks conquest of the U.S.S.R. promised quick results of great value at a lower price. Thus the other alternatives appeared much less desirable to Hitler.

The third reason he fought in 1941 was his belief that even if he sought peace, Stalin would attack him as soon as it was obvious. Not only the whole history of Soviet duplicity, but also some specific evidence, especially an alleged speech by Stalin, confirm that this was indeed the Soviet design.¹⁵ Hitler suspected this:

By no treaty or pact can a lasting neutrality of Soviet Russia be insured with safety. At present all reasons speak against Russia's

¹⁴ Nazi-Soviet Relations, p.353. Closing lines of the letter from Hitler to Mussolini explaining the decision to attack Russia. Dated June 21, 1941.

¹⁵ Alexander Werth, Russia at War, 1941-1945, (New York: Avon Books, 1965), p. 135-136.

departure from this state of neutrality. In eight months, one year, or several years this may be altered.

Hitler decided to gain the advantages inherent in setting the date himself.

Thus Hitler attacked when he did because he underestimated the strength of the Red Army, had unattractive alternatives, and considered the struggle inevitable. In none of this is the safety of the Rumanian oil fields a major consideration, though on the other hand the first and last reasons certainly include them. Oil, unlike iron ore, did not lead to a major extension of the war by itself.

The Utilization of Synthetic Production

The Germans also turned to the synthetic production of oil from coal in spite of the fact synthetic oil cost 400% to 500% as much as natural oil because, even with all of Rumania's oil, she still was short by 25%.¹⁷ While production rose rapidly, it never rose rapidly enough to meet the goals set for it and these goals were themselves set far too low.¹⁸ Worst of all the German oil industry was centered in only one hundred plants of which several huge facilities were dominant. This concentration in so few plants, while doubtless more efficient at a time when efficiency was vital, was to prove a fatal defect when the bombing raids began in earnest.

Other Methods of Evasion

Stockpiling

Basically speaking Germany never had any stockpiles of oil. Her

¹⁶Bullock, p. 564. Memorandum read to the heads of the armed services on October 10, 1939.

¹⁷Klein, pp. 33, 34

¹⁸Ibid., p. 41.

supplies and her needs were too closely balanced for surpluses to be accumulated in wartime and in peacetime she lacked the requisite foreign exchange. Finally the nature of Blitzkrieg as an economic weapon made large stockpiles unnecessary and so no real effort was ever made to accumulate any.¹⁹

Substitution

Substitution as a method of overcoming the oil shortage was never very promising. Some effort was made to use wood to propel civilian vehicles²⁰ and gas propellant was also used, but basically substitution was not possible except at a loss in efficiency, e.g. the use of horses in Wehrmacht supply columns.

Reduction of Requirements

In spite of extensive importation and synthetic production by the Nazis, they found reduction of consumption an equally necessary technique. In applying it they were helped by the fact Germany had always lagged far behind the other industrial nations in the consumption of oil and thus had relatively low needs to begin with—despite the Nazis' best efforts to dissipate this advantage with their motorization program in the 1930's.²¹ The use of Blitzkrieg tactics further assisted them by reducing the length and extent of the really heavy fighting and hence the oil required for it. In 1940-1941, the two full years where Blitzkrieg was dominant, Germany used only 6.1 million tons of gasoline. Thus reduction of need was perhaps the most important method of all.

¹⁹ Ibid., p. 56-59.

²⁰ Egon Glesinger, Nazis in the Woodpile: Hitler's Plot for Essential Raw Materials, (New York: The Bobbs-Merrill Company, 1942), p. 24-29.

²¹ Klein, p. 32.

²² Ibid., p. 39.

The Allied Bombing Offensive

Realizing that many of the sources of Germany's oil supplies could not be captured in time to produce a significant effect on the course of the war, the Allies tried to destroy them instead. With the exceptions of the Russian destruction of Maikop and various lesser fields and the Allies' attempted sabotage of Floesti, sabotage was never an important means of doing this. Aerial bombardment, the basic Allied weapon for the destruction of Germany's sources of oil, was used against both her natural supplies at Floesti and her synthetic supplies in Germany proper.

The first attempt to raid Floesti was by R.A.F. Wing Commander Viscount Forbes in early 1941. He was refused permission by the Greek government to use the Greek bases his two-engined bombers had to have to reach Floesti on the grounds that Greece was not at war with Rumania.²³ Nevertheless fear of such a raid caused Hitler to send a 21-aircraft troops to Floesti and may have been one of the causes of his Balkan campaign in the spring of 1941.²⁴ When Russia was attacked, she launched three air attacks on Floesti within a week; none effected more than minor damage. When the United States entered the war, her first bombing attack in Europe was on Floesti (June 12, 1942). Thereafter no efforts were made to bomb Floesti until the ill-fated American air attack of August 1, 1943 began a series of twenty-two heavy bombing attacks lasting until August 13, 1944, just before Floesti fell to the Russians. The attackers flew 9,173 sorties, dropped 13,709 tons of bombs, and reduced output eighty percent, but the cost was high: 324 heavy bombers and 2,365 men.²⁵

²³Dugan and Stewart, p. 26.

²⁴John Robert Doughtson, Nazi War Aims: The Plans for the Thousand Year Reich, (Rock Island: Augustana College Press, 1962), p. 39.

²⁵Dugan and Stewart, p. 26-27.
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²⁶*Ibid.*, p. 277, 278.

The attacks on Germany's synthetic oil factories have a similar history. Begun early in the war they achieved no serious effects until August, 1944 when Ploesti fell and Germany's dependence upon them became complete. Delayed by the need to destroy the French railway network in time for D-day, the Allied air forces were not able to attack the German oil plants in full force until the summer of 1944. By September 11 they had reduced German aviation gas production to nothing. Only two weeks later that limited bombing allowed production to rise enough to keep the German war economy from complete collapse.²⁷ Even though a complete collapse was barely averted, fuel shortages made the planned use of the Luftwaffe and the mechanized units of the Wehrmacht impossible after January, 1945.²⁸ Oil thus was the strategic shortage which proved the claims of the strategic bombing theorists. But in August 1944, when there were enough bombers, the war was almost over.

Conclusions

Oil was perhaps the most critical of Germany's strategic shortages and the lack of assured and adequate supplies a great handicap to her. Nevertheless the tremendous potential a determined modern state has to evade even the worst strategic shortages was sufficient to enable her to evade it until so late in the war that her failure was mostly an academic question. Then the Allied air offensive, coupled with the advance of the Red Army, crippled her by cutting off virtually all of her oil supplies. Oil was the classic proof of strategic bombing, but it was

²⁷Wilward, p. 170.

²⁸Ibid., p. 171.

not the cause of the invasion of the U.S.S.R. nor was it decisive in Germany's defeat due to the truly amazing German efforts at evasion.

CHAPTER IV

MANPOWER

Introduction

Although not itself a raw material, manpower "is undoubtedly the ultimate limiting factor in a nation's war effort."¹ To solve the strategic shortage in manpower, the Nazis passed draconic legislation, but the shortage remained. Yet the mere fact a labor shortage existed is perhaps equally astonishing for when the Nazis took power Germany had 6,014,000 unemployed.² By July 1939 this had been reduced to 38,379.³ Thus a condition of severe over-full employment existed even before the war began and almost three years before the Nazis began to put their economy on a full war footing. The German labor shortage, one of the Nazis proudest boasts in the prewar years, was the basis of one of their worst wartime strategic shortages.⁴

For the Germans there were two possible methods of evasion: reallocation and expansion of the labor force.

The Evasion of the Strategic Shortage in Labor By Expansion of the Labor Force

Utilization of Germans

¹Klein, p. 104.

²Claude W. Guillebaud, The Economic Recovery of Germany: From 1933 to the Incorporation of Austria in March 1938, (London: MacMillan and Co. Ltd, 1939), p.46.

³"Jürgen Kuczynski, Germany: Economic and Labor Conditions under Fascism, (New York: International Publishers, 1945), p. 163.

⁴Paul Hagen (pseud.), Will Germany Crack? A Factual Report on Germany, trans. by Anna Coples, (New York: Harper and Brothers, 1942), p. 26.

The Pre-War Period

The native German labor force could have been expanded not only by direct recruitment, but also by lengthening the work week and by automating for greater output per worker. In the years preceding the war the Nazis claimed to have done all three things. To provide a legal basis they passed a six year series of laws abolishing the rights of workers which culminated in the law of June 22, 1936 empowering any government employment office to conscript for an indefinite period any employable man or woman in the Reich for any job whatsoever.⁵

In reality, however, the percentage of men of working age in 1939 gainfully employed was less than in 1925 and that of women no higher.⁶ Since the size of the armed forces and the bureaucracies of the government and the party had increased enormously in this period, this means these powers had not resulted in any increase in the normal size of the labor force. Rather, the industrial labor force was relatively smaller. The average number of hours in the work week rose only three percent.⁷ The rationalization movement ceased in 1933: hourly productivity in general did not rise at all in 1933-1939. By comparison it rose thirty percent in the period 1925-1933.⁸ Thus the Nazis, while bringing the German economy to over-full employment in the pre-war years, nevertheless did not alleviate the resultant labor shortage by expanding their labor force.

⁵Otto Nathan, The Nazi Economic System: Germany's Mobilization for War, (Durham, North Carolina: Duke University Press, 1944), p. 200.

⁶Klein, p. 68.

⁷Ibid., p. 70.

⁸Ibid., pp. 70-71.

The War Years

This remained true during the war. In July 1944 the employment of women was only 52,000 above the July 1939 level. In the same period the number of German males in the industrial labor force fell by 2,390,000.⁹ Even the length of the work week only increased 1.1 hours in the first three years of the war. Finally there were efforts at increasing efficiency in the war-essential industries which raised productivity by sixty percent, but this by no means eliminated the labor shortages as output tripled.¹⁰ The German labor force thus did not grow during the war but rather contracted. A large labor force reserve existed, especially in women, along with vast official powers to employ it, but in fact compared to the need almost nothing was done.

Utilization of Non-Germans

The reason for this apparently foolish inertia lies in the extensive importation of foreign labor. In sharp contrast to the Allied countries where the civilian labor force was maintained by using women and other prewar non-workers, by lengthening the work week, and similar measures, in Germany it was maintained by the importation of foreign labor.¹¹ It is a singular tribute to Nazi methods of administration that no accurate official figures existed as to the number of workers they imported.¹² The U.S. Strategic Bombing Survey

⁹ Milward, pp. 46-47.

¹⁰ Klein, pp. 133, 216-217.

¹¹ Ibid., p. 144.

¹² Milward, p. 97.

estimated that there were 300,000 foreign workers in Germany on May 31, 1939 and that this number increased steadily over the next five years to 7,130,000 of whom 1,330,000 were prisoners of war.¹³ It was these workers who had to make up for the loss of 2,634,000 German industrial workers in roughly the same period and to produce the additional output required by the abandonment of Blitzkrieg. Of these workers, however, many were used in SS schemes of dubious efficiency, in domestic service, and in agriculture. Thus except in terms of numbers, the number of workers imported was not greatly in excess of German replacement needs.

Often very little use was made of these foreign workers except as physical laborers, and virtually no attempt was made at classification by skill or by experience required in their home countries.¹⁴ Sabotage and inefficiency by the imported workers further reduced the value of these passive labor imports. In consequence the importation of foreign workers did not eliminate the German strategic shortage.

The Evasion of the Strategic Shortage in Labor by Reallocation

The Pre-War Years

In 1939 the occupational distribution of the German labor force differed significantly from the occupational distribution of 1925 in only two sectors: Agricultural employment fell from 30.5% of the work force to 24.8%. Government employment rose from 4.2% to 12.2%. The

¹³ Ibid., p. 113.

¹⁴ Ibid., p. 111-113.

first of these shifts not only was hindered by the Nazis; it was in fact flatly illegal under a decree of May 17, 1934 forbidding agricultural workers to leave their profession. The second of these shifts was the natural consequence of the party bureaucracy, the greatly increased armed forces, the growth of the governmental bureaucracy, and the new paramilitary forces. The proportion of the work force in manufacturing actually fell by 0.9%.¹⁵

Within manufacturing, however, a shift away from the consumer goods sector (especially textiles and clothing industry and the paper production industry) to the metal fabrication and chemical industries occurred. This shift, though, becomes much less marked when the figures for 1929, a more prosperous year than 1925, are considered. With this small exception, there were no shifts in the allocation of the German industrial labor force in the prewar years due to the Nazi use of their legal powers to reallocate the available labor force in favor of war essential industries.¹⁶

The War Years

This failure to reallocate the labor force continued deep into the war. Four years after the war began, employment in war-essential industries had risen only eighteen percent. The amount of slack remaining due to the labor reallocation is shown by the fact the least-essential industries had lost only twenty-eight percent of their laborers and the least essential sub-sector of all, domestic service, only nine percent. In comparison to the United Kingdom these figures

¹⁵Klein, p. 72.

¹⁶*Ibid.*, pp. 74-75.

show a much weaker effort in labor reallocation.¹⁷ This picture did not change in the remaining months of the war. Non-essential consumer goods production remained throughout 1944.¹⁸ Some non-essential sectors were even given more labor. For instance in November 1944 there were 8,000 more domestic servants than in 1943.¹⁹

In the end allocation was the key bottleneck in labor supply. First the system failed to use its skilled labor adequately with the result that there was a persistent skilled labor shortage. Not only were imported skilled laborers assigned to manual labor, but German skilled laborers were drafted into the Wehrmacht at an unreasonable rate. Apprentices, for example, were deferred until their training was over and were then drafted. The Germans never devised a way to allocate sufficient men in sufficient time to training scheme to produce skilled laborers or to allocate their skilled labor efficiently. Second the conflict between the manpower needs of the armed forces and the needs of the war industries upon which those armed forces depended was never adequately resolved. The Armed Forces drafted 1,500,000 apprentices and 687,000 UK-classified men from industry for a military establishment that was itself swollen.²⁰ In the last months all war workers were drafted into the Volksturm; the final admission that production no longer mattered.²¹

Conclusion

First the Germans never expanded their native labor force to the

¹⁷ Ibid., pp. 142-145.

¹⁸ Milward, pp. 106-109. ¹⁹ Ibid., p. 114. ²⁰ Ibid., pp. 110, 114.

²¹ Ibid., pp. 180-181.

fullest extent possible, but rather relied on the importation of foreign laborers.

Second this importation of foreign laborers was mismanaged to an almost unbelievable degree.

Third the Germans never made a maximum effort to reallocate labor into war-essential industries.

Fourth the Germans never achieved a satisfactory balance between the manpower needs of the munitions industry and the armed forces thereby greatly intensifying their skilled labor shortage.

Fifth, while labor is the ultimate limit on a nation's war effort and the Germans did not handle this strategic shortage at all well, they were nevertheless able to delay the reckoning until it no longer mattered.

CHAPTER V

ADMINISTRATION

Introduction

The administration of the German war economy, never a clear and well-organized organization, shifted radically during the war. There were at least ten distinct and conflicting organizations charged with responsibility for its management in the Blitzkrieg period:

- 1) the three armed forces all determined their requirements independent both of one another and of the economy as a whole.
- 2) The Labor Ministry under Robert Ley had primary responsibility for manpower requirements.
- 3) The Economics Ministry under Walther Funk handled raw material allocation.
- 4) The Reich Commissioner for Building, Fritz Todt, was responsible for all construction.
- 5) The Economic General Council under Goering's chairmanship theoretically held supreme power but in practice seldom used it in Germany proper.
- 6) The Four Year Plan Office also under Goering was supposed to have prepared the German economy for war and to be a co-ordinating agency.
- 7) The Armed Forces' War Economy and Armament Office under General Thomas was the OKW's economic planning and co-ordinating staff.
- 8) The Ministry of Armament and Munitions under Fritz Todt, dealt only with army supply problems in this early period.
- 9) In addition the Finance Ministry, the Reich Price Commissioner, the forty-three Gauleiter, the SS, and sundry other agencies were involved in the management of the war economy.

- 10) Finally at the top Adolf Hitler had to coordinate all these agencies not only on general policy as any ruler would but also on daily matters because no one else had the power to do this.

It was this surplus of administration and shortage of coordination that was to hinder all pre-1942 German efforts to solve her strategic shortages. Later, after the Blitzkrieg period ended, the Speer Ministry to a large extent solved this problem by taking over almost complete control of the economy.

The Blitzkrieg Years

In the first three years of the war the German economy was run by various conflicting agencies with relatively little central planning or control. The ones described below are the most important.

Adolf Hitler

Basically power to enforce a decision on conflicting agencies and authority to make economic plans was held by no one beneath Adolf Hitler. Consequently he was not only the court of last resort, but the court of first resort as well. That this made excessive demands on his time was recognized by the Nazis in theory. Consequently the economy was split into two sectors. Over the civil sector first Schacht and then Funk presided as Plenipotentiary for the Economy. Over the military sector Goering presided as Plenipotentiary for the War Economy. Over the two sectors combined was the Economic General Council under Goering. In practice Funk was a nonentity who was gradually sheared of his powers as the war progressed. Goering overemphasized the Luftwaffe at the expense of the other services and showed more interest in maintaining his authority than he did using it. Finally the Economic General Council which Goering headed met seldom and never

used its power.¹ Thus in practice Hitler remained the sole co-ordinator of the economy.

Hitler's position as the operational head of the German economy was unwise because Hitler was a singularly bad economic leader. It was also unwise because he could not devote sufficient time to his role as leader. He not only had no understanding of modern economic theory; he did not even comprehend the existence of the basic problem with which economists seek to deal, the allocation of limited resources among unlimited needs. When once asked by Speer about the priorities to be used if everything required could not be produced simultaneously he typically answered: But everything can be! Finally Hitler combined an incredible interest in matters of detail, especially technical problems and army problems, with an almost total lack of interest in economic problems of a general nature. He found time to discuss tank production in all its details, but he never found time to look into the chaotic steel rationing process.² Nevertheless in the litzkrieg period Hitler alone exercised central control of the economy.

The Ministry of Economics

The decline in the power of the Ministry of Economics from the time of Schacht to the time of Funk is the classic example of how the power of a Nazi ministry rested not on its legal position, but on the ability of its head. In theory Funk as Plenipotentiary for the Economy was in charge of the ministries of Economics, Labor, Finance, Food, and Forestry.³ In reality these ministries went their own way and Funk

¹Klein, pp. 150, 152, 169.

²Klein, pp. 169-171.

³Franz Neumann, Behemoth: The Structure and Practice of National Socialism, 2nd ed. (New York: Octagon Books, 1963), p. 253.

only controlled trade and commerce, banking, and foreign exchange. Only in so far as the Ministry of Economics controlled the importation and allocation of raw materials did it directly affect the German war economy.⁴ Nevertheless its lack of power did not discourage it from engaging in empire-building and empire-maintenance. Especially it sought to prevent any decline in consumer goods production with the result that valuable manpower and material were denied war industries

which needed them. In the Blitzkrieg years consumer goods production actually rose and in addition there were heavy imports from the conquered areas.⁵

The control of raw materials was exercised through the twenty-seven Reichstellen each of which controlled a group of raw materials. The Reichstellen were substantially autonomous and of markedly varying efficiency.⁶ The board for non-ferrous metals did excellent work, for instance, while the steel board functioned very badly.⁷ To obtain needed raw materials an armaments factory first exaggerated and then reported its needs for the next three months to the procurement office of the armed service which had placed the weapons' order creating the need. The procurement offices of each service totaled these requests and padded the total generously before passing it on

⁴Milward, p. 21.

⁵Milward, pp. 28-29.
Klein, pp. 161-162.

⁶Nathan, pp. 47-49.

⁷Klein, pp. 162-163.

to the OKW's War Economy and Armaments Office which then negotiated with the Ministry of Economics for the requested raw materials. If necessary the Four Year Plan Office or Hitler arbitrated. The Reichsstellen were then informed how the agreed amounts were to be distributed. Whether the plants ever got the raw materials they had requisitioned then depended on the competence of the relevant Reichsstellen. No one ever checked to see what the actual, as opposed to the stated needs, were or even whether the need for the requested raw material still existed after the bureaucracy got through processing the order. Thus if the weapons order was cancelled or modified as often happened the original requisition was still sent. Or rather it was supposed to be sent; often the required quantities of one crucial raw material in a program requiring several raw materials would never arrive at all.⁸

The Ministry of Labor

Although theoretically under the control of Funk, in practice the Ministry of Labor was wholly autonomous. As we saw in Chapter IV, the Ministry had extraordinary legal powers to meet the manpower needs of the war-essential industries, but it made little use of them. It did, however, maintain Comb-out Commissions under each of the three hundred local Labor Offices to remove unneeded workers from any plant, military or civil, and reassign them where they were needed. Both the armed forces and the Ministry of Armaments and Munitions bitterly resented this interference in the management of the plants producing for them and consequently set up competing commissions to prove their need for labor. However, on the whole this activity of the Ministry of

⁸Klein, Pp. 163-164.

of labor was beneficial.⁹

To obtain needed labor from the Ministry of Labor an armaments plant merely applied to the local Labor Office. The Labor Office then supplied the needed men from those locally available. Usually in these years, this worked. When it did not, the War Economy and Armaments Office would ask the Ministry of Labor to relocate workers from some other district. Disputes would then arise on the existence of the need and/or on its importance relative to other claims. Again there was no one below Hitler who could arbitrate such disagreements.¹⁰ Fortunately, however, in these years there was enough slack in the supply of labor to keep this from being too serious.

The Four Year Plan Office

As Goering's secretariat, the Four Year Plan Office had considerable theoretical authority, but never tried to use it. Far from aiding Goering direct the economy, it merely settled a few raw material allocation disputes and regulated the factories entrusted to it by the original Four Year Plan.¹¹

The Ministry of Armaments and Munitions

The Ministry of Armaments and Munitions was created in February 1940 as a result of Hitler's dissatisfaction with the military's

⁹Nathan, pp. 196-199.
Klein, p. 165.

¹⁰Klein, pp. 165-166.

¹¹Neumann, pp. 219-250, 595.
Klein, p. 169.

handling of economic affairs. It dealt only with army procurement and was designed to assist and not to replace the army's own procurement agency.¹² Thus it was not very important for most of the economy; however, from it Speer's Ministry for Armaments and War Production was to arise.

The Armed Forces' War Economy and Armaments Office

The Armed Forces' War Economy and Armaments Office had relatively little power because (1) Hitler preferred civilian advisors and (2) its advice was unpleasant to Hitler. Specifically it had a much better idea than he of Allied production possibilities, especially with regard to the U.S. and the U.S.S.R. Therefore it recommended going over to a total war economy as soon as the war began. This advice was most unpopular in high Nazi circles and consequently the War Economy and Armament Office never received the power to do more than assist the wholly autonomous procurement agencies of the three armed services. It could not control or even co-ordinate these agencies, let alone lead the war economy itself. Moreover its duties were considered technical and "un-military" by the offices of all three services with the result that the good officers often sought to avoid assignment to it.¹³

The Procurement Agencies of the Armed Forces

Army

Army procurement was the responsibility of Colonel-General Fromm, Chief of Army Equipment and Commander-in-Chief of the Replacement Army. In practice he was directly responsible, not to the OKH or the

¹² Ibid., p. 152.

¹³ Ibid., pp. 150-151, 156.

OKW, but to Hitler personally. In army planning, moreover, supply officers were ignored by the officers in charge of operational planning thus creating an internal lack of liason.¹⁴

Air Force

Due to the power of Goering air force procurement remained the most independent and least co-ordinated of the armed forces' procurement agencies until the last year of the war. Due to Goering's frequent changes in his orders, it also remained the worst run. It frequently specified changes in design that made mass production almost impossible. Moreover it took up a far larger share of Germany's munitions output than was justifiable and never settled on production priorities among the various types of aircraft it wanted built.¹⁵

Navy

The OKM's procurement agency was relatively small and was the first armed service procurement agency to be turned over to the Speer Ministry.¹⁶

Summary

These agencies and the minor ones listed but not described ran the German war economy in a remarkably inefficient manner and yet the German war economy was never more successful than it was in these years. This system, ramshackle though it was, was quite adequate for the reduced requirements of Blitzkrieg.

The Post-Blitzkrieg Years

Following the defeat before Moscow in late 1941, Hitler decided

¹⁴ Ibid., p. 157.

¹⁵ Ibid., p. 157, 159-160.

¹⁶ Ibid., p. 157; Milward, pp. 82-83.

to convert to a full war economy. To Todt's Ministry of Armaments and Munitions to which he then entrusted much of the central direction of the war economy. Todt, however, was killed on February 8, 1942 in an airplane crash. His successor, Albert Speer, continued the process of reform and centralization.¹⁷

Gradually Speer took over control of most of the agencies discussed above even though there were certain key exceptions which managed to hold out for quite a long time, however. Luftwaffe procurement did not come under his control until March, 1944; the procurement of labor, while taken from the Labor Ministry and given to Sauckel's Plenipotentiary for Labor on March 19, 1942 never did come under Speer's control; the Economics Ministry was not completely stripped of its powers until November, 1943; and the SS's economic empire remained independent and inefficient to the very end.¹⁸

The new line of command in all its essentials was established by May, 1942. At the top was Hitler. At frequent conferences with Speer, he made the most important decisions. Speer, functioning as Minister of Armaments and War Production, held the daily responsibilities. Beneath him was the network of Committees and Rings begun by Todt. For each major type of armaments (e.g. tanks, ships, etc.) a Main Committee existed. For an essential component (e.g. ball-bearings) used by several Main Committees a Ring existed. The Committee and Rings were staffed by young technicians and were quite efficient.¹⁹

¹⁷Ibid., pp. 66-73.

¹⁸Ibid., pp. 81-82, 130-133.

¹⁹Neumann, pp. 589-594.

When necessary they were supplemented by special ad hoc Staffs created to deal with individual crises. These included the Fighter Staff set up to raise fighter production in 1944, the Ruhr Staff set up when the Ruhr was cut off by Allied bombing, the Ball-bearing Staff set up after the Allied air raids on that industry, and the Synthetic Oil Staff, also born of Allied air raids. Finally raw material allocation was centralized in a new office, Central Planning. Ostensively under the Four Year Plan Office and Goering, actually it amounted to regular fortnightly meetings of Speer and Milch to allocate raw materials among all claimants. ²⁰

Summary

The new administrative arrangements raised production greatly as we saw in Chapter I. But even until the end of the war enough administrative disunity persisted to hamper the war unnecessarily

Germany, monolithic and totalitarian, never achieved the efficient economic structure of her democratic opponents in the West.

Conclusions

First the German war economy was characterized by extreme internal disunity and infighting during the Blitzkrieg years.

Second the increased needs following the end of Blitzkrieg made this an impossible luxury and that therefore the Ministry of Armaments and Munitions was empowered to unify the economy.

²⁰ Milward, pp. 83-86.

Third the centripetal tendencies of Nazi administration continued until the end and thus reduced the effectiveness of the Speer Ministry.

Fourth at all levels and times Nazi economy administration tended to be a matter of creating special agencies with vaguely defined authority in reaction to emergency situations rather than a matter of rational future-orientated planning.

BIBLIOGRAPHY

Books

A Member of the German Freedom Party, Hitler Calls This Living! trans. by Munroe Frayes. London: Sidgwick and Jackson, Ltd., 1939.
By a German emigre. Inaccurate and unreliable.

Basch, Antonin. The Danube Basin and the German Economic Sphere. New York: Columbia University Press, 1943.
By a Czech diplomat. Argues that fall of Czechoslovakia led to German dominance in Balkans. Downgrades German successes there earlier. Weak on oil.

B., A.J. Europe Under Hitler: In Prospect and in Practice. London: Oxford University Press for The Royal Institute of International Affairs, 1941.
Pamphlet on German "New Order". Sees much more skill and organization than there actually was.

Bauer, Wilhelm. German Economic Policy. Berlin: Terramare Publication, Inc. 1939.
Nazi propaganda.

Bengtson, John Robert. Nazi War Aims: The Plans for the Thousand Year Reich. Rock Island, Illinois: Augustana College Library, 1962.
A summary of Nazi history 1933-1945 coupled with quotations from Mein Kampf and Table Talk on the fate of the world after a Nazi victory. No new evidence is adduced. Brief and useless.

Borkin, Joseph, and Welsh, Charles A. Germany's Master Plan: The Story of an Industrial Offensive. New York: Duell, Sloan and Pearce, 1943.
By the chief specialist on foreign cartels of the Anti-trust Division of the Justice Department and another cartel specialist, it sees a vast plot going on for decades by German cartels to weaken our defenses by monopolistic arrangement with American firms.

Brassey's Naval Annual, Rear-Admiral H.G. Thursfield (ed.), Vol. LIX. London: William Clowes and Sons, Ltd. 1948.
Contains the Navy's records of the Fuehrer Conferences on Naval Affairs for the war years.

Bruck, W.F. Social and Economic History of Germany from William II to Hitler, 1888-1938: A Comparative Study. Oxford: Oxford University Press, 1938.
Sees "Cameralism, the peculiar German type of Mercantilism" as the key to the last 200 years of German socio-economic history.

Bullock, Alan. Hitler: A Study in Tyranny. rev. ed. New York: Harper and Row, Publishers, 1964.

An excellent biography with an undue thesis on political history at the expense of economic history.

Derry, T.K. The Campaign in Norway. London: Her Majesty's Stationery Office, 1952.

Part of the United Kingdom's official history, it argues that while British action to cut the iron ore traffic was inevitable so was a German reaction and concludes that Britain could not possibly have held Norway. A very good book.

Dugan, James and Stewart Carroll. Ploesti: The Great Ground-Air Battle of 1 August 1943. New York: Random House, 1963.

Contains little information of a general nature as it is concerned exclusively with the battle and the warriors and not with general economic problems.

Germanicus (pseud.) (ed.), Germany, The Last Four Years: An Independent Examination of the Results of National Socialism, Boston: The Houghton Mifflin Company, 1937.

A collection of articles in the February 1937 number of The Banker, a London banking magazine. More sympathetic to the Nazis and less emotional than most of the other books of this period, it emphasizes the alleged fiscal unsoundness of the regime and urgently recommends against UK loans to Germany and against a policy of appeasement.

Glesinger, Egon. Nazis in the Woodpile: Hitler's Plot for Essential Raw Material. New York: The Bobbs-Merrill Co. 1942.

By the Secretary-General of the Comité International du Bois. Exaggerates the importance of wood and the success of the wood-based export industries.

Guillebaud, C.W. The Social Policy of Nazi Germany. Cambridge: Cambridge University Press, 1941.

Very good and not at all propagandistic.

Hagen, Paul (psued.) Will Germany Crack? A Factual Report on Germany. trans. by Anna Coples. New York: Harper and Brothers, 1942.

By an overly pessimistic S.P.D. exile who used reports from ordinary workers in the S.P.D. underground. Fairly good.

Hamburger, L. How Nazi Germany Has Mobilized and Controlled Labor. Washington, D.C.: The Brookings Institution, 1940.

By a Swiss labor economist at the University of Geneva, it argues the Nazi elimination of the legal rights of labor was unplanned but in complete accord with Nazi ideology. The legal aspects of the development of the German labor situation to 1940 are quite clearly explained.

Hitler, Adolf. Hitler's Secret Book. trans. Salvator Attanasio. New York: Grove Press, Inc. 1961.

Primarily on foreign policy. Little economic discussion.

_____. Hitler's Secret Conversations, 1941-1944, trans. Norman Cameron and R.H. Stevens. New York: The New American Library, 1961.

Mealtime monologues by Hitler. Must be used with caution as the views he attributes to himself at earlier times are not always the ones he actually held at those times.

_____. Mein Kampf. trans. Ralph Manheim. Boston: Houghton Mifflin co., 1962.

Hitler's principal work. Almost no discussion of economics.

International Labour Office. The Exploitation of Foreign Labour by Germany. Montreal: International Labour Office, 1945.

A wartime study with understandably inaccurate figures.

Jones, F. Elwyn. Hitler's Drive to the East. London: Victor Gollancz, Ltd. 1937.

By a British leftist. Ideological, warped and unpreceptive—quite inferior to Basch.

Klein, Burton H. Germany's Economic Preparations for War. Cambridge: Harvard University Press, 1959.

Influenced by the author's work with the Strategic Bombing Survey, it concentrates on the years prior to 1943 and pictures the German economy as not beginning to mobilize until 1942. Very important, but based on pre-1943 sources only.

Kuczynski, Jürgen. Germany: Economic and Labour Conditions Under Fascism. New York: International Publishers, 1945.

Argues that the German economy was geared to heavy industry and war and that workers and peasants were exploited. Has detailed discussions of wages and working conditions through 1943. By a Communist scholar.

Lajos, Ivan. Germany's War Chances As Pictured in German Official Literature. London: Victor Gollancz, Ltd. 1939.

A condensed Hungarian translation of Sternberg's Germany and a Lightning War. Emphasizes that Hungary might not ally with Germany again.

Lewis, Cleona. Nazi Europe and World Trade. Washington, D.C.: The Brookings Institution, 1941.

Detailed proof that Europe can not be economically self-sufficient as the Nazis proposed. Excellent data.

Lochner, Louis F. Tycoon and Tyrants: German Industry From Hitler to Adenauer. Chicago: Henry Regnery Company, 1954.

By the translator of Goebbels's diaries. Argues that industry was not responsible for Hitler's rise to power or his actions in power. Useful for the attitudes of anti-Nazi industrialists.

Lorwin, Lewis L. Economic Consequences of the Second World War. New York: Random House, 1941.

Discusses the consequences of both a British and a German victory and advocates a "World New Deal" to ensure perpetual peace, progress and prosperity.

Lurie, Samuel. Private Investment in a Controlled Economy: Germany 1933-1939. New York: Columbia University Press, 1947.

Too early to use the U.S.S.B.S. reports or the early articles based upon them, it contains the usual pre-war errors.

Miller, Douglas. Via Diplomatic Pouch. New York: Didier Publishing Co., 1944.

A series of twenty-seven reports from the U.S. commercial attache in Berlin to the government covering 1931-1937. Disconnected and lacking any clear theme, the reports selected show considerable insight and make quite accurate predictions.

_____. You Can't Do Business With Hitler. Boston: Little, Brown and Co., 1941.

Argues that Nazi aims and policies make it a vital U.S. interest to defeat Germany. Well written and easily read, it was very influential in the U.S.

Milward, Alan S. The German Economy at War. London: The Athlone Press, 1965.

Concentrates on the period after 1941 and in general agrees with Klein. Shows the German economy began to mobilize earlier than previous post-war writers had believed and emphasizes the role of Fritz Todt in this. Very good.

Moulton, Harold G. and Marlio, Louis. The Control of Germany and Japan. Washington, D.C.: The Brookings Institution, 1944.

Sophisticated analysis of ways the strategic shortages of Germany could be exploited to frame an efficient defense against her while yet framing a generous treaty of peace.

Munk, Frank. The Legacy of Nazism: The Economic and Social Consequences of Totalitarianism. New York: The Macmillan Company, 1943.

Deals with post-war economic reconstruction.

Nathan, Otto. The Nazi Economic System: Germany's Mobilization for War. Durham: Duke University Press, 1944.

Emphasizes military nature of the economy and is the best summary of the erroneous pre-war viewpoint.

Nazi-Soviet Relations 1939-1941: Documents from the Archives of The German Foreign Office. Raymond J. Sonntag and James S. Beddie (eds.). Washington, D.C.: U.S. Government Printing Office, 1943.

Does not include the detailed economic documents, but does include several interesting summaries and all the important political documents.

Necker, Wilhelm. Nazi Germany Can't Win: An Exposure of Germany's Strategic Aims and Weaknesses. trans by Edward Fitzgerald. London: Lindsay Drummond, Ltd., 1939.

Very accurate on Nazi ideological aims and military plans, but overestimated Germany's economic weaknesses. Saw that the Nazis planned only for a short war.

Neumann, Franz. Behemoth: The Structure and Practice of National Socialism, 1933-1944. 2d ed. New York: Octagon Books, 1963.

A Marxist interpretation. Uses only pre-war and wartime data and is quite unreliable on factual matters in consequence.

Peterson, Edward Norman. Hjalmar Schacht: For and Against Hitler, a Political-Economic Study of Germany 1923-1945. Boston: The Christopher Publishing House, 1954.

Very useful discussion of Schacht's opposition to full economic mobilization. Too early to use Klein or Schacht's Confessions. Little on the economy during the war. Annotated bibliography.

Poole, Kenyon E. German Financial Policies, 1932-1939. Cambridge: Harvard University Press, 1939.

Considers the German recovery unhealthy due to excessive expenditures on armaments and the German economy fully mobilized.

Reimann, Guenther. The Vampire Empire: Doing Business Under Fascism. New York: The Vanguard Press, 1939.

Verbose and polemical. One of the worst pre-war works.

Reveille, Thomas (pseud.). The Spoil of Europe: The Nazi Technique in Political and Economic Conquest. New York: W.W.Norton and Co., 1941.

Carefully written and fairly good inspite of several major misinterpretations. Annotated bibliography.

Robert, Dr. Karl (pseud.). Hitler's Counterfeit Reich: Behind the Scenes of the Nazi Economy. New York: Alliance Book Corporation, 1941.

Written as propaganda and bereft of scholarly apparatus, it sees the inefficiency well and is very preceptive, but overrates the amount of planning for war.

Rodgers et. al. Industry Looks at the New Order. London: Hodder and Stoughton, 1942.

B.B.C. propaganda broadcasts to the U.S.

Roush, G.A. Strategic Mineral Supplies. New York: McGraw-Hill Book Company, Inc., 1939.

Examines the strategic shortages in minerals of the U.S.

The Royal Institute of International Affairs, Information Department.
Occupied Europe: German Exploitation and Its Postwar Consequences.
London: Oxford University Press for The Royal Institute of International Affairs, 1944.

Replaced and updated A.J.B.'s Europe Under Hitler.

Schacht, Hjalmar. Account Settled. trans. Edward Fitzgerald. London: George Weidenfeld and Nicolson, Ltd., 1949.

Defense of his activities during the Hitler years.

_____. Confessions of "The Old Wizard": The Autobiography of Hjalmar Horace Greeley Schacht. trans. Diana Pyke. Boston: Houghton Mifflin Company, 1956.

A more inclusive and considered account than Account Settled.

Snyder, Louis L. The War: A Concise History, 1939-1945. New York: Dell Publishing Co., 1964.

Bitterly anti-German general history of the war.

Sternburg, Fritz. From Nazi Sources: Why Hitler Can't Win. New York: Alliance Book Corporation, 1939.

The best 1939 account of Germany's economic problems in any protracted war. Based on German official sources only, it overestimated German economic weaknesses and the role of General Thomas, but saw the need for a short war.

Stolper, Gustav. German Economy, 1870-1940: Issues and Trends. New York: Reynal and Hitchcock, 1940.

Sees the basic theme of German economic history as "the ascendancy of the state over the economic life of the nation" and Nazism as merely the logical culmination of German history. Views the economy as fully mobilized by 1938.

Taylor, A.J.P. The Origins of the Second World War. London: Readers Union, 1962.

Primarily a diplomatic history, it is weakened by its failure to use the economic data which supports its case.

Trianovitch, Vaso. Economic Development of Germany Under National Socialism. New York: National Industrial Conference Board, 1937.

Conservative in orientation, it presents a mildly favorable picture of Germany's economic status. Unique in not discussing its military aspects.

U.S. Office of Strategic Services, Research and Analysis Branch. Civil Affairs Handbook: Germany. 17 pts. Washington, D.C.: U.S. Army Service Forces, 1944.

Prepared to assist military civil affairs officers in newly occupied areas of Europe.

Wilmot, Chester. The Struggle for Europe. New York: Harper and Row, Publishers, 1963.

One volume history of the war in Western Europe from a British viewpoint. Emphasizes the latter years and has some interesting comments on bombing and on the effect of strategic shortages on military operations.

Ziemke, Earl F. The German Northern Theater of Operations, 1940-1945. Washington, D.C.: U.S. Government Printing Office, 1959.

Part of a U.S. Army series on German operations in World War II in which our forces were not involved, it is based mainly on captured German records and emphasizes military matters without adequate discussion of their economic aspects.

Articles

Crone, G.R. "German Supplies of Raw Materials and Food," Geographical Journal, XCVI (July, 1940), 42-47.

Thorough but does not allow for increased consumption due to wartime military requirements or for evasive measures.

Eucken, Walter. "On the Theory of the Centrally Administered Economy: An Analysis of the German Experiment", Economica XV (May, August 1943), 79-100, 171-193.

Discusses whether a separate theory is required for non-competitive economies and concludes it is. Hostile to the whole idea of centrally administered economies.

Gellermann, Joseph E. "Germany's Resource Position in 1938," National Industrial Conference Board Bulletin XIII #1

"The German Economy in War", Army Quarterly July, 1946.

Herz, John H. "German Administration Under the Nazi Regime", American Political Science Review, August, 1946.

Horniker, Arthur Leon. "German Contracting in Occupied Europe", Harvard Business Review, XXV (Autumn, 1946) 74-91.

Covers the years 1940-1942 primarily and emphasizes the advantages the occupied areas derived from this trade.

Klein, Burton. "Germany's Preparation for War: A Re-examination", American Economic Review, XLII (March, 1948) 56-77.

Same thesis as his book. One of the first articles revising the pre-war views.

- London, L.D. "The Origins of the Second World War." Journal of American Studies, (November, 1964). Shows some of Klein's figures are internally inconsistent.
- Milward, A.S. "The End of Blitzkrieg", Economic History Review, 2d Series XVI (April, 1964) 499-518.
Revises Klein and the U.S.S.B.S. reports by showing the end of blitzkrieg came after the failure to take Moscow and not after Stalingrad as is usually argued. A very fine article.
- Newman, Phillip C. "Key German Cartels under the Nazi Regime", Quarterly Journal of Economics, August 1948.
- Schweitzer, Arthur. "Business Power under the Nazi Regime", Zeitschrift für Nationalökonomie, XX (October, 1960) 414-442.
Views the Third Reich as having a "trilateral power structure" composed of the Nazis as the major powerholders and "big business and Generals" as the minor powerholders who were allowed a small measure of independence in exchange for the use of their exclusive "skill and knowledge".
- _____. "The Role of Foreign Trade in the Nazi War Economy", Journal of Political Economy, LI (August, 1943) 322-337.
Views it in terms of financing only and does not discuss the commodities traded. Markedly Marxist flavor.
- Simpson, Amos E. "The Struggle for Control of the German Economy, 1936-1937", Journal of Modern History, March, 1959.
- Singer, H.W. "The German War Economy in the Light of German Economic Periodicals", Economic Journal, L-LIV (December and June, 1940-1944).
Based primarily upon the Deutsche Volkswirt and the Vier-jahresplan.
- Spiegel, Henry William. "Wehrwirtschaft: Economics of the Military State", American Economic Review, XXX (December, 1940), 713-723.
Explains the German theory of wehrwirtschaft well, but does not comment on the actual operation of the German war economy.
- Stern-Rubarth, Edgar. "Dr. Schacht: The German Talleyrand", Contemporary Review, March, 1949.
- Triska, Jan F. "'Work Redeems': Concentration Camp Labor and Nazi German Economy", Journal of Central European Affairs, April, 1959.

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