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Introduction to Economists at War: How World War II Changed Economics (and Vice Versa)

Ariane Dupont-Kieffer, Robert W. Dimand, and Sylvie Rivot

1. The Interrelationships between World War II and Economics

"War is perhaps the most organized of all human activities and in turn it has stimulated further organization of society," according to Margaret MacMillan (2020: xxi). Economists and the discipline of economics have been deeply affected by war, both by the demands of governments and armed forces for economic guidance and information to harness resources for war and the displacement and upheaval caused by war. Economists and economics have in turn affected the conduct and outcome of war (Cairneross 1995), as illustrated by the prominence of marshalling economic resources (Overy 1995; Harrison 1998). The Second World War also gave rise to new institutions during and after the war, whether at the national level (e.g., planning offices or with the so-called militaryindustrial complex) or at the international level (e.g., the World Bank and the International Monetary Fund [IMF], created at Bretton Woods in July 1944; the Economic and Social Council of the United Nations [UN], created on June 26, 1945; the OEEC [Organization for European Economic Co-operation], created on April 16, 1948; and the Comecon—Council for

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Mutual Economic Assistance—on January 25, 1949). These institutions took on new kinds of tasks and promoted new types of applied economics. The Second World War also changed the way economists and non-economists worked together, with economists becoming key actors during and after the war.

Research in economic history and economic sociology (Tooze 2001, 2006; Wieviorka 2023) has focused mainly on the migrations from the occupied countries or under the rule of dictatorships in Europe to the free world, most often to the United States or the United Kingdom. In academic circles, this period has often been seen as the beginning of the Americanization of economics. The 2023 HOPE conference aimed to build on the current state of knowledge, and we accordingly sought to explore a different narrative, less centered on the United States. In particular, we sought to understand the extent to which these migrations of economists led to the creation of other spheres of influence, both geographically—especially outside, which is often seen as the "periphery" of the US-British axis—and institutionally—governmental and nongovernmental organizations. Given the global dimension of this war, supplementing our existing knowledge means looking at other journeys and other experiences of economists outside the Anglo-Saxon sphere. Economists from different countries and backgrounds were mobilized as experts in the preparation and conduct of the war, but also in the construction of a postwar world in the midst of the bipolarization around the United States and the USSR and decolonization.

Next, the conference sought to identify the participation of economists in the construction of new geopolitical equilibria, as contributions to these equilibria were made by individuals and communities. This is because economic analysis is embodied: it is the fruit of individuals driven by their own research questions, but also working for institutions with their own agendas and methodologies. The aim of this volume, however, is not so much to trace the careers of economists as individuals, but to understand how the careers of these individuals, affected by this disruptive episode, contributed to the transformation of existing economic knowledge and practice. We have also considered the contribution of economists and economics to the conduct of the war: its preparation (planning), war strategy, end of war strategies, and postwar contributions (planning to promote postwar recovery). This implies an assessment of how the Second World War changed the way economists viewed their role in society. The impact of the war on all economies

worldwide led economists in different countries—whether directly affected by the conflict or not—to review their analytical frameworks. As a result, significant changes can be seen in the relationships between economists as a profession and organizations such as academia, of course, but also government departments and trade unions.

2. War Economics: Shaking Up and Mixing Up

The world war, together with related preparations and postwar reconstruction, created needs for government mobilization of resources, for control of inflation and for allocation of scarce resources by rationing, and for logistical, strategic, and tactical planning. The involvement of economists and their expertise famously extended from John Maynard Keynes's How to Pay for the War and his central role together with Harry Dexter White in the Bretton Woods negotiations about the structure of the postwar world economy, through Lionel Robbins and James Meade in the Economic Section of the War Cabinet Offices, John Kenneth Galbraith at the Office of Price Administration and the leadership of Galbraith and Nicholas Kaldor in postwar evaluation of the effects of strategic bombing, to Charles Kindleberger in the Marshall Plan. These issues were at the core of the work of US-Europe axis economists but also in countries not directly considered as battlefields or directly contributing to war efforts. For example, the massive need for raw materials affected the raw materials market worldwide, in colonies of the different European empires (British, French, Dutch, Italian, Portuguese, etc.) but also in Latin America.

The war also had a profound impact on all the social sciences. Statistics were used for political purposes through the development of political polling (Dargent 2011) and, more generally, the quantification of the human sciences, particularly in the United States in the twentieth century (Schweber 2002): "Historians of sociology agree with the critics' assessments that the Second World War marked a turning point in the adoption of statistics as the authoritative method in sociology and the model for its practice against which other forms defined themselves (Biddle 1999; Biddle and Boumans 2021). They also agree that the war established a strong link between statistics and survey research" (Schweber 2002: 69). Desrosières ([1993] 2000, 2014) showed that the Second World War was an accelerator of the trend toward quantification in Europe for any analysis of economic, sociological, and political

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phenomena. At the international level, the construction of statistical frameworks to allow international comparison and national economic monitoring with national accounts started in the 1930s (Dupont-Kieffer 2012a). The Second World War and the postwar years promoted this development, especially in the work of UN commissions and the construction of the system of national accounts (Vanoli 2006). Arguably economists and economics were never more deeply involved in a war, nor has the transformative impact of a war upon economics been more profound and lasting, throughout the warring and other countries, than World War II. The war seems to have made the relationship with reality even more acute and urgent than the economic crisis of the 1930s. Historians of economics have well documented this transition (Mirowski 2002), either through its mathematization (Weintraub 2002) or through its statistical approach (Porter 1986, 1995; Aldrich 2010) or through the synthesis of these two branches that is econometrics (Bjerkholt 1998; Dupont-Kieffer 2003; Morgan 1990) and also through its becoming an engineering science (Klein 1995, 2015; Klein and Morgan 2001).

2.1. War Economics and the Adaptation of Economics: Military Applications of Civilian Tools

The conference sought to understand the extent to which these particular war years in a person's life can lead economists to rethink their work and theoretical corpus. One of the military themes is the processing of data and the gathering of information as documented in economic history and war studies. The aim is to understand how war has led economists to examine the interface between the relevance of their economic analysis grids and their analytical and theoretical economic baggage for understanding and explaining economic phenomena. These links have been explored in the history of economics by showing the role of cooperation between economists and the military-industrial complex, a cooperation that led, among other things, to the creation of the RAND Corporation in 1948. The close relation of these military funding sources to the flourishing of mathematical economists is illustrated by the editorship of the Naval Research Logistics Quarterly by Oskar Morgenstern, coauthor with John von Neumann of the foundational work on game theory.

Existing literature (notably Bollard 2020) had already shown, for example, the key role played by Leontief in the development of input-output

analysis to develop targeted bombing. The article by Marcel Boumans in this volume shows that Milton Friedman was mobilized thanks to his ability to deal with imperfect data sets. Economists have developed statistical tools to analyze social data derived from field surveys rather than laboratory experiments. These data do not have the regularity to which physicists are accustomed. The history of science and the history of politics have well documented the impact of conflict on the creation of statistical tools and the development of their use (Fienberg 1985), particularly on the theory of opinion polls and sequential analysis.

2.2. The Economics of War and New Economic Tools

Judy Klein's work clearly shows the significant impact of war, and the Cold War in particular, on the development of statistical and mathematical tools for solving resource allocation problems. Although this field developed outside periods of war, with the work of Kiaer on representative sampling at the beginning of the century in Norway and then the transition to random sampling in the 1930s (see also Didier 2020 and Mespoulet 2001), the two world wars saw an acceleration of sampling research, notably with the contribution of Madow and Madow in 1944. This development led to the creation of the UN Statistical Commission, which set up the Sub-Commission on Statistical Sampling in 1947.

Boumans sheds new light on Friedman's wartime experience at the Statistical Research Group (SRG) Division of War Research at Columbia University and the role of this experience in shaping his postwar economic methodology. Friedman's experience at the SRG shaped one of his key messages about the validity of a hypothesis based on its ability to make predictions and, more precisely, to test its implications. His experience at the SRG led Friedman to develop his methodology for statistical analysis when dealing with "lousy data." Friedman also played a major role in the development of sampling techniques. This had a crucial influence on Friedman's methodology, exemplified by his 1953 essay titled "The Methodology of Positive Economics."

In his contribution to this volume, Michele Alacevich shows that Albert Hirschman and Paul Rosenstein-Rodan were mobilized by the US military authorities to take stock of the German economy and Eastern Europe. These two economists focused their thinking on the determinants of development and laid the theoretical foundations for their development economics proposals.

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Harald Hagemann's article in this volume documents the contribution of German-speaking emigrant economists to the US government services and complements his analysis of the immigration of German economists to the US (Hagemann 2011). While two-thirds of emigrant scholars eventually settled in the United States, the United Kingdom was the other main host country. In particular, Hagemann focuses on the contributions of Hans Singer, Erwin Rothbarth (with a focus on the comparison between the rationing systems implemented in Britain and Germany), and Nicholas Kaldor, who provided one of the best analyses of the German war economy while also making significant contributions to growth theory.

This volume also aims to draw attention to the multiple links between war economics and postwar theoretical developments. If the question of economic data and frameworks as part of "full-scale" war is an important lever for the transformation of economics, it is necessary to understand how other issues directly related to the war effort led economists to revise their corpus. To take just one critical example, the field of monetary and financial issues has been explored by economic and political historians, especially around the Keynes-White controversy during the drafting of the Bretton Woods agreements (Dostaler 1995; Steil 2013). Recent studies have shown that the role of lender of last resort was revisited during the Second World War (Aglietta and Scialom 2003). The aim of the conference was to explore the idea that, beyond the monetary and financial issues directly related to the conflict, economic theory was revisited in relation to other issues such as coordination and equilibrium. For example, one of the aims was to understand whether the context of scarcity, which led to planning and the coexistence of two allocation systems—situations that have been well documented by historians—did not lead economists to revisit the issues of coordination by the market in greater depth, or whether the analytical proposals that emerged to manage the war would be no more than a footnote in the history of economics.

The conference also sought to explore the possibility that highly operational and applied issues may have led some authors to revisit theoretical issues that are recurrent in economics as coordination or optimization issues. Logistical and tactical problem-solving promoted a vast wartime expansion of what became known in the United States as operations research and in Britain as operational research (and closely resembled what was called planometrics in the Soviet Union), creating a well-funded, burgeoning discipline that came to overlap and interact

with mathematical economics, which before and after World War II had been relegated to the fringes of the discipline of economics.

A striking example of this interaction, and of its importance in bringing mathematical economics into the mainstream of economic theory, is the way in which linear programming, called activity analysis, was rooted in the work on logistical scheduling by George Dantzig and Marshall Wood for the US Air Force and by Tjalling Koopmans for the wartime Combined Shipping Adjustment Board (and in the input-output modeling of Leontief) and by the postwar funding of such research by the RAND Corporation (whose sole client was the air force) and the Office of Naval Research (Düppe and Weintraub 2014; Weintraub 1983).

Linear programming was presented as early as 1934 by Ragnar Frisch in his article "Circulation Planning" as the holy grail for solving coordination problems (Dupont-Kieffer, 2012b). Alan Bollard shows that Leonid Kantorovich was a pioneer in the development of such a conceptual and applied tool, especially for logistical and transport issues to supply Leningrad during the siege. But it was with the work of Koopmans, also concerned with transport problems, that linear programming came to be seen as a methodological solution to a problem of coordination and optimal allocation.

While focusing on the contributions of Koopmans and Dantzig during the US wartime economy, Robert W. Dimand (this issue) highlights the wartime roots of these fundamental contributions to activity analysis and linear programming. On the one hand, Koopmans tackled the problem of merchant shipping, a problem that led him to make significant contributions to the transport problem—and hence to activity analysis. On the other hand, Dantzig and his colleagues invented linear programming for military purposes. Dantzig was involved in the planning of the entire US air war effort. With these two examples, Dimand shows how mathematical economics, previously on the periphery of economics, was one of the mathematical sciences that received unprecedented impetus from military sources.

Beyond this impetus, however, it is interesting to note the extent to which transport issues led economists to move beyond operational questions and return to questions of "pure" economic theory. Focusing on transport issues, it is worth noting that Allais argued in 1948 that his study "Le problème de la coordination des transports et la théorie économique" ("The Problem of Transport Coordination and Economic Theory") was "inspired by the desire to build *a bridge between theory and practice* and

to show practitioners how they can be helped by meditating on the results of theoretical economics, while at the same time enabling theorists to supplement general economic theory by coming into contact with the concrete problems posed by reality" (Allais 1948: 213). His question was not so much one of railroad coordination as of competition and pricing for the optimal allocation of resources.

In 1949, Koopmans explicitly took up in *Econometrica* the question raised by Allais in 1948 to investigate the optimal use of resources, in particular the allocation of ships in times of war and scarcity. Considering indirect and direct costs, he rethinks the allocation of vessels in the network and concludes that the correct estimation of marginal costs lies at the heart of an optimal allocation of vessels on shipping lines (Koopmans [1947] 1949: 143) and a reduction in empty runs. This article builds on his work on linear programming, as shown in Dimand's article, but most importantly initiates a broader theoretical research program in geographical economics: "In conclusion, I wish to emphasize that a theory of optimal transport rates, of which the present analysis is a small beginning, would provide an indispensable foundation for any theory of the optimal geographical distribution industry" (Koopmans [1947] 1949: 145). It could also be seen as the beginnings of a research program on the coordination of decisions, between a centralized and a decentralized mode of coordination, a question that would be at the heart of the handbook by Beckmann, McGuire, and Winsten (1956) to which Koopmans contributed an introduction and a chapter.

2.3. War Economics and the Planning Doctor: The Rise of Expertise?

The experience of planning for wartime mobilization and the need to craft informed policy for postwar reconstruction created new roles for economic expertise, especially guidance of stabilization policy by economywide econometric models based on national income data, as is shown for France and Italy by articles in this volume. Postwar development assistance offered opportunities for economic advising and statistical investigation in countries that could have stayed out of the heat of the war, such as Argentina, or were only involved in the war to a limited extent, such as Brazil. Economic expertise crossed national boundaries and continents and was reflected in a demand for "planning doctors," such as Charles Bettelheim, to craft strategies to achieve development, much as wartime fiscal needs brought Lauchlin Currie to China.

2.3.1. Planning and the Planning Doctor Judy Klein's work (2015) clearly shows the impact of war, and especially the Cold War, on the development of statistical and mathematical tools for solving problems of resource allocation. But it remains to be seen to what extent planning issues are part of a history of institutions and tools, but more generally of the construction of the acceptance of active state intervention in the economic sphere. What was the role of the Second World War in this process? The aim is to understand the decisive moments that led economists to think about planning and how it should be carried out—a question that arose from the crisis of the 1930s but then shifted to the preparation and conduct of the war, and finally the reconstruction.

In France, productivity gains became a crucial issue in the context of the Second World War, as Régis Boulat (2008: 81) shows. For the Vichy regime, it was a way of responding to German orders in a context where companies were facing shortages of labor and raw materials (Kuisel 1977). For the French Resistance, productivity was a lever to rebuild the country after the war. Despite their antagonistic views of society, the Vichy regime and the French Resistance both agreed on the need to draw up an economic plan based on a description of the economic situation. The latter was based on a series of indices, including the productivity index. Moreover, the war reinforced the idea of a planned economy, a planning operation supported by organizations with an economic focus, such as the business cycle institutes (Boulat 2019).

One of the key sectors of the war and reconstruction was energy. Economic history and war studies historians have clearly shown that the energy question was at the heart of battles for innovation in terms of alternative energy techniques (synthetic fuel, rediscovery of wood and gas). The media of the time regularly reported on debates around energy supply and prices. It is easy to understand why European integration was based on these energy issues, for example, the foundation of the European Coal and Steel Community (ECSC) in 1954. This context of high energy demand could explain the shift from debates between economists on competition and on the structuring of the energy sector in the prewar period to debates focused on the productivity measurement and the conditions for enhancing productivity and setting prices in a context of public monopoly (Yon 2014). The difficulty of distinguishing between the respective contributions of labor and capital productivity in a flow industry led to the emergence of new concepts such as total factor productivity (Bénistand 2022), new tools, and new expertise.

Several contributions in this volume addressed this key issue of planning. First, Katia Caldari and Muriel Dal Pont Legrand, as well as Antonella Rancan, complement the existing knowledge by dissecting the long process of constructing a theory of a planned economy in a market economy country. These two articles, as well as Hagemann's contribution, show that productivity, both of capital and of labor in a context of labor shortages, is at the heart of the debate on the planned economy. The issues of capital preservation, labor productivity, and capital productivity would be at the heart of the war economy but also of reconstruction.

The article by François Allisson focuses on the original figure of Charles Bettelheim (1913–2006). Since the end of the Second World War, the French Marxist economist carried out important scientific activity on economic planning, together with international consulting activity in developing countries as a non-Soviet expert on Soviet planning, for example, in India, Egypt, and Cuba. As a "planning doctor," Bettelheim advised governments on the preparation of socialist five-year plans. The Second World War influenced Bettelheim both intellectually, with his study of the German wartime economy, and institutionally, as his wartime encounters proved crucial in shaping his postwar career as a planning doctor. After the war, Bettelheim cofounded and edited the Revue française du travail and was personally involved in international relations, representing France in particular on the board of the International Labor Office. Observing from New York the massive labor strikes of 1945–46 in the United States, with its millions of participants, he did not see in it an alternative way out of capitalism. He later distanced himself from the Soviet model, advocating, for example, flexibility in retail prices to avoid the shortages that characterized the Soviet economy (Kirtchik 2019).

Finally, the article by Hsiang-Ke Chao and Hsiao-ting Lin focuses on the eminent figure of Lauchlin Currie, who visited China twice during the Second World War at the request of the Chinese Nationalist government. This analysis of Currie's proposed land tax policy highlights his political economy based on land tax revenues considered as the only reliable source of wartime finance that could reduce the reliance on printing money to increase the money supply. It also highlights the interdependence between economic issues, on the one hand, and political and diplomatic issues, on the other. Indeed, Roosevelt wanted Currie's mission to focus not only on economics but also on political and military affairs. Chao and Lin argue convincingly that Currie made every effort to fulfill his role as Chiang Kai-shek's political economist.

2.3.2. The Rise of Economic Expertise Economics is becoming a legitimate and widely shared way of interpreting the world and political and social phenomena in this period, during which economists have established themselves as leading figures, either individually or on behalf of organizations.

This *HOPE* volume also discusses the figure of the economic expert that emerges throughout its various contributions. As mentioned above, economists were mobilized as part of the war effort or invited to act as whisperers in the ears of kings. How did this role of expert lead them to revise their analytical and theoretical corpus developed before and during the war? In this way, we try to understand the toolbox of the planning doctor. These chapters focus on individual and sometimes collective figures, since the expert was commissioned by organizations, particularly international organizations, set up after the Second World War.

The first lesson to be learned from studying the figure of the planning doctor is the professionalization of the actors involved. Every country sent economists, that is, experts trained as economists, to the UN economic commissions to consider the conditions for rebuilding the postwar world and establishing a new economic order. Although the historians have shown that it was not always economists who drew up the plans for postwar reconstruction, their work became more professional. The literature shows that this professionalization had already taken place between the wars and that the profession of economist attracted people trained in other disciplines. Numerous studies in the history of economics have pointed to some famous examples of the switch from the natural sciences to economics, including the first recipient of the Bank of Sweden Prize in Economics in memory of Alfred Nobel, Jan Tinbergen (Dekker 2021). The need to train economists does not date back to the Second World War, but the need to train people whose mandates or functions require them to use an economic approach is obvious. This need had already begun to emerge for engineers, especially in prewar France, and became essential in the United States, especially at the Massachusetts Institute of Technology after the war (Cherrier 2014).

Not only did economic discourse become more disciplinary and specialized, it also permeated the political debates between the major players in reconstruction. Political history shows that after the Second World War, trade unions began to offer economic training to their members. In Europe, reconstruction in many countries was based on the tripartite management of the economy, nationalized enterprises, and social risk,

and in this context trade unions were actors in economic and social dialogue in their own right. The study of the theoretical corpus taught to trade unionists still receives very little attention from economic historians, particularly as regards the foundations of the economic analysis of their understanding of the world. Outside the academic sphere of economics, the postwar world no longer seems to be one in which a lawyer like Gaston de Bergery oversaw the drawing up of the economic plan for the Popular Front. Planning and the definition of priority economic issues would henceforth be entrusted to economists trained as economists. Ragnar Frisch made no mistake when he set up courses in economics in the internment camps where he was held, believing that postwar reconstruction would rely on economists (Bjerkholt 1998; Andvig 1985; Dupont-Kieffer 2003).

3. Economists at War: Migrations of People, Migration of Ideas, and the Rise of Alternative Thinking

In addition to the effects, both on the war effort and on the development of data analysis and economic techniques, of the wartime demand for the services and expertise of economists and operations researchers, the upheavals of war and revolution transformed the arts, the humanities, and the sciences, including economics and other social sciences, by displacing scholars from one country or continent to another—which is also illustrated by the example of Morgenstern and von Neumann. The Graduate Faculty of the New School for Social Research in New York (now the New School University) began as the University in Exile. Some economists emigrated more than once. Jacob Marschak, once Slutsky's student in Kyiv and then a nineteen-year-old Menshevik minister in a short-lived republic in the Caucasus, was displaced first by the Russian Revolution to Germany, where he took his doctorate, and then from Germany by the rise of the Nazis. He became the founding director of the Oxford University Institute of Statistics and then, brought to the United States by a Rockefeller Foundation fellowship, taught in the New School's University in Exile before taking the research directorship of the Cowles Commission. Trygve Haavelmo, intending to spend a year at Harvard while working on his University of Oslo dissertation, was stranded in the United States by the German occupation of Norway and thus was at the Cowles Commission when he published his pathbreaking reconstruction of econometrics based on probability theory. Economics in North America or Britain or Australia

was, like physics or classical music, transformed by Continental European émigrés. After World War II, Austrian economics, in the tradition of Carl Menger's Vienna school, was centered in the United States with Ludwig von Mises at New York University, Friedrich Hayek at the University of Chicago's Committee on Social Thought, and Fritz Machlup in Buffalo and Johns Hopkins—not in Austria.

3.1. Migrations and Americanization of Economics?

Migrations require historians to review or rethink the profession of economist during this dramatic episode from two perspectives: on the one hand, the construction and evolution of communities, and on the other hand, the relationship between the community of economists and other communities, both in terms of sharing best practices and economic analysis.

There has been a great deal of work on the role of leading economists in the conduct of the war, as illustrated by Alan Bollard's book *Economists at War* and the emblematic figures of Keynes or Morgenstern. Economic history and above all economic and political history show that they are mobilized in different institutions. The impact of the war on the careers of economists, their role during the war, and their output in economic analysis has been studied to some extent.

However, these biographical sketches show that little is known about this period. For example, Dekker (2021) highlights the difficulty of obtaining biographical information on Jan Tinbergen's activities during the Second World War, despite his commitment to peace from the beginning of his career. Reading Tinbergen's work, illuminated by the contextualization proposed by Dekker, it becomes clear that the Second World War seems to have strengthened his commitment to peace and to the production of economic tools to promote the economic conditions for peace. Similarly, by remaining within the community of committed econometricians, Frisch's analytical output during the Second World War and in the immediate postwar period has been little studied. Andvig (1985; see also Dupont-Kieffer 2003) points out that Frisch's internment in a concentration camp may be linked to his call for econometricians to assume social responsibility in the editorial of the first postwar issue of *Econometrica* (Frisch 1946).

For Tinbergen and Frisch, the Second World War served as an accelerator to produce macroeconomic, statistical, and accounting tools for analyzing situations outside market equilibrium and for guiding economic policy to resolve crises. Indeed, the social responsibility of econometricians is rooted in their work in analyzing the Great Depression in the interwar period. Their social commitment and call for economic expertise are well known in the academic world, but also in other communities in their countries, political parties, trade unions, fellow citizens—this call is often linked in the Dutch and Norwegian press.

This volume follows on from these histories, analyzing the shift that took place during the Second World War in the analytical or methodological contributions produced by certain institutions, organizations, or communities. Epstein (1987), Morgan (1990), Bjerkholt (1998), Boumans (1999), and Le Gall (2007) show that structural econometrics was able to develop thanks to the "probabilistic" revolution triggered by Haavelmo's 1944 thesis in the United States. Recent work on the history of econometrics also shows the disruptive effect on the organization of conferences by the *Econometric Society*—conferences moving from Europe to the US—and on the publication of *Econometrica*, while highlighting the shift in the core of the *Econometric Society* from Europe to the United States.

The intellectual biographies mentioned above show that economic analysis evolves through individual migrations. However, these migrations have transformative effects on the communities that receive these displaced economists, whether these economists are directly involved in the war effort in the host country or simply seeking refuge. For example, when European economists migrated to the United States, communities intermingled and intersected, whether in academic circles or in the military-industrial complex. This intermingling of individual paths and the appointment of economists to nonacademic or business-oriented institutions may have had an impact on their later careers, as this stage in their careers generated a cross-fertilization of ideas. We would like to further investigate to what extent and how the dissemination of economics through new channels, concepts, and tools took place within these institutions and through these collaborations, whether directly related to the war effort or not. For example, Haavelmo's stay in the United States during the war, far from the fighting and the Nazi occupation of Norway, enabled him not only to start a probabilistic revolution in econometric analysis but also to reach a wider and more diverse audience in Chicago. Could this be seen as part of the Americanization of economics? Indeed, Haavelmo was sent by Frisch to the United States at the beginning of the war and continued his work aimed at integrating statistical tools into economic analysis and breaking out of the deterministic framework established by Frisch. However, Bjerkholt and Dupont-Kieffer (2010, 2011) show that his research began before the war and that his "forced" emigration to the United States allowed him to complete his research program. His stay in the United States, which Haavelmo experienced as an exile, was certainly an opportunity to produce knowledge but also an opportunity to disseminate his research findings to a wider and more diverse community of economists. Migration changes opportunities for knowledge production and reach out to impacting communities.

Hagemann also mentions migrations. Complementing his earlier work (esp. Hagemann 2011), Hagemann examines the migrations of Germanspeaking emigrants to the United Kingdom, the second-largest host country for these academics, after the United States. The knowledge of emigrant scholars from Nazi Germany or the Soviet Union made up a significant proportion of these research efforts in computer science, game theory, and operations research. Those economists who eventually settled in Britain developed specific expertise in the German war economy. Singer's analyses covered a wide range of issues: general planning, organization of supply, labor supply, wage policy, price control, restrictions on consumption and private investment, substitution of products and raw materials, monetary policy, and war financing. Erwin Rothbarth focused on the rationing approach and (in 1941) developed the concept of a "virtual price system." To what extent would it have been necessary to change incomes in the prerationing situation to bring the quantities of goods consumed under rationing conditions into line with the "optimal" quantities, that is, the quantities preferred by consumers under the conditions of price determination in free markets with given nominal incomes? One of the most important analysts of the German war economy and postwar reconstruction was Hal C. (Hermann Christian) Hillmann, who analyzed the changes in the volume, direction, and structural composition of Germany's foreign trade after the end of the First World War to answer the likely effects of an Allied naval blockade on Germany's imports and exports. Another important figure among these émigré economists was Nicholas Kaldor: in his work on the German war economy, Kaldor had already addressed the importance of capital equipment in industry for war potential.

3.2. International Approach of the Expertise: UN Commissions and International Organizations

Many works on economic history and on the history of economics point to the development of the role of experts in guiding political decision-making in the economic sphere. This status of the expert developed particularly in the management of the Great Depression but also in the preparation and conduct of the war. This *HOPE* volume focuses on these expert journeys to understand when economic expertise was called upon, what economic skills were required, and whether this expertise changed the expert's toolkit. In doing so, we seek to understand whether economic expertise presupposes the constitution of a theoretical corpus common to all experts or a theoretical corpus that evolves with each assignment.

The history of economics increasingly focuses on the development of macroeconomic models by international institutions, such as the IMF or the World Bank, and central banks (Acosta et al. 2024). Historians and political scientists have described in detail the conditions leading to the creation of these international bodies, and their extended scope of action and legitimacy, particularly in the economic field, compared to the international organizations created after the First World War. The construction of a theoretical and analytical corpus that would allow a common, or at least shared, understanding of the economic phenomena in these international bodies between 1945 and the beginning of the Marshall Plan and the Cold War in 1948 would need to be examined.

The role of US-based "global" organizations in Cold War geopolitics leads to the Americanization of economics. This framework seems to be dominated by theoretical proposals coming from the United States, or at least from experts living there. However, this internationalization can be seen as an opportunity to cross-fertilize ideas and develop conceptual and statistical tools. These international organizations help to make the economic problems of individual countries comparable from an international and global perspective.

Archives of expert debates within international institutions show that, in the context of the emerging Cold War, economic thinking was diverse and that the challenge was to build a specific understanding of economics that was not centered on American thinking. For example, the UN commissions and subcommissions were tasked with dealing with the shortage of agricultural products and raw materials in the immediate postwar period. The community created to this end was based on technical skills and scientific expertise. It is striking how careful Frisch, who was asked

by David Weintraub to recommend experts,² is to justify the competence and expertise of the people he suggests by presenting a short curriculum vitae and the publications that justify a nomination.

Next, an analysis of the archives shows that the work of the UN commissions highlights the attempt to build a common minimum theoretical corpus that could serve as a basis for shared expertise. A reading of the debates shows that these economists share a certain number of analyses but can disagree on both diagnoses and solutions. Conversely, the debates could have had an impact on the economic thinking of the economists involved. However, in the period between the end of the Second World War and the beginning of the Cold War, they sought to develop a common analytical framework. These UN meetings on economic issues reflect the emergence of new economic communities and collaborations.

3.3. New Communities and Expertise outside the US-UK Axis: Tools for National Sovereignty, Fight against Inequalities

The global dimension of the conflict is characterized by its impact and significant economic consequences on the belligerent countries and the countries on the political periphery of the conflict (Wieviorka 2023). These consequences led economists to rethink the economic interpretation of the benefits of international trade, one of the issues at stake in the UN working groups. Without the Second World War and the involvement of economists in the conduct of the conflict, the economic approach might not have been adopted. However, economics became a new framework for understanding relations between countries, between entities in colonial empires, and the emergence of a new economic order (Marseille 2005) both at the national and international level during and after the Second World War. What is also at stake is that the Second World War established the idea that economic analysis is key to deciphering and understanding the world, in addition to geopolitics, especially since the expansion of the Nazi regime was partly based on geopolitics. We can see the beginnings of this progressive movement in the interwar period, when geographers

^{2.} David Weintraub (1904–69) was an American economist who worked for the federal government. In the 1940s he was appointed head of the Office of Foreign Relief and Rehabilitation Operations at the Department of State. At the end of the war, he became a member of the US staff appointed at the United Nations Relief and Rehabilitation Administration (UNRRA). Frisch wrote to him, as he was the secretary of the Economic and Employment Commission at the United Nations in 1947.

such as Albert Demangeon used economic analysis to understand the development of colonial empires. As early as the 1920s, Demangeon (1920, 1923) insisted on using the cost-benefit analysis of the colonies to understand both the demands for independence and, above all, the reasons why the central powers abandoned their empires.³

This volume aims to complement existing narratives by seeking to understand how academic and nonacademic economists from different parts of the world have revisited the economic theory that formed the basis of their training to explain the trade relationships between a "center" and a "periphery." We wanted to explore further the link between political demands for decolonization—or a rebalancing of power between the US-UK axis and the communities of economists outside this axis—and the emergence of new frameworks of economic analysis in the countries of what became the "Third World" and the Soviet bloc.

The article by Adriana Calcagno and Pedro Garcia Duarte focuses on Raúl Prebisch and Celso Furtado, two important contributors to development economics and to the theories and policies supported by the UN Economic Commission for Latin America (ECLAC). Special attention is given to the role that the geopolitical changes brought about by the Second World War played in shaping their ideas. Prebisch's and Furtado's intellectual paths toward industrialization policies were shaped by the changing international order and by local developments in their countries, including the building of a more scientific statistical system that would help the state to design development policies. The case of Prebisch is of particular interest here because the Second World War led him to completely change his views on the need for Argentina to reduce its external vulnerability, as industrialization became the only way for primary exporting countries to reduce their imports and diversify their markets, a theory he brought to ECLAC.

In this volume, Alan Bollard shows that Japan in the 1930s was marked by two contradictory movements in terms of the adoption and dissemination of economic ideas. On the one hand, there was a gradual appropriation of various schools of economic thought—notably European—by Japanese economists and the dignitaries of the bureaucracy in charge. The influences were many, from Schmöller to Marx. But this flowering was to

^{3.} While geographers borrowed an analytical grid from economics, some young economists also looked to geography and geopolitics for a way of understanding the world. Hirschman, for example, attended Demangeon's lectures when he was a student in Paris (1933).

be halted by the hardening of the regime, which was engaged in military conquest in Asia. On the other hand, the bureaucracy in charge of Japanese political expansion understood the need to control economic development and resource planning, not only to finance political expansion but also to secure it. These bureaucrats would not trust economists, even those trained at Tokyo's Imperial University, to get the economic war machine up and running. So they put themselves in charge, but in so doing, they ended the proliferation of economic ideas.

It was not until the end of the conflict that the variety of schools of thought was revived, and a new effort was made to appropriate the different schools of thought, particularly Marxist ones. The US presence enabled these economists to discover new American economists, such as Paul Samuelson. However, the Japanese did not abandon European thought, rediscovering not only Marx but also Keynes. But the interesting point is that these young Japanese economists developed an economic discourse and proposals to counter the proposals of American experts who wanted to reduce the Japanese economy to an agrarian one. Determined to establish some independence during the occupation led by Douglas MacArthur and aware of the rise of Marxist economics in Asia generally, Japanese economists sought to formulate their own economic ideas.

Alternative economic discourses were developed to support the political positions of the Soviet bloc by proposing theoretical alternatives to the corpus produced in the Western bloc. Indeed, some of the contributions to the *HOPE* conference recall that Stalin understood the importance of being able to produce an alternative economic theory, to the point of publishing a treatise (*Economic Problems of Socialism in the USSR* in 1952). As Allisson shows, this construction was achieved through a dialogue that had already begun during the New Economic Policy (NEP) (Gousseff 1996: 125; Shpotov 2002), as part of a desire for autonomy and the production of a counterdiscourse (Allisson 2011), or at least an alternative framework for understanding the economic world of the Soviet bloc.

The article by Nikolay Nenovsky and Tsvetelina Marinova also highlights the inconsistency of a Communist economic theory or centrally planned economy. This contribution also analyzes the difficulties, both theoretical and practical, of building a socialist model of integration. If planning was seen as the proper alternative to the market as a coordinating mechanism, initiatives such as the Council for Mutual Economic Assistance (CMEA), established in 1949, clearly lacked a theoretical foundation and faced practical difficulties in its establishment.

Interestingly, these practical difficulties encouraged attempts at theoretical development, especially on monetary issues. And various alternatives emerged in the satellites of the Soviet Union, for example, in Yugoslavia as well as in Bulgaria.

This story needs to be further explored to understand to what extent this production of economic theory resulted from its own questioning and of the political and economic context specific to what was happening, and to what extent this production depended on dialogues with economists from the Western bloc and on the need to produce a counterdiscourse or at least a solid theoretical alternative. In what ways did economists from the "Western" and "Eastern" blocs produce different analyses and solutions to the question of managing shortages and reconstruction?

We have yet to explore several types of alternative-thinking or nonmainstream intellectuals (nonmainstream economists, neither Western nor Eastern countries, pre-1939 and post-1945 issues). We can mention in particular the contribution of Karl Polanyi's The Great Transformation in 1944, which is typically seen as a result of his experience of the Second World War. A refugee economist who could be likened to the migrants from Central and Eastern Europe who provided a breeding ground for American and British economics, Polanyi called for a rethinking of economic theory in the face of the collapse of "nineteenth-century civilization" (Polanyi [1944] 1983: 37), which he characterized in terms of four institutions: (1) the balance of power; (2) the international gold standard; (3) the self-regulating market, "which produced a hitherto unsuspected material well-being"; and (4) the liberal state. After analyzing the collapse of each of these pillars, Polanyi, "freed from the utopia of the market" (349), invites us to rethink the constitution of economic value outside the concept of the self-regulating market, but within a reformulation of freedom. Polanyi would thus open a third way between market liberalism and socialism (Maucourant 2011, 2020).

4. Perspectives for Future Research

Much has been learned, but much remains to be explored and debated, about how economists and economics affected the Second World War and the postwar economic order, and how the war and postwar order (postwar reconstruction, the Cold War, the dissolution of colonial empires) transformed economics, reshaped economic ideas and techniques, and changed individuals and institutions who spoke with authority within the

discipline. Whether dealing with economy-wide econometric models, linear and nonlinear programming, aggregate demand stabilization, or national income and product accounts, or guiding the development of countries in the global periphery, economists in the post–World War II years were engaged in activities that contrasted with the characteristic activities of prewar economists. The demands of the war and the postwar order that emerged shaped these changes in economics, as economists and economic expertise helped to shape the conduct of the war and the creation of the postwar economic order.

These research perspectives include a rethinking of existing narratives of the Second World War. This volume provides insight into the extent to which our narratives in economic history are influenced by narratives developed in other disciplines (such as economic history, but also military history and the history of technology) and by the contexts in which knowledge is produced and received. As Wieviorka (2023) has shown, there are many narratives specific to each discipline, but they feed off each other. Moreover, existing narratives are increasingly challenged by newer research and by the ability to interrogate the narratives produced.

Morgan and Stapleford (2023) show that changing the narrative encourages one to look for different data and sources, to question temporal boundaries and sequences, to relativize the role of key events that serve as anchor points for narratives (such as Bretton Woods), and to question the global dimension of the war (an impact of the war beyond the conflict zones). The traditional demarcation of the Second World War comes from political science, with 1939 and 1945 as the beginning and end of the conflict. The issues addressed in this volume provide an opportunity to reexamine the commonly accepted demarcation of the war: from an economic perspective, the Second World War began before 1939 (in Southeast Asia) and ended after 1945 (with postconflict planning).

More broadly, our aim is also to broaden research perspectives on the subject by highlighting what is happening on the intellectual and geopolitical so-called peripheries. Outside the emerging bipolar world, new issues are emerging (access to export markets, economic independence, etc.) that require new tools and a new role for the expert economist (interventionism, national accounting and the construction of indexes, economic forecasting).

This volume was motivated by the need to better understand the transformative effect of economic expertise during the war on the production of economic knowledge by different communities and authorities. The

conference concluded with a wrap-up session to identify future research perspectives opened up by our papers and debates.

First, the economic approach to the geopolitical world seems to be relevant and necessary. Indeed, it seems essential for all those involved in the reconstruction of the postwar world. It explains the need for experts in various national and international bodies. This need is reflected in the professionalization of economists and the need for economic education. What remains to be understood, however, is what constitutes the theoretical basis of economic expertise and the body of knowledge that is recognized as having to be passed on to train a "good" expert.

To decipher this body of knowledge in economics that stemmed from the events of the Second World War, we need to ask ourselves the following questions: How ideological are the economic tools? Are the same economic tools used in so-called backward and dominant economies? Is a different approach to quantification necessary in non-Western countries?

Our starting point was the observation that several narratives coexist on the links between economists, economics, and the Second World War: a history of the victors with the "Americanization of economics," a well-documented economic history of the costs of the war, of the emergence of new economic institutions, a history centered on biographies, a history of the financing of the war.

Questioning the narratives that have accompanied the role of economists during the Second World War makes it possible to examine its transformative role on the production of economic knowledge, to delve into a history of the corpus, and to link the history of concepts to the context of their production and reception.

This questioning means recognizing them as elements of contextualization, while allowing ourselves to change the perspective of the narratives adopted so far. So, what is the right timeline, and how to divide this into periods? Doesn't the process of transforming economic ideas begin with the preparation for war, rather than with the armed conflict itself? It also means comparing the sequence proposed by the narratives of political history and armed conflict with the unfolding of the conflict and comparing it with the sequences specific to the history of economics. The beginning of the political Cold War thus corresponds to the emergence of two theoretical blocs. This correspondence invites us to identify the triggers for the development of economics outside the standard narratives proposed by history, economic history, and political history. Finally, it means avoiding a history of "great" events such as Bretton Woods and of

controversies between schools of thought or great figures of economics to look more closely at what, in the daily task of war economics, will trigger a wider reflection on the key concepts of economic analysis, such as coordination or equilibrium, market structure, and the ownership of capital.

And the precise dates of wartime need to be reconsidered, as economists were at work preparing for the war before 1939 and at work managing the economic consequences of the war, including rationing, after 1945. Some tools, such as national accounting, originated in the analysis of the causes and solutions to the economic crisis of the 1930s, and the Second World War served to accelerate their adoption and dissemination. Other concepts and tools, now largely unrecognized, did not survive the war economy and were not considered for postwar purposes. History is often written through the prism of the story of the victors and what remains, but the history of economics draws its identity from its ability to dig into the interstices of the contingencies of the past and to question our distance from our own present.

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