Introduction

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World War II is certainly one of the most intensively studied periods of history. Rivers of ink have been absorbed by the volumes chronicling the Nazi regime, the military history of the war, and postwar reconstruction. Most recently, Adam Tooze has provided a magisterial history of the economy of the Third Reich in his *Wages of Destruction*.[1] What more can be said? Actually, there is a huge missing piece. Although the financing and management of World War II has been, with some exceptions, carefully told from the domestic point of view of the belligerents, not as much is known about how resources were extracted from the countries occupied by Germany or in its sphere of influence and how critical these resources were for Germany's military success. Similarly, we know little about the long-term effects of exploitation on the postwar economies. In the standard works on the German war economy, the exploitation of occupied Europe does not play a central role.[2] In addition, the role of neutrals is widely neglected.[3]

[1] Adam J. Tooze, *The Wages of Destruction: The Making and Breaking of the Nazi Economy* (London, 2006).

[2] Tooze's predecessors include: Alan S. Milward, *Die deutsche Kriegswirtschaft 1939–1945* (Stuttgart, 1966); Dietrich Eichholtz, *Geschichte der deutschen Kriegswirtschaft 1939–1945*, 5 vols. (1969–1996; reprint, Munich 1999); and Militärgeschichtliches Forschungsamt, ed., *Das Deutsche Reich und der Zweite Weltkrieg*, vol. 5, parts 1 and 2, *Organisation und Mobilisierung des deutschen Machtbereichs – Teilband 1: Kriegsverwaltung, Wirtschaft und personelle Ressourcen 1939 bis 1941* (Stuttgart, 1988) and *Organisation und Mobilisierung des deutschen Machtbereichs – Teilband 2: Kriegsverwaltung, Wirtschaft und personelle Ressourcen 1942 bis 1944/45* (Stuttgart, 1999). In his study of the German war economy, Rolf Wagenführ, who had been the former chief statistician in Albert Speer's Ministry of Armaments, makes almost no mention of occupied

There are, of course, some prominent exceptions, with recent research paying more attention to occupied countries, providing a broader perspective.[4] Hein Klemann and Sergei Kudryashov, for example, provide an overview of the occupied economies that draws on the numerous studies of individual countries.[5] Their comparative framework yields new insights. One important contribution is their effort to estimate clandestine production by the occupied populations, which is not included in the official wartime output statistics or in most estimates of GDP. According to their findings, clandestine production was substantial. In the Netherlands, for example, it amounted to about 20–25 percent of agricultural production. The implication is that the actual standard of living in occupied countries might have been significantly higher than the levels implied by official food rations or based on the official GDP/capita minus German extractions. Unfortunately, information on this phenomenon is generally lacking, though the fact of clandestine production shows that there were limits to the control exercised by the Nazis over the occupied

Europe: Rolf Wagenführ, *Die deutsche Industrie im Kriege 1939–1945* (Berlin, 1954). Likewise, Burton H. Klein's monograph on the German war economy pays little attention to the exploitation of occupied countries: Burton H. Klein, *Germany's Economic Preparations for War* (Cambridge, MA, 1959).

3 Harold James, "Switzerland and Sweden in the Second World War," in Christoph Buchheim and Marcel Boldorf, eds., *Europäische Volkswirtschaften unter deutscher Hegemonie* (Munich, 2012), 211–28, here 211–212.

4 P. Liberman, *Does Conquest Pay? The Exploitation of Occupied Industrial Societies* (Princeton, 1996); Mark Mazower, *Hitler's Empire: Nazi Rule in Occupied Europe* (London, 2008); Buchheim and Boldorf, *Europäische Volkswirtschaften*.

Some important contributions on individual countries include: Robert Bohn, *Reichskommissariat Norwegen. "Nationalsozialistische Neuordnung" und Kriegswirtschaft* (Munich, 2000); Alan S. Milward, *The Fascist Economy of Norway* (Oxford, 1972); Karl-Heinz Schlarp, *Wirtschaft und Besatzung in Serbien 1941–1944. Ein Beitrag zur nationalsozialistischen Wirtschaftspolitik in Südosteuropa* (Stuttgart, 1986); John Gillingham, *Belgian Business in the Nazi New Order* (Ghent, 1977); Herman Van Der Wee and Monique Verbreyt, *A Small Nation in the Turmoil of the Second World War: Money, Finance and Occupation (Belgium, its Enemies, its Friends, 1939–1945)* (Leuven, 2009); Hans-Erich Volkmann, *Luxemburg im Zeichen des Hakenkreuzes. Eine politische Wirtschaftsgeschichte 1933 bis 1944* (Paderborn, 2010); Hans Umbreit, *Der Militärbefehlshaber in Frankreich 1940–1944* (Boppard, 1968); Alan S. Milward, *The New Order and the French Economy* (Oxford, 1970); Gerhard Hirschfeld, *Fremdherrschaft und Kollaboration. Die Niederlande unter deutscher Besatzung* (Stuttgart, 1984); Philip Giltner, *"In the Friendliest Manner": German–Danish Economic Cooperation During the Nazi Occupation of 1940–1945* (New York, 1998).

5 Hein Klemann and Sergei Kudryashov, *Occupied Economies: An Economic History of Nazi Occupied Europe, 1939–1945* (London, 2012), 184, 270. The significance of clandestine production is also discussed in Mazower, *Hitler's Empire*, 262 and Liberman, *Does Conquest Pay*, 53.

economies that are often not factored into postwar accounts.[6] Nevertheless, this diversion of resources did not greatly impede the occupiers, and the countries under German hegemony during World War II were a vital source of supplies for Hitler's war machine.

While the magnitude and means of mobilizing Germany's domestic resources has received considerable scholarly attention, the transfer of raw materials, labor and, especially finished products to Germany from occupied Europe is yet to be fully documented and analyzed. Only recently was a first attempt made to estimate the numbers of foreigners who worked for the German war machine within Germany's borders.[7] One study has estimated that the value Germany obtained from foreign workforce was about 10 percent of German war expenditures.[8] These considerable external resources enabled Germany to pursue a multi-front war, but they imposed enormous costs on the occupied and Nazi-allied states. These nations saw their incomes and consumption reduced as their economies were reoriented to production of war materiel for Germany.[9] Mobilization of resources for the Nazis was more thorough in more developed occupied countries compared to the poorer countries.[10] But even among the more advance economies, there were remarkable differences that reflected political factors. For example, France and the Netherlands each delivered between one-third and one-half of their industrial output to Germany but Denmark only about one-tenth of its production.[11] By 1943, half of the French workforce was employed in the German war effort.[12] In total, funds provided from abroad covered about one-quarter to one-third of Germany's war costs.[13]

Occupation placed high costs on the conquered nations, but it did also provide some benefits. New industries were created because of the

[6] Klemann and Kudryashov, *Occupied Economies*, 184.
[7] Mark Spoerer and Jochen Fleischhacker, "Forced Labourers in Nazi Germany: Categories, Numbers, and Survivors," *The Journal of Interdisciplinary History*, 33, nr. 2 (Autumn 2002): 169–204.
[8] Klemann and Kudryashov, *Occupied Economies*, 367.
[9] For estimates of damages, costs, and the decrease of consumption in comparative perspective, see Klemann and Kudryashov, *Occupied Economies*, 373–432.
[10] Liberman, *Does Conquest Pay*, 36–68.
[11] Klemann and Kudryashov, *Occupied Economies*, 92; Mazower, *Hitler's Empire*, 267.
[12] Mazower, *Hitler's Empire*, 261.
[13] Klemann and Kudryashov, *Occupied Economies*, 104. For an estimate of the size of external resources as a percentage of Germany's national income, see Mark Harrison, "Resource Mobilization for World War II: The U.S.A., U.K., U.S.S.R., and Germany, 1938–1944," *Economic History Review*, 41, nr. 2 (1988): 171–192, here, 189.

German demand or because of the need to substitute for unavailable imports.[14] In the Netherlands, after a long slump, industrial production even boomed during the first years of occupation due to the German demand.[15] But it should be also clear that the benefits were outweighed by far by the costs of occupation.

This volume addresses some of the important questions left unanswered in the recent research on Germany's economic exploitation of the countries under its sway. While we have some measures of financial exploitation, the means and principles that guided the various German occupation authorities have not been studied in depth, so that it is not clear how far the degree of exploitation was affected by political considerations or the efficiency of the occupiers.[16] Adam Tooze has emphasized that a closer looks needs be taken at the institutions that were responsible for the financial policies of the Reich and their execution in order to understand the German war economy.[17] Thus far, our knowledge is fragmentary.[18] We know, for example, that the Germans carried out huge construction projects in occupied Europe, but we do not know how much money was spent on them. The full cost would include wage payments and provisions to the military and forced workers.

The magnitude of resource transfer to the Nazi military machine by the countries under German hegemony has important implications for the interpretation of Germany's wartime strategy and mobilization. Most accounts of the German war economy, as mentioned, focus on the domestic economy, with the exception of imported forced labor. This oversight is probably due the fact that the considerable funding from clearing credits and occupation payments was largely spent within the occupied countries, with Germany's official trade balance showing only modest movements. Determining the scale of the occupied countries' contributions is important for our understanding of the functioning of the German war machine. If the contributions were modest, internal resource constraints were binding on Germany. But if, on the other hand, the conquered or subservient countries provided a substantial portion of the resources for

14 Mazower, *Hitler's Empire*, 270; Klemann and Kudryashov, *Occupied Economies*, 424.
15 Klemann and Kudryashov, *Occupied Economies*, 81.
16 Ibid., 203–205. See also Götz Aly, *Hitlers Volksstaat. Raub, Rassenkrieg und nationaler Sozialismus* (Bonn, 2005).
17 See Tooze, *Wages of Destruction*, 567.
18 Richard J. Overy, "The Economy of the German 'New Order,'" in: Richard J. Overy, Gerhard Otto, and Johannes Houwink ten Cate, eds., *Die "Neuordnung" Europas. NS-Wirtschaftspolitik in den besetzten Gebieten* (Berlin, 1997), 11–28, here, 17.

the war effort, constraints on Nazi planning were less binding than most scholars have assumed.

Two hypotheses central to our understanding of World War II may thus need to be reconsidered: (1) the Blitzkrieg hypothesis, which holds that, trusting in its ability to win quick, decisive victories, Germany deliberatively did not fully mobilize before the end of 1941, and (2) the inefficiency hypothesis, which contends that before Albert Speer became armament minister at the beginnings of 1942, the German economy's resources were not efficiently mobilized.[19] Recent revisions in the basic statistics have suggested that domestic and external resources available for waging war were greater than previously believed.[20] For example, Scherner has shown that occupied Europe's contributions to the German war effort in the form of weapons manufacturing and deliveries to the Reich were far larger and were provided for a longer period of time than earlier scholars had believed.[21] About a quarter to a third of munitions and materials were paid for or produced by countries under German occupation or influence. Boldorf and Scherner have shown that a considerable share of

[19] For the classical statement of the Blitzkrieg hypothesis, see Milward, *Die deutsche Kriegswirtschaft*. See also United States Strategic Bombing Survey, ed., *The Effects of Strategic Bombing on the German War Economy*. Overall Economic Effects Division, October 31, 1945, vol. 1 (New York, 1976); Klein, *Germany's Economic Preparations*. For criticisms of the Blitzkrieg hypothesis by the proponents of the inefficiency hypothesis, see Militärgeschichtliches Forschungsamt, *Organisation und Mobilisierung des deutschen Machtbereichs – Teilband 1: Kriegsverwaltung, Wirtschaft und personelle Ressourcen 1939 bis 1941*, 347–689; and Richard J. Overy, *War and Economy in the Third Reich* (Oxford, 1994). Speer's armaments miracle has been questioned by Tooze, *Wages of Destruction*; Jonas Scherner and Jochen Streb, "Das Ende eines Mythos? Albert Speer und das so genannte Rüstungswunder," *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 93 (2006): 172–196; and Lutz Budrass, Jonas Scherner, and Jochen Streb, "Fixed-price Contracts, Learning and Outsourcing: Explaining the Continuous Growth of Output and Labour Productivity in the German Aircraft Industry during World War II," *Economic History Review*, 63 (2010): 107–136.

[20] On war-related investments, see Jonas Scherner, "Nazi Germany's Preparation for War: Evidence from Revised Industrial Investment Series," *European Review of Economic History*, 14 (2010): 433–468; Jonas Scherner, "Armament in the Depth or Armament in the Breadth? German Investments Pattern and Rearmament during the Nazi Period," *Economic History Review*, 66 (2013): 497–517. On goods exported from occupied countries in favor of the German war economy, see Jonas Scherner, "Der deutsche Importboom während des Zweiten Weltkriegs. Neue Ergebnisse zur Struktur der Ausbeutung des besetzten Europas auf der Grundlage einer Neuschätzung der deutschen Handelsbilanz," *Historische Zeitschrift*, 294 (2012): 79–113.

[21] Jonas Scherner, "Europas Beitrag zu Hitlers Krieg. Die Verlagerung von Industrieaufträgen der Wehrmacht in die besetzten Gebiete und ihre Bedeutung für die deutsche Rüstung im Zweiten Weltkrieg," in Buchheim and Boldorf, *Europäische Volkswirtschaften*, 70–92.

French occupation tribute was not for occupation purposes but rather to wage war on the Eastern front.[22]

Our knowledge of the forced labor used by the German war economy is also far from complete, lacking information on workers outside of Germany's borders, as Spoerer and Fleischhacker have recently emphasized.[23] Relatively little research has been conducted to examine the long-term postwar effects of the German occupation, which redirected development and left large overhangs of money and debt. In addition, there is a considerable gap in our knowledge of how far neutral nations and other Axis countries cooperated with Germany and perhaps avoided some of the burden that Germany attempted to impose on them.[24]

Why do we know so little about these dimensions of the Nazi war effort? The short answer is that, just as in the case of political collaboration, discussion of economic collaboration quickly became taboo in many liberated countries.[25] In Denmark, for example, the fact that domestic companies earned good profits during the occupation was hushed up after the war because it did not fit in the consensus view that the occupation period was a time of general suffering.[26] It took decades before an historical discussion of political collaboration could begin, and even then the economic dimension of collaboration was almost entirely ignored. This situation is unfortunate because occupation not only imposed a large immediate burden on the nations under Axis domination but also produced longer terms costs and changes that had profound effects on reconstruction and the development of postwar Europe.

Scholars in many countries, from Norway to Bulgaria, have slowly begun to review the history of Nazi economic hegemony. The concentration on individual nations has been an obstacle, however, to putting together the big picture. To pull this work together and make it accessible

[22] Marcel Boldorf and Jonas Scherner, "France's Occupation Costs and the War in the East: The Contribution to the German War Economy, 1940–1944," *Journal of Contemporary History*, 47 (2012): 291–316.

[23] Spoerer and Fleischhacker, "Forced Labourers in Nazi Germany."

[24] James, "Switzerland and Sweden in the Second World War."

[25] On Norwegian society during the occupation period and on the Norwegian historiography on the occupation, see Susanne März, *Die langen Schatten der Besatzungszeit. Vergangenheitsbewältigung in Norwegen als Identitätsdiskurs* (Berlin, 2007); Synne Correll, "Krigens Ettertid: Okkupasjonshistorien i norske historiebøke" (PhD dissertation, University of Oslo, 2010). On the renewed interest in the Norwegian role during the occupation period, see Nina Drolsum Kroglund, *Hitlers norske hjelpere. Nordmenns samarbeid med Tyskland 1940–45* (Oslo, 2010).

[26] Klemann and Kudryashov, *Occupied Economies*, 425.

in English, a conference was organized at the German Historical Institute in Washington, DC, in 2009. This volume grew out of that conference, bringing together essays based on papers presented in Washington as well as additional studies that were commissioned to provide a more complete picture.

Although our findings in this volume contribute to a revised interpretation of World War II, we do not attempt to provide a new synthesis. Our purpose is more modest to pull together from a broad range of sources and countries evidence of the magnitude and methods of Germany's economic exploitation of its conquered foes, its allies, and its neutral trading partners. We sought to provide the broadest possible picture, but we were unable to include individual essays on some of the nations that were vital to the Nazi war effort: Italy, Spain, Romania and Switzerland. Their contributions to the German war effort are, however, touched on in the course of the book.

To set the framework for the essays in this volume, this introduction will sketch the general means by which the Third Reich was able to extract resources of countries under its rule or influence. While nations conquered by and allied to Germany had a wide range of political regimes, with varying degrees of independence, the means of exploitation followed very similar patterns. Exploitation began with the clearing arrangements for international trade that preceded the war. For the occupied countries, requisitions, occupation payments, and transfers of labor followed after conquest. A key element for the exploitation of both occupied and allied countries evolved out of the clearing agreements that Germany engineered after it went off of the gold standard de facto in 1931. While Germany was on the gold standard, any balance of payments deficit or surplus was covered by either payment in gold, foreign exchange, or borrowing. Once borrowing became impossible and payments imbalances had to be cleared by alternate means, a clearing agreement was necessary to determine how this would be managed. Such agreements were established before the war with, for example, Yugoslavia, Romania, Hungary, and, as Vera Asenova details in Chapter 14, Bulgaria.[27] When, as typical, Germany had a trade deficit, these countries had to decide how to compensate their exporters who had received Reichsmarks in blocked accounts at their central banks. Exporters might be forced to wait for payment, be rationed payment in their national currencies, or be paid in full. The last option, which became

[27] Vera Asenova, "German Economic Exploitation of Bulgaria: Short Term Policies and Long-Term Institutional Effects."

the standard means by which accounts were cleared among countries such as France, Belgium, and the Netherlands (until 1941) that fell under Nazi domination, not only effected a real transfer of resources to Germany but paid for it by creating money and producing an inflationary stimulus in the surplus country. Furthermore, as markets disappeared during the war, the prices at which trade would be conducted had to be determined by negotiation, providing a potential means to extract resources from neutral nations and allies alike, such as Sweden and Bulgaria. The terms of clearing agreements and of trade relations were clearly dictated by Germany in the case of occupied countries; the picture is more complex in the case of neutral and Axis countries, as Eric Golson demonstrates for Sweden and Jari Eloranta and Ilkka Nummela show for Finland in their contributions to this volume (Chapters 10 and 12).[28] German authorities involved in the exploitation of Europe often disagreed on how to handle the increasing prices of goods exported from Axis countries, especially in Southern and Southeastern of Europe, and tried to avoid importing inflation into Germany, as Jonas Scherner explains in his essay on German financial policies (Chapter 2).[29]

The clearing arrangements thus formed the basis for managing most of the trade, services, and capital movements between the Reich and other countries. These issues and the consequences both for Germany and for Germany's clearing partners are discussed here by Scherner (Chapter 2) and Asenova (Chapter 14). The experiences of the occupied countries and Germany's trading partners varied on account of the complex German military and civilian command structures in the occupied countries and of Berlin's political objectives in respect to individual countries. For example, Germany financed some of its trade by borrowing from its allies and the occupied countries, especially the Netherlands. In the course of war, the system of bilateral clearing agreements was expanded and a central clearing system was partially introduced that would have been fully implemented when the war was over.[30] German plans for the postwar

[28] Eric Golson, "Sweden as an Occupied Country? Swedish-Belligerent Trade During World War II"; Jari Eloranta and Ilkka Nummela "Master and Slave? Equal Partners? Economic Interactions and Exchange of Strategic Resources Between German and Finland During the Second World War."

[29] Jonas Scherner, "The Institutional Architecture of Financing German Exploitation: Principles, Conflicts, and Results."

[30] For details on the multilateral clearing system, see Bundesarchiv Berlin R 184/186, report on the DVK, 20.12.1946. See also Overy, "The Economy of the German 'New Order,'" 22.

period envisioned the creation of a European trade block in which trade flows would be directed to meet Germany's needs. The Reichsmark was to be fully convertible and the dominant currency in Europe; it was thus sometimes called the "Euro-Mark" in the Third Reich's internal planning documents. In some respects, this vision of a pan-European trading and currency system anticipates the system that took shape between the establishment of the European Payments Union (1950) and the currency union of the 1990s that culminated in the introduction of the euro.

After Germany's initial wartime success in conquering large portions of Europe, the authorities in Berlin were faced with critical choices about how to exploit the productive capacity of the countries that had fallen under Germany's sway. Conquest was usually followed by looting of military equipment, supplies, and valuables such as artworks, but the Third Reich still faced the question of how it could effectively harness the captive economies for its own purposes.[31] The basic issue was whether goods should be produced in the occupied countries or allied countries and whether labor and raw materials should be transferred to Germany for production.

Nazi authorities initially did not attempt to transfer production from the occupied countries to Germany. The standard means for expropriation of output was the creation of a special account for the German occupation forces at the occupied nation's central bank (e.g., the Banque de France, the Nederlandsche Bank, the National Bank of Belgium, and the Norges Bank). In Eastern Europe, new central banks were created so that this method of expropriation could be employed.[32] The German occupation administration and military forces could then draw upon these accounts, which permitted them to purchase output in local currency that was created for them by the central bank. By this technique, a substantial portion of GDP of each occupied country – reaching 25 percent or more in some case – was bought with these funds.[33] The German war aims during World War I and the Treaty of Versailles, discussed in Burhop's

[31] Christoph Buchheim examined a Nazi source that calculated a lower limit of the value of the loot Germany seized in occupied Europe. "Die besetzten Länder im Dienste der deutschen Kriegswirtschaft während des Zweiten Weltkriegs. Ein Bericht der Forschungsstelle für Wehrwirtschaft," *Vierteljahrshefte für Zeitgeschichte*, 34 (1986): 117–145.

[32] In occupied Poland, for example, the Germans established the Emissionsbank in Polen.

[33] For the case of France, see Chapter 4 of this volume and for Norway, see Chapter 9 and Riksarkivet Olso, Privatarkivet 951, box 2, Hans Claussen Korff, Norwegens Wirtschaft im Mahlstrom der Okkupation (unpublished manuskript).

essay (Chapter 1), served, in part, to justify the Nazi strategy of exploiting occupied countries, as shown in Scherner's contribution (Chapter 2).[34]

The problem that presented itself to the governments of occupied Europe that the Nazis installed or permitted to survive was whether to allow the full inflationary effects of this monetary increase to be felt. Fearful of huge price increases, they imposed wage and price controls,[35] but they also sought to soak up a considerable portion of the monetary increase by raising taxes and selling bonds, as will be discussed more in detail in the chapters on France (Chapter 4) and Belgium (Chapter 7).[36]

Simply put, the goods that the Germans purchased could be paid for by increased taxes, increased debt, or inflation. Governments of many occupied countries preferred more borrowing or money creation to higher taxes, which would have directly reduced already miserable wartime living standards. An increased national debt created a problem for the postwar future, which could be solved either by raising taxes, defaulting on the wartime debt or inflation. When German spending was paid for by money creation, it was typically accompanied by wage and price controls, leading to repressed inflation.[37] The built-up inflationary pressure could be released either by a postwar de-controlling prices and wages or by a monetary reform that demonetized a portion of the currency. Each of these alternatives carried different distributional consequences for the postwar economy – and the countries in our volume tried various alternatives.

The Nazi overlords of the occupied countries were not, however, content to rely upon the functioning of a market economy to supply the

[34] Carsten Burhop, "Germany's Economic War Aims and the Expectation of Victory, 1918."

[35] Many regulations were modelled along the lines of those previously implemented in Germany itself. On price policy, for example, see, Bruno Wurst, *Die Preisbildung im Warenverkehr mit den eingegliederten, in Schutz genommenen und besetzten Gebieten*, (Stuttgart, 1943).

[36] Eugene N. White, "The Long Shadow of Vichy: The Economic Consequences of German Occupation"; Kim Oosterlinck and Eugne N. White, "La Politique du Moindre Mal: Twice-Occupied Belgium." See also Marcel Boldorf, "Die gelenkte Kriegswirtschaft im besetzten Frankreich (1940–1944)," in Buchheim and Boldorf, *Europäische Volkswirtschaften*, 109–130. For a detailed comparison about how Western European countries financed the occupation, see Kim Oosterlinck, "Soverign Debt and War Finance in Belgium, France and the Netherlands," in Buchheim and Boldorf, *Europäische Volkswirtschaften*, 93–106.

[37] A comprehensive study of the controls in occupied countries has yet to be written. Some information may be found in Wurst, *Die Preisbildung*.