

“THE NAVY’S SUCCESS SPEAKS FOR ITSELF”?

The German Navy’s Independent Energy Security Strategy, 1932–1940

Anand Toprani

[The] Naval High Command has from the very beginning operated from the conviction—especially in view of the lessons Italy had to learn during the Abyssinian War—that in any military conflict, particularly one in which England is in any way involved, economic warfare will play a considerable role alongside military operations. In view of the fact that England has at its disposal connections around the world, it is only possible for the navy to secure oil supplies from overseas through long and exhaustive preparation.

ADMIRAL ERICH RAEDER TO ECONOMICS MINISTER WALTHER FUNK, 6 MAY 1940

[You claim] that only the Naval High Command has failed to show any appreciation for your efforts with regard to petroleum supplies. This is correct. The Naval High Command recognized from the start that, by pursuing a wartime petroleum supply policy under the influence of the major oil companies, your department was following a path that must eventually lead to calamity.

RAEDER TO FUNK, 27 JUNE 1940

The National Socialists’ primary foreign policy objective after taking office was to rearm Germany so that it might reverse the verdict of the First World War and acquire the “living space” necessary to becoming a world power on par with Britain or the United States. For the German armed services, the Third

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Reich’s ambitious plans meant that they were compelled to broaden their missions and operational capabilities. For its part, the German navy expanded between 1933 and 1939 from a coastal-defense force to one capable of deploying a fleet to challenge the Royal Navy for command of the seas. But this would be impossible without sufficient raw materials, most importantly petroleum to fuel

the navy's surface ships and submarines. As an oil-poor nation vulnerable to blockade and short of foreign exchange to pay for imports, Germany had to make hard choices about how to allocate its limited supplies of petroleum—not just between the military and civilian consumers but also among the armed services.

Since the Third Reich required continental hegemony before it could aspire to global supremacy, German leaders devoted their limited economic resources to satisfying the petroleum requirements of their army and air force (gasoline and aviation fuel) before those of the navy (fuel oil and diesel fuel). The German navy resented its subordinate status and—as befits a budding maritime force with global aspirations—pursued an independent energy-security strategy that featured acquiring in Iraq and Mexico oil concessions that would allow it to stockpile large quantities of petroleum in peacetime. But the navy's long-term oil ambitions—and bureaucratic manipulations—conflicted with the overall energy-security strategy of the Third Reich, which was focused on the short-term goal of fueling a land and air struggle for the mastery of Europe. Although Adolf Hitler expected the navy to play a much larger role in achieving German objectives than even the naval leadership initially expected, other agencies with competing ideas about how to guarantee Germany's energy security joined forces to quash the navy's plans in Iraq and Mexico in 1936 and 1938 before they did irreparable damage to Germany's relations with the major U.S. and British oil companies, which were the Third Reich's most important foreign suppliers of oil prior to the outbreak of the Second World War.

THE PROBLEM OF NAVAL FUEL SUPPLIES IN THE THIRD REICH

In the years between the National Socialist “seizure of power” in 1933 and the outbreak of the Second World War in 1939, the Third Reich made impressive strides in increasing Germany's supply of petroleum (see table 1). The centerpiece of Germany's energy-security strategy to increase domestic production of petroleum was the development of a synthetic-fuel industry. Since before the First World War German scientists had been perfecting methods of synthesizing various petroleum products from coal—first the Bergius process (1913), which yielded gasoline, then the Fischer-Tropsch process (1926), which could produce heavier fuels, such as diesel, but was more expensive than the Bergius process. The National Socialists did not stop at synthetic fuel; they embraced what we would today call an “all of the above” approach, including incentivizing domestic crude-oil production and curtailing civilian consumption (0.312 barrels of gasoline per capita in Germany, compared with 0.98 in Great Britain and 3.99 in the United States by 1938).¹

Nevertheless, total consumption within Germany still rose as the economy recovered from the Great Depression, and although domestic synthetic- and

TABLE 1
GERMANY'S PETROLEUM SUPPLY, 1933–1939
(THOUSANDS OF METRIC TONS)

Year	Crude Oil	Refined Petroleum (natural & synthetic)	Imports
1933	230	291	2,685
1934	318	N/A	3,155
1935	427	N/A	3,826
1936	445	N/A	4,229
1937	453	620	4,313
		Synthetic Fuel Only	
1938	552	1,600	4,957
1939	888	2,200	5,165

Note: Crude oil statistics for 1938–39 includes Austrian output. Figures drawn from Reichs-Kredit-Gesellschaft AG, "Treibstoffwirtschaft in der Welt und in Deutschland"; and USSBS, *Effects of Strategic Bombing on the German War Economy*, p. 75.

crude-oil production managed to keep pace, the share of imports within Germany's overall supply of petroleum did not decline (70 percent by 1938). Nor, for that matter, were the armed services able to make significant progress in accumulating stockpiles, even though they knew full well from their experience during the Great War that they could not expect to import much from over-

seas in the event of a British blockade.²

The most pressing challenge was, however, the cost of importing petroleum to meet rising domestic consumption—from 2,478,000 tons in 1932 to 5,165,000 tons in 1939. Importing large quantities of petroleum in peacetime was not a straightforward matter, since the U.S. and British oil companies that dominated the global oil industry demanded at least partial repayment in hard currency.³ As a result, German expenditures of foreign exchange for petroleum imports almost doubled during the first half of the Third Reich, from 129,800,000 Reichsmarks (RM) in 1933 to 230,000,000 RM in 1939.⁴ Under normal circumstances this would not pose an insurmountable challenge, since a modern industrial nation can simply boost its exports to balance its current account. Germany was not, however, operating under normal economic conditions after the National Socialists took power. The Great Depression and the collapse in global trade had wiped out most of Germany's foreign-exchange reserves before 1933, after which rearmament soaked up German industrial and domestic raw materials (e.g., coal) production, leaving only small quantities available for export. The need to import food and strategic raw materials and to service the German foreign debt, as well as fears of unleashing inflation, convinced Hitler and Hjalmar Schacht (then president of the Reichsbank and later minister of economics) to reject the path taken by Britain and the United States and devalue the Reichsmark.⁵ This meant that German exports were overvalued by as much as 40 percent compared with those priced in dollars or sterling.⁶ Although this eased Germany's import bill, reduced exports meant lower earnings of foreign exchange, which (along with the

overall rise in commodity prices as the global economy recovered from the Great Depression) impaired the Third Reich's ability to cover the gap between its consumption and production of most key strategic raw materials through imports.⁷

Even Romania, which became Germany's most important source of oil after 1939 and later joined the Axis, was not a reliable supplier. Production there peaked in 1936 at 8,700,000 tons—good for fourth place among world oil producers but only 5 percent of the output of the United States. Six of the seven largest oil companies in Romania before the war, accounting for roughly 80 percent of that nation's production, were owned by American, British, Dutch, French, and Belgian oil companies or banks, while Romanian, Italian, and German firms controlled the remaining production. The Romanian government meanwhile received royalties from the foreign oil companies in the form of crude oil (11–12 percent of total production). The major obstacle from Germany's perspective was that it could not import oil at will. Starting in 1935, Bucharest limited the amount of oil it exported to Germany that could be paid for through clearing agreements (see below) to 25 percent of the total value of all exports.⁸

During the Third Reich, Germany used a variety of methods to finance international trade, including “clearing agreements,” “barter agreements,” and payment in “blocked currency.” Clearing agreements are basically pools of money into which a nation's exporters deposit the hard-currency proceeds of their sales; importers thereafter draw from these pools to finance their purchases. Barter agreements are transactions denominated in finished or unfinished goods. Finally, the Reich created “blocked currency” known as “Askimarks” (a German portmanteau word for Foreigners' Special Accounts for Domestic Payment) to finance trade with Latin America. These “Askimarks” were nonconvertible and could only be used to purchase specified German goods.⁹ In all three instances, the guiding principle was to keep the amount of money that changed hands to a minimum. This included both foreign exchange (e.g., dollars and sterling) and the Reichsmark, whose value would drop if foreigners exchanged it for other currencies. The Third Reich was happy to allow foreign firms to accumulate their earnings within Germany, provided that they did not repatriate them. This was of course unacceptable to the U.S. and British oil companies, which had to remit at least some of their earnings back home.¹⁰

One method of meeting Germany's oil requirements at minimal cost to the country's dwindling reserves of foreign exchange was importing crude oil directly from Iraq through the British Oil Development Company (BOD), a multinational combine that won the oil concession for all of Iraq west of the Tigris River in 1932. Even though supplies from Iraq would be unavailable in the event of a British blockade, many German officials—especially the navy leadership—hoped the

BOD would facilitate the stockpiling of oil in peacetime and reduce Germany's dependence on the U.S. and British major oil companies.¹¹ Another alternative was to take advantage of Mexico's nationalization of its oil industry in 1938 to purchase the now-discounted Mexican oil with minimal expenditure of foreign exchange.¹² The story of German participation in the BOD and of subsequent efforts in Mexico therefore offers a valuable perspective on the role of one relatively autonomous agency—the German navy—in defining and implementing an independent energy-security strategy within the framework of Germany's overall preparations to wage another world war.¹³

German naval policy during the early years of the Third Reich was relatively modest in scope and objectives. Building on the lessons of the First World War, Admiral Erich Raeder (commander in chief of the German navy) ruled out building a fleet capable of challenging the Royal Navy, preferring a smaller fleet composed of “pocket battleships,” cruisers, aircraft carriers, and submarines. Moreover, he considered France, rather than Britain, both the quantitative benchmark and the expected opponent.¹⁴ Consequently, when it came to petroleum requirements the navy was a minor player by comparison with its sister services.¹⁵ In 1935, a year before Germany embraced a policy of self-sufficiency in petroleum through the Four-Year Plan (mainly by boosting production of synthetic fuel), the German navy imported roughly 75 percent of its requirements.¹⁶ The following year, the Naval High Command projected its annual wartime needs as of 1939 at only 1,400,000 tons of fuel oil and 400,000 tons of diesel fuel, all of which it expected would be supplied from domestic production and reserves.¹⁷ By 1938, however, as the process of rearmament gathered steam, the German navy was estimating it would require as much as 4,500,000 tons of fuel oil per year in wartime. Since domestic production of fuel oil was well behind expectations (only 130,000 tons per annum), the navy had no option but to import most of its requirements.¹⁸

The navy's requirements continued to balloon as Germany's aggressive foreign policy increased the probability of a great-power conflict. Starting in 1933, Raeder had sought to manipulate Hitler into granting the navy a larger slice of the resource pie by framing the desired naval construction program in terms designed to appeal to Hitler's stated policy preferences. Hitler had, since his earliest days in politics and explicitly in *Mein Kampf* and his unpublished “Second Book,” spoken in favor of an alliance with Britain and Italy directed against France, then the Soviet Union, and finally the United States. Following Hitler's cues, rather than demanding a fleet equal to that of the Royal Navy the navy asked for one equal to that of France, which it hoped would enhance Germany's value as an ally to Britain (i.e., in accord with Hitler's grand strategy).¹⁹



Raeder (second from left), General Werner von Blomberg (minister of war; third from left), and Hitler on board the battleship *Deutschland* in April 1934
 Bundesarchiv, Bild 183-1987-0703-514 / CC-BY-SA

Raeder, then, was caught flat-footed when Hitler abruptly abandoned his efforts to woo Britain and instead sought to use the German navy as a deterrent against it. As relations with Britain deteriorated in the wake of the Anschluss with Austria and the onset of the Sudeten crisis in the summer of 1938, Hitler pushed the navy to adopt more and more expansive construction programs. Raeder still preferred a balanced fleet designed to wage a *guerre de course* against Britain, but Hitler overruled him and demanded additional capital ships. This process culminated in the “Z-Plan” of January 1939, which envisaged the creation by 1946 of a fleet of superbattleships capable of challenging the Royal Navy for maritime dominance.²⁰ As a result of the Z-Plan the navy’s annual requirements of fuel oil and diesel fuel in wartime would skyrocket to eight million tons by 1947–48, whereas the entire German domestic production of all petroleum products in 1938 totaled a mere 6,150,000 tons. Even assuming sufficient oil could be found—which was unlikely, since the air force had also received permission to quintuple its frontline and reserve strength—the navy would need to construct ten million tons of fuel-storage capacity at a time when there was insufficient coal, iron, or steel available to meet existing armaments or economic programs (including the expansion of synthetic-fuel production).²¹

As early as 1937, in fact, the navy had begun to express doubts about whether Germany would soon be self-sufficient in petroleum and to worry that domestic production of fuel oil and diesel was lagging behind that of the gasoline and

aviation fuel critical for combined-arms operations on land (i.e., supplies for the army and air force).²² The fact that the man responsible for Germany's economic mobilization, Hermann Göring, was also commander in chief of the air force and privileged the expansion of synthetic gasoline production (including aviation fuel) over that of fuel oil and diesel fuel did not go unnoticed within the navy.²³ Although Germany had poured resources into its burgeoning synthetic-fuel industry, future production would, according to one naval assessment, likely only suffice "to absorb" increases in military and civilian consumption. The navy therefore could not afford to be cut off from the international oil market. Rather than chase "oil autarky" in Europe, the navy's position by 1938 was that it ought "to maintain and forcefully expand connections with foreign oil companies."²⁴

By September 1939 imported oil accounted for roughly a quarter of the German navy's diesel supply and a third of its fuel oil supply. For the year as a whole, 228,105 tons of fuel and 125,042 tons of diesel fuel came from overseas.²⁵ The navy considered this inadequate and wished to accumulate a reserve equivalent to at least a year's consumption, after which time anticipated higher domestic production could pick up the slack. There was no shortage of oil on the international market; the problem, rather, was financial, since Germany lacked the foreign exchange to pay for imports of sufficient quantities of petroleum from the major U.S. and British oil companies. The Office of the Four-Year Plan (which oversaw Germany's policy of autarky) and the Armed Forces High Command (theoretically responsible for coordinating all the services but in practice serving as Hitler's personal military staff with little authority over the other services) continued to purchase whatever they could from abroad (mainly diesel and fuel oil) while producing the most expensive products, especially aviation fuel and lubricants, domestically through either conventional drilling and refining or synthesis. The German navy, by contrast, pursued three separate paths to securing cheap petroleum from abroad without going through the major oil companies: Estonian oil shale and crude oil from Iraq and from Mexico.²⁶

GERMANY AND THE SEARCH FOR OIL IN IRAQ, 1932–1936

Estonian oil shale was attractive in spite of its uncompetitive price since Estonia (an independent republic until 1940) could be a reliable source of supply even in wartime, because Germany thought it likely that it would still control access through the Baltic even during a conflict against Britain or the Soviet Union. Exports of petroleum extracted from shale to Germany began in 1937 and reached 110,000 tons in 1939. But oil shale yielded only trivial amounts of naval fuel—the navy's prewar contracts guaranteed deliveries of only three thousand tons of fuel oil a month (at well above the world market price) against a total consumption of 44,300 tons. In any case, deliveries ended in 1940 after the Soviet Union annexed

Estonia; also, in August 1941 retreating Red Army troops destroyed the shale-processing installations before the Wehrmacht could occupy them.²⁷

With regard to Iraq, the impetus came from a German industrial consortium comprising four major steel companies—Ferrosaal, Otto Wolff, Mannesmann, and Stahlunion (although Ferrosaal was the dominant member). This consortium was a partner in the British Oil Development Company in Iraq.²⁸ In fact, the German navy was a relative latecomer to this story—various civilian agencies had been considering the consequences of German participation in the BOD since 1930, when the newly formed company was still negotiating with the Iraqi government for a concession.²⁹ BOD representatives had assured the German legation in Baghdad that their aim was to promote the “Open Door” in Iraq and break the “preferential position” enjoyed by the Iraq Petroleum Company (IPC), a multinational conglomerate composed of the Anglo-Persian Oil Company (after 1935 the Anglo-Iranian Oil Company), Royal Dutch/Shell, the Compagnie Française des Pétroles, the Standard Oil Company of New Jersey, and the Standard Oil Company of New York.³⁰ The IPC had secured a formal concession in 1925, initially for the entire country but in 1931, when the company renegotiated the concession, limited to thirty-two thousand square miles—that is, all of Iraq east of the Tigris River. The company discovered a massive oil field (Baba Gurgar) in 1927 near Kirkuk but had made little progress in developing it since then.³¹ In frustration, the Iraqi government turned in 1932 to the BOD, which received a concession covering forty-six thousand square miles west of the Tigris River.³² (The online version of this article reproduces period maps of crude oil concessions in the Middle East.)

From the start, there was considerable interest in the prospect of German firms earning tens of millions of Reichsmarks in industrial orders and Germany finding a cheap source of oil imports.³³ There was also some trepidation—the German Foreign Office warned that if the BOD was too successful, it could spark a price war in Germany should the major oil companies decide to drive it from that market. While German consumers would benefit, such domestic petroleum producers as the chemical cartel IG Farben, which had made massive investments in synthetic-fuel production since 1925, would suffer heavy losses. This would have a ripple effect throughout the German economy, since expansion of synthetic-fuel production stimulated demand for labor, coal, and steel.³⁴ Although they were supportive of the ambitions of the BOD, senior Foreign Office officials suggested that the German government maintain its distance by reining in German diplomats in Iraq and refraining from extending official support to the company.³⁵

Initially, most German officials were skeptical of the strategic value of Iraqi oil, especially in wartime, since it was vulnerable to blockade. But they were

impressed by the economic benefits for depression-ridden German industry and hoped that French and Italian participation in the BOD would improve the company's prospects.³⁶ Over the objections of IG Farben, the government agreed in 1932 to guarantee up to 50 percent of a million-Reichsmark investment made by the German industrial consortium to acquire half the shares in the BOD held by one of the founders of the company, Thomas Brown. Although a Scottish businessman, Brown enjoyed close ties to the German government through his efforts to promote closer economic relations between Germany and Persia during the 1920s.³⁷ By virtue of these special "founders' rights," the German firms could supply 38 percent of the BOD's materiel requirements (with a total value of perhaps 100,000,000 RM) and receive 12 percent of the oil produced by the company.³⁸

The question of official German support for the BOD had initially been a purely civilian matter, with the ministries of economics, finance, and foreign affairs taking responsibility. This changed between 1934 and 1936, when the German consortium (in concert with its Italian partners) tried to acquire majority control of the BOD and of the holding company, Mosul Oil Fields, established to exploit the BOD's concession rights.³⁹ The armed services, the German navy in particular, now evinced considerable interest in the outcome of events in Iraq, as the rise of the Third Reich—and Hitler's explicit commitment to a crash rearmament program no matter what the cost—portended a significant rise in military oil consumption within the coming decade.⁴⁰

The German consortium within the BOD sought to acquire control of the company by subscribing to private share offerings to raise capital now unavailable on London financial markets because of the machinations of the rival IPC

TABLE 2
IRAQI OIL PRODUCTION
(THOUSANDS OF BARRELS)

1932	836
1933	917
1934	7,689
1935	27,408
1936	30,406
1937	31,836
1938	32,643

Source note: Figures drawn from DeGolyer and MacNaughton, *Twentieth Century Petroleum Statistics* (Dallas: DeGolyer and MacNaughton, 2004).

to fund the BOD's exploration efforts and cover the "dead rent" (i.e., royalties to be paid before any oil production had started—starting at £100,000 in gold in 1933 and rising to £200,000 by 1937) owed to the Iraqi government. Although the BOD had yet to produce oil on a commercial scale (see table 2), the industrial consortium and its supporters within the German government were encouraged by favorable geological assessments by Alfred Bentz, Germany's premier petroleum geologist and head of the oil division of the Prussian Geological Survey. In 1935, he estimated that the BOD concession had twenty-three million tons of proven reserves and another hundred million tons of probable reserves.⁴¹

Because of Germany's balance-of-payments difficulties, the German consortium had to pay for most of these new shares with industrial goods required for the construction of oil production infrastructure, including a railway to the Mediterranean through Syria. A rail line was necessary because the oil discovered in the BOD's concession was too "heavy" (50 percent asphalt content) to pump—although a pipeline was not out of the question in the future if the Germans resolved the technical obstacles. (Ferrostaal had, in the interim, also worked out an agreement with independent German and British refiners to sell them up to a million tons of heavy oil per year.)⁴² Total expenditures would have reached over 20,000,000 RM by 1936, but the consortium was willing to move forward if the Reich put forward a 70 percent financial guarantee (although German bureaucrats speculated it would have settled for 50 percent).⁴³

The question whether to support the push for a greater German stake in the BOD united military and civilian policy makers. The War Ministry supported any plan that could increase its supply of petroleum, especially since peacetime naval diesel and fuel-oil consumption was expected to rise 2.5 times between 1935 and 1938. The navy's supply/demand position was in fact so tight that it could only sustain current operations and had nothing left over to stockpile. Economics Minister Schacht, the man who had stabilized the Reichsmark in 1934 without resorting to devaluation by embracing a rigid system of capital controls and bilateral trade agreements, liked the idea of taking control of the BOD. For him, it offered an easy means to reconcile the competing demands of rearming and of improving Germany's balance of payments while reducing the country's dependence on the U.S. and British major oil companies.⁴⁴ The Foreign Office believed that both the British and the Iraqis would welcome a German "counterweight" to the Italians and the Soviets in the Middle East, while the German minister to Iraq (Fritz Grobba) argued that building a railway to carry oil of the British Oil Development Company to the Mediterranean would earn Germany significant goodwill across the Middle East.⁴⁵ Time was of the essence—the military and Economics Ministry had to start making preparations immediately to ensure that there were enough tankers to move the oil from Iraq to Germany and sufficient independent domestic refining capacity to process it, as most of the existing refineries were owned by the major oil companies, which would not process crude oil from rival firms.⁴⁶

The only consistent opposition came from the Finance Ministry. After initially backing down in the face of unified support for additional financial support for the German industrial consortium in August 1935, the ministry dug in its heels when Ferrostaal requested guarantees a few months later for a further 15,000,000 RM of expenditures (including royalty payments to the Iraqi government, which the Italians could no longer cover following the outbreak of the Second

Italo-Abyssinian War).⁴⁷ As Finance Minister Johann Ludwig von Krosigk explained to Schacht in December 1935, expanding the Third Reich's financial exposure in Iraq made economic sense only if the German group within the BOD achieved majority control of the company, whereas the plan proposed by Ferrostaal left the German industrial consortium with only a 33 percent stake. The low quality of the oil discovered in the BOD's concession was another impediment. Even assuming it was possible to build a thousand-kilometer railway capable of transporting sufficient quantities of oil to the Mediterranean coast, the BOD's higher operating costs would put it at a disadvantage compared with the capital-rich IPC, which would redouble its efforts to throttle its competitor, especially if the BOD tried to move excess oil to the Persian Gulf to compete for markets beyond Europe.⁴⁸

A meeting of key officials at the Economics Ministry in December 1935 failed to reach a consensus.⁴⁹ The Finance Ministry remained skeptical, while the Economics Ministry, the Naval High Command, and the Foreign Office continued to support a German takeover of the BOD in spite of the mounting costs.⁵⁰ In any event, a decision had to be made soon. The Germans had the option to acquire a controlling interest in the company along with 50 percent of its future oil production in concert with British and American partners, including the independent oilman William Rhodes Davis, who would subsequently play a major role in promoting the German-Mexican oil trade.⁵¹

In January 1936, Raeder tried one last time to make the case for both the strategic and commercial viability of the BOD to Krosigk. The admiral claimed that the BOD's concession could produce up to three million tons of crude oil per year, one-third of which would go to Germany, at a cost of only a pound per ton, quickly amortizing the costs of building the necessary tankers and storage facilities. Also, recent technological advances meant that the heavy oil from the BOD concession could be refined into expensive fuels and lubricants. Raeder advised that at the very least Germany hold on to its shares in the BOD for a while longer, if only to bargain them for rights to "oil territories in Central or South America, which could after examination prove to be more advantageous in terms of supplying Germany in either war or peace in view of their geographical situation."⁵²

During a meeting with Krosigk on 25 March 1936, according to naval records, Wilhelm Keppler (one of Hitler's primary economic advisers) apparently dismissed the navy's plans as "superfluous, since the German Reich would within a short amount of time cover its entire demand for oil internally." Keppler was more concerned, Raeder perceived, by the possibility that the navy might no longer be a customer for the vast quantities of expensive synthetic fuel to be produced domestically.⁵³ Keppler later disputed the navy's characterization of his position.⁵⁴ He insisted that he had broached the matter of German control

of the BOD with no less an authority than the Führer. Hitler had been skeptical of supporting a German takeover of the BOD two years before, and nothing had changed since then. As far as Hitler was concerned, Germany lacked the necessary foreign exchange, and anything short of majority control of the company was useless. Most importantly, the scheme would “incur for us the enmity of powerful international oil interests.”⁵⁵ Finally, Hitler had little incentive to goad the British, so soon after the remilitarization of the Rhineland.⁵⁶

Ultimately, the navy’s arguments proved unconvincing, and the Third Reich opted against issuing financial guarantees large enough to allow the German industrial consortium to take over the BOD.⁵⁷ The Italians had already given up in 1935. The state-owned Azienda Generale Italiana Petroli, which controlled the Italian stake in the BOD, had reassessed its position due to the threat of League of Nations oil sanctions following the invasion of Abyssinia. Italy could hardly depend on oil deliveries from Iraq when they traveled by pipeline through the French League of Nations mandate of Syria or the British mandates of Transjordan and Palestine. The Italians therefore sold their stake in the BOD to the Anglo-Iranian Oil Company and chose instead to concentrate their efforts in Albania.⁵⁸

With the Italians out of the way, there was nothing stopping the IPC from taking control of the BOD, initially by covering the “dead rent” for 1936. The Iraqi prime minister complained to Grobba that the Italians had been paid off by the Anglo-Iranian Oil Company (then 51 percent owned by the British government) with promises to continue oil deliveries during the Abyssinian War. In other words, he charged, the British government, in collusion with the oil companies, had rejected the use of oil sanctions over Italy’s brutal invasion of Abyssinia in order to facilitate Rome’s capitulation in the struggle for control of Middle Eastern oil.⁵⁹ There is no evidence to support Grobba’s claims (repeated uncritically by several historians) that the British government had been reluctant to push for sanctions less out of fear of driving Italy into an alliance with Germany than out of a desire to take control of the BOD.⁶⁰ Nevertheless, it is difficult to take issue with the verdict that the Reich abandoned the BOD less out of narrow concerns over the economic viability of the project than for broader strategic considerations.⁶¹

Ferrostaal eventually (at the end of 1936) sold off its interest in the BOD for £1,250,000 in foreign exchange and future orders to the IPC, which in turn created a subsidiary (Mosul Holdings Ltd., renamed the Mosul Petroleum Company in 1941) that acquired control of the BOD in 1937.⁶² The Naval High Command was naturally disappointed by this turn of events. The one consolation was that it might be able to use the proceeds of the sale of the German shares in the BOD for “Mexican oil rights.”⁶³ But after the sale of Ferrostaal’s shares went through, the only pledge the navy could secure from the Economics Ministry was a vague assurance that it could use the earnings to hunt for other overseas oil concessions.⁶⁴

THE SHIFT TO MEXICO, 1936–1940

German interest in acquiring an oil concession in Mexico predated the First World War. German geologists had surveyed the country as early as 1912, and the Deutsche Bank (which controlled the major independent German oil company, Deutsche Petroleum), the German Foreign Office, and the Imperial German Navy all expressed interest in securing a concession in Mexico as an alternative oil source that would allow Germany to break the Standard Oil Company's domination of the European market. In May 1914, the Mexican dictator Victoriano Huerta even offered the German ambassador a 150,000-square-kilometer concession in Tampico, which would be expropriated from its American owners, in a vain attempt to solicit German support to prop up his regime, which collapsed in July under pressure from the U.S. government.⁶⁵ (See the online version of this article for a reproduction of a period map of Mexican oil fields.)

After the BOD fiasco, the German government, even though Germany lacked the spare refinery capacity to process any crude oil besides that imported by the major oil companies, gave the navy permission in 1937 to pursue opportunities to purchase oil concessions in Latin America. This was the German navy's third and final attempt to secure its own independent source of supply before 1939. There were two provisos: the navy's efforts could "in no way disrupt the internal petroleum economy," and the Third Reich would not consider providing support to any endeavor involving "politically unreliable countries."⁶⁶ The Spanish Civil War, which began the year before, lent additional urgency to the search for new suppliers. Naval fuel consumption increased after the Germans joined "nonintervention" patrols with the British and French while supporting operations by Nationalist forces and the Condor Legion of German volunteers. Just as importantly, and also in 1937, Shell and Standard Oil of New Jersey began demanding full payment in hard currency.⁶⁷

The navy moved quickly. As early as September 1936 it had asked the German commercial attaché in Mexico City to query the Mexicans about whether they were interested in establishing a partnership between Germany and Mexico's state-owned company, Petromex, to start production on land within Mexico's national petroleum reserve.⁶⁸ The Mexicans initially appeared receptive, but negotiations had stalled by 1938, owing to skepticism on the part of the German Foreign Office and German oil companies (which worried about antagonizing their U.S. and British counterparts), as well as the reluctance of the Mexican government to conclude an intergovernmental accord with the Third Reich when domestic nationalist hostility against foreign control of Mexico's oil was running high.⁶⁹

The Mexican government's nationalization of its oil industry in March 1938—and with it the expropriation of the properties owned by U.S., British, and Dutch oil companies—afforded the Germans an unparalleled opportunity to corner

the market for Mexican oil.⁷⁰ The major oil companies had retaliated against nationalization by launching a boycott of expropriated Mexican oil, and Mexico was desperate for new customers as well as technical and financial support to continue increasing output (see table 3).⁷¹ Whatever Mexico's misgivings about the Third Reich, there were no other customers for its oil (besides independent companies that were themselves planning to sell to Germany), especially after negotiations with Italy and Japan failed. The Mexicans were in such desperate straits that they were willing to accept payment through barter. The German navy had meanwhile established a partnership with the Dresdner Bank, which was being used for "camouflage" and handled negotiations with the Mexicans through a subsidiary.⁷²

In April 1938 the Naval High Command asked the Economics Ministry to release £600,000 of the foreign exchange earned from the sale of the German shares in the BOD to purchase an oil concession in Mexico.⁷³ The German navy played fast and loose with the truth to get its way. According to the German minister in Mexico City, the Mexicans were not nearly as eager to grant a concession as the Naval High Command claimed; their problem was disposing of excess oil they already had on hand.⁷⁴ But even if a concession agreement went through, production would not start, according to the geologist Bentz, until "*the end of 1941 at the earliest.*"⁷⁵ Most importantly, the navy failed to convince its critics that Germany had more to gain than it would lose through closer ties with Mexico. The Economics Ministry had no objection to the navy continuing to buy Mexican oil, but it opposed any intergovernmental accord and rejected the navy's request for foreign exchange. Instead, it tried to convince the navy that oil autarky was within sight, while also confessing its reluctance to incur the wrath of the major

oil companies by defying their boycott of Mexico.⁷⁶

The Third Reich was dependent on the U.S. and British companies to sell them petroleum that could then be stockpiled, and for that reason Germany could not afford "to annoy" them just yet.⁷⁷

Raeder tried again in September and December 1938 through personal appeals to Göring to release the requested £600,000 to begin preparatory work. The Mexican offer was almost too good to be true. Unlike in Iraq, where the logistical challenges of moving oil from the interior to the coast were formidable, Mexico was offering participation in a state-owned concession only sixty kilometers from ports on the Atlantic coast.⁷⁸ From geological estimates completed by Bentz in 1936 and 1937, Raeder was

TABLE 3
MEXICAN OIL PRODUCTION
(THOUSANDS OF BARRELS)

1933	34,000
1934	38,172
1935	40,241
1936	41,028
1937	46,907
1938	38,506
1939	42,898
1940	44,036

Source note: Figures drawn from DeGolyer and MacNaughton, *Twentieth Century Petroleum Statistics*.

convinced that the concession in question could yield up to ten million tons of oil per year (with 20 percent going to the Mexican government), with shipments to Germany beginning a year after the start of operations.⁷⁹ All of this could be had for an expenditure of only £600,000 in foreign exchange, which on the open market would pay for a mere 150,000 tons of petroleum. Plus, Germany could sell any surplus from its operations in Mexico for hard currency. As long as Germany took the “necessary precautions,” its Mexican oil concession might even serve as a source of supply in wartime.⁸⁰

Opposition to the navy’s plans now came from a former ally—the Economics Ministry—which tried to convince the Naval High Command to abandon its quixotic efforts. During an interagency conference on 15 November 1938, the ministry warned the navy that increasing exports to Mexico to pay for imported oil could undermine Germany’s overall financial position.⁸¹ The German navy stuck to its guns, but its efforts proved fruitless; the navy and the Dresdner Bank eventually had to abandon their negotiations with Mexico City for a concession in the face of implacable opposition from the Economics Ministry, which again denied the navy’s application for the release of foreign exchange in December 1938.⁸²

There was one other possibility: the Mexicans were still sitting on copious amounts of oil and willing to sell on the basis of barter with deferred payment. Through supply contracts with the aforementioned William Davis (who owned concessions within the rich Poza Rica oil field and had been pushing for closer German-Mexican commercial relations since 1933), the German navy took full advantage of the Mexicans’ difficulties following nationalization.⁸³ In the short run, it acquired extra oil to cover its additional requirements during the Spanish Civil War. Also, Mexico quickly became an invaluable source of oil for the navy in its redoubled efforts to find more-accommodating suppliers than the major U.S. and British companies, such as Shell and Standard Oil, which had been demanding full payment in hard currency since 1937. The navy’s schemes were a thorn in the side of the major oil companies, which started making vague threats and sought to discredit Davis.⁸⁴

The major oil companies also dangled a number of carrots to keep the Third Reich from violating their boycott against Mexico. Both Standard Oil of New Jersey and Royal Dutch/Shell (the two foreign firms with the largest interests in Mexico prior to nationalization) offered to place additional commercial orders with German firms and accept partial compensation through clearing agreements.⁸⁵ In August 1938, Shell went farther and made the Third Reich an offer it could not refuse: Shell would replace any oil imported from Mexico and accept payment on a clearing basis. The navy was not fooled—Shell’s offer was a ploy to poison Germany’s relationship with Mexico, which had been a reliable partner

even during the Sudeten crisis that year. Both Standard and Shell, on the other hand, had created numerous “difficulties,” including diverting tankers heading to Germany to Britain. Mexico was also one of the few oil producers willing to accept payment in Reichsmarks, and if Germany cut ties there, it would be completely at the mercy of the major U.S. and British oil companies. Rather than knuckle under to the major companies’ blackmail, the navy pointed out that “there are in the world thousands of independent oil companies besides the majors, among which many would be ready under favorable conditions to undertake the delivery of all manner of fuels to Germany.”⁸⁶ Economics Minister Walther Funk did not dispute that his department had sought to maintain good relations with the major oil companies but countered that this had been done in accordance with Germany’s overall energy-security strategy, which stressed the fulfillment of immediate requirements.⁸⁷



Walther Funk at the Nuremberg war crimes trials

U.S. government photo

The available evidence seems to support the navy’s argument. Mexico, particularly under the left-wing president Lázaro Cárdenas, had little affinity for the Third Reich, but it had to stifle its political misgivings to make ends meet.⁸⁸ The Reich imported 649,216 tons of Mexican petroleum in 1938, compared with 281,266 tons in 1933, much of it arranged by private firms. Imports continued to rise right up to the outbreak of the Second World War. Davis’s oil company, for instance, exported during the first eight months of 1939 1,972,609 tons of Mexican oil, most of which went to Germany—by now the largest customer for Mexican petroleum products.⁸⁹ As a result, the German navy’s reserves of diesel fuel rose from 262,000 tons on 1 January 1938 to 650,000 on war’s eve (about three years’ wartime consumption), even though its share of domestic German production had not increased.⁹⁰

By the time the Second World War began, the German navy’s efforts to cover the differential between its expected wartime consumption and actual domestic production by stockpiling large quantities of imported oil had, in the assessment of one historian, been consigned “to the realm of fantasy.”⁹¹ Raeder complained that the other government departments had been “dismissive” of the navy’s suggestions, which he claimed could have provided Germany with the means to accumulate large military and civilian stockpiles. The Economics Ministry, Raeder contended in a particularly nasty missive of June 1940, had been in the pocket of the U.S. and British major oil companies, and its policies were “disastrous” for Germany’s energy security. There was no better proof of the soundness of the navy’s alternative strategy, Raeder argued, than the fact that Göring had been forced following the war’s outbreak “to withdraw petroleum from the navy and transfer it to the economy and other branches of the armed services.”⁹²

After the war, Raeder bragged that the navy had managed to stockpile roughly a million tons of petroleum before the war from a variety of sources—“most of all from Mexico.”⁹³ Was his boasting justified? Yes and no. At the onset of the Second World War, Germany’s naval fuel reserves were small compared with those of Japan after Pearl Harbor (forty-three million barrels in total—about 90 percent of which was controlled by the Imperial Japanese Navy) or even Italy in July 1940 (1,666,674 tons for all three services). These figures worked out to two years’ wartime consumption, including domestic oil production, for the Japanese navy and less than five months for the Italian navy (leaving aside army and air force requirements, and based on the rate of consumption during the first quarter of 1941, since Italy’s domestic production was minuscule).⁹⁴

German naval reserves at the start of the war were therefore much smaller in terms of volume than those of either Italy or Japan, but the German navy could at least fall back on a burgeoning domestic oil industry (both synthetic and crude), as well as a share of Romanian oil production. Japan and Italy were not so fortunate, once they lost access to overseas imports and expended their prewar reserves. Most importantly, the German navy’s position was much stronger than that of either its sister services or of the German war economy as a whole. At least some of the credit is attributable to the navy’s success in securing additional imports from Mexico before the outbreak of hostilities. The Third Reich went to war with a reserve stock of only 1,898,000 tons, which amounted to less than six months’ worth of peacetime consumption.⁹⁵ As of 25 November 1939, however, the navy alone possessed reserves of 725,000 cubic meters (cbm—i.e., 6.3 barrels of oil, or a little less than one ton) of diesel fuel and 382,000 cbm of fuel oil, not including 50,000 tons of diesel fuel stored abroad. On the basis of the average rate of consumption during the first three months of the war (8,100 cbm of diesel and 71,500 cbm of fuel oil), and assuming no new construction in 1940, the diesel reserves including U-boat consumption would have lasted for more than seven years, while supplies of fuel oil would suffice for five and a half months.⁹⁶ Sufficient quantities of diesel fuel for U-boats were available until 1944, but the supply of fuel oil tightened after 1940, when the navy had to start transferring some of its stocks to the German army and then the Italian navy.⁹⁷ Like the industrious ant, the navy was punished for its success by having to support unprepared grasshoppers across Germany and Italy.

RESOURCE MANAGEMENT AND HARD CHOICES

No one can deny that a war machine in the Hydrocarbon Age requires fuel, but not all fuels are created equal. Nor for that matter are the interests of consumers, even within a single nation, identical. Both historical and contemporary energy analysts would be wise to avoid a monolithic understanding of the role

of energy (strategic or otherwise) within a given society. Such an understanding has unfortunately been the case with the Third Reich. Building on the work of wartime analysts such as those of the U.S. Strategic Bombing Survey, students of Germany's prewar oil policy have focused their attention on the Third Reich's development of synthetic fuel from coal as a means of breaking Germany's dependence on overseas oil sources that were controlled by its enemies, priced in foreign exchange, and susceptible to blockade in wartime.⁹⁸

Synthetic fuel did indeed afford Germany a measure of energy independence on the eve of the Second World War, but only for certain kinds of petroleum products, namely, lighter fuels, such as gasoline. While the German army and air force enjoyed considerable benefits from prewar policies, the navy did not and was forced to pursue imaginative means of securing the diesel fuel and fuel oil it required but Germany's domestic synthetic- and crude-oil industries could not provide. The bitter feud that ensued exposed one of the contradictory tendencies at the heart of the Third Reich's supposedly totalitarian approach to rearmament—one between a dominant, "continental" faction obsessed with "autarky" and a navy that retained a "maritime" perspective.⁹⁹ Leaving aside whether its assessments of German prospects in Iraq and Mexico were justified, the navy's pursuit of an independent energy-security strategy ran afoul of the overall energy-security strategy of the Third Reich. That larger strategy sought to appease the U.S. and British oil companies in peacetime even as it stockpiled supplies and built up its synthetic-fuel industry to wage a war that would forever free Germany from its dependence on overseas raw materials—in part by expropriating the assets of the very companies with which it had traded in peacetime.¹⁰⁰

Since the German navy (aside from its U-boats) played a relatively minor role during the Second World War, it is tempting to dismiss the story of its efforts to secure oil from Iraq and Mexico during the 1930s as a historical curiosity.¹⁰¹ But this would be a mistake, for those episodes afford us insight concerning Germany's wider grand strategy. Germany did not reject a stake in the oil of Iraq or Mexico merely because of financial constraints. Starting in October 1936, around the time Ferrostaal began selling off its interest in the BOD, the Third Reich would expend 574,000,000 RM on synthetic-fuel projects (partially offset by higher duties on imported crude oil) during just the first year of the so-called Four-Year Plan of 1936.¹⁰² Compared with such astronomical sums, several million Reichsmarks in the form of industrial goods or foreign exchange appears to have been a relatively small price to pay for hundreds of thousands, if not millions, of tons of Iraqi or Mexican crude oil per year.

The problem, instead, was that the navy's ambitions clashed with the Third Reich's overarching strategy, since the latter was geared for preparing for war at

the earliest possible time. The German navy's perspective on energy security was shaped by the fact that it required years, if not decades, to design and construct platforms capable of implementing any naval strategy—be it a *guerre de course* using cruisers or a “Mahanian” concept centered on capital ships. The navy had been prepared to wait a decade between the design and commissioning of its first “pocket battleship” in 1933 (*Deutschland*); waiting a handful of years while German interests developed new oil fields in Iraq or Mexico was not a tremendous sacrifice.¹⁰³

But the Third Reich as a whole had only a narrow window of opportunity to achieve its continental objectives. This meant that decisions, especially after 1938, concerning the allocation of economic and financial resources would be made on the basis of Germany's immediate needs. Such thinking, for instance, also encouraged the German air force to prioritize the production of medium and tactical bombers over four-engine heavy bombers, even though German officers shared the prevailing strategic consensus regarding the potential efficacy of strategic bombing.¹⁰⁴ In the case of the navy, whose oil-related schemes would require considerable time to reach fruition, the Third Reich had no option but to maintain its businesslike relationship with the U.S. and British major oil companies, which had proved relatively accommodating with regard to Germany's crippling shortage of foreign exchange. Their oil might have been more expensive than that offered by either Iraq or Mexico, but it was available immediately, and its purchase did not jeopardize relations with other great powers. Within this context, even Hitler realized that the German navy's confrontational policies vis-à-vis the oil companies promised little material gain over the short run, and that at a potentially high strategic cost.

From the perspective of contemporary energy security, the example of the German navy before 1939 represents a valuable lesson in resource management in an era of tight economic and financial constraints. Force development, especially in peacetime, when a nation has yet to mobilize completely, requires hard choices about whose requirements can be met and at what cost to other national consumers. In a constrained resource environment, a policy that seeks to maximize advantage for any one service may entail costs that run contrary to interests of rival institutions. Rather than deluding themselves that it is possible to achieve security in every area, civilian and military decision makers should recognize the potential trade-offs that their decisions can have on other institutions residing under the national security umbrella. Most importantly, they must always be prepared to adjust their expectations and reconcile their parochial interests to the evolving demands and priorities of national strategy in a dynamic strategic environment.

NOTES

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1. The figures on per capita consumption are from United States Strategic Bombing Survey [hereafter USSBS], *The German Oil Industry: Ministerial Report, Team 78* (Washington, D.C.: U.S. Government Printing Office [hereafter GPO], 1945), p. 7. The specific chemical properties of various kinds of crude oil affect the volume of space it occupies. One ton of oil can fill between six and eight barrels, depending on its gravity and viscosity. For the sake of clarity, throughout this study, one ton of oil equals seven barrels of oil, and vice versa.
2. One of the measures that mitigated the effects of the blockade in the First World War was a relatively successful effort at stockpiling petroleum before the war. The 343,000 tons accumulated equaled 10 percent of Germany's wartime consumption. The key assessment of oil's strategic role during the First World War remains Ferdinand Friedensburg, *Das Erdöl im Weltkrieg* (Stuttgart, Ger.: Ferdinand Enke Verlag, 1939), esp. pp. 53–58 (Allied blockade measures), 69–80 (Germany's petroleum supply during the war), and 121–28 (oil's influence over the war's outcome).
3. *Foreign exchange* refers to assets held by a nation in foreign currencies. Imports usually require payment in either the currency of the exporting nation or currencies that are freely convertible into others. Because it tends to keep its value and is both a reliable store of wealth and a trusted medium of exchange, a convertible currency (or gold)—often referred to as a hard currency—is purchased by national banks as a “reserve currency” to back up a local currency or liabilities.
4. Reichs-Kredit-Gesellschaft AG, “Treibstoffwirtschaft in der Welt und in Deutschland,” April 1938, T-84/51 (EAP 66-c-2-10/22), National Archives and Records Administration, College Park, Md. [hereafter NARA].
5. From 1924 to 1933, one U.S. dollar was worth on average four Reichsmarks, while one British pound fetched about twenty Reichsmarks until 1931 (when Britain went off the gold standard). After taking power, the National Socialists set an artificially high exchange rate to facilitate imports, in spite of Germany's trade deficits. Between 1933 and 1939, one dollar equaled 2.5 RM and one pound about 12 RM. Harold Marcuse, *Historical Dollar-to-Marks Currency Conversion Page*, www.history.ucsb.edu/faculty/marcuse/projects/currency.htm.
6. Additional factors exacerbating Germany's financial difficulties were international antipathy to the Third Reich for its suspension of repayment of foreign debts and for its brutality, as well as emigration by persecuted political and minority groups (especially German Jews). During the first major economic crisis of the regime, in the summer of 1934, total foreign currency reserves sufficed to pay for only one week's worth of imports. Williamson Murray, *The Change in the European Balance of Power, 1938–1939: The Path to Ruin* (Princeton, N.J.: Princeton Univ. Press, 1984), pp. 4–17; Adam Tooze, *The Wages of Destruction: The Making and Breaking of the Nazi Economy* (New York: Viking, 2006), pp. 37–134, esp. 49–50, 68–86.

7. Besides Murray's and Tooze's books, the preceding discussion is drawn from Anand Toprani, "Oil and Grand Strategy: Great Britain and Germany, 1918–1941" (PhD diss., Georgetown University, 2012), pp. 346–408; USSBS, *The Effects of Strategic Bombing on the German War Economy* (Washington, D.C.: GPO, n.d.), pp. 73–78; USSBS, *German Oil Industry*; USSBS, *Oil Division: Final Report* (Washington, D.C.: GPO, 1945); Anthony Krammer, "Fueling the Third Reich," *Technology and Culture* 19, no. 3 (1978), pp. 394–422; and Raymond Stokes, "The Oil Industry in Nazi Germany, 1936–1945," *Business History Review* 59, no. 2 (Summer 1985), pp. 254–77.
8. Dietrich Eichholtz, *Deutsche Politik und rumänisches Öl, 1938–1941: Eine Studie über Erdölimperialisumus* (Leipzig, Ger.: Leipziger Universitätsverlag, 2005), pp. 13–16.
9. David Haglund, "'Gray Areas' and Raw Materials," *Inter-American Economic Affairs* 36, no. 3 (1982), p. 34. For more-detailed discussion, see H. W. Arndt, *The Economic Lessons of the Nineteen-Thirties* (London: Routledge, 1963), pp. 176–206, and Günther Reimann, *The Vampire Economy: Doing Business under Fascism* (New York: Vanguard, 1939).
10. Some companies did agree, however, to keep a portion of their profits in Germany and used them instead to purchase German industrial goods. Mira Wilkins, *The Maturing of Multinational Enterprise: American Business Abroad from 1914 to 1970* (Cambridge, Mass.: Harvard Univ. Press, 1974), pp. 237–38.
11. The key source on the BOD is Helmut Mejcher, *Die Politik und das Öl im Nahen Osten: I. Der Kampf der Mächte und Konzerne vor dem Zweiten Weltkrieg* (Stuttgart, Fed. Rep. Ger.: Klett-Cotta, 1980), pp. 102–45, but it suffers from the defects of a narrow source base—Mejcher relied largely on the records of the German Finance Ministry, which means that his narrative omits certain key details and is sometimes overly speculative. See also Mejcher, "The International Petroleum Cartel (1928), Arab and Turkish Oil Aspirations and German Oil Policy towards the Middle East on the Eve of the Second World War," in *Oil, the Middle East, North Africa and the Industrial States*, ed. Klaus Jürgen Gantzel and Helmut Mejcher (Paderborn, Fed. Rep. Ger.: F. Schöningh, 1984), pp. 27–59, esp. 54–57, and Mejcher, *The Struggle for a New Middle East in the 20th Century: Studies in Imperial Design and National Politics* (Piscataway, N.J.: Transaction, 2007), pp. 371–82.
12. Klaus Volland, *Das Dritte Reich und Mexiko: Studien zur Entwicklung des deutsch-mexikanischen Verhältnisses 1933–1942 unter besonderer Berücksichtigung der Ölpolitik* (Frankfurt am Main, Fed. Rep. Ger.: Peter Lang, 1976), pp. 83–174, is indispensable on the role of oil in German-Mexican relations. Lorenzo Meyer, *Mexico and the United States in the Oil Controversy, 1917–1942* (Austin: Univ. of Texas Press, 1977), pp. 173–216 (pp. 209–13 for Mexican trade with the Axis), is the best work on the Mexican nationalization and its immediate aftermath from the Mexican perspective.
13. The primary studies of the German navy's oil policy during the Third Reich are Wilhelm Meier-Dörnberg, *Die Ölversorgung der Kriegsmarine 1935 bis 1945* (Freiburg, Fed. Rep. Ger.: Rombach, 1973), passim, esp. pp. 31–44 for the navy's efforts in Iraq and Mexico, and Hans-Jürgen Zetzsche, "Logistik und Operationen: Die Mineralölversorgung der Kriegsmarine im Zweiten Weltkrieg" (PhD diss., Christian-Albrechts-Universität zu Kiel, 1986), pp. 18–102, esp. 46–72. Erich Raeder's memoirs are broadly accurate but unreliable in their particulars: *Mein Leben: Von 1935 bis Spandau* (Tübingen-Neckar, Fed. Rep. Ger.: Verlag Fritz Schlichtemayer, 1957), pp. 58–65. Titus Kockel utilized previously unavailable sources, such as the records of the Bundesanstalt für Geowissenschaften und Rohstoffe [hereafter BGR] in his studies of prewar German oil policy, but his findings concerning the navy's efforts in Iraq and Mexico are derived largely from the existing secondary literature: Kockel, "Geologie und deutsche Ölpolitik: Die frühe Karriere des Erdölgeologen Alfred Theodor Bentz" (PhD diss., Technische Universität Berlin, 2003); Kockel, *Deutsche Ölpolitik* (Berlin: Akademie Verlag, 2005); and Dietrich Eichholtz and Titus Kockel, *Von Krieg zu Krieg: Zwei Studien zur deutschen Erdölpolitik in der Zwischenkriegszeit* (Leipzig, Ger.: Leipziger Universitätsverlag, 2008), pp. 151–60.
14. Military History Research Unit [hereafter MGFA], *Germany and the Second World War*, vol. 1, *The Build-Up of German Aggression* (Oxford, U.K.: Clarendon, 1990), pp. 458–62.

15. Zetzsche, "Logistik und Operationen," pp. 46–49.
16. Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 31.
17. Raeder to Göring, "Oelbedarf der Kriegsmarine," 4 September 1936, T-77/101 (Wi/IF 5.433), NARA.
18. Armed Forces High Command, Defense-Economy Staff, "Akttenotiz auf Grund einer Besprechung mit Herrn Ministerialrat Dr. Fetzer OKM betr. Oelversorgung," 17 June 1938, T-77/683 (Wi/VI. 356), NARA. Much of the increase since 1933 was attributable to the 1935 Anglo-German Naval Agreement, which authorized the German navy to build up a fleet with a total tonnage 35 percent that of the Royal Navy.
19. MGFA, *Build-Up of German Aggression*, pp. 456–72.
20. Michael Salewski, *Die deutsche Seekriegsleitung* (Frankfurt am Main, Fed. Rep. Ger.: Bernard & Graefe, 1970–75), vol. 1, pp. 38–65; MGFA, *Build-Up of German Aggression*, pp. 472–79.
21. Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 29–30; MGFA, *Build-Up of German Aggression*, pp. 479, 500; Tooze, *Wages of Destruction*, pp. 287–304, esp. 288–89, 294–95; Zetzsche, "Logistik und Operationen," pp. 58–60. Both Göring and elements of the Wehrmacht tried and failed to circumvent Hitler's order to prioritize the navy's raw materials requirements; Jost Dülffer, *Weimar, Hitler und die Marine: Reichspolitik und Flottenbau, 1920–1939* (Düsseldorf, Fed. Rep. Ger.: Droste Verlag, 1973), pp. 509–12.
22. The best source on prewar German naval construction and strategy is still Dülffer's *Weimar, Hitler und die Marine*, esp. pp. 419–34, for the economic context of naval rearmament in the wake of the Four-Year Plan of 1936. Unfortunately, Dülffer gives petroleum policy short shrift. He acknowledges that the German navy was "skeptical" of the ambitions of the Four-Year Plan with regard to energy independence and would have preferred that the extra resources be committed to rearmament rather than domestic raw material production (pp. 430–31). But Dülffer mistakenly claims that since the Four-Year Plan did not hinder naval construction, Raeder saw no reason to interfere with government policy—an unjustified conclusion, as we shall see.
23. Zetzsche, "Logistik und Operationen," pp. 52–56, 58.
24. Wulf, "Die Ölversorgung Deutschlands in der Marine," n.d. [ca. 1938], enclosed with "Unterlagen (Heft 2) K. Kap. Assmann," n.d., T-1022/4076 (PG 33957), NARA.
25. German Navy, Defense-Economy Office, "Bedeutung der deutschen Mineralölversorgung für die Kriegsmarine," 5 August 1940, T-1022/1772 (PG 32209), NARA. Before the war, most of Germany's oil imports originated in the United States, Latin America, and the Dutch East Indies.
26. Besides the aforementioned secondary sources, the following discussion of the German navy's unsuccessful efforts in Iraq and Mexico is based largely on the contemporaneous summaries included in Raeder to Keitel et al., "Ölversorgung der Kriegsmarine," 6 May 1940; and Raeder to Funk et al., 27 June 1940; both in T-1022/3405 (PG 31762/B), NARA.
27. Manfred Rasch, "Zur Mineralölpolitik der Kriegsmarine: Dokumente aus dem Jahre 1935," *Militärgeschichte Mitteilungen* 37, no. 1 (1985), pp. 71–101, esp. 82–85. See also Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 33–34.
28. Corporate relations are summarized in Dennis Kumetat, "The Failure of German Business and Economic Policy towards Iraq in the 1930s: The Case of the German Arms and Steel Company Otto Wolff, Cologne," *Al-Abhath: Journal of the American University of Beirut* 55/56 (2007/2008), pp. 147–73.
29. Owing to space constraints, it is impractical to delve deeply into the intricacies of the Reich's relationship with the BOD. The complicated history between 1930 and 1936 is summarized in Jäger, "Memorandum über die Mosul Oil Fields Ltd.," 22 January 1942, enclosed with Jäger to Griebel, "Iraq," 23 January 1942, T-77/660 (Wi/Vi. 142), NARA. The 22 January memo appears to be based on an earlier paper prepared by Ferrostaal to justify its request for government financial assistance in taking over the BOD: "Zusammenfassende Darstellung über Mosul Oil Fields Ltd.," 18 November 1935, R2/16816, Bundesarchiv, Berlin-Lichterfelde [hereafter BA-B]. The key documents may be found

- in R 2/16815–16816, BA-B; R 92244–92248, Politisches Archiv des Auswärtiges Amtes [hereafter PAAA]; and T-77/645 (Wi/Vi. 13a, b), NARA. The financial composition of both the BOD and its subsidiary Mosul Oil Fields is summarized in “B.O.D. Co. Ltd.” and “Mosul Oil Fields, Ltd.,” n.d. [after August 1936], R 8119/8369, BA-B. For secondary-source accounts, besides Mejcher, *Die Politik und das Öl*, see Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 34–39, and Zetzsche, “Logistik und Operationen,” pp. 65–68. It is still worth consulting Fritz Grobba’s account of German participation in the BOD, in spite of its factual errors, if only because he was a direct participant in those events: Fritz Grobba, *Männer und Mächte im Orient: 25 Jahre diplomatischer Tätigkeit im Orient* (Göttingen, Fed. Rep. Ger.: Musterschmidt-Verlag, 1967), pp. 85–94.
30. Today these companies are known as BP, Shell, Total, and (for the two Standard Oils) ExxonMobil.
 31. Litten, “Erdöl im Irak,” 31 January 1930, R 92244, PAAA. See also “Niederschrift über die Bedeutung der deutschen Quote in der British Oil Development Co.,” 25 May 1931, R 92245, PAAA; and Grobba, “Weltmarktperspektiven für Irak-Petroleum,” 9 February 1933, R 92246, PAAA.
 32. The history of Iraq’s oil industry during the interwar era, as well as the role of the IPC in stifling oil production, is covered in Walter Adams, James Brock, and John Blair, “Retarding the Development of Iraq’s Oil Resources: An Episode in Oleaginous Diplomacy, 1927–1939,” *Journal of Economic Issues* 28, no. 1 (1993), pp. 69–93; John Blair, *The Control of Oil* (New York: Pantheon, 1976), pp. 80–85; Gregory Nowell, *Mercantile States and the World Oil Cartel, 1900–1939* (Ithaca, N.Y.: Cornell Univ. Press, 1994), pp. 270–75; Edith Penrose and E. F. Penrose, *Iraq: International Relations and National Development* (London: Ernest Benn, 1978), passim; and Daniel Silverfarb, *Britain’s Informal Empire* (New York: Oxford Univ. Press, 1986), pp. 94–105.
 33. Grobba, “Erdöl im Irak,” 19 March 1930[?], R 92244, PAAA.
 34. IG Farben’s controversial role in synthetic-fuel production before and during the Third Reich is assessed in Peter Hayes, *Industry and Ideology: IG Farben in the Nazi Era* (Cambridge, U.K.: Cambridge Univ. Press, 1987), pp. 36–42, and Thomas Parke Hughes, “Technological Momentum in History: Hydrogenation in Germany, 1898–1933,” *Past and Present* 44, no. 1 (1969), pp. 106–32.
 35. Breitfeld, “Memorandum,” 28 April 1930; and Minute for Curtius, “Stehen die deutschen Warenlieferungen für die British Oil Development Company (B.O.D.) im Irak im rechten Verhältnis zu dem politischen Risiko?,” 6 May 1930; both in R 92244, PAAA.
 36. Minister of Economics, “Finanzierung der deutschen Beteiligung an der British Oil Development Co.,” 10 June 1932, R 92245, PAAA; Finance Ministry, “Irak-Oel-Konsortium,” 27 February 1934, R2/16815, BA-B.
 37. Brown had initially tried to arrange financing with the support of the Reich on his own in early 1932, but because of the high-risk nature of oil development the Minister of Economics advised him to seek additional partners while the government studied the issue more carefully; Warmbold to Brown, 29 April 1932, R 2/16815, BA-B; Grobba, “Finanzierung des deutschen Anteils an der B.O.D.,” 26 May 1932, R 92245, PAAA. Information about Brown is meager, but his activities in Iran during the 1920s are examined in Rashid Khatib-Shahidi, *German Foreign Policy towards Iran before World War II: Political Relations, Economic Influence and the Bank of Persia* (London: Tauris, 2012), pp. 47ff, 182.
 38. Mejcher, *Die Politik und das Öl*, pp. 108–17. The composition of the German consortium is summarized in “Irak—Transaktion,” n.d. [ca. 1932], R 2/16815, BA-B. For a good summation of the state of affairs at the beginning of 1934, see Koehler, “Deutsche Beteiligung an der Oelkonzession westlich des Tigris im Irak,” 10 January 1934, R 3101/20320, BA-B. See also Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 35ff.
 39. Besides the sources below, see Mejcher, *Die Politik und das Öl*, pp. 125–45.
 40. Hitler had announced his commitment to rearmament, conscription, and the “occupation of living space in the east” as well as its “ruthless Germanization” to the leaders of the German army and navy in February 1933—barely a week after taking office; Thilo

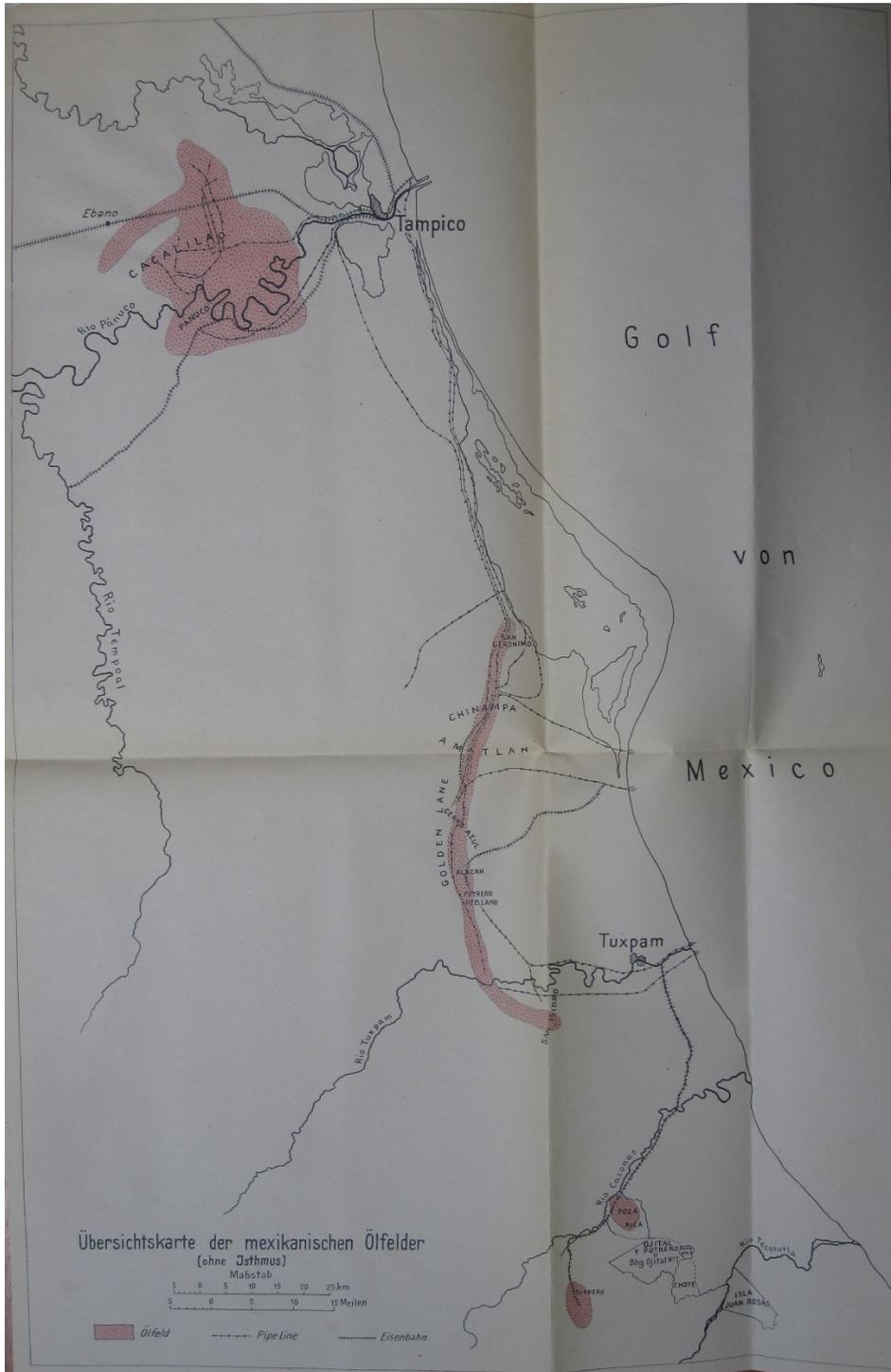
- Vogelsang, "Neue Dokumente zur Geschichte der Reichswehr," *Vierteljahrshefte für Zeitgeschichte* 2, no. 4 (1954), pp. 434–36. A few months later, the new government adopted an ambitious eight-year military spending program that would consume between 5 and 10 percent of gross domestic product per annum; Tooze, *Wages of Destruction*, pp. 53–55. The growth in the size of the navy was considerable—a fivefold rise in manpower (16,450 to 78,892) and twelvefold budgetary increase (187,000,000 RM to 2,389,000,000 RM) between 1932 and 1939; MGFA, *Build-Up of German Aggression*, pp. 456–57.
41. Bentz, "Geologische Begutachtung der Erdölkonzession der British Oil Development Cy. Ltd. Mosul (Iraq)," 18 June 1935, BGR 49074.
 42. Mejcher, *Die Politik und das Öl*, p. 137.
 43. Minister of Economics, "Deutsche Beteiligung an der Oelkonzessionsgesellschaft im Irak" 26 June 1935, R 92246, PAAA; Minister of Finance, "Deutsche Beteiligung an der Mossul Oil Fields Co Ltd," 31 July 1935, R2/16816, BA-B.
 44. For that reason, he was also a major backer of the German synthetic-fuel industry. For background on Schacht's policies, see Tooze, *Wages of Destruction*, pp. 86–96, 115–20.
 45. Schacht to Krosigk, "Deutsche Beteiligung an der BOD," 13 July 1935, R 92246, PAAA; Grobba to the Foreign Office, "Eisenbahnbau der B.O.D. von ihren Ölfeldern nach Tel-Kotchek," 19 July 1935, T-77/645 (Wi/Vi. 13a, b), NARA; Pelte to Krosigk, "Deutsche Beteiligung an der BOD," 29 July 1935, R 2/16816, BA-B; Nasse and Härtig, "Deutsche Beteiligung an der Ölgewinnung im Irak," 23 August 1935, R2/16816, BA-B; Schacht to Krosigk, "Deutsche Beteiligung an der B.O.D.," 6 December 1935, R 92247, PAAA. See also Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 36–38.
 46. Armed Forces Office, Defense-Economy Bureau, "Vortragsnotiz über Einfuhr von Iraköl," 6 August 1935, T-77/645 (Wi/Vi. 13a, b), NARA.
 47. Nasse and Härtig, "Deutsche Beteiligung an der Ölgewinnung im Irak"; Minister of Finance, "Neuanträge der Ferrostaal," 6 November 1935; both in R2/16816, BA-B.
 48. Krosigk to Schacht, "Deutsche Beteiligung an der BOD," 14 December 1935, T-77/645 (Wi/Vi. 13a, b), NARA.
 49. Schniewind to Prüfer, Thomas, Fetzer, and Nasse, "Deutsche Beteiligung an der BOD," 10 December 1935, R 92247, PAAA.
 50. One sticking point was whether Ferrostaal had sufficient funds to take over the BOD and pursue construction of both a railway and pipeline to the Mediterranean; Griebel, "Aktenvermerk über eine Besprechung im R.Wi.Min. am 16.12.1935," 28 December 1935, T-77/645 (Wi/Vi. 13a, b), NARA. A representative of Ferrostaal's sister company assured the Armed Forces Office that neither the political nor the financial obstacles were insurmountable. Thomas to Reusch, 25 September 1935; Reusch to Thomas, 1 October 1935; and Thomas to Reusch, 9 October 1935; all in T-77/645 (Wi/Vi. 13a, b), NARA.
 51. Finance Ministry, "Deutsche Beteiligung an der Mosul Oil Fields: Besprechung in RWiM v. 23.9.36," 24 September 1936, R2/16816, BA-B. Davis sweetened the deal by offering to provide oil from alternative sources on a clearing basis until production began in Iraq and to refine future imports of Iraqi oil in a refinery he owned in Hamburg, which he would sell to the German navy on a long-term contract; Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 37–38.
 52. Raeder to Krosigk, "Deutsche Beteiligung an der BOD," 13 January 1936; "Ausführungen zu dem Projekt Mosul Oil Field Company," enclosed with Raeder to Krosigk, "Deutsche Beteiligung an der BOD," 29 January 1936, R 2/16816, BA-B; both reprinted in Mejcher, *Die Politik und das Öl*, pp. 235–46 (see also pp. 138–40, 142–43). Trading shares of Iraqi oil for Latin American oil appears to have been the preference of Schacht as well; Ritter, "Aktenvermerk," 3 December 1936, T-120/2433, NARA.
 53. Raeder to Keitel et al., "Ölversorgung der Kriegsmarine."
 54. No full record of the meeting exists. A minute to Krosigk makes no mention of Keppler's position and only summarizes the navy's position. Minute for Krosigk, 26 March 1936, R 2/16816, BA-B.
 55. Keppler dismissed Raeder's criticism, surmising that the artless admiral had clearly

- been led astray by someone who was “at the very least careless with the trust of others”; Keppler to Funk, 15 May 1940, enclosed with Funk to Raeder, 6 June 1940, T-77/211 (Wi/IF 5.1082), NARA. See also Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 43 note 120.
56. Finance Ministry, “Irak-Oel-Konsortium”; Mejcher, *Die Politik und das Öl*, pp. 124–25.
57. The Finance Ministry was not convinced. Until a way could be found to move the oil via pipeline, the operating costs of the BOD would be exorbitant; anyway, too little oil could be transported to the Mediterranean for the company to be profitable; minute for Krosigk, “Irak Industriekonsortium: Deutsche Beteiligung an der BOD,” 31 January 1936, R 2/16816, BA-B. The disagreements between the Naval High Command and the Finance Ministry are summarized in Raeder to Krosigk et al., “Ölversorgung der Kriegsmarine,” 27 June 1940, T-1022/3405 (PG 31762/B), NARA. Schacht’s enthusiasm also began to wane, because of his mistrust for Davis. Finally, the legality of Ferrostaal’s plan was in question, owing to a lawsuit in London; Mejcher, *Die Politik und das Öl*, pp. 143–45.
58. Mejcher, *Die Politik und das Öl*, p. 143; Ruprecht, “Italien und das albanische Erdöl,” *Militär-Wochenblatt* 125, no. 33 (14 February 1941).
59. Grobba to the Foreign Office, “Inhalt der Iraq Petroleum Company an der British Oil Development Company,” 23 October 1936, enclosed with Foreign Office to the Economics Ministry et al., 30 October 1936, R 2/16816, BA-B, reprinted in Mejcher, *Die Politik und das Öl*, pp. 247–53; Grobba, *Männer und Mächte*, p. 94.
60. Helmut Mejcher, “Die britische Erdölpolitik im Nahen Osten, 1914–1956,” *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* 59, no. 3 (1972), p. 368; Mejcher, *Kampf der Mächte und Konzerne vor dem Zweiten Weltkrieg*, p. 143; Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 38–39; Zetzsche, “Logistik und Operationen,” pp. 66–67. Unfortunately, the relevant volume of the history of BP deals with the BOD only superficially and does not mention the Second Italo-Abyssinian War; James Bamberg, *The History of the British Petroleum Company*, vol. 2, *The Anglo-Iranian Years, 1928–1954* (Cambridge, U.K.: Cambridge Univ. Press, 1994), pp. 162–70.
61. Mejcher, *Die Politik und das Öl*, p. 145.
62. Jäger, “Memorandum über die Mosul Oil Fields Ltd.” See also Bamberg, *Anglo-Iranian Years*, p. 170, and A. E. Gunther, “The German War for Crude Oil,” *Petroleum Times* (27 March 1948), pp. 319–20.
63. The German government tried to convince Ferrostaal either to maintain a minority interest or to sell its stake to another group of German firms. But the suicide of Thomas Brown (who had handled negotiations with the other partners in the BOD) and Ferrostaal’s lack of interest in the oil business ruled out further German participation. Finance Ministry, “Deutsche Beteiligung an der Mosul Oil Fields,” 24 September 1936.
64. The Economics Ministry had agreed to this concession in a letter to the Naval High Command of 22 March 1937, which is referenced in Raeder to Göring, “Erwerb von Erdölkonzessionen in Mexiko,” 9 September 1938, T-77/418 (Wi/IF 5.3326), NARA.
65. The German minister to Mexico blanched at the thought of provoking the United States in such a manner and quickly declined the offer; A. A. Fursenko, *The Battle for Oil: The Economics and Politics of International Corporate Conflict over Petroleum* (Greenwich, Conn.: JAI, 1990), pp. 149, 156–57; Friedrich Katz, *The Secret War in Mexico: Europe, the United States, and the Mexican Revolution* (Chicago: Univ. of Chicago Press, 1981), pp. 203–205, 240–43. The Deutsche Bank’s corporate strategy between 1906 and 1912 is summarized in Nowell, *Mercantile States and the World Oil Cartel*, pp. 61–72. Nowell does not mention the role of Mexico; in his account, the still-undiscovered oil fields of Mesopotamia (Iraq) would be the instrument by which Germany freed itself from dependence on U.S.-controlled oil.
66. “Besprechung über die Frage des Erwerbs von Erdölkonzessionen in Süd- und Mittelamerika am 14. April 1937,” BGR 49022; German Foreign Office to the German Legation in Mexico, 25 May 1937, quoted in Volland, *Das Dritte Reich und Mexiko*, pp. 89–90.

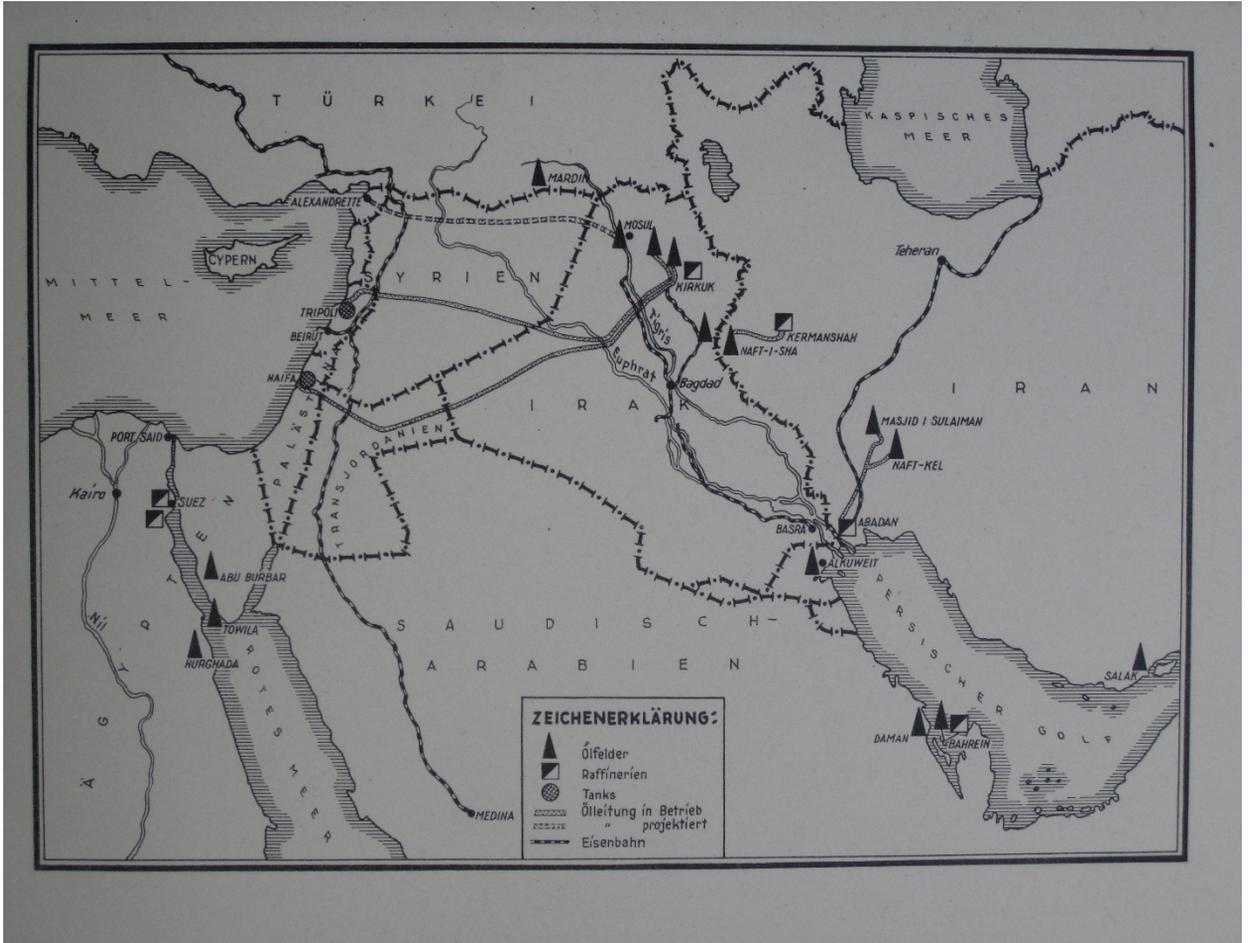
67. Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 32.
68. Weissmüller to Burandt, "Petroleum Concession in Mexico," 26 September 1936, enclosed with Fetzer to the Foreign Ministry, "Petroleum Concession in Mexico," 21 October 1936, document no. 619, in *Auswärtiges Amt, Documents on German Foreign Policy, 1918–1945, Series C* (Washington, D.C.: GPO, 1957–1983), vol. 5, pp. 1130–32.
69. Volland, *Das Dritte Reich und Mexiko*, pp. 86–99. Relations had cooled between the two countries between 1936 and 1938 over the Spanish Civil War and Mexican criticism of Germany's aggressive foreign policy. *Ibid.*, pp. 43–82.
70. Besides the sources cited below, the following discussion is drawn from *ibid.*, pp. 103–54.
71. Clayton Koppes, "The Good Neighbor Policy and the Nationalization of Mexican Oil: A Reinterpretation," *Journal of American History* 69, no. 1 (1982), pp. 62–81; Lorenzo Meyer, "The Expropriation and Great Britain," in *The Mexican Petroleum Industry in the Twentieth Century*, ed. Jonathan Brown and Allan Knight (Austin: Univ. of Texas Press, 1992), pp. 154–72; Volland, *Das Dritte Reich und Mexiko*, pp. 116–22.
72. Raeder to Göring, "Erwerb von Erdölkonzessionen in Mexiko"; Raeder to Keitel et al., "Ölversorgung der Kriegsmarine." For the role of the Dresdner Bank, see Christopher Simpson, ed., *War Crimes of the Deutsche Bank and the Dresdner Bank: Office of the Military Government (U.S.) Reports* (New York: Holmes & Meier, 2002), pp. 284–87.
73. Raeder to Keitel et al., "Ölversorgung der Kriegsmarine."
74. Volland, *Das Dritte Reich und Mexiko*, p. 104.
75. Funk, "Stellungnahme . . .," 6 June 1940, enclosed with Funk to Raeder, 6 June 1940 [emphasis original].
76. Armed Forces High Command, Defense-Economy Staff, "Aktennotiz auf Grund einer Besprechung mit Herrn Ministerialrat Dr. Fetzer OKM betr. Oelversorgung"; Volland, *Das Dritte Reich und Mexiko*, pp. 104–105, 131–32.
77. The companies had apparently been "complaining" about the navy's concession hunting. Raeder to Keitel et al., "Ölversorgung der Kriegsmarine."
78. The German navy had declined an undeveloped oil concession held by Otto Wolff AG in Ecuador, precisely because it was only interested in oil fields near the Atlantic coast and considered it "uneconomical" to transport oil from the Pacific coast since it would have to travel through the Panama Canal; "Besprechung am 12. November 1937 über Erdölkonzession der Firma Otto Wolff in Ecuador," 18 November 1937, BGR 49022. For further details, see Eichholtz and Kockel, *Von Krieg zu Krieg*, pp. 171–79.
79. Bentz was enamored of the prospects around Poza Rica and the Isthmus of Tehuantepec. He ruled out territories along the "Golden Lane" in Veracruz, where starting in 1908 prospectors had discovered massive oil fields that were now nearing exhaustion, as well as more risky territories under state control that would require extensive investment in terms of exploration or infrastructure development; "Bericht ueber die Moeglichkeiten von Erdoelbeteiligungen in Mexiko," 30 October 1936, BGR 49035; "Bericht über den Stand der Verhandlungen über Ölmöglichkeiten in Mexiko," 10 November 1937, BGR 49038; "Beteiligungsmöglichkeiten an mexikanischen Ölfeldern (Reise September/Okttober 1937)," 15 January 1938, BGR 49044. Bentz also agreed to serve as the navy's representative in negotiations with the Mexican government; Naval High Command to Göring, "Erwerb von Erdölkonzessionen in Mexiko," 28 November 1938, enclosed with Naval High Command to the Armed Forces Command, "Erwerb von Erdölkonzessionen in Mexiko," 28 November 1938, T-77/671 (Wi/VI. 236), NARA.
80. Raeder to Göring, "Erwerb von Erdölkonzessionen in Mexiko"; Raeder to Göring, "Erwerb von Erdölkonzessionen in Mexiko [sic]," 12 December 1938, T-77/645 (Wi/VI. 13a, b), NARA. See also Armed Forces High Command, Defense-Economy Staff, "Aktennotiz auf Grund einer Besprechung mit Herrn Ministerialrat Dr. Fetzer OKM betr. Oelversorgung"; and Raeder to Keitel et al., "Ölversorgung der Kriegsmarine." Until the summer of 1938, the German navy's wartime planning focused primarily on the demands of waging a conflict against France or the Soviet Union;

- Salewski, *Deutsche Seekriegsleitung*, pp. 20–38. Even after war against Britain became likely, the navy continued to hope that Latin America could serve as a staging area; Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 44–48. That the German navy might continue to purchase supplies of oil from overseas in wartime was not out of the question if it could do so through Italy. In fact, as of November 1939, the navy still had fifty thousand tons of diesel stored abroad, primarily in Spain and the Soviet Union. Moreover, the navy hoped to purchase oil from Mexico or the United States using surreptitious dollar reserves in Switzerland and New York (\$476,200, plus an additional \$711,300 stored at home); attachment to Grassman to the Naval Warfare Staff, 6 December 1939, T-1022/1735 (PG 32198a), NARA.
81. Funk to the Naval High Command, 5 December 1938; Naval High Command to Funk, “Ölbezüge aus Mexiko . . .,” 27 December 1938; attachments 1, 2 to Raeder to Funk et al., 27 June 1940. See also Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 41–42.
82. The Naval High Command did not help its case by refusing to coordinate with the Armed Forces High Command: Raw Materials Department to Defense-Economy Staff, “Erwerb von Erdölkonzessionen in Mexiko durch OKM,” 27 September 1938; Armed Forces High Command, Defense-Economy Staff, “Devisenantrag OKM für Ölkonzessionen in Mexiko,” 30 September 1938; both in T-77/671 (Wi/VI. 236), NARA. In spite of the navy’s behavior, the Armed Forces High Command considered the proposal to be “desirable” and supported the expenditure of £600,000; Keitel, “Erwerb von Erdölkonzessionen in Mexiko,” 5 October 1938, T-77/671 (Wi/VI. 236), NARA. The navy’s secretiveness over its intentions—such as plans to refine Mexican oil in a refinery on the Spanish Canary Islands or to stockpile fuel abroad in secret depots—contributed to other agencies’ mistrust; Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 40; Zetzsche, “Logistik und Operationen,” p. 61.
83. Davis had been promoting closer economic relations between Mexico and the Third Reich since 1934 and had arranged for a geological mission to Mexico under Bentz’s leadership in 1936; Clemm to das Auswaertige Amt, “W. R. Davis, Boston,” 16 April 1936, R 92247, PAAA. For more on Davis’s early efforts, which succeeded in garnering the official German support for the construction of a refinery in Hamburg to process imported oil from Mexico, see Volland, *Das Dritte Reich und Mexiko*, pp. 83–86. According to the U.S. State Department, Davis and the German navy had agreed to the sale of 300,000 tons of Mexican oil, with payment split sixty/forty between “Askimarks” and foreign exchange; U.S. Consulate, Bremen, to the secretary of state, “The German Oil Industry,” 5 September 1938, no. 133, Record Group 59, General Records of the Department of State, 862.6363/183, NARA.
84. Not everyone in Germany trusted Davis—the Finance Ministry and Schacht did not want him to play any role in Iraq through the BOD; minute by the Finance Ministry, 26 March 1936, R2/16816, BA-B. German intelligence had its own doubts about Davis, claiming that his company’s “interests now turn more towards the French Government than the German”; Reich Main Security Office to Keppler, “Firma Davis u. Co., New York,” 11 September 1939, T-120/2677, NARA. Davis died suddenly of a heart attack in Houston in August 1941, possibly assassinated by British intelligence; William Stevenson, *A Man Called Intrepid: The Secret War* (New York: Harcourt Brace Jovanovich, 1976), pp. 289–95. For more on Davis’s colorful history, see Dale Harrington, *Mystery Man: William Rhodes Davis, Nazi Agent of Influence* (London: Brassey’s, 2001).
85. Volland, *Das Dritte Reich und Mexiko*, pp. 133–36; Zetzsche, “Logistik und Operationen,” pp. 73–80. According to the Economics Ministry, Shell and Standard had requested only a “restriction” of the oil trade with Mexico. Economics Minister Walther Funk complained that the navy had misrepresented the oil companies’ offer as a demand for the complete cessation of all oil sales with Mexico. Funk, “Stellungnahme. . .”
86. Raeder to Keitel et al., “Ölversorgung der Kriegsmarine”; Volland, *Das Dritte Reich und Mexiko*, p. 139.
87. Funk, “Stellungnahme. . .”
88. Volland, *Das Dritte Reich und Mexiko*, pp. 156–74, 199–200.

89. *Ibid.*, pp. 121, 139–40, 154–56. The Germans never followed through on their end of the barter exchange (delivery of oil tankers); Gunther, “German War for Crude Oil,” p. 319.
90. Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 41 note 111; British Chiefs of Staff Committee, Technical Sub-Committee on Axis Oil, *Oil as a Factor in the German War Effort, 1933–1945*, 8 March 1946, A.O. (46) 1, p. 84, retrieved from the Digital Library of the Combined Arms Research Library, Fort Leavenworth, Kans.
91. Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 30.
92. Raeder to Funk et al., 27 June 1940; Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, pp. 43–44; Raeder, *Mein Leben*, pp. 63–64; Zetzsche, “Logistik und Operationen,” pp. 56–57. Funk was so infuriated by Raeder’s note of 27 June 1940 that he refused to discuss the matter any further; Funk to Raeder, 11 July 1940, T-77/211 (Wi/IF 5.1082), NARA.
93. Raeder, *Mein Leben*, p. 63.
94. USSBS, *Oil in Japan’s War* (Washington, D.C.: GPO, 1946), pp. 11–16; Jack Greene and Alessandro Massignani, *The Naval War in the Mediterranean, 1940–1943* (London: Chatham, 1998), pp. 142–44. The Italians imported 1,303,328 tons of petroleum from Germany and Romania between 1940 and 1943, but even this did not suffice to maintain the Italian navy at a state of full operational readiness.
95. USSBS, *Oil Division*, p. 17.
96. The fuel oil situation would deteriorate considerably in the event of new naval construction and thereafter depend on the security of existing synthetic facilities, further expansion of synthetic output, and continued imports from overland suppliers. Attachment to Grassman to the Naval Warfare Staff, 6 December 1939.
97. Chiefs of Staff Committee, *Oil as a Factor in the German War Effort*, p. 84.
98. See Robert Goralski and Russell Freeburg, *Oil & War: How the Deadly Struggle for Fuel in WWII Meant Victory or Defeat* (New York: Morrow, 1987), pp. 13–26, which was one of the primary sources for Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York: Simon & Schuster, 1991), pp. 328–50.
99. Meier-Dörnberg, *Ölversorgung der Kriegsmarine*, p. 43.
100. See Anand Toprani, “Germany’s Answer to Standard Oil: The Continental Oil Company and Nazi Grand Strategy, 1940–1942,” *Journal of Strategic Studies* 37, nos. 6–7 (December 2014), pp. 949–73.
101. Much of the navy’s ineffectiveness stemmed from its leadership’s disparagement of naval aviation and submarines in favor of surface ships before the war. Murray, *Change in the European Balance of Power*, pp. 45–47.
102. USSBS, *German Oil Industry*, p. 23.
103. MGFA, *Build-Up of German Aggression*, pp. 457–58.
104. Williamson Murray, “The Luftwaffe before the Second World War: A Mission, a Strategy?,” *Journal of Strategic Studies* 4, no. 3 (1981), pp. 261–70, esp. 268.



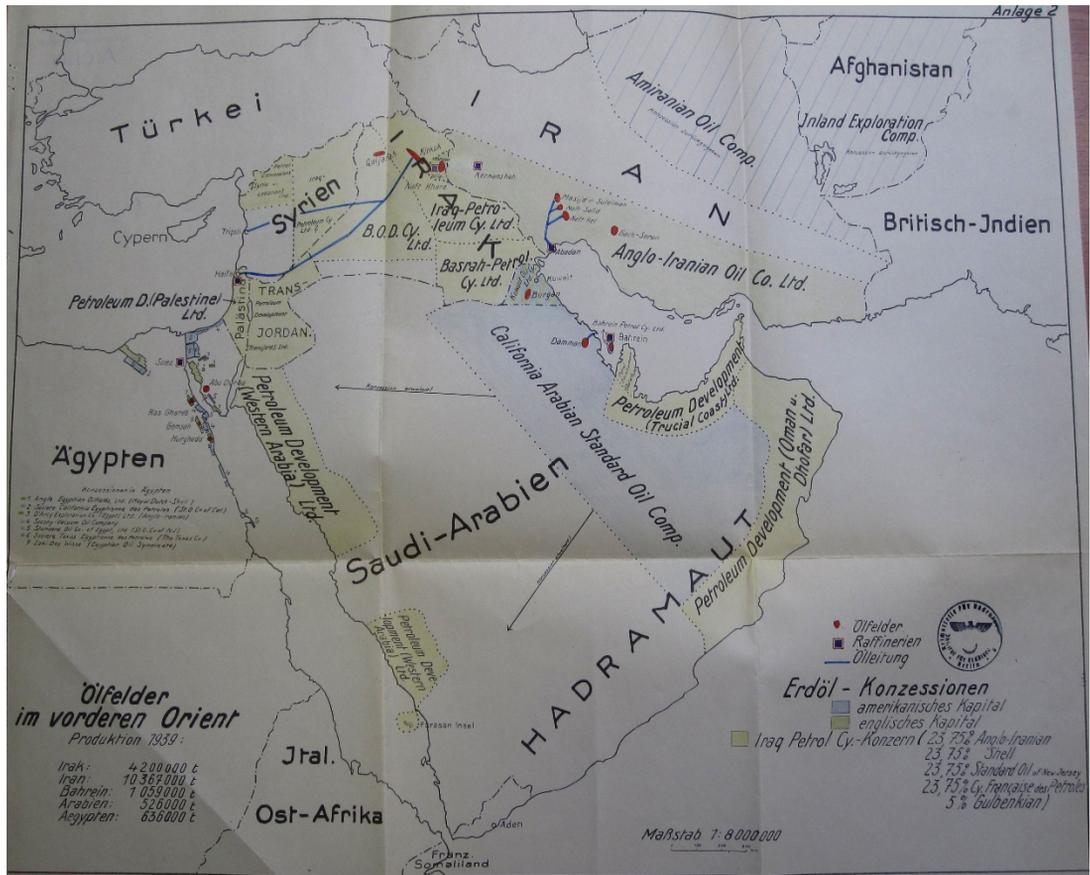
“Overview Map of the Mexican Oil Fields,” BGR 49044.



“Crude Oil in the Orient,” 30 January 1939, BGR 49062.



“Geological Evaluation of the Crude Oil Concession of the British Oil Development Company, Ltd., Mosul (Iraq),” 18 June 1935, BGR 49074.



“Crude Oil Concessions,” BGR 49459.